ROAD PLANS

WEST LAFAYETTE
NORTHWESTERN AVENUE
PHASE 4-SAFETY IMPROVEMENTS

TRAFFIC AND PEDESTRIAN CROSSING SAFETY IMPROVEMENTS ON NORTHWESTERN AVE. THESE IMPROVEMENTS INCLUDE NEW PAVEMENT MARKINGS, MEDIAN CONSTRUCTION, SIDEWALK, CURB, LIGHTING AND TRAFFIC SIGNALS UPDATES.

TRAFFIC DATA		NORTHWESTERN AVE.		CHERRY LANE	
A.A.D.T.	(2015)	21,000	V.P.D.	12,000	V.P.D.
A.A.D.T.	(2035)	25,000	V.P.D.	14,000	V.P.D.
D.H.V.	(2035)	2,000	V.P.H.	1,000	V.P.H.
DIRECTIONAL DISTRIBUTION	(2015)	55/45	%	50/40	%
TRUCKS	(2035)	3	% D.H.V.	2	% D.H.V.
		5	% A.A.D.T.	2	% A.A.D.T.
DESIGN DATA					
DESIGN SPEED		25 MPH		40 MPH	
FUNCTIONAL CLASSIFICATION		OTHER PRINCIPAL ARTERIAL		OTHER PRINCIPAL ARTERIAL	
TERRAIN		LEVEL		LEVEL	
RURAL/URBAN		URBAN		URBAN	
ACCESS CONTROL		NONE		NONE	
PROJECT DESIGN CRITERIA		3R (NON-FREEWAY)		3R (NON-FREEWAY)	

PROJECT LOCATION SHOWN BY

Approx. 40°25'53" N. Lat. & 86°54'50" W. Long.

GROSS LENGTH: - 1.07 Miles
NET LENGTH: - 1.07 Miles

SCALES:

PLAN { LONG:- 1"=20' / TRANS:- 1"=20'   PROFILE { HORIZ:- N/A / VERT:- N/A   MAX. GRADE- Existing

END PROJECT
P.O.C. Sta. 115+69.38 "B"

END CONSTRUCTION
P.O.T. Sta. 5+71.31 "C"

BEGIN CONSTRUCTION
P.O.T. Sta. 1+27.89 "C"

BEGIN PROJECT
P.O.T. Sta. 59+08.65.00 "B"

VICINITY MAP
TIPPECANOE COUNTY

SCALE: NONE

INDEX

SHEET NO.	DESIGNATION
01	TITLE SHEET
02-09	SURVEY CONTROL
10-11	TYPICAL CROSS SECTIONS
13-23	MAINTENANCE OF TRAFFIC
25-30	CONSTRUCTION DETAILS
31	GEOMETRIC DETAILS
32	MISCELLANEOUS DETAILS
33-36	EROSION CONTROL PLAN
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THE LATEST VERSION OF CITY OF WEST LAFAYETTE STANDARD POLICY AND GUIDELINES, AND TYPICAL CONSTRUCTION GUIDELINES AND DETAILS SHALL BE USED IN CONJUNCTION WITH INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2014 TO BE USED WITH THESE PLANS.

Indiana 811
Know what's below.
Call before you dig.

CAUTION
LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND MARKS MADE UPON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

Metronet
3701 Communications Way
Evansville, IN 47715
Attn: Jeffery Ketterer
Email:Jeffery.Ketterer@mntllc.net
765-449-5610

Indiana American Water of West Lafayette
1007 Happy Hollow Rd.
West Lafayette, IN 47906
Attn: Shannon Gaylord
Email:shannon.gaylord@amwater.com
765-743-7973

City of West Lafayette
Street Commissioner
500 S. River Rd.
West Lafayette, IN 47906
Attn: David Downey
Email:ddowney@westlafayette.in.gov
765-775-5145

City of West Lafayette
Sanitary Sewer and Storm Water
500 S. River Road
West Lafayette, IN 47906
Attn: David Henderson
Email:dhenderson@westlafayette.in.gov
765-775-5145

Purdue University
Office of the Univ. Arch.
401 S. Grant St.
West Lafayette, IN 47907
Attn: Jim Knapp
765-494-3417

Purdue University Utilities
Freehafer Hall of Admin. Services
West Lafayette, IN 47907
Attn: Jay Schwartz
Email:jaschwartz@purdue.edu
765-494-4637

UTILITIES

Comcast
1002 E. Center Rd.
Kokomo, IN 46902
Attn: Jerry Shutters
Email:Jerry Shutters@cable.comcast.com
765-455-5935

Duke Energy
3395 Greenbush St.
Lafayette, IN 47905
Attn: Steve Thompson
Email:steven.thompson@duke-energy.com
765-446-4012

Frontier Communications
3216 Imperial Pkwy.
Lafayette, IN 47909
Attn: Ted Foster
Email:Ted.Foster@ftr.com
765-423-3531

Vectren Gas
1250 S. Creasy Ln.
Lafayette, IN 47905
Attn: Nick Brady
Email:nbrady@vectren.com
765-449-5610

Indiana Datapipe, LLC
427 N. 6th St., Suite C
Lafayette, IN 47901
Attn: Mike Wehr
Email:mike@indianadataline.com
765-269-8510

Zayo Bandwidth
701 W. Henry St., Suite 201
Indianpolis, IN 46225
Attn: Jim Kellam
Email:jkellam@zayo.com
317-524-5713

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Butler Fairman Seufert
CIVIL ENGINEERS

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JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

CERTIFIED BY: J. Carly Sheets   3-23-15
DATE

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

	FILE
	DESIGNATION
SURVEY BOOK	SHEET
	01 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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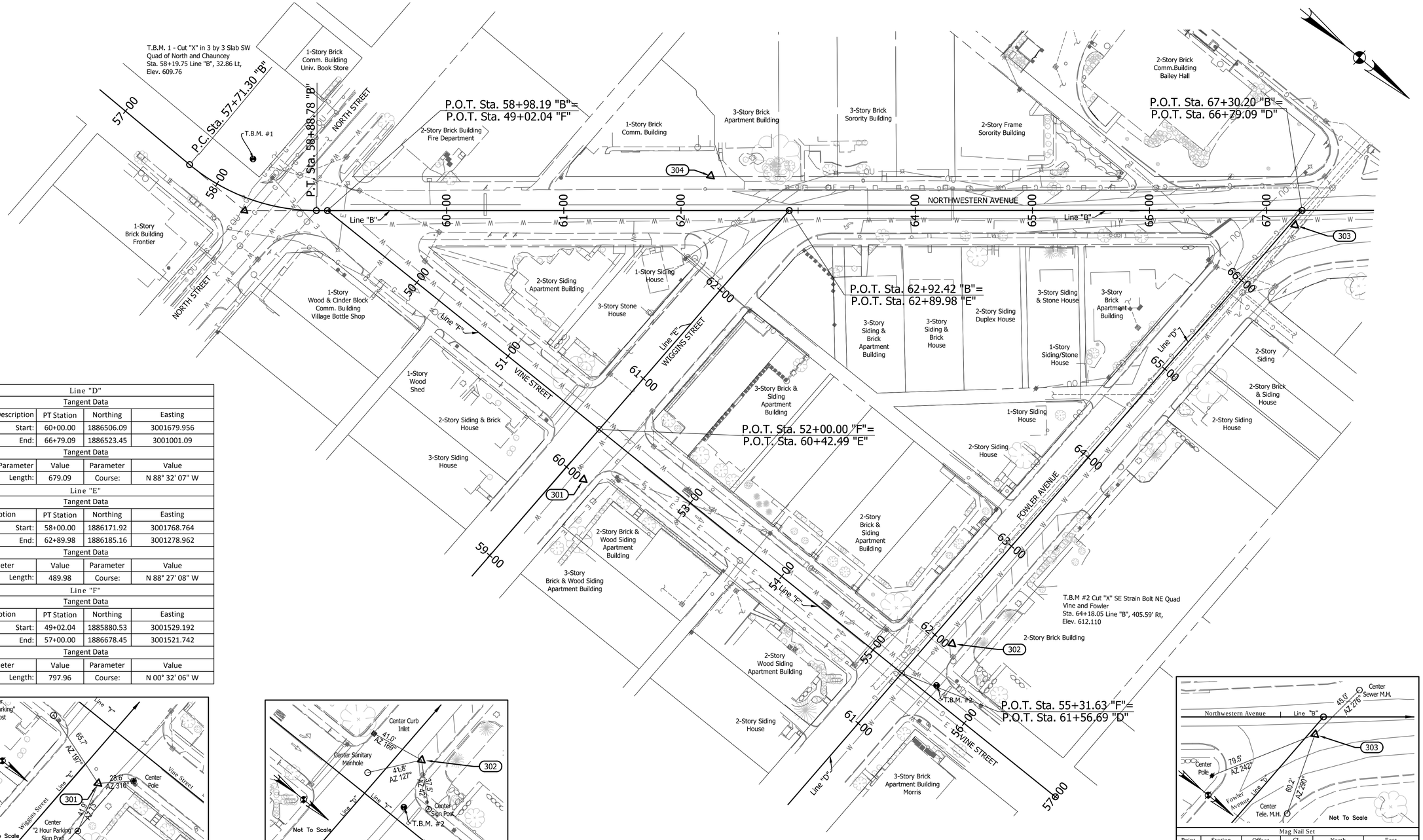

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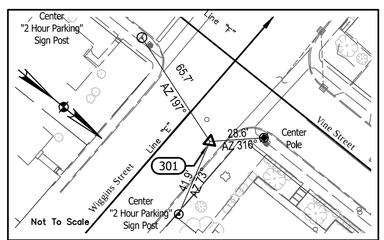
Description	PT Station	Northing	Easting
Start:	60+00.00	1886506.09	3001679.956
End:	66+79.09	1886523.45	3001001.09
Tangent Data			
Parameter	Value	Parameter	Value
Length:	679.09	Course:	N 88° 32' 07" W

Line "E"			
Tangent Data			
Description	PT Station	Northing	Easting
Start:	58+00.00	1886171.92	3001768.764
End:	62+89.98	1886185.16	3001278.962
Tangent Data			
Parameter	Value	Parameter	Value
Length:	489.98	Course:	N 88° 27' 08" W

Line "F"			
Tangent Data			
Description	PT Station	Northing	Easting
Start:	49+02.04	1885880.53	3001529.192
End:	57+00.00	1886678.45	3001521.742
Tangent Data			
Parameter	Value	Parameter	Value
Length:	797.96	Course:	N 00° 32' 06" W



Mag Nail Set					
Point	Station	Offset	CL	North	East
301	60+01.35	17.91' Rt.	"E"	1886195.266	3001567.974

Mag Nail Set					
Point	Station	Offset	CL	North	East
302	62+03.80	16.16' Rt.	"D"	1886527.4463	3001476.6327

Mag Nail Set					
Point	Station	Offset	CL	North	East
303	67+24.15	12.54' Rt.	"B"	1886526.736	3001014.620

RANDALL A. NICK REGISTERED No. 20900163 STATE OF INDIANA LAND SURVEYOR

RECOMMENDED FOR APPROVAL: Z:\SigRAN_Transparent.tiff 3-23-15
DESIGN ENGINEER DATE

DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

SURVEY CONTROL SHEETS NORTHWESTERN AVENUE

WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
TEL 317-713-4615
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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	02 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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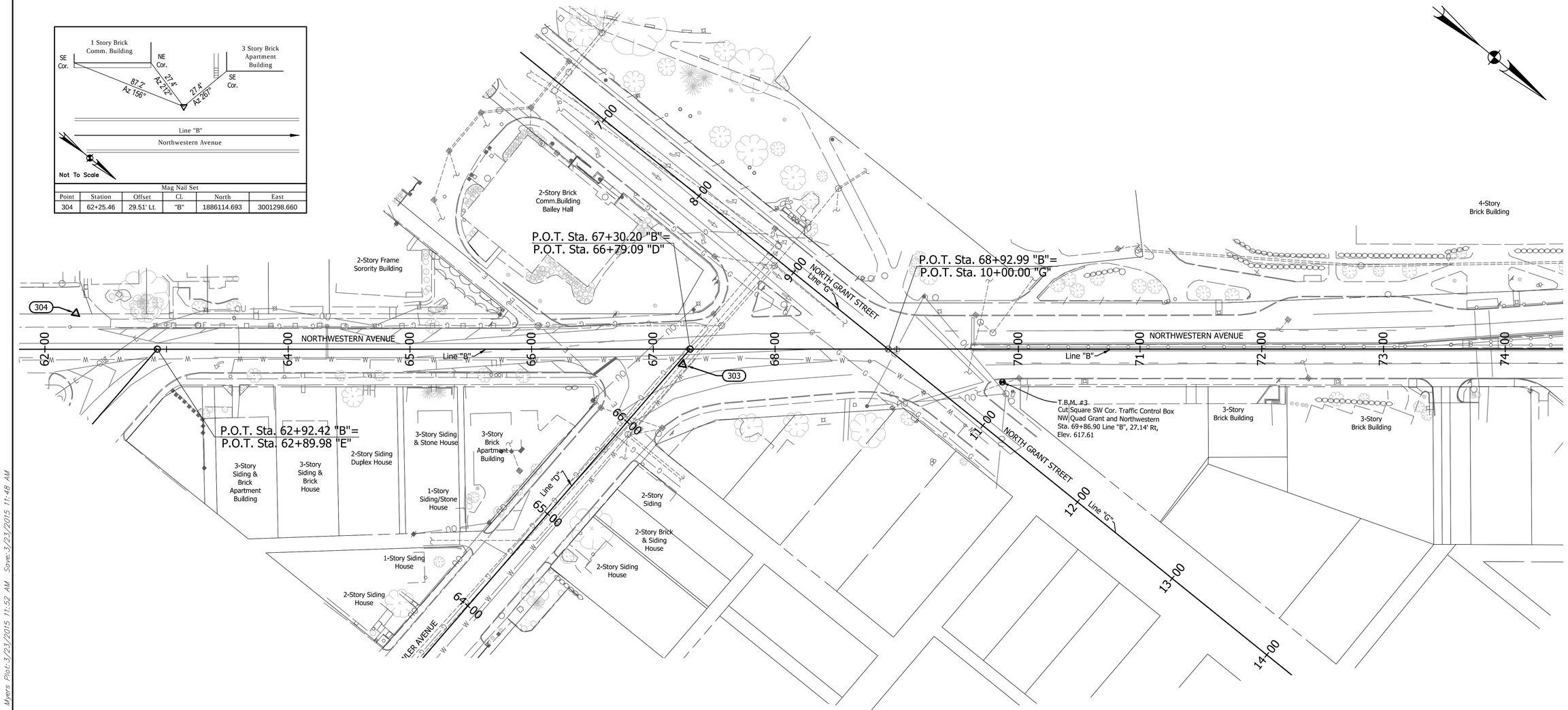
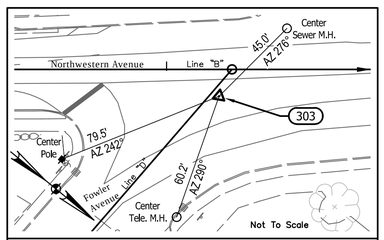
Mag Nail Set					
Point	Station	Offset	CL	North	East
304	62+25.46	29.51' Lt.	"B"	1886114.693	3001298.660



Line "G"			
Tangent Data			
Description	PT Station	Northing	Easting
Start:	4+27.89	1886077.16	3000902.274
End:	15+05.90	1887155.14	3000893.763
Tangent Data			
Parameter	Value	Parameter	Value
Length:	1078.01	Course:	N 00° 27' 08" W



Mag Nail Set					
Point	Station	Offset	CL	North	East
303	67+24.15	12.54' Rt.	"B"	1886526.736	3001014.620

RANDALL A. NICK
REGISTERED
No.
20900163
STATE OF
INDIANA
LAND SURVEYOR

RECOMMENDED FOR APPROVAL: Z:\SigRAN_Transparent.tiff 3-23-15
DESIGN ENGINEER DATE

DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

SURVEY CONTROL SHEETS
NORTHWESTERN AVENUE
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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	03 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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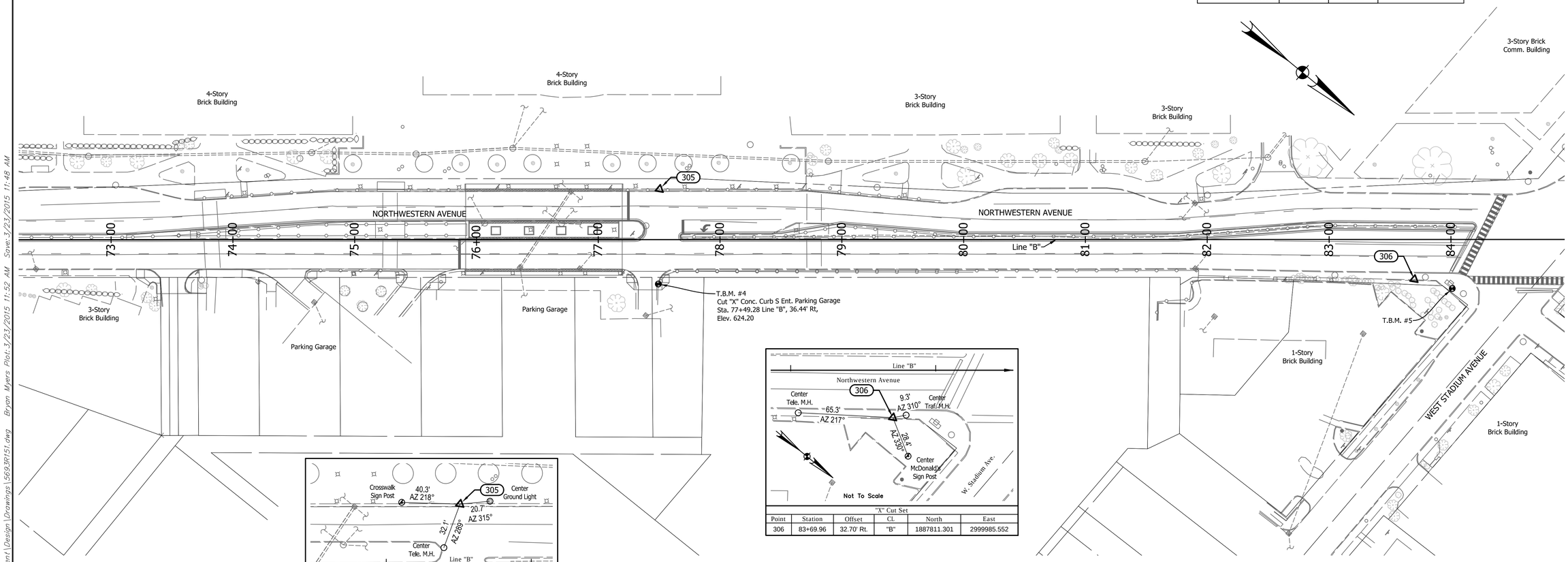
Line "B"			
Tangent Data			
Description	PT Station	Northing	Easting
Start:	54+99.29	1885492.71	3001571.259
End:	57+71.30	1885764.71	3001573.521
Tangent Data			
Parameter	Value	Parameter	Value
Length:	272.01	Course:	N 00° 28' 35" E
Curve Point Data			
Description	Station	Northing	Easting
PC:	57+71.30	1885764.71	3001573.521
RP:		1885766.11	3001404.725
PT:	58+88.78	1885873.26	3001535.163
Circular Curve Data			
Parameter	Value	Parameter	Value
Delta:	39° 52' 36"	Type:	LEFT
Radius:	168.8		
Length:	117.48	Tangent:	61.23
Mid-Ord:	10.12	External:	10.76
Chord:	115.13	Course:	N 19° 27' 43" W
Tangent Data			
Description	PT Station	Northing	Easting
Start:	58+88.78	1885873.26	3001535.163
End:	88+56.62	1888166.6	2999651.381

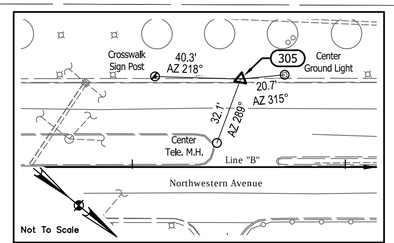
Line "B" (Continued)			
Tangent Data			
Parameter	Value	Parameter	Value
Length:	2967.84	Course:	N 39° 24' 00" W
Curve Point Data			
Description	Station	Northing	Easting
PC:	88+56.62	1888166.6	2999651.381
RP:		1888393.9	2999928.096
PT:	90+85.14	1888376.17	2999570.436
Circular Curve Data			
Parameter	Value	Parameter	Value
Delta:	36° 33' 45"	Type:	RIGHT
Radius:	358.1		
Length:	228.52	Tangent:	118.3
Mid-Ord:	18.07	External:	19.03
Chord:	224.66	Course:	N 21° 07' 08" W
Tangent Data			
Description	PT Station	Northing	Easting
Start:	90+85.14	1888376.17	2999570.436
End:	102+98.56	1889585.09	2999510.517
Tangent Data			
Parameter	Value	Parameter	Value
Length:	1210.41	Course:	N 02° 50' 15" W

Line "B" (Continued)			
Curve Point Data			
Description	Station	Northing	Easting
PC:	102+98.56	1889585.09	2999510.517
RP:		1889536.95	2998539.215
PT:	108+75.18	1890119.63	2999317.821
Circular Curve Data			
Parameter	Value	Parameter	Value
Delta:	33° 58' 21"	Type:	LEFT
Radius:	972.49		
Length:	576.62	Tangent:	297.07
Mid-Ord:	42.42	External:	44.36
Chord:	568.21	Course:	N 19° 49' 25" W
Tangent Data			
Description	PT Station	Northing	Easting
Start:	108+75.18	1890119.63	2999317.821
End:	111+84.39	1890367.2	2999132.552
Tangent Data			
Parameter	Value	Parameter	Value
Length:	309.21	Course:	N 36° 48' 36" W

Line "B" (Continued)			
Curve Point Data			
Description	Station	Northing	Easting
PC:	111+84.39	1890367.2	2999132.552
RP:		1892083.67	3001426.18
PT:	119+62.34	1891045.32	2998756.192
Circular Curve Data			
Parameter	Value	Parameter	Value
Delta:	15° 33' 32"	Type:	RIGHT
Radius:	2864.79		
Length:	777.95	Tangent:	391.38
Mid-Ord:	26.37	External:	26.61
Chord:	775.56	Course:	N 29° 01' 50" W
Tangent Data			
Description	PT Station	Northing	Easting
Start:	119+62.34	1891045.32	2998756.192
End:	131+97.04	1892196.06	2998308.672
Tangent Data			
Parameter	Value	Parameter	Value
Length:	1234.7	Course:	N 21° 15' 04" W

Line "B" (Continued)			
Curve Point Data			
Description	Station	Northing	Easting
PC:	131+97.04	1892196.06	2998308.672
RP:		1891157.7	2995638.684
PT:	136+97.04	1892643.92	2998087.8
Circular Curve Data			
Parameter	Value	Parameter	Value
Delta:	10° 00' 00"	Type:	LEFT
Radius:	2864.79		
Length:	500	Tangent:	250.64
Mid-Ord:	10.9	External:	10.94
Chord:	499.37	Course:	N 26° 15' 04" W
Tangent Data			
Description	PT Station	Northing	Easting
Start:	136+97.04	1892643.92	2998087.8
End:	146+00.00	1893415.87	2997619.354
Tangent Data			
Parameter	Value	Parameter	Value
Length:	902.96	Course:	N 31° 15' 04" W
Internal Station	Back Station	Ahead Station	
9085.18	9085.64	9088.2	





"X" Cut Set					
Point	Station	Offset	CL	North	East
305	77+50.35	41.36' Lt.	"B"	1887285.502	3000321.608

"X" Cut Set					
Point	Station	Offset	CL	North	East
306	83+69.96	32.70' Rt.	"B"	1887811.301	2999985.552

RANDALL A. NICK
REGISTERED
No.
20900163
STATE OF
INDIANA
LAND SURVEYOR

RECOMMENDED FOR APPROVAL: Z:\SigRAN_Transparent.tiff 3-23-15
DESIGN ENGINEER DATE

DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

SURVEY CONTROL SHEETS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	04 OF 72
CONTRACT	PROJECT

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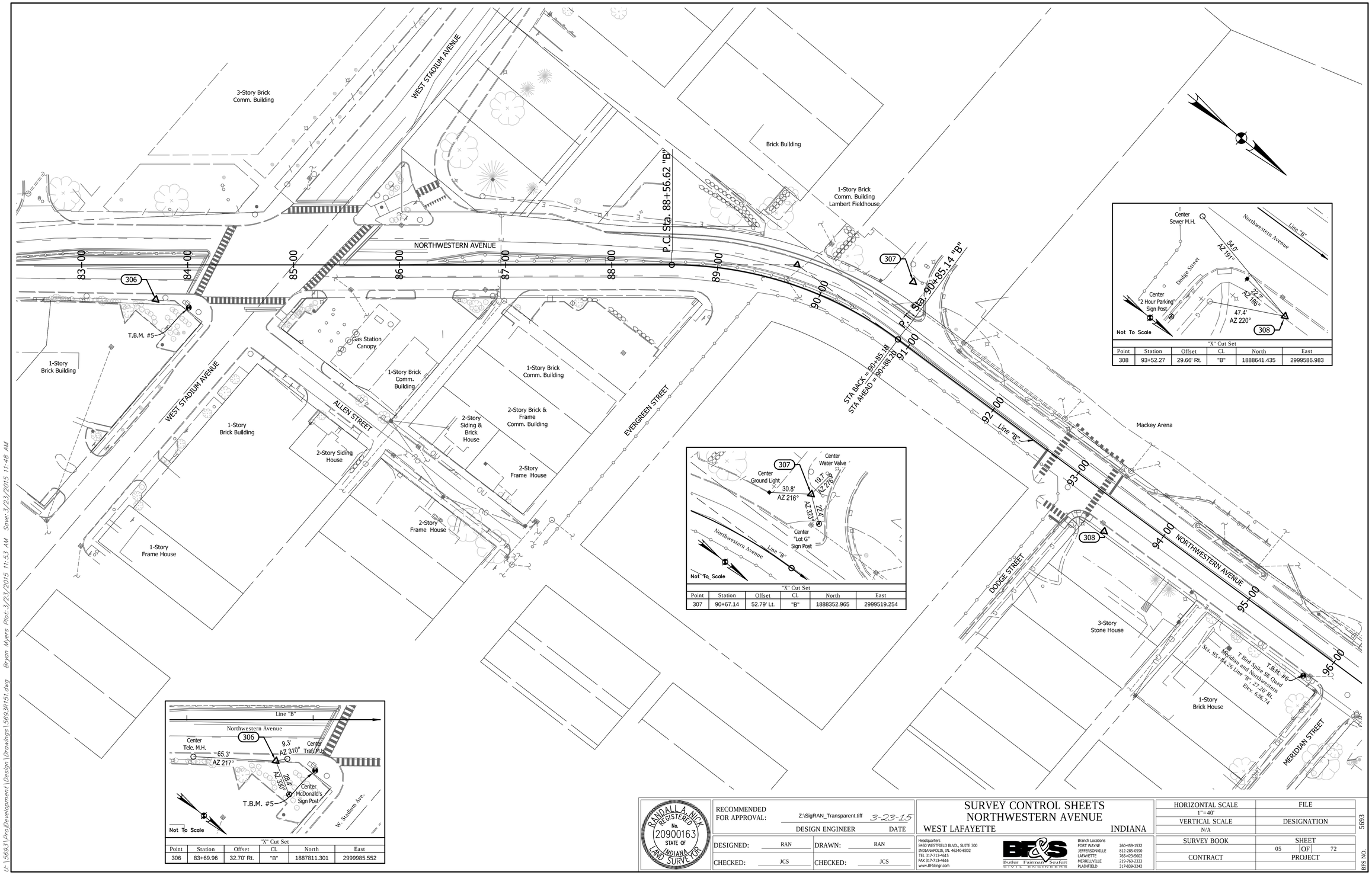

"X" Cut Set

Point	Station	Offset	CL	North	East
306	83+69.96	32.70' Rt.	"B"	1887811.301	2999985.552

"X" Cut Set

Point	Station	Offset	CL	North	East
307	90+67.14	52.79' Lt.	"B"	1888352.965	2999519.254

"X" Cut Set

Point	Station	Offset	CL	North	East
308	93+52.27	29.66' Rt.	"B"	1888641.435	2999586.983

RANDALL A. NICK REGISTERED No. 20900163 STATE OF INDIANA LAND SURVEYOR

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DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

SURVEY CONTROL SHEETS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	05 OF 72
CONTRACT	PROJECT

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"X" Cut Set

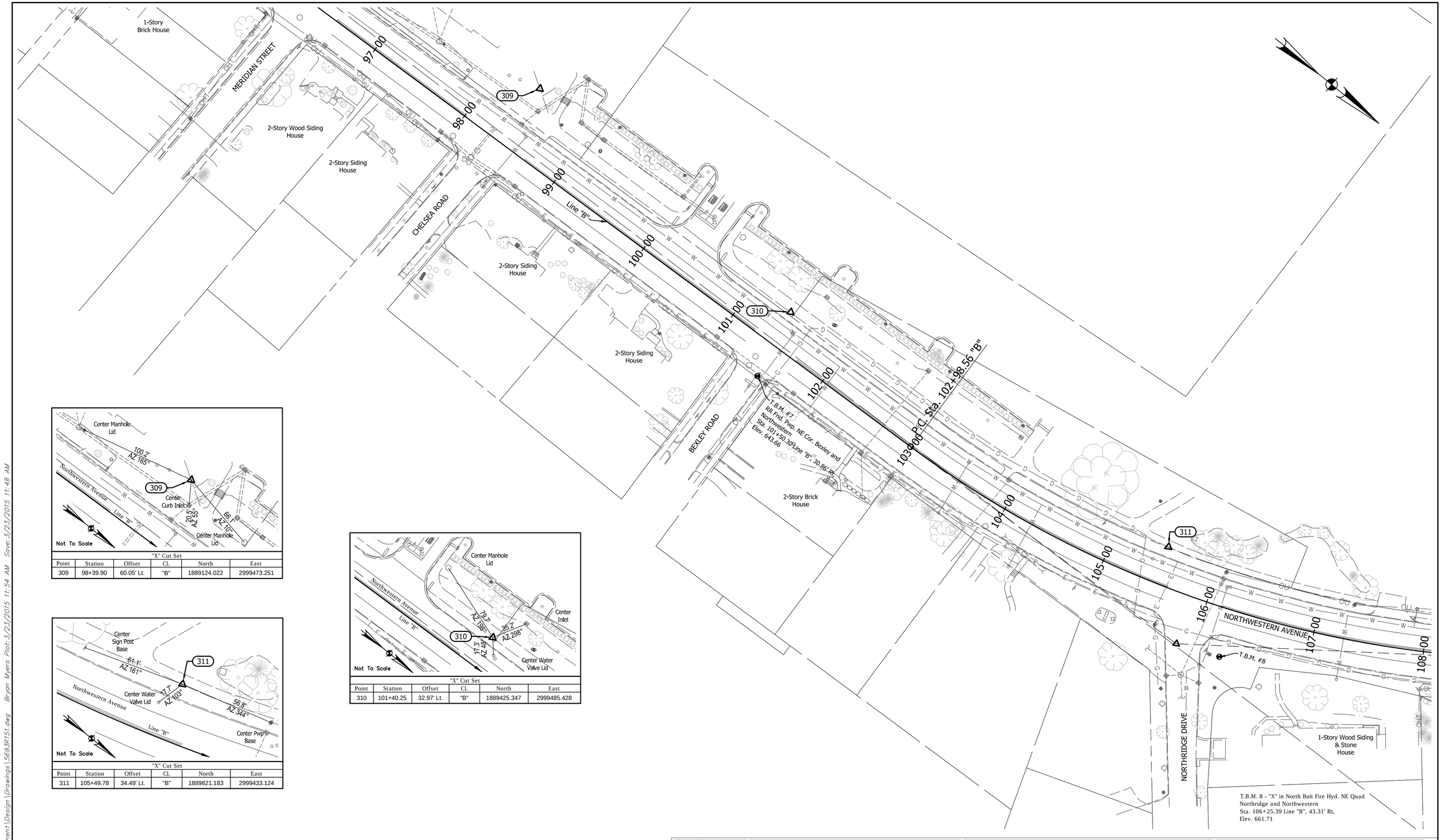
Point	Station	Offset	CL	North	East
309	98+39.90	60.05' Lt.	"B"	1889124.022	2999473.251

"X" Cut Set

Point	Station	Offset	CL	North	East
311	105+49.78	34.49' Lt.	"B"	1889821.183	2999433.124

"X" Cut Set

Point	Station	Offset	CL	North	East
310	101+40.25	32.97' Lt.	"B"	1889425.347	2999485.428



T.B.M. 8 - "X" in North Bolt Fire Hyd. NE Quad Northridge and Northwestern
Sta. 106+25.39 Line "B", 43.31' Rt,
Elev. 661.71

RANDALL A. NOLK
REGISTERED
No. 20900163
STATE OF INDIANA
LAND SURVEYOR

RECOMMENDED FOR APPROVAL: Z:\SigRAN_Transparent.tiff 3-23-15
DESIGN ENGINEER DATE

DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

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WEST LAFAYETTE INDIANA

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	06 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\ProjDevelopment\Design\Drawings\5693R151.dwg Bryan Myers Plot:3/23/2015 11:54 AM Save:3/23/2015 11:49 AM

T.B.M. 9 - Cut Square Traffic Control Box SW
Quad Cherry and Northwestern
Sta. 113+95.58 Line "B", 34.44' Rt,
Elev. 685.44

P.T. Sta. 108+75.18 "B"

P.C. Sta. 111+84.39 "B"

P.T. Sta. 5+04.70 "C"

P.O.T. Sta. 114+74.14 "B"=
P.O.T. Sta. 6+00.00 "C"

P.T. Sta. 119+62.34 "B"

Line "B"

Line "C"

CHERRY LANE

NORTHWESTERN AVENUE

T.B.M. #9

2-Story Wood Siding & Brick House

2-Story Wood Siding & Brick House

1-Story Wood & Brick House

Split-Story Wood Siding House

1-Story Stone & Siding House

1-Story Siding House

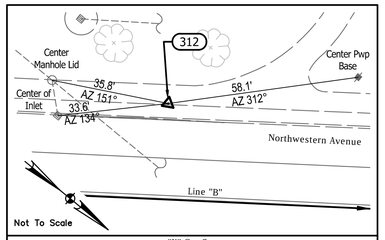
2-Story Brick House

2-Story Siding House

2-Story Siding & Stone House

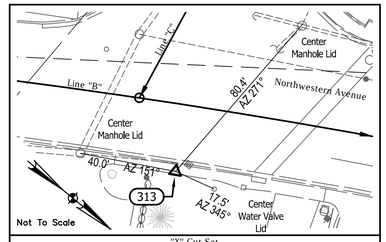
2-Story Stone House

Line "C"			
Tangent Data			
Description	PT Station	Northing	Easting
Start:	0+00.00	1890572.41	2998374.483
End:	1+71.78	1890565.11	2998546.108
Tangent Data			
Parameter	Value	Parameter	Value
Length:	171.78	Course:	S 87° 33' 52" E
Curve Point Data			
Description	Station	Northing	Easting
PC:	1+71.78	1890565.11	2998546.108
RP:		1891996.21	2998606.976
PT:	5+04.70	1890589.57	2998877.374
Circular Curve Data			
Parameter	Value	Parameter	Value
Delta:	13° 19' 00"	Type:	LEFT
Radius:	1432.39		
Length:	332.92	Tangent:	167.21
Mid-Ord:	9.66	External:	9.73
Chord:	332.17	Course:	N 85° 46' 38" E
Tangent Data			
Description	PT Station	Northing	Easting
Start:	5+04.70	1890589.57	2998877.374
End:	6+00.00	1890607.56	2998970.961
Tangent Data			
Parameter	Value	Parameter	Value
Length:	95.3	Course:	N 79° 07' 08" E



"X" Cut Set

Point	Station	Offset	CL	North	East
312	111+05.43	29.07' Lt.	"B"	1890286.559	2999156.588



"X" Cut Set

Point	Station	Offset	CL	North	East
313	114+93.61	27.88' Rt.	"B"	1890638.476	2998984.975

RANDALL A. NICK
REGISTERED
No.
20900163
STATE OF
INDIANA
LAND SURVEYOR

RECOMMENDED FOR APPROVAL: Z:\SigRAN_Transparent.tiff 3-23-15
DESIGN ENGINEER DATE

DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

SURVEY CONTROL SHEETS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	07 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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T.B.M. 10 - Bolt Spike Set Pwp. SW Cor. Hillcrest and Northwestern
Sta. 120+55.88 Line "B", 39.50' Lt,
Elev. 713.80

T.B.M. #10

P.T. Sta. 119+62.34 "B"

HILLCREST ROAD

1-Story Frame House

120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00 128+00 129+00 130+00 131+00 132+00

NORTHWESTERN AVENUE

Line "B"

HILLCREST ROAD

1-Story Siding House

CARROLTON BOULEVARD

2-Story Siding House

2-Story Siding House

2-Story Siding & Stone House

1-Story Wood Siding & Brick House

2-Story Sid. House

T.B.M. 11 - Spike Set NW Cor. Garden and and Northwestern
Sta. 130+15.50 Line "B", 39.39' Lt,
Elev. 718.67

T.B.M. #11

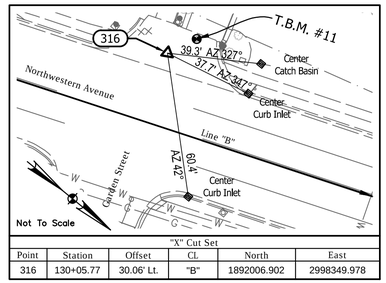
P.C. Sta. 131+97.04 "B"

GARDEN STREET

1-Story Siding & Brick House

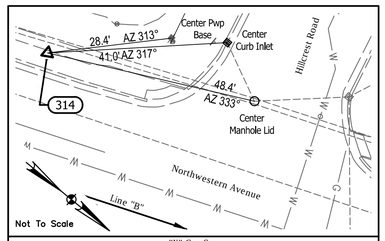
1-Story Siding House

2-Story Siding House



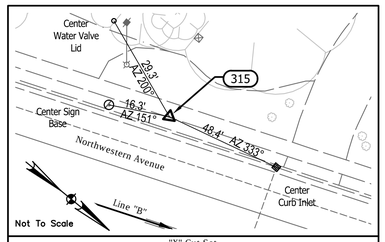
"X" Cut Set

Point	Station	Offset	CL	North	East
316	130+05.77	30.06' Lt.	"B"	1892006.902	2998349.978



"X" Cut Set

Point	Station	Offset	CL	North	East
314	120+42.91	28.31' Lt.	"B"	1891110.149	2998700.600



"X" Cut Set

Point	Station	Offset	CL	North	East
315	126+82.84	28.02' Lt.	"B"	1891706.673	2998468.928

RANDALL A. NICK
REGISTERED
No. 20900163
STATE OF INDIANA
LAND SURVEYOR

RECOMMENDED FOR APPROVAL: Z:\SigRAN_Transparent.tiff 3-23-15
DESIGN ENGINEER DATE

DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

SURVEY CONTROL SHEETS
NORTHWESTERN AVENUE
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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	08 OF 72
CONTRACT	PROJECT

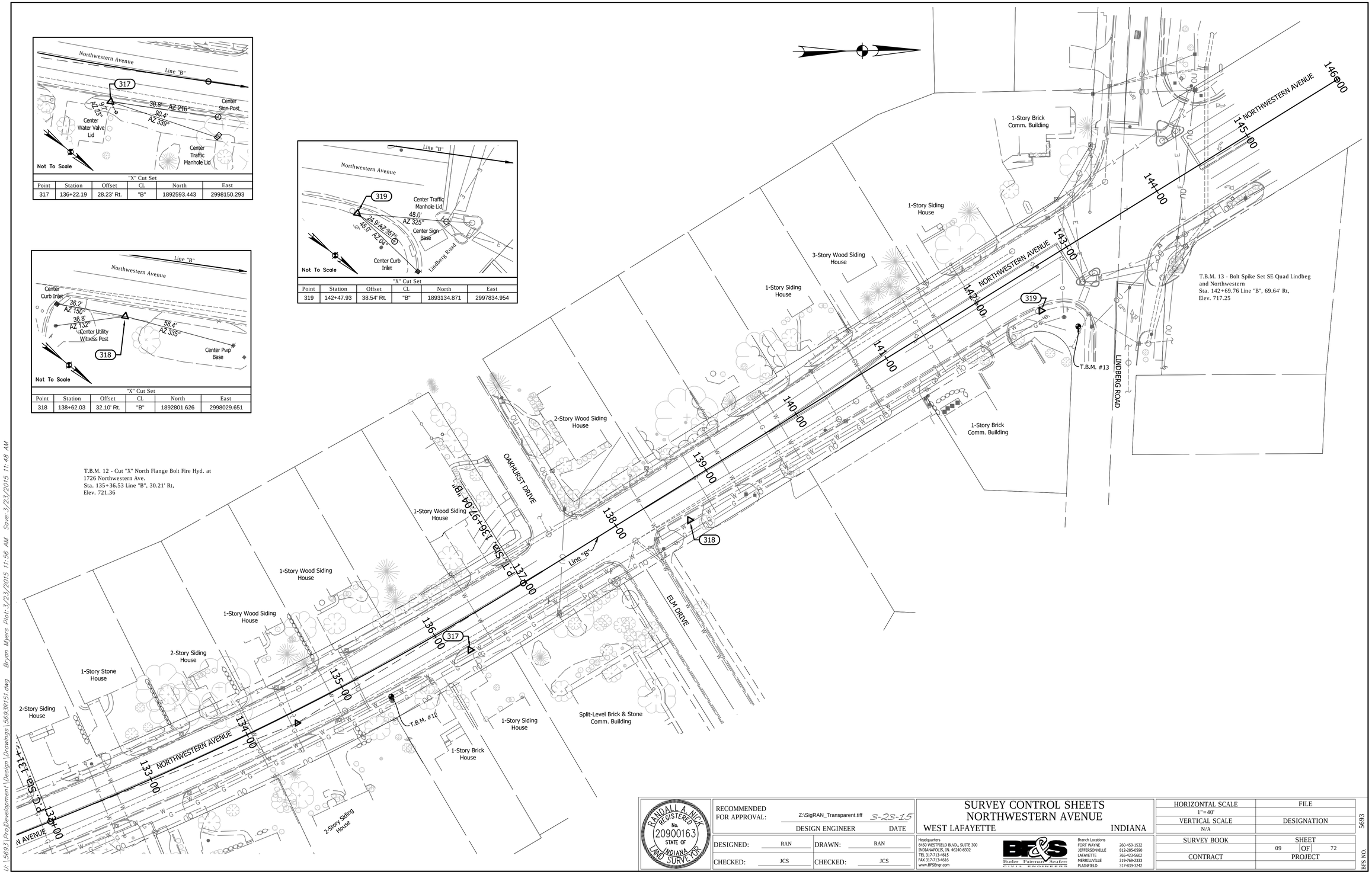
BFS NO. 5693

U:\5693\ProDevelopment\Design\Drawings\5693fr151.dwg Bryan Myers Plot:3/23/2015 11:55 AM Save:3/23/2015 11:48 AM

"X" Cut Set					
Point	Station	Offset	CL	North	East
317	136+22.19	28.23' Rt.	"B"	1892593.443	2998150.293

"X" Cut Set					
Point	Station	Offset	CL	North	East
318	138+62.03	32.10' Rt.	"B"	1892801.626	2998029.651

"X" Cut Set					
Point	Station	Offset	CL	North	East
319	142+47.93	38.54' Rt.	"B"	1893134.871	2997834.954



RANDALL A. NICK
REGISTERED
No. 20900163
STATE OF INDIANA
LAND SURVEYOR

RECOMMENDED FOR APPROVAL: Z:\SigRAN_Transparent.tiff 3-23-15
DESIGN ENGINEER DATE

DESIGNED: RAN DRAWN: RAN
CHECKED: JCS CHECKED: JCS

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	FILE
1"=40'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	09 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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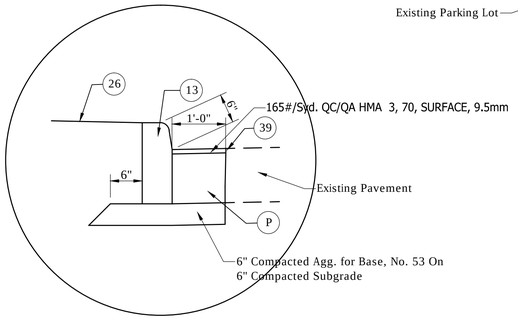
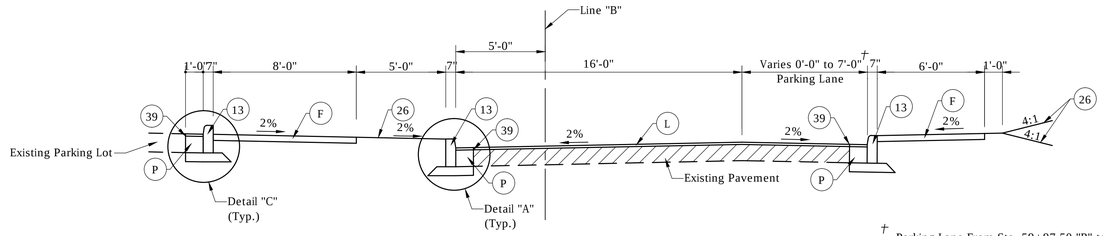


DETAIL "A"

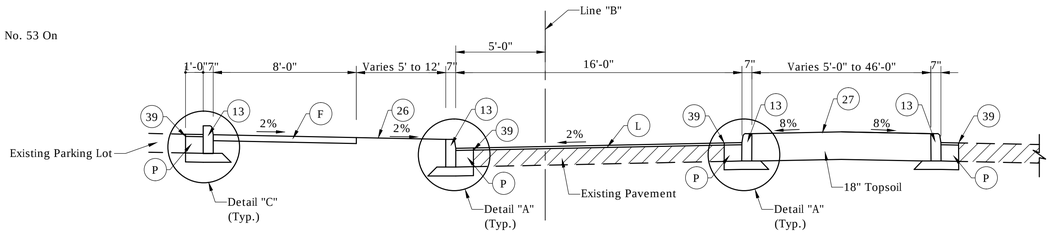


† Parking Lane From Sta. 59+97.50 "B" to Sta. 61+69 "B"

TYPICAL CROSS SECTION - NORTHWESTERN AVE.

Scale: 1/4" = 1'-0"

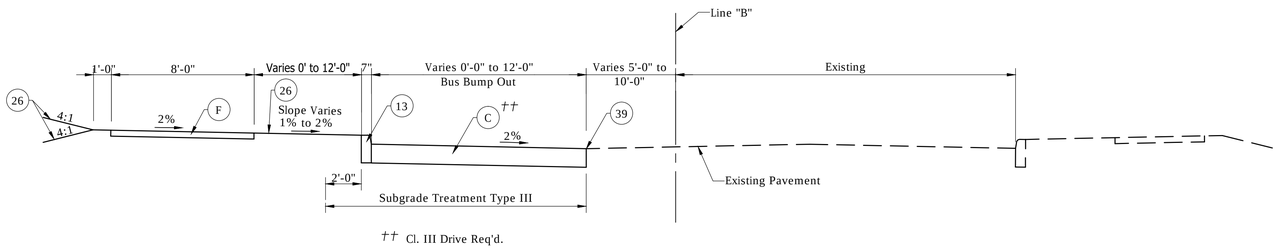
Sta. 59+54 "B" to Sta. 62+00 "B"



TYPICAL CROSS SECTION - NORTHWESTERN AVE.

Scale: 1/4" = 1'-0"

Sta. 62+00 "B" to Sta. 63+69 "B"

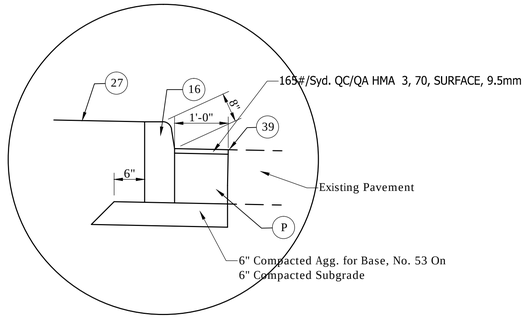


†† Cl. III Drive Req'd.

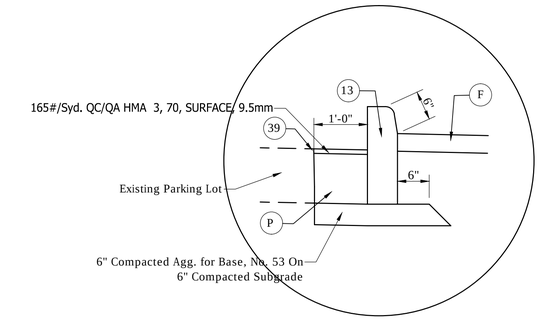
TYPICAL CROSS SECTION - NORTHWESTERN AVE.

Scale: 1/4" = 1'-0"

Sta. 63+69 "B" to Sta. 66+83 "B"



DETAIL "B"



DETAIL "C"

LEGEND

13	CONCRETE CURB, 6"
16	CONCRETE CURB, 8"
26	SODDING, NURSERY
27	LANDSCAPING
39	SAW CUT, FULL DEPTH
C	PCCP FOR APPROACHES
F	CONCRETE SIDEWALK, 4"
L	165#/Sys. QC/QA, HMA, 3, 70, SURFACE, 9.5mm ON VARIABLE DEPTH HMA MILLING
P	CONCRETE PATCHING

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

TYPICAL CROSS SECTIONS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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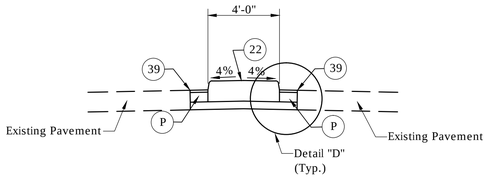
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	
VERTICAL SCALE	DESIGNATION
NA	
SURVEY BOOK	SHEET
	10 OF 72
CONTRACT	PROJECT

BFS NO. 5693

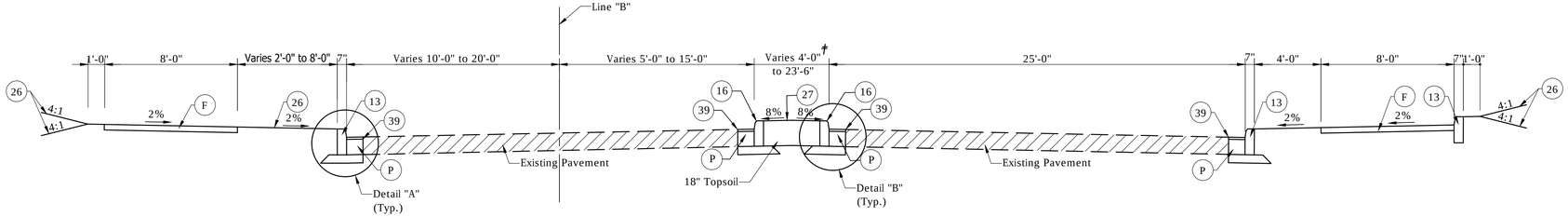
U:\5693\ProjDevelopment\Design\Drawings\5693R211.dwg Byron Myers Plot:3/23/2015 11:35 AM Save:3/21/2015 9:59 AM



MODIFIED CENTER CURB TYPE C

Scale: 1/4" = 1'-0"

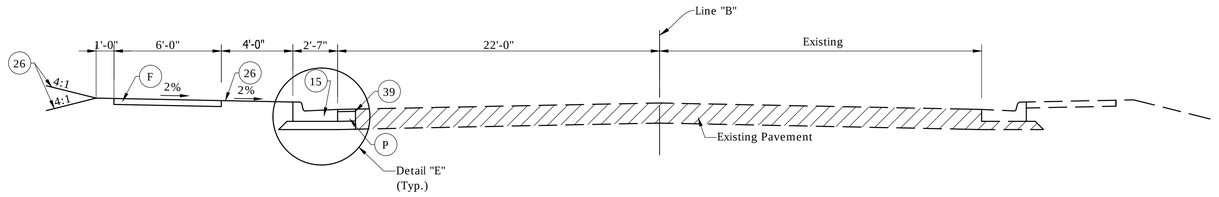
† Sta. 67+70 "B" to Sta. 68+12 "B"



TYPICAL CROSS SECTION - NORTHWESTERN AVE.

Scale: 1/4" = 1'-0"

Sta. 66+83 "B" to Sta. 68+12 "B"



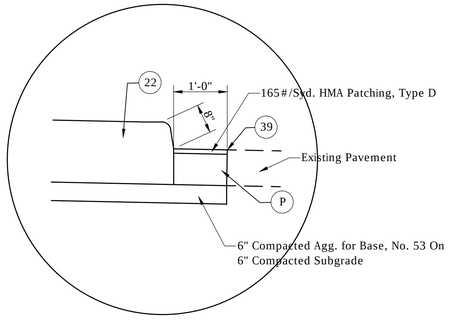
TYPICAL CROSS SECTION - NORTHWESTERN AVENUE

Scale: 1/4" = 1'-0"

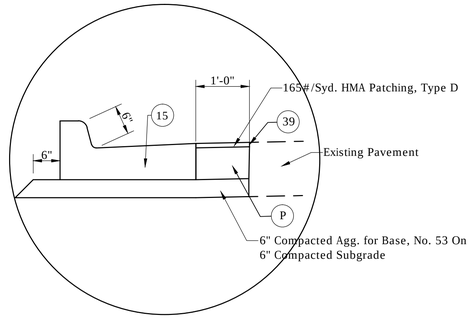
Sta. 114+09.87 "B" to Sta. 115+69.38 "B"

LEGEND

13	CONCRETE CURB, 6"
15	CONCRETE CURB AND GUTTER
16	CONCRETE CURB, 8"
22	CONCRETE CENTER CURB, TYPE C, MODIFIED
26	SODDING, NURSERY
27	LANDSCAPING
39	SAW CUT, FULL DEPTH
F	CONCRETE SIDEWALK, 4"
P	CONCRETE PATCHING



DETAIL "D"



DETAIL "E"

JOHNNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

TYPICAL CROSS SECTIONS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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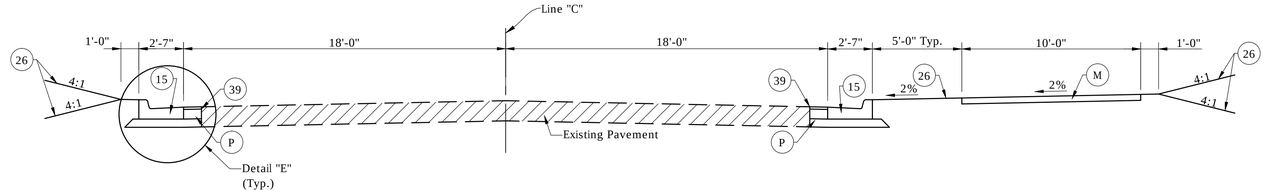
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1/4"= 1'-0"	
VERTICAL SCALE	DESIGNATION
NA	
SURVEY BOOK	SHEET
	11 OF 72
CONTRACT	PROJECT

BFS NO. 5693

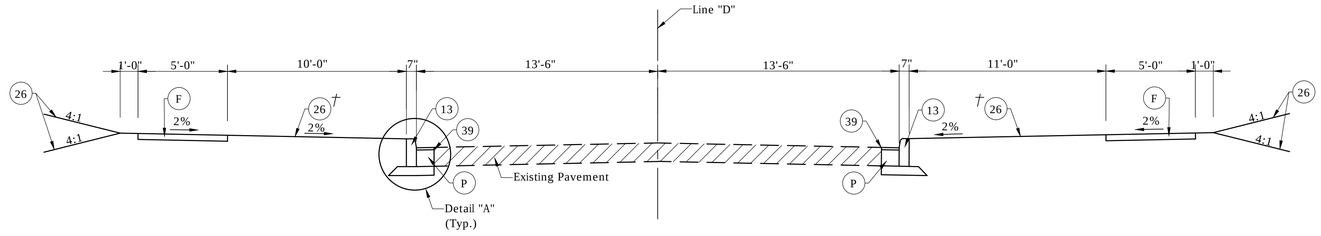
U:\5693\ProDevelopment\Design\Drawings\5693fr211.dwg Bryan Myers Plot: 3/23/2015 11:35 AM Save: 3/21/2015 9:59 AM



TYPICAL CROSS SECTION - CHERRY LANE

Scale: 1/4" = 1'-0"

Sta. 1+27.89 "C" to Sta. 5+71.31 "C"

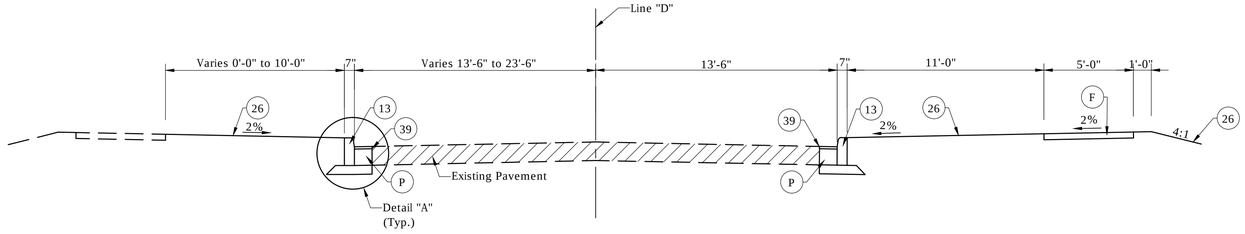


† Area to be (28) Sta. 63+85.75 "D" to Sta. 64+11.25 "D"

TYPICAL CROSS SECTION - FOWLER AVE.

Scale: 1/4" = 1'-0"

Sta. 63+86 "D" to Sta. 64+67 "D"



TYPICAL CROSS SECTION - FOWLER AVE.

Scale: 1/4" = 1'-0"

Sta. 64+67 "D" to Sta. 65+74 "D"

LEGEND

(13)	CONCRETE CURB, 6"
(15)	CONCRETE CURB AND GUTTER
(26)	SODDING, NURSERY
(28)	RAIN GARDEN
(39)	SAW CUT, FULL DEPTH
(F)	CONCRETE SIDEWALK, 4"
(M)	MULTI-USE TRAIL: HMA FOR SIDEWALK, CONSISTING OF 140#/SYS. HMA SURFACE, TYPE A ON 220#/SYS. HMA INTERMEDIATE, TYPE A ON 6" COMPACTED AGGREGATE NO. 53, BASE ON SUBGRADE TREATMENT TYPE III
(P)	CONCRETE PATCHING

JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15 DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

TYPICAL CROSS SECTIONS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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PLAINFIELD 317–839–3242

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	12 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\ProDevelopment\Design\Drawings\5693fr211.dwg Bryan Myers Plot: 3/23/2015 11:35 AM Save: 3/21/2015 9:59 AM

57+00 58+00 59+00 60+00 61+00 62+00 63+00

SEQUENCE OF OPERATIONS

1. Place temporary pavement markings, signage and channelizing devices and remove existing pavement markings as needed. Cover lane usage signs as needed.
2. Contractor responsible for maintaining pedestrian traffic per MUTCD and restricting jay walking between crosswalks with physical barriers.
3. Construct curbs, ramps, pedestrian refuge, median, lighting, signals, signage, and signalization. Utilize Flagging operations as needed.
4. Remove sidewalk at station 103+85 "B" utilizing flagger operations as needed.
5. Maintain ingress & egress to all properties for pedestrians and vehicles at all times.

LINE "B"

BEGIN PROJECT
P.O.T. Sta. 59+08.65 "B"

P.C. Sta. 57+71.30 "B"

P.O.T. Sta. 58+98.19 "B" =
P.O.T. Sta. 49+02.04 "F"

P.T. Sta. 58+88.78 "B"

NORTH STREET

P.O.T. Sta. 62+92.42 "B" =
P.O.T. Sta. 62+89.98 "E"

LINE "B"

10' Min.

NORTHWESTERN AVENUE

50+00

10' Min.

LINE "F"

VINE STREET

51+00

52+00

61+00

LINE "E"

WIGGINS STREET

62+00

40

55' Taper

Northwestern Ave.
M.O.T. Design Speed 15mph

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (1) END CONSTRUCTION XG20-2
- (2) ROAD CONSTRUCTION AHEAD XW20-1
- TRAFFIC SIGNS
- TRAFFIC FLOW

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

PHASE 1
MAINTENANCE OF TRAFFIC
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	13 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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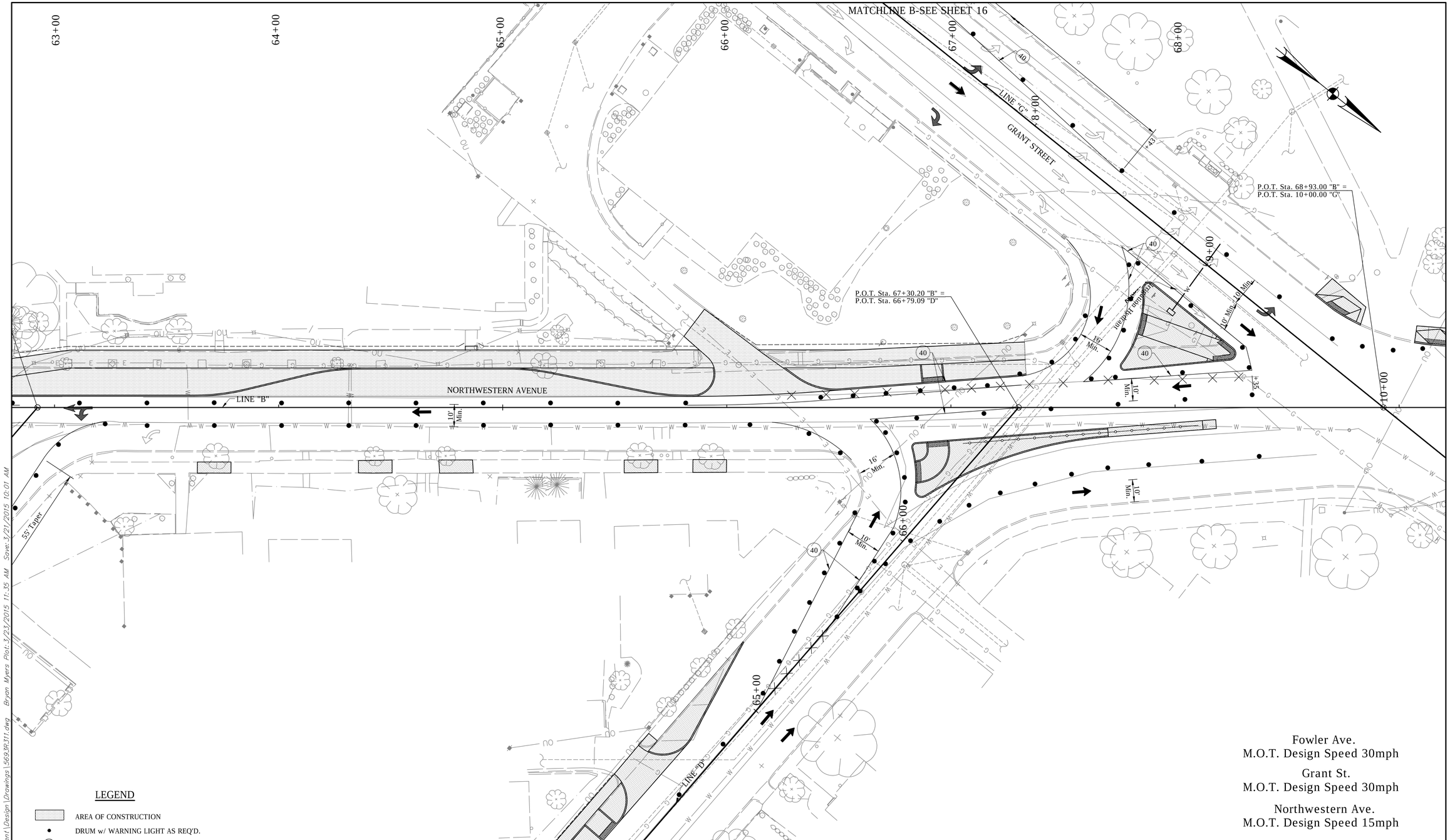

Fowler Ave.
M.O.T. Design Speed 30mph

Grant St.
M.O.T. Design Speed 30mph

Northwestern Ave.
M.O.T. Design Speed 15mph

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (40) TEMP. PAVEMENT MARKINGS, SOLID WHITE, 4"
- TRAFFIC SIGNS
- TRAFFIC FLOW
- LINE, REMOVE

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

PHASE 1
MAINTENANCE OF TRAFFIC
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
TEL 317-713-4615
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www.BFSEngr.com

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JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 14 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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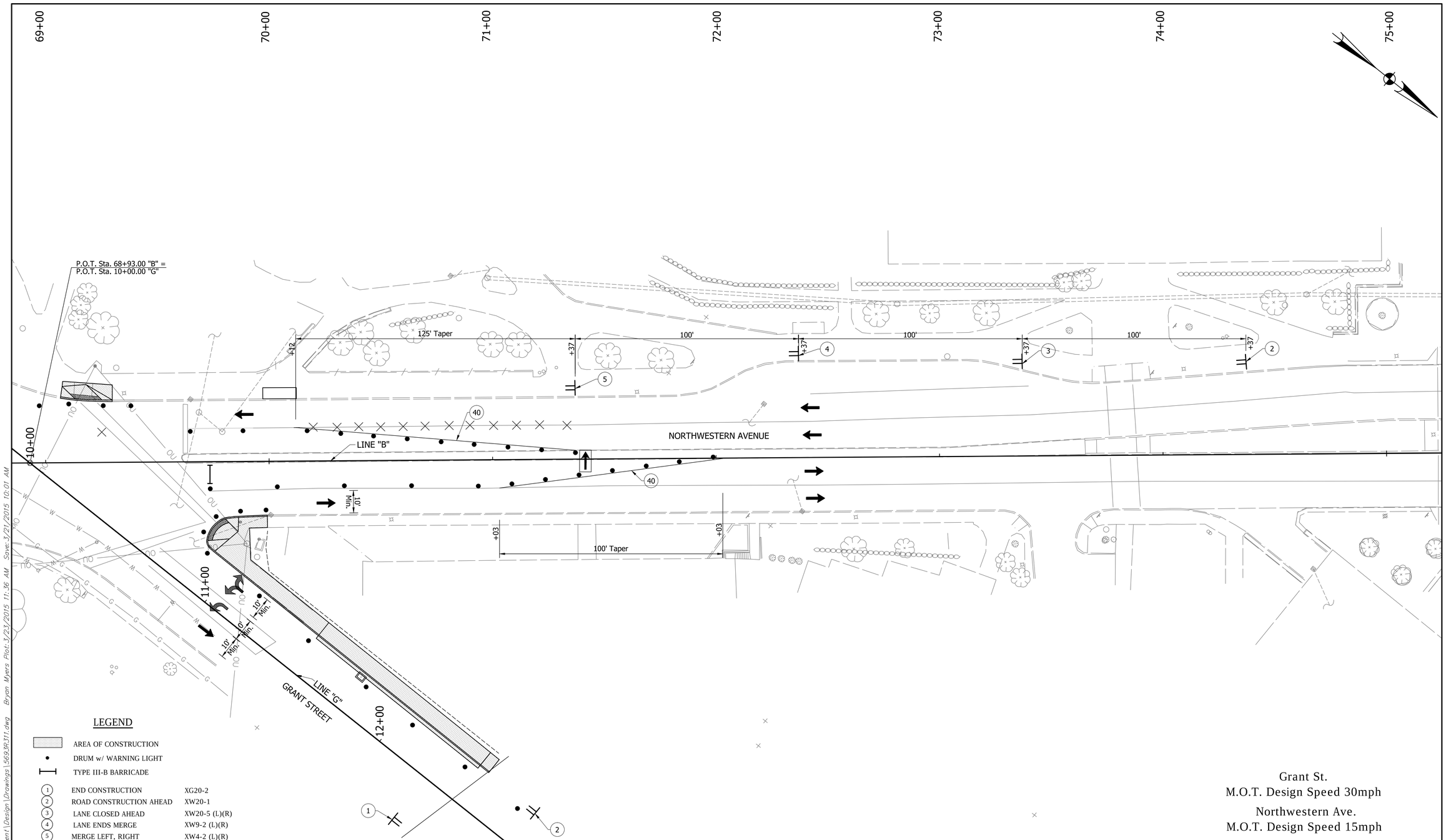

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT
- TYPE III-B BARRICADE
- (1) END CONSTRUCTION — XG20-2
- (2) ROAD CONSTRUCTION AHEAD — XW20-1
- (3) LANE CLOSED AHEAD — XW20-5 (L)(R)
- (4) LANE ENDS MERGE — XW9-2 (L)(R)
- (5) MERGE LEFT, RIGHT — XW4-2 (L)(R)
- (40) TEMP. PAVEMENT MARKINGS, SOLID WHITE, 4"
- TRAFFIC SIGNS
- TRAFFIC FLOW
- FLASHING ARROW SIGN
- LINE, REMOVE

Grant St.
M.O.T. Design Speed 30mph

Northwestern Ave.
M.O.T. Design Speed 15mph

JOANNA CARLY SHEATS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheats 3-23-15
DESIGN ENGINEER — DATE

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE 1"=20'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION
SURVEY BOOK	SHEET 15 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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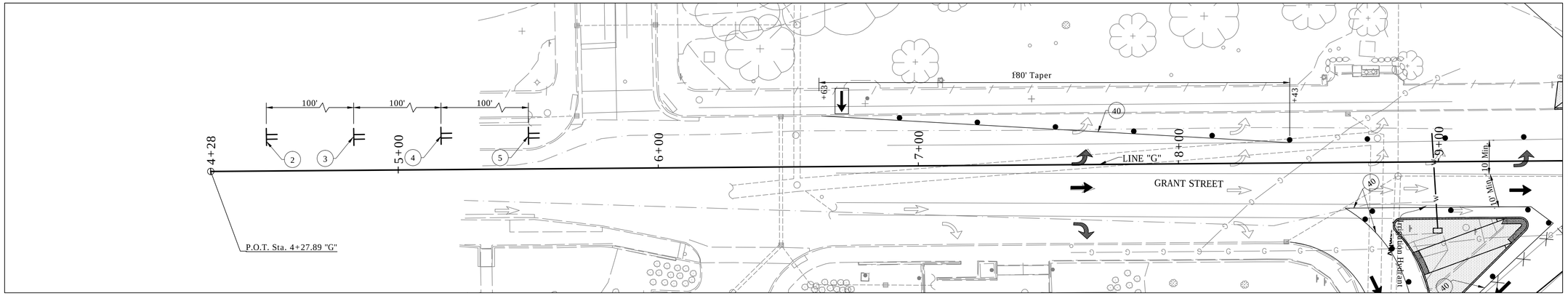

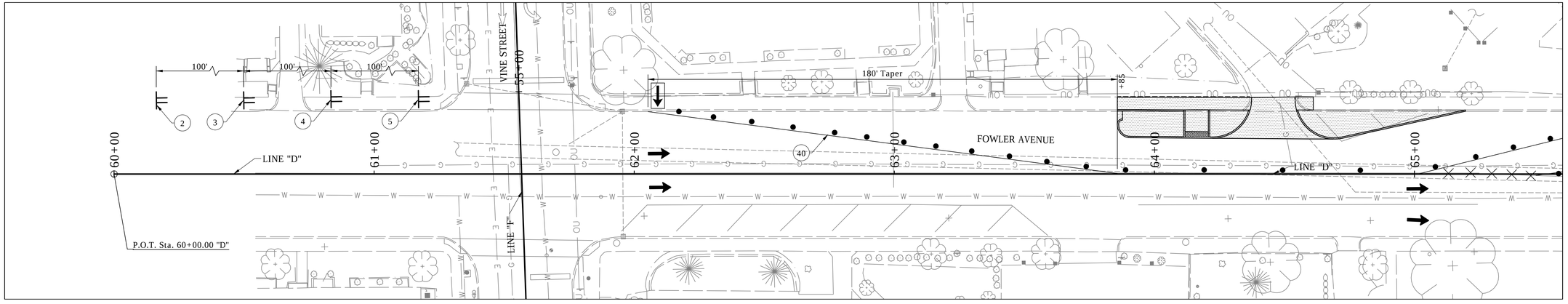

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (2) ROAD CONSTRUCTION AHEAD — XW20-1
- (3) LANE CLOSED AHEAD — XW20-5 (L)(R)
- (4) LANE ENDS MERGE — XW9-2 (L)(R)
- (5) MERGE LEFT, RIGHT — XW4-2 (L)(R)
- (40) TEMP. PAVEMENT MARKINGS, SOLID WHITE, 4"
- TRAFFIC SIGNS
- TRAFFIC FLOW
- FLASHING ARROW SIGN
- LINE, REMOVE

Fowler Ave.
M.O.T. Design Speed 30mph

Grant St.
M.O.T. Design Speed 30mph

JOHNNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	16 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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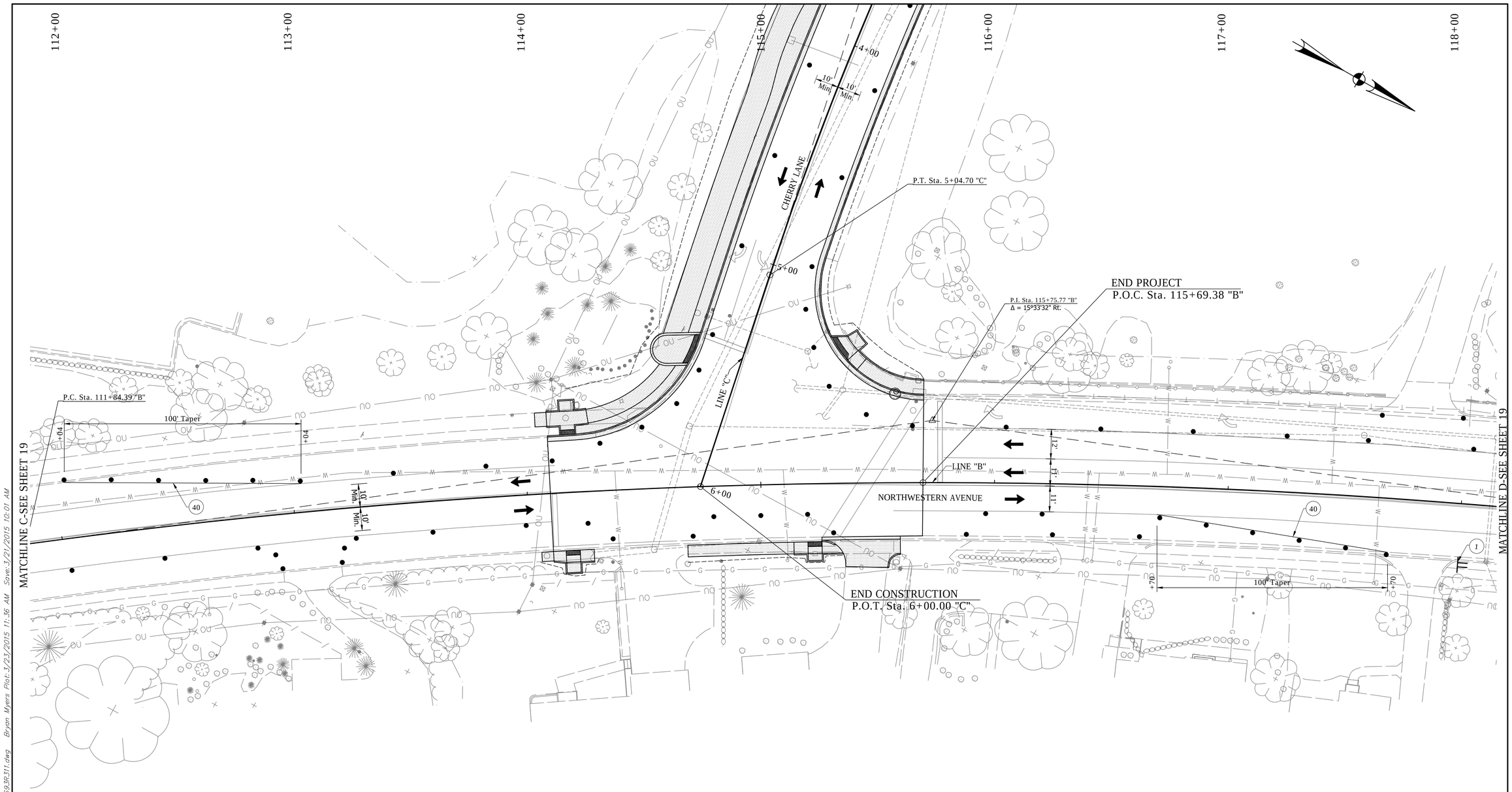

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (1) END CONSTRUCTION XG20-2
- (40) TEMP. PAVEMENT MARKINGS, SOLID WHITE, 4"
- TRAFFIC SIGNS
- TRAFFIC FLOW

Cherry Ln.
M.O.T. Design Speed 20mph

Northwestern Ave.
M.O.T. Design Speed 20mph

JOANNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	17 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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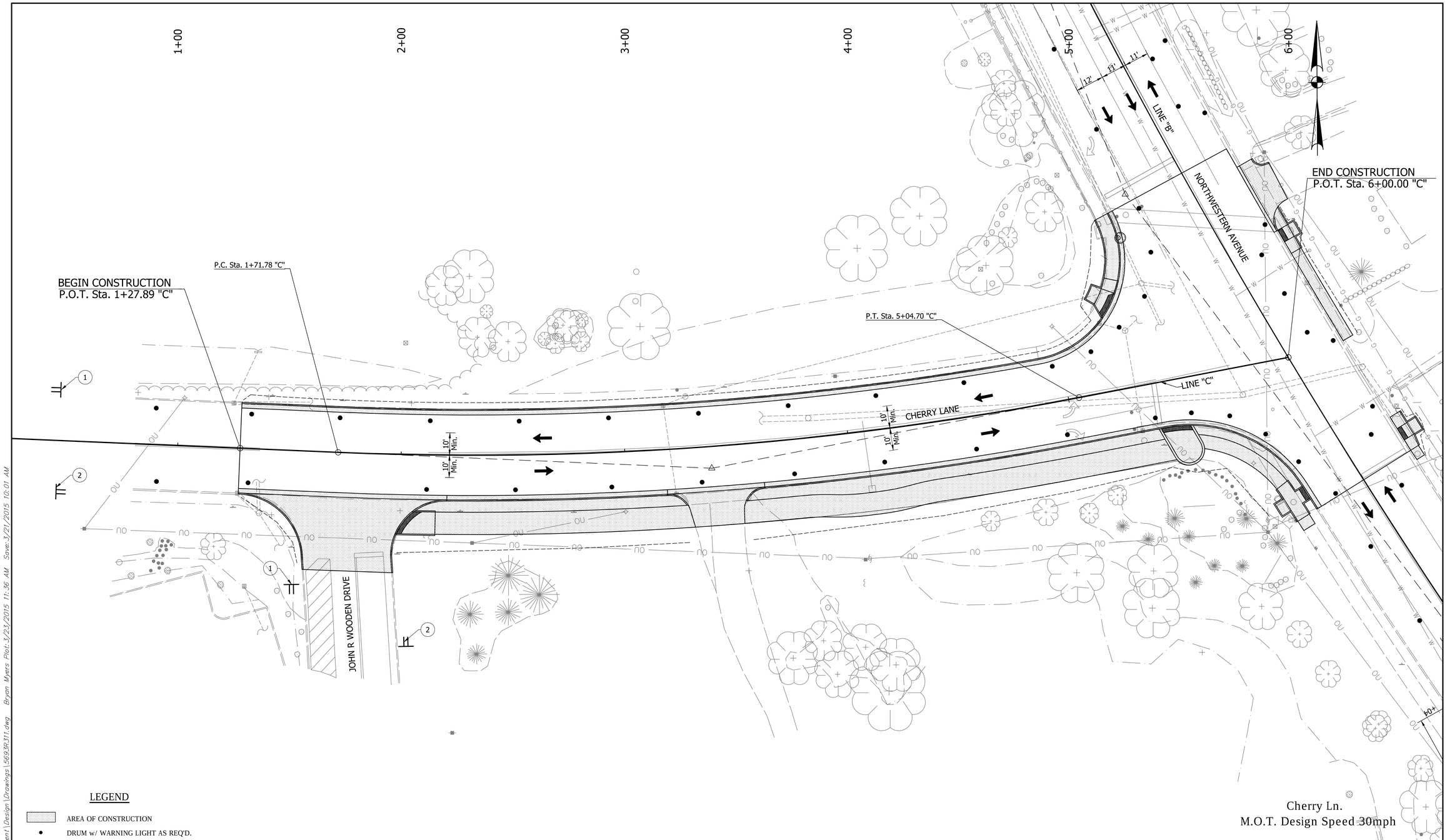

LEGEND

	AREA OF CONSTRUCTION	
•	DRUM w/ WARNING LIGHT AS REQ'D.	
1	END CONSTRUCTION	XG20-2
2	ROAD CONSTRUCTION AHEAD	XW20-1
	TRAFFIC SIGNS	
	TRAFFIC FLOW	

Cherry Ln.
M.O.T. Design Speed 30mph

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

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DESIGN ENGINEER DATE

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 18 OF 72
CONTRACT	PROJECT

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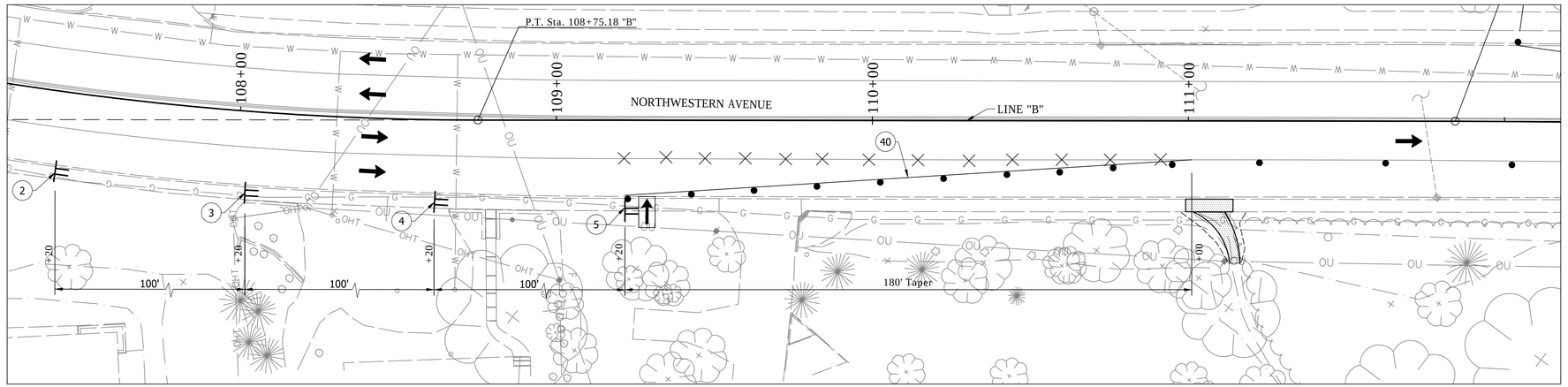

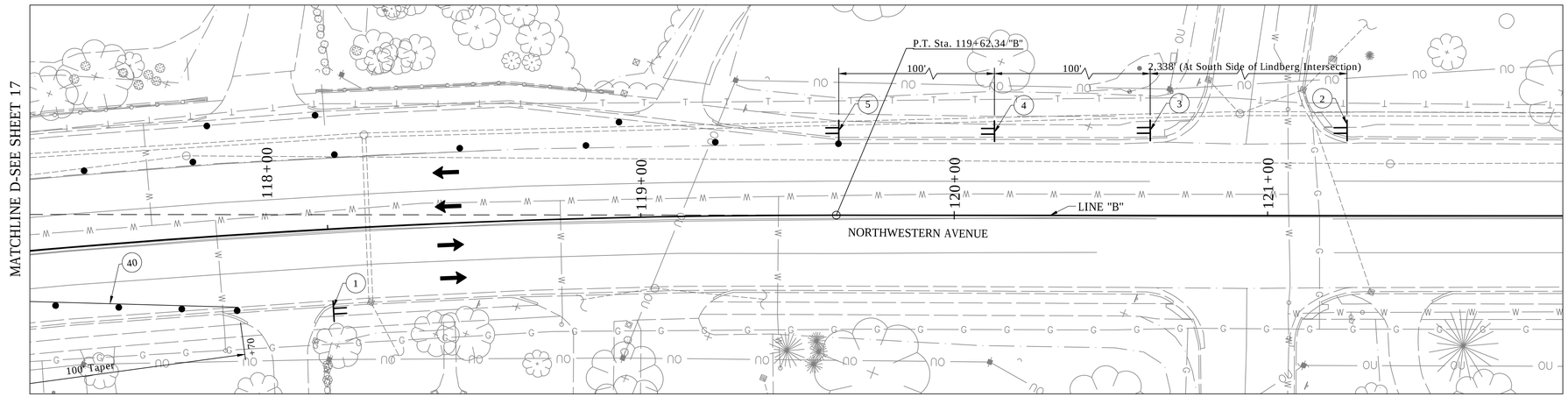

LEGEND

	AREA OF CONSTRUCTION	
•	DRUM w/ WARNING LIGHT AS REQ'D.	
1	END CONSTRUCTION	XG20-2
2	ROAD CONSTRUCTION AHEAD	XW20-1
3	LANE CLOSED AHEAD	XW20-5 (L)(R)
4	LANE ENDS MERGE	XW9-2 (L)(R)
5	MERGE LEFT, RIGHT	XW4-2 (L)(R)
40	TEMP. PAVEMENT MARKINGS, SOLID WHITE, 4"	
	TRAFFIC SIGNS	
	TRAFFIC FLOW	
	FLASHING ARROW SIGN	
	LINE, REMOVE	

Cherry Ln.
M.O.T. Design Speed 20mph

Northwestern Ave.
M.O.T. Design Speed 20mph

JOANNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

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DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 19 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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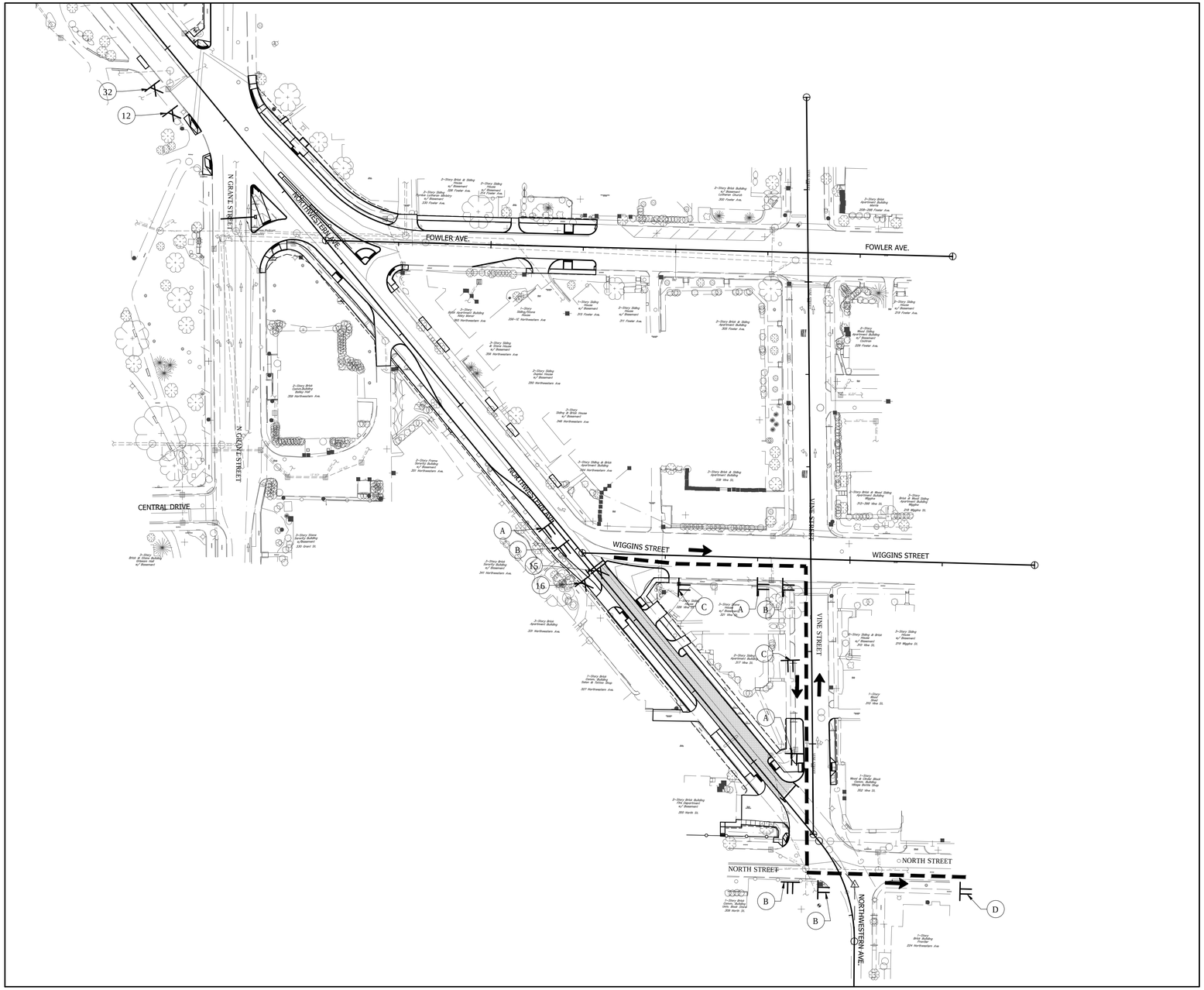

DETOUR XM4-8
NORTHWESTERN AVE
M5-1 (L or R)

ROUTE MARKER ASSEMBLY
(A)

DETOUR XM4-8
NORTHWESTERN AVE
M6-3

DIRECTIONAL DETOUR
ROUTE MARKER ASSEMBLY
(B)

DETOUR XM4-8
NORTHWESTERN AVE
M5-1 (L or R)

CONFIRMING DETOUR
ROUTE MARKER ASSEMBLY
(C)

END XM4-6S
DETOUR XM4-8
NORTHWESTERN AVE

END DETOUR RMA
ROUTE MARKER ASSEMBLY
(D)

SYMBOL	MESSAGE	CODE	TYPE	QUANTITY
(A)	Advanced Detour RMA			3
(B)	Directional Detour RMA			4
(C)	Confirming Detour RMA			2
(D)	End Detour RMA			1
(12)	DETOUR AHEAD	XW20-2	A	1
(15)	ROAD CLOSURE SIGN ASSEMBLY	R11-2	RCSA	1
(16)	ROAD CLOSED TO THRU TRAFFIC	R4-11	RCSA	1
(32)	ROAD CLOSED AHEAD	W20-3	A	1

LEGEND

- DETOUR ROUTE MARKER ASSEMBLY
- TRAFFIC SIGNS
- TRAFFIC FLOW
- DETOUR ROUTE
- AREA OF CLOSURE

NOTE:
1. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE SIGNS AND PLACEMENT OF SAID SIGNS IN COMPLIANCE WITH THE IMUTCD (LATEST EDITION) AND THE CURRENT INDOT STANDARDS.
2. MAINTAIN INGRESS & EGRESS TO PROPERTIES AT ALL TIMES.
3. VINE STREET TO BECOME 2-WAY DURING DETOUR PHASE.

DONNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

DETOUR ROUTE
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

Headquarters
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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	20 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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57+00 58+00 59+00 60+00 61+00 62+00 63+00

SEQUENCE OF OPERATIONS

1. Place temporary pavement markings, signage and channelizing devices and remove existing pavement markings as needed. Cover lane usage signs as needed.
2. Contractor responsible for maintaining pedestrian traffic per MUTCD and restricting jay walking between crosswalks with physical barriers.
3. Construct curbs, ramps, pedestrian refuge, median, lighting, signals, signage, and signalization. Utilize Flagging operations as needed.
4. Remove sidewalk at station 103+85 "B" utilizing flagger operations as needed.
5. Maintain ingress & egress to all properties for pedestrians and vehicles at all times.

BEGIN PROJECT
P.O.T. Sta. 59+08.65 "B"

LINE "B"

P.C. Sta. 57+71.30 "B"

P.O.T. Sta. 58+98.19 "B" =
P.O.T. Sta. 49+02.04 "F"

P.T. Sta. 58+88.78 "B"

NORTH STREET

P.O.T. Sta. 62+92.42 "B" =
P.O.T. Sta. 62+89.98 "E"

10' Min.

LINE "B"

NORTHWESTERN AVENUE

50+00

VINE STREET

LINE "F"

51+00

52+00

61+00

LINE "E"

WIGGINS STREET

62+00

M.O.T. Design Speed 15mph

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (1) END CONSTRUCTION XG20-2
- (2) ROAD CONSTRUCTION AHEAD XW20-1
- TRAFFIC SIGNS
- TRAFFIC FLOW

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PHASE 2
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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	21 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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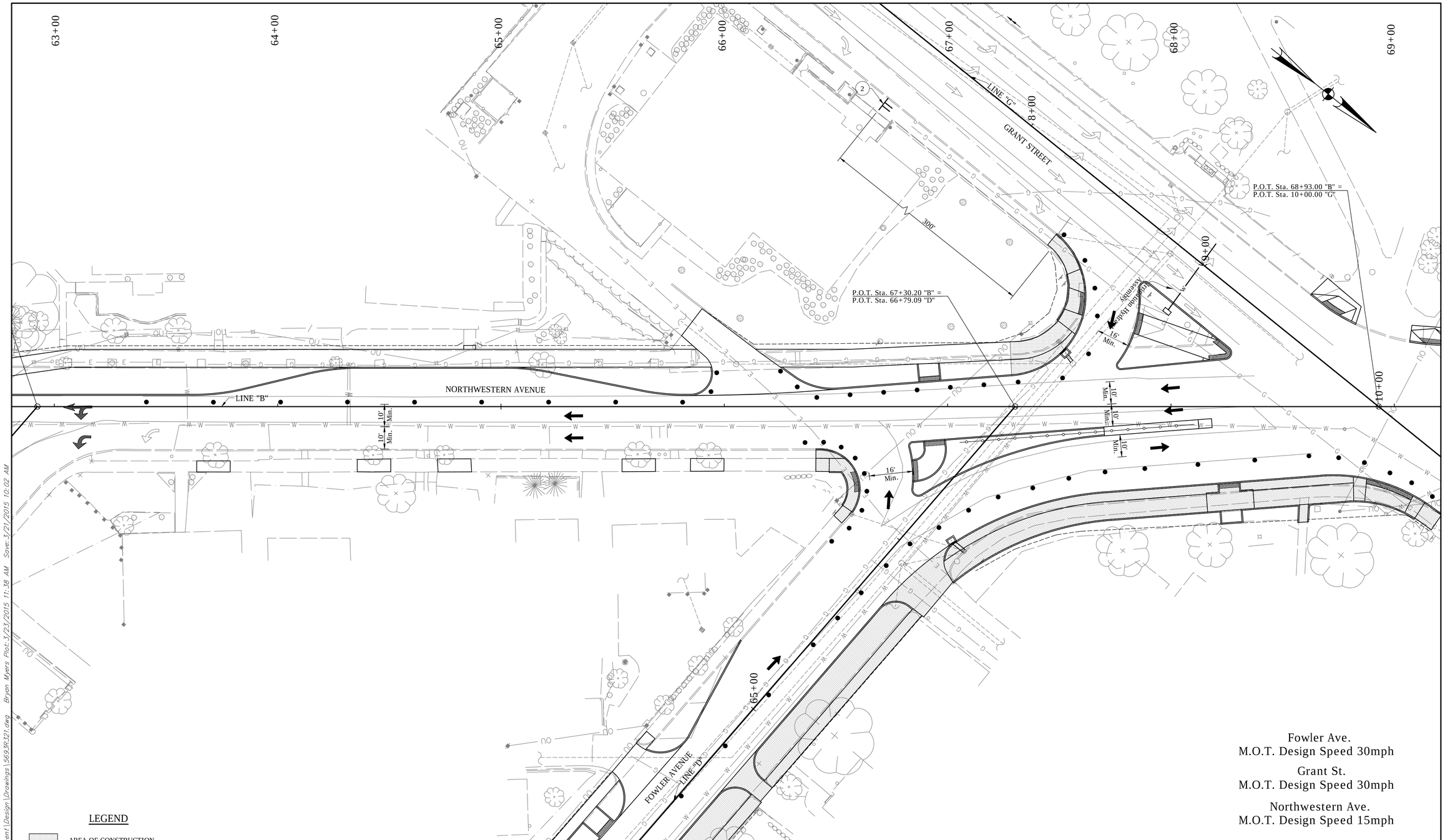

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (2) ROAD CONSTRUCTION AHEAD XW20-1
- TRAFFIC SIGNS
- TRAFFIC FLOW

Fowler Ave.
M.O.T. Design Speed 30mph

Grant St.
M.O.T. Design Speed 30mph

Northwestern Ave.
M.O.T. Design Speed 15mph

JOHNNA CARLI SHEATS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	22 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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69+00 70+00 71+00 72+00 73+00 74+00 75+00

P.O.T. Sta. 68+93.00 "B" =
P.O.T. Sta. 10+00.00 "G"

10+00

LINE "B"

NORTHWESTERN AVENUE

11+00

LINE "G"

12+00

13+00

1

2

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (1) END CONSTRUCTION XG20-2
- (2) ROAD CONSTRUCTION AHEAD XW20-1
- TRAFFIC SIGNS
- TRAFFIC FLOW

Northwestern Ave.
M.O.T. Design Speed 15mph

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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	23 OF 72
CONTRACT	PROJECT

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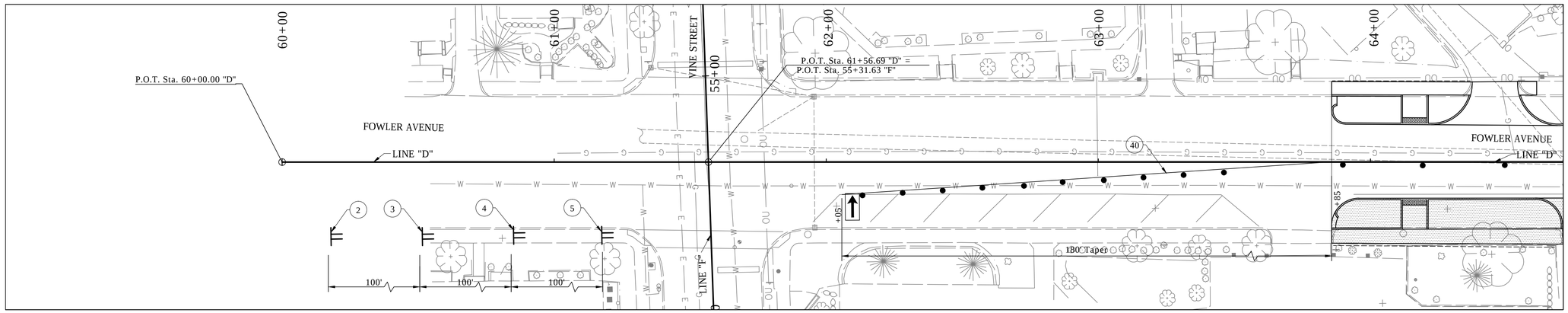

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT AS REQ'D.
- (2) ROAD CONSTRUCTION AHEAD — XW20-1
- (3) LANE CLOSED AHEAD — XW20-5 (L)(R)
- (4) LANE ENDS MERGE — XW9-2 (L)(R)
- (5) MERGE LEFT, RIGHT — XW4-2 (L)(R)
- (40) TEMP. PAVEMENT MARKINGS, SOLID WHITE, 4"
- TRAFFIC SIGNS
- TRAFFIC FLOW

Fowler Ave.
M.O.T. Design Speed 30mph

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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 24 OF 72
CONTRACT	PROJECT

BES NO. 5693

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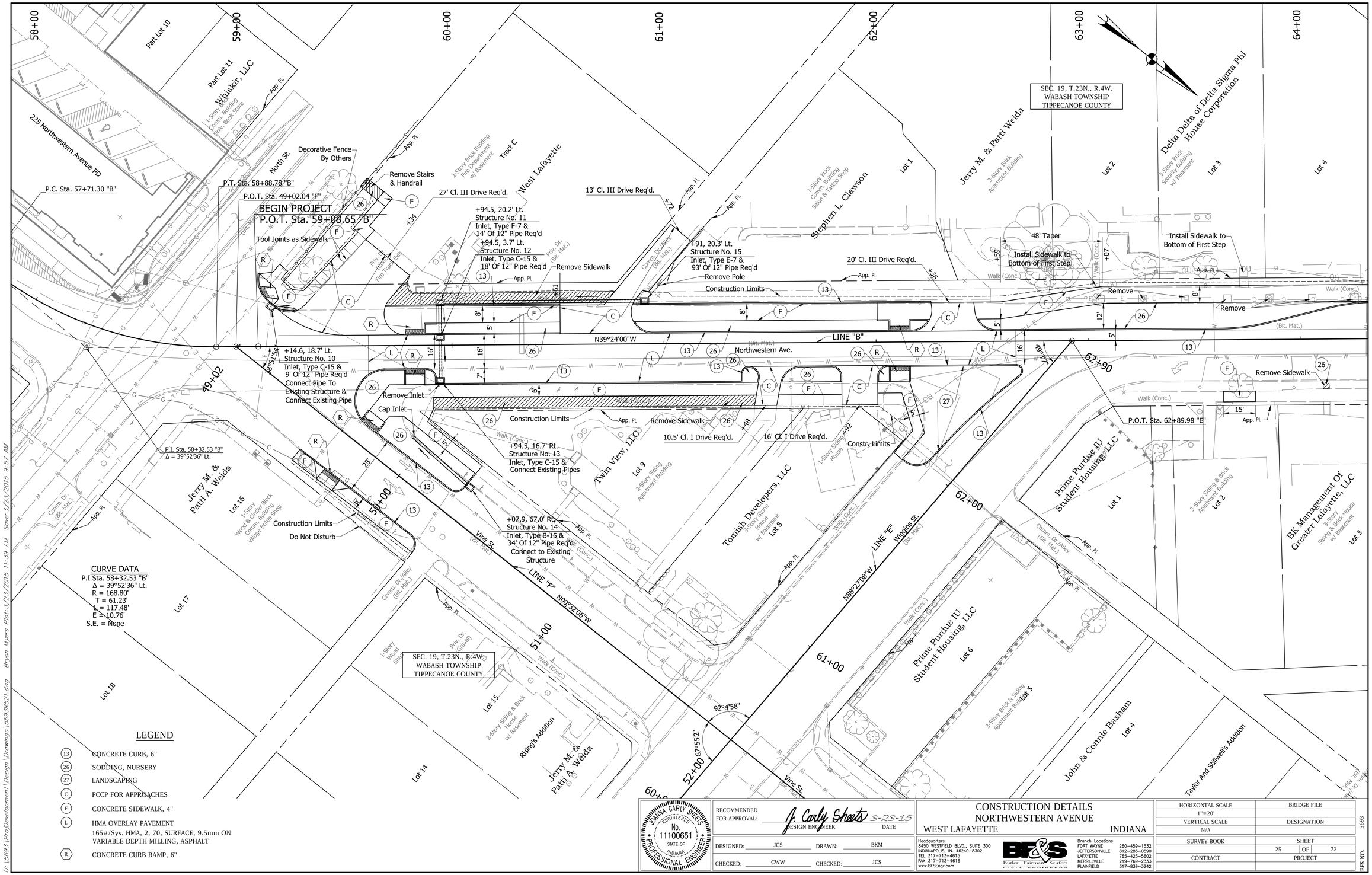

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Butler Fairman Seufert CIVIL ENGINEERS

Branch Locations
FORT WAYNE 260-459-1532
JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

CONSTRUCTION DETAILS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	25 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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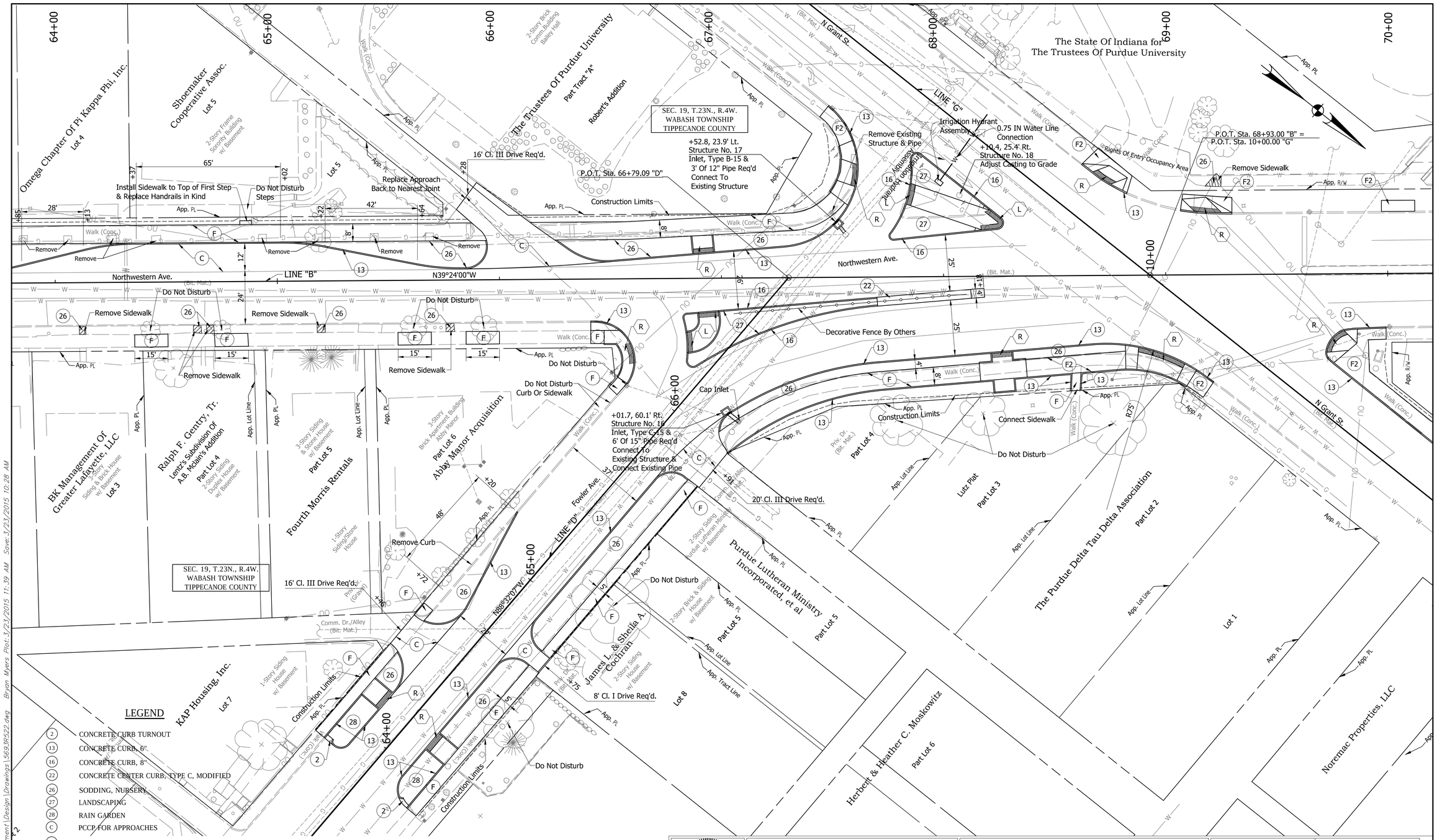

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JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

CONSTRUCTION DETAILS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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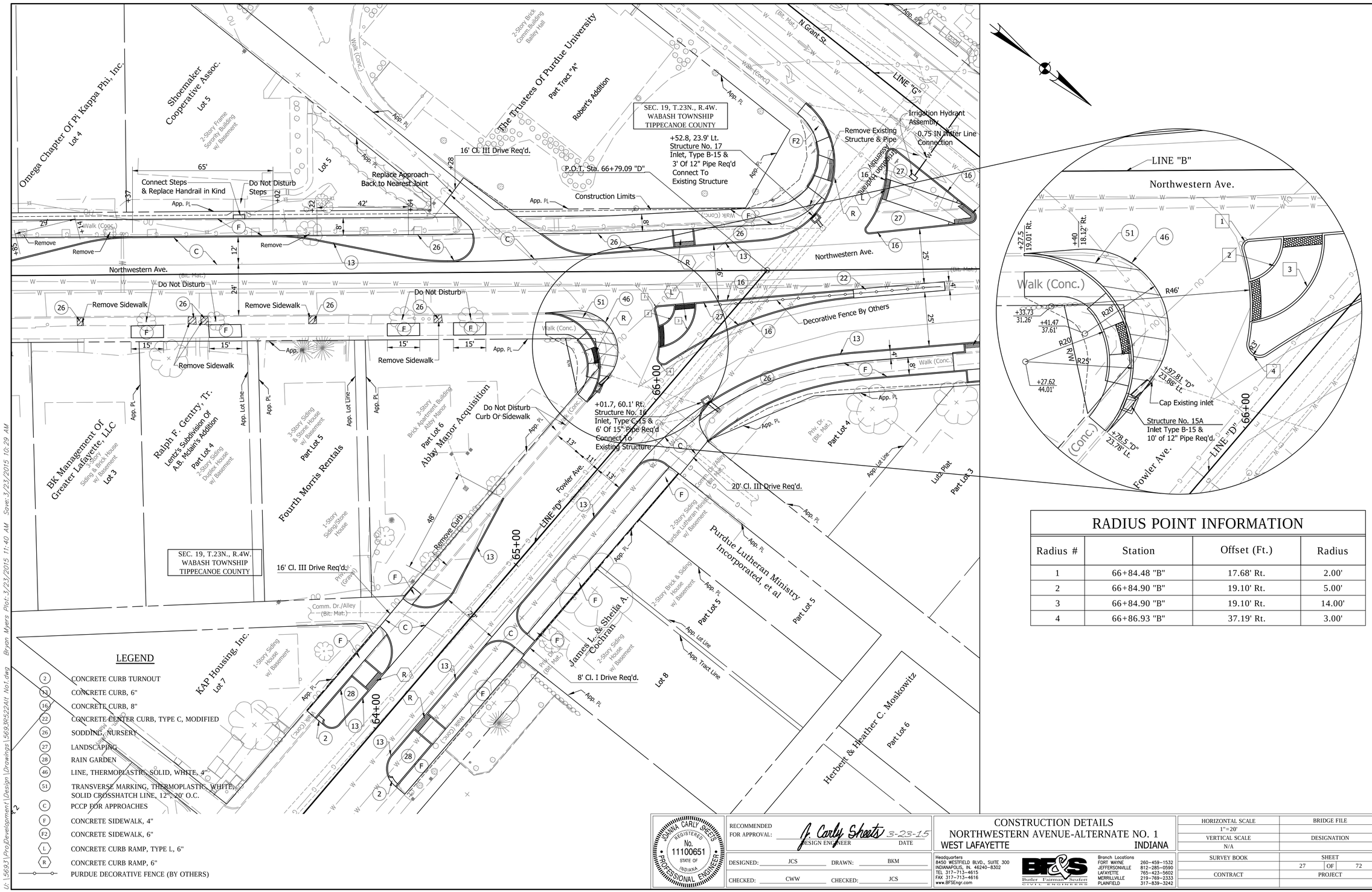
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	26 OF 72
CONTRACT	PROJECT

BFS NO. 5693



RADIUS POINT INFORMATION

Radius #	Station	Offset (Ft.)	Radius
1	66+84.48 "B"	17.68' Rt.	2.00'
2	66+84.90 "B"	19.10' Rt.	5.00'
3	66+84.90 "B"	19.10' Rt.	14.00'
4	66+86.93 "B"	37.19' Rt.	3.00'

JOANNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER — DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

CONSTRUCTION DETAILS
NORTHWESTERN AVENUE-ALTERNATE NO. 1
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
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Branch Locations
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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 27 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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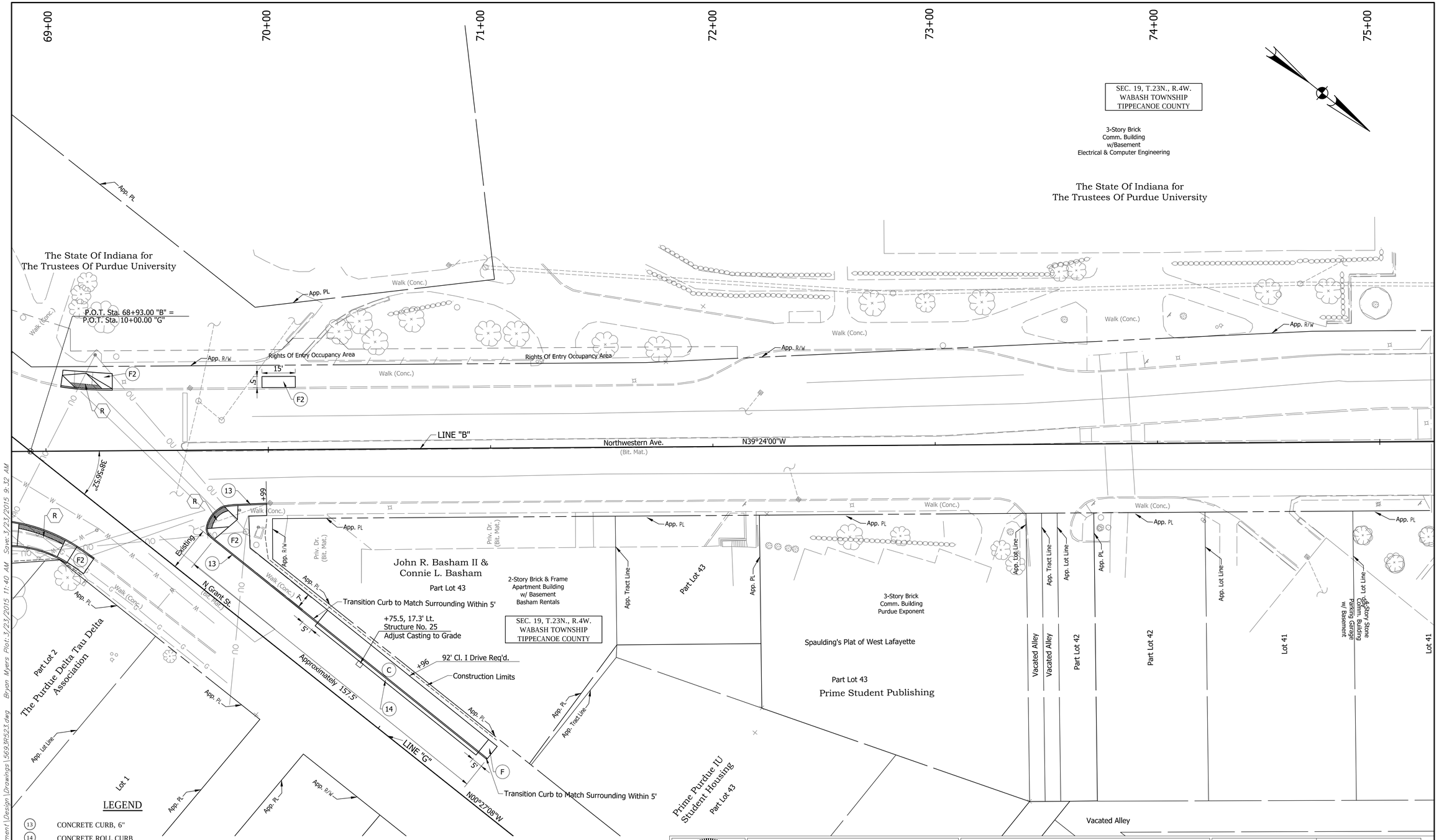

LEGEND

13	CONCRETE CURB, 6"
14	CONCRETE ROLL CURB
26	SODDING, NURSERY
C	PCCP FOR APPROACHES
F	CONCRETE SIDEWALK, 4"
F2	CONCRETE SIDEWALK, 6"
R	CONCRETE CURB RAMP

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
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CONSTRUCTION DETAILS
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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 28 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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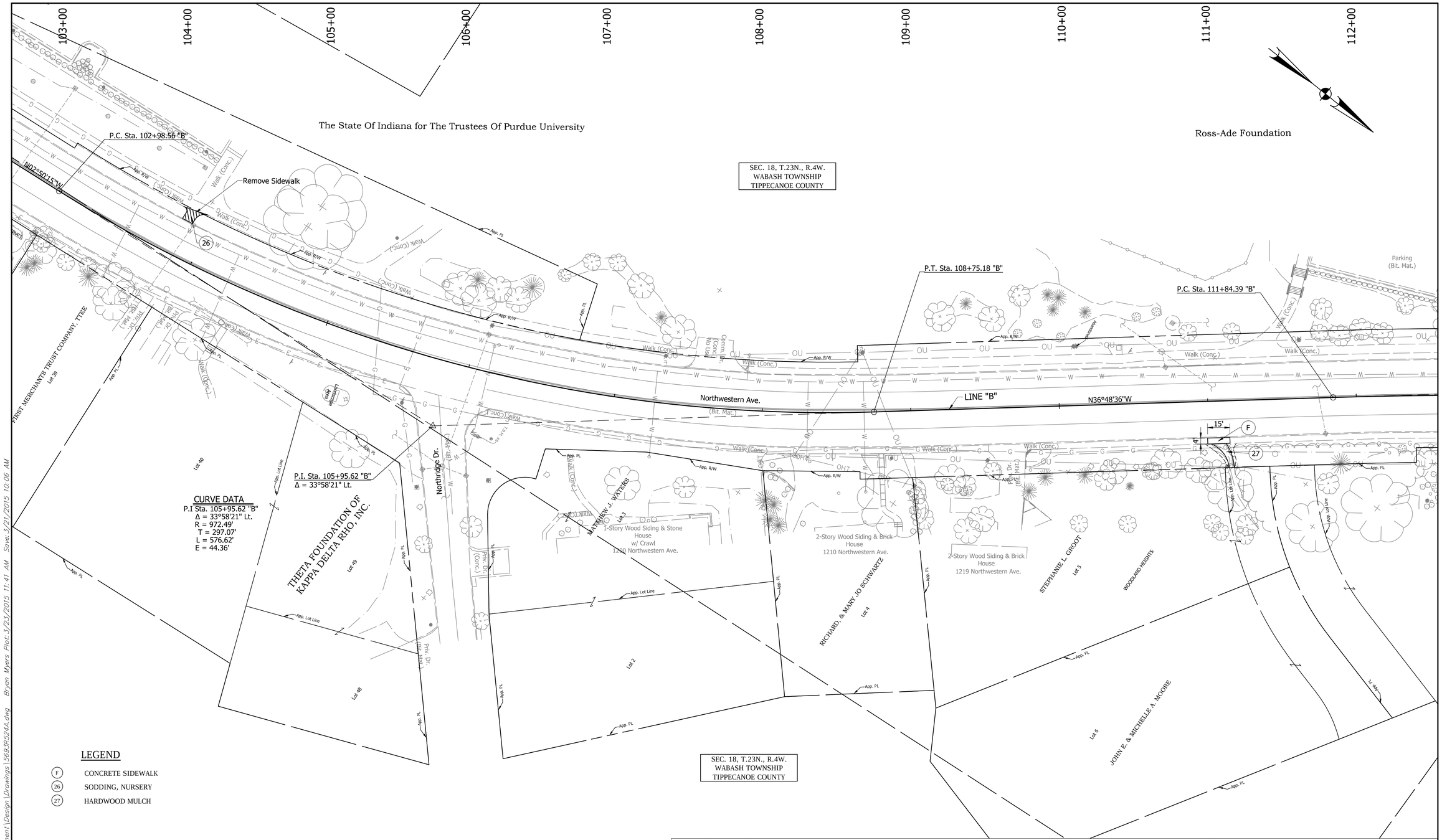

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JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

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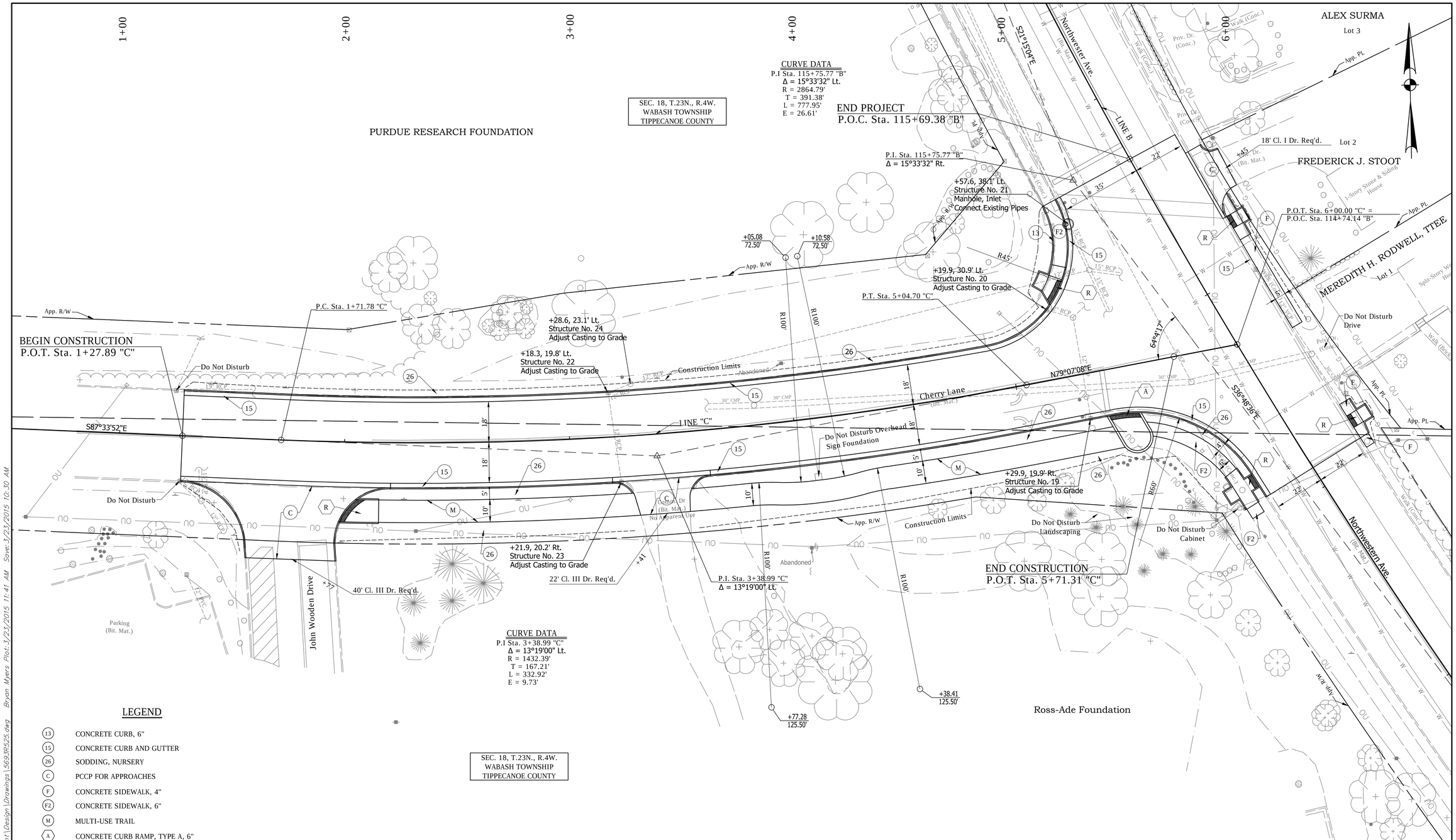
PLAINFIELD 317-839-3242

HORIZONTAL SCALE 1"=30'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION
SURVEY BOOK	SHEET 29 OF 72
CONTRACT	PROJECT

BFS NO. 5693



LEGEND

13	CONCRETE CURB, 6"
15	CONCRETE CURB AND GUTTER
26	SODDING, NURSERY
C	PCCP FOR APPROACHES
F	CONCRETE SIDEWALK, 4"
F2	CONCRETE SIDEWALK, 6"
M	MULTI-USE TRAIL
A	CONCRETE CURB RAMP, TYPE A, 6"
R	CONCRETE CURB RAMP, 6"

SEC. 18, T.23N., R.4W.
WABASH TOWNSHIP
TIPPECANOE COUNTY

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

CONSTRUCTION DETAILS
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WEST LAFAYETTE INDIANA

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 30 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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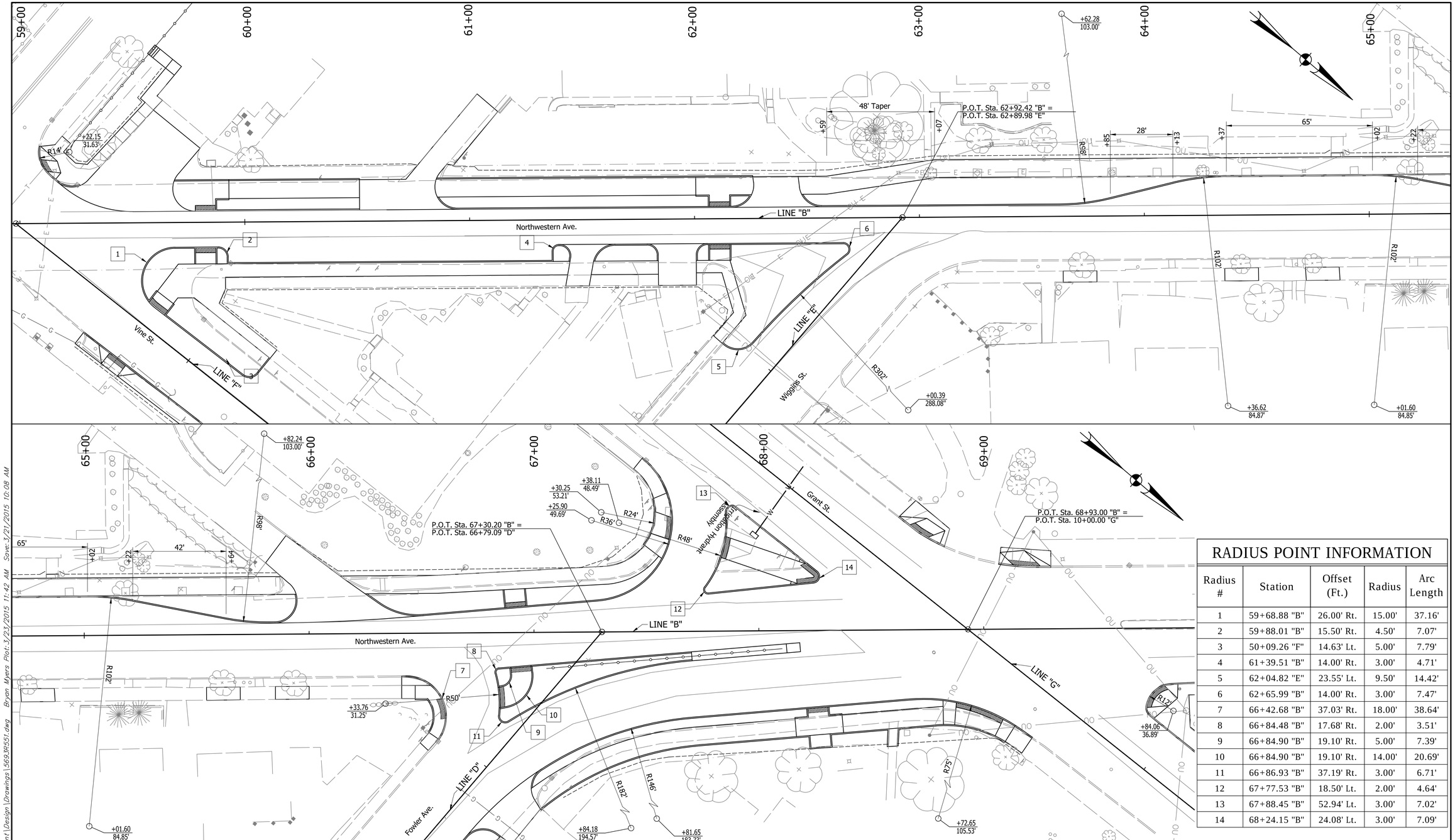

RADIUS POINT INFORMATION

Radius #	Station	Offset (Ft.)	Radius	Arc Length
1	59+68.88 "B"	26.00' Rt.	15.00'	37.16'
2	59+88.01 "B"	15.50' Rt.	4.50'	7.07'
3	50+09.26 "F"	14.63' Lt.	5.00'	7.79'
4	61+39.51 "B"	14.00' Rt.	3.00'	4.71'
5	62+04.82 "E"	23.55' Lt.	9.50'	14.42'
6	62+65.99 "B"	14.00' Rt.	3.00'	7.47'
7	66+42.68 "B"	37.03' Rt.	18.00'	38.64'
8	66+84.48 "B"	17.68' Rt.	2.00'	3.51'
9	66+84.90 "B"	19.10' Rt.	5.00'	7.39'
10	66+84.90 "B"	19.10' Rt.	14.00'	20.69'
11	66+86.93 "B"	37.19' Rt.	3.00'	6.71'
12	67+77.53 "B"	18.50' Lt.	2.00'	4.64'
13	67+88.45 "B"	52.94' Lt.	3.00'	7.02'
14	68+24.15 "B"	24.08' Lt.	3.00'	7.09'

NOTE: All Station Offsets From Line "B" Unless Otherwise Noted.

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

GEOMETRIC DETAILS
WEST LAFAYETTE INDIANA

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 31 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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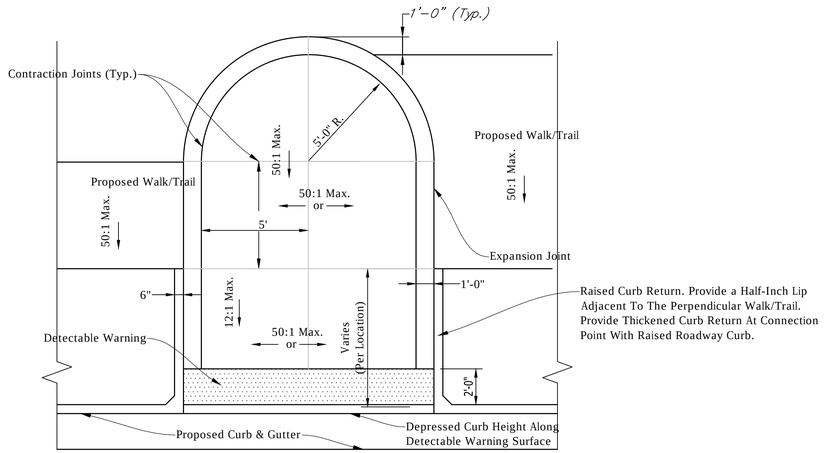
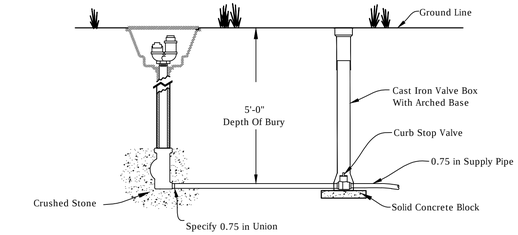


CONCRETE CURB RAMP, TYPE "A"

Scale: Not To Scale

NOTE:
1. 12:1 Max. Longitudinal Slope, 50:1 Max. Cross Slope
2. 50:1 Max. Longitudianl Slope At Trail/Sidewalk Crossings.
3. 4'x4' Level (50:1x50:1 Max.) Landing Shall Be Provided Within Ramp.
4. 6" Class A Concrete, on 6" Compacted Agg., No. 53, Base.



Irrigation Hydrants Shall Be Murdock M-V476 Irrigation Hydrants As Manufactured By Murdock., City of Industry, CA

Irrigation Hydrants Shall Be Self-Draining, Non-Freezing, Compression Type. Inlet Connection Shall Be 0.75 in Or 1" IP. Outlet Shall Be 0.75 in IP Or GHT, Or 1" IP.

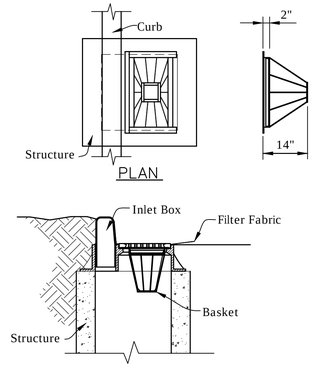
Irrigation Hydrants Shall Have A Steel Pipe Riser With A Cast Iron Box And Locking Lid. Principal Interior Operating Parts Shall Be Brass And Removable From Street Washer For Servicing Without Excavation.

Irrigation Hydrants Shall Be Set In 4 Cubic Feet Of Crushed Stone

IRRIGATION HYDRANT ASSEMBLY

Scale: None

NOTE:
IRRIGATION HYDRANT ASSEMBLY AND WATER SERVICE CONNECTION TO BE BID AS ALTERNATE NO. 3



NOTES:

Installation:
Install Basket Curb Inlet Protection As Soon As Inlet Boxes Are Installed (New Development) Or Prior To Land Disturbing Activities (Existing Development).

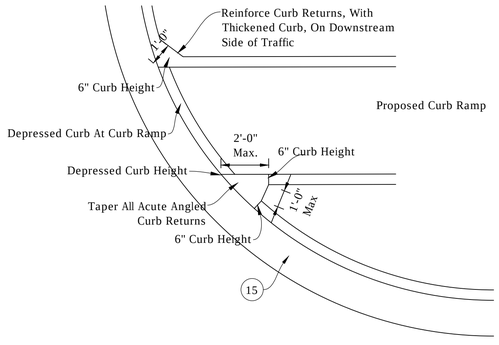
If Necessary, Adapt Basket Dimensions To Fit Inlet Box Dimensions.

Remove The Grate And Install The Frame Into The Grate Opening. Cut And Install Geotextile Fabric According To The Manufacturer's Recommendations. Replace The Grate.

Maintenance:
Inspect Daily And After Each Storm And Remove Sediment. Replace Or Clean Geotextile Fabric As Needed. Remove Tracked On Sediment From The Street (But Not By Flushing With Water) To Reduce The Sediment Load On This Curb Inlet Practice.

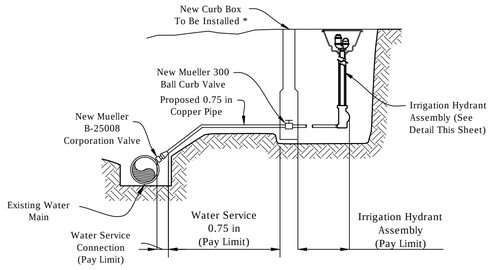
BASKET CURB INLET PROTECTION DETAIL

Scale: N.T.S.



CURB RAMP CURB RETURN DETAIL

Scale: Not To Scale



SERVICE CONNECTION / IRRIGATION HYDRANT ASSEMBLY DETAIL

Scale: None

NOTE:
IRRIGATION HYDRANT ASSEMBLY TO BE BID AS ALTERNATE NO. 3

* Curb Boxes Shall Be Of The "Arch" Type And Shall Be As Manufactured By A.Y. McDonald Mfg. Co.

JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

MISCELLANEOUS DETAILS
WEST LAFAYETTE INDIANA

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INDIANAPOLIS, IN. 46240-8302
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Butler Fairman & Seufert ENGINEERS

Branch Locations
FORT WAYNE 260-459-1532
JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
As Shown	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	32 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\ProDevelopment\Design\Drawings\5693R561.dwg Bryan Myers Plot:3/23/2015 11:42 AM Save:3/23/2015 9:29 AM

58+00
59+00
60+00
61+00
62+00
63+00
64+00
64+00
68+00

BEGIN PROJECT
P.O.T. Sta. 59+08.65 "B"

P.O.T. Sta. 58+98.19 "B" =
P.O.T. Sta. 49+02.04 "F"

P.C. Sta. 57+71.30 "B"

P.T. Sta. 58+88.78 "B"

P.O.T. Sta. 62+92.42 "B" =
P.O.T. Sta. 62+89.98 "E"

NORTH STREET

LINE "B"

NORTHWESTERN AVENUE

VINE STREET

LINE "F"

WIGGINS STREET

LINE "E"

+92
+41
+55
+83

610
611
612
613
614
615
616
617

EROSION CONTROL SYMBOL LEGEND

CW	Concrete Washout	SF	Silt Fence
	Curb Inlet Protection		

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

EROSION CONTROL PLAN
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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INDIANAPOLIS, IN. 46240-8302
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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	33 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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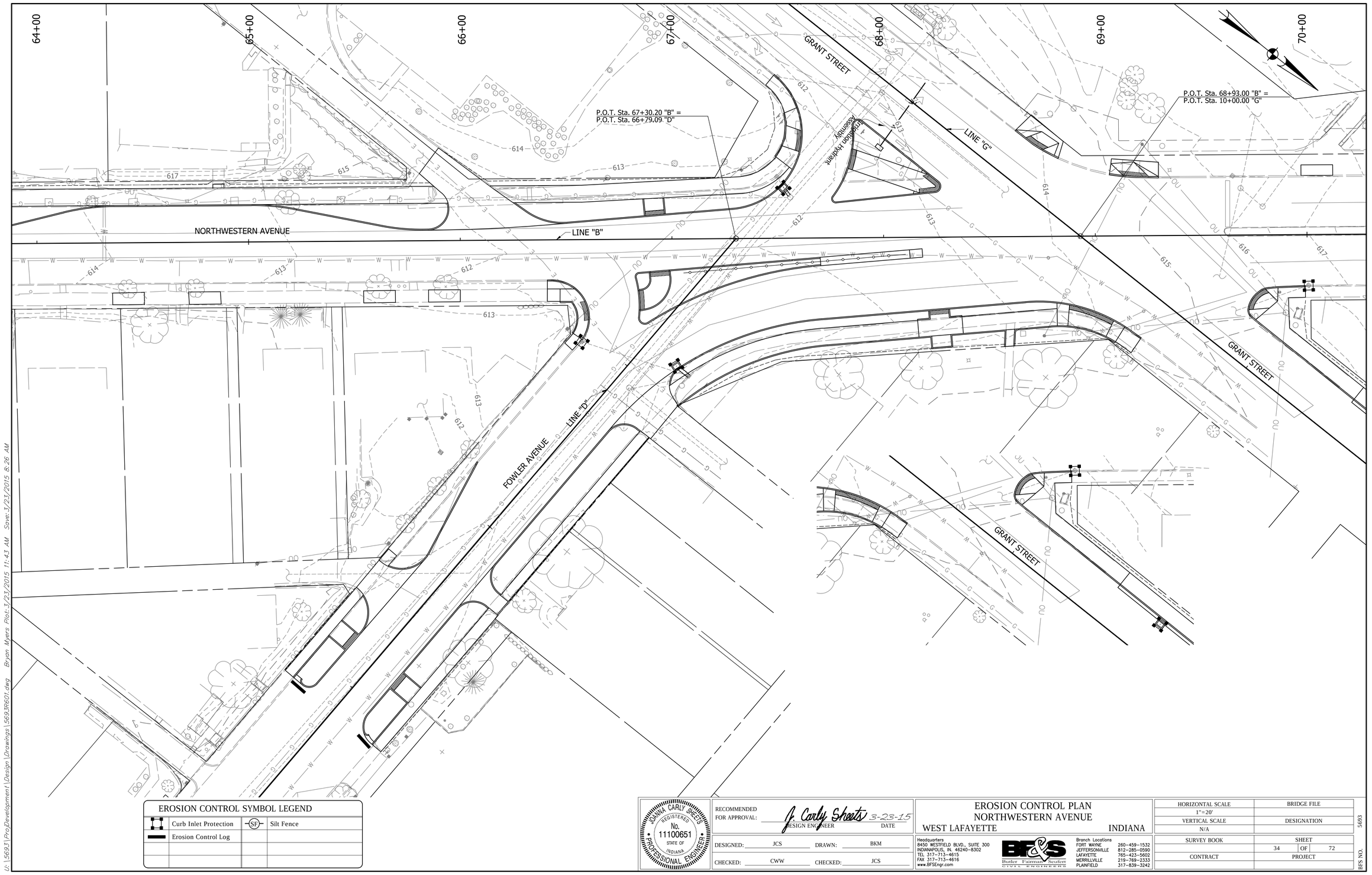

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EROSION CONTROL SYMBOL LEGEND

	Curb Inlet Protection	SF	Silt Fence
	Erosion Control Log		

JOANNA CARLY SHEETS
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EROSION CONTROL PLAN
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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	34 OF 72
CONTRACT	PROJECT

BFS NO. 5693

107+00 108+00 109+00 110+00 111+00 112+00 113+00

P.T. Sta. 108+75.18 "B"

P.C. Sta. 111+84.39 "B"

LINE "B"

NORTHWESTERN AVENUE

+93 +33

660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678

EROSION CONTROL SYMBOL LEGEND	
SF	Silt Fence

JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

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EROSION CONTROL PLAN
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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 35 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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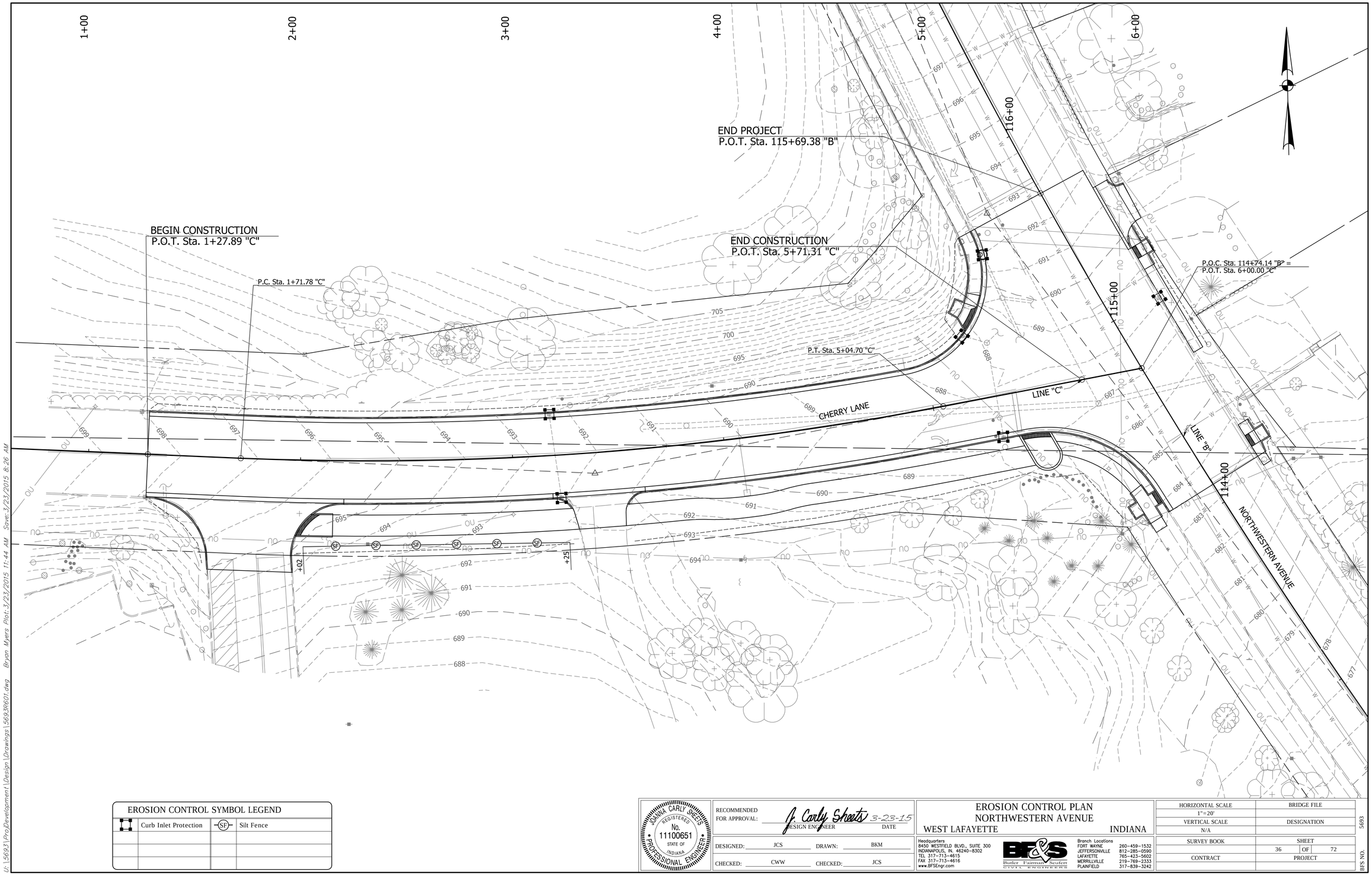

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EROSION CONTROL SYMBOL LEGEND

	Curb Inlet Protection	SF	Silt Fence

JOANNA CARLY SHEETS
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PROFESSIONAL ENGINEER

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EROSION CONTROL PLAN
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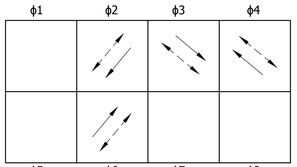
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

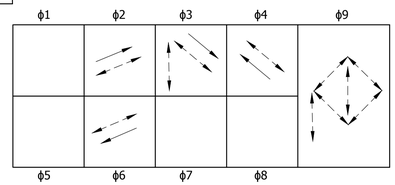
HORIZONTAL SCALE 1"=20'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION
SURVEY BOOK	SHEET 36 OF 72
CONTRACT	PROJECT

BFS NO. 5693

65+00 66+00 67+00 68+00 69+00 70+00 71+00



EXISTING PHASE DIAGRAM



REVISED PHASE DIAGRAM

EXISTING LOOP TAG TABLE	
LANE	TAG NUMBER
NLA	NLA3 - 1,2,3,4
NLB	NLB3 - 1,2,3,4
NA	NA3 - 1,2,3,4
SL	SL4 - 1,2,3,4
SA	SA4 - 1,2,3,4

GRANT STREET (25 mph)

NLA NLB NA

P.O.T. Sta. 67+30.20 "B" = P.O.T. Sta. 66+79.09 "D"

LINE "B"

LINE "D"

FOWLER AVENUE (30 mph)

Abandoned Strain Pole Foundation Shall Be Removed 18" Below Grade

P.O.T. Sta. 68+93.00 "B" = P.O.T. Sta. 10+00.00 "G"

NORTHWESTERN AVENUE (25 mph)

Abandoned Strain Pole Foundation Shall Be Removed 18" Below Grade

Relocate Existing Span Mounted Sign "To Wiggins"

Relocate Existing Span Mounted Sign "To Wiggins & Northwestern"

LINE "G"

GRANT STREET (30 mph)

SA

DETAIL A

DETAIL A
Abandoned Strain Pole Foundation
Shall Be Removed

LEGEND

- TRAFFIC SIGNAL HEAD, 3 FACE, 12": RED, AMBER, GREEN, POLYCARBONATE, W/BACKPLATE AND TAPE
- TRAFFIC SIGNAL HEAD, 3 FACE, 12": RED, LT. AMBER ARROW, LT. GREEN ARROW, POLYCARBONATE, W/BACKPLATE AND TAPE
- TRAFFIC SIGNAL HEAD, 5 FACE, 12": RED, AMBER, GREEN, LT. AMBER ARROW, LT. GREEN ARROW, POLYCARBONATE, W/BACKPLATE AND TAPE
- COUNTDOWN PEDESTRIAN SIGNAL HEAD, 18" INTERNATIONAL SYMBOLS
- COUNTDOWN PEDESTRIAN SIGNAL HEAD, 18" INTERNATIONAL SYMBOLS AND ACCESSIBLE PEDESTRIAN PUSHBUTTON W/ R10-3e SIGN ON EXTENSION BRACKET
- 4' REINFORCED 2" X 2" SIGN POST, BLACK AND ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON W/R10-3e SIGN ON EXTENSION BRACKET
- 10' SIGNAL PEDESTAL ON "A" FOUNDATION
- SIGNAL CANTILEVER STRUCTURE AND FOUNDATION
- EXISTING CONTROLLER AND "P-1" CABINET ON "P-1" FOUNDATION
- 1 30' SIGNAL CANTILEVER ARM
- 2 35' SIGNAL CANTILEVER ARM
- 3 35' CANTILEVER FOR SIGNS
- 4 45' SIGNAL CANTILEVER ARM
- EXISTING SIGNAL HANDHOLE, TYPE I
- SIGNAL HANDHOLE, TYPE II
- 2" CONDUIT
- EXISTING 2" CONDUIT
- EXISTING SERVICE POINT
- SPAN MOUNTED SIGN
- ANTENNA FOR RADIO INTERCONNECT (ALTERNATE 4)
- EXISTING DETECTOR HOUSING

1. ADJUST EXISTING SIGNAL HANDHOLE TO GRADE.
2. EXISTING SIGNAL CABINET, CABINET FOUNDATION, CONTROLLER, OTHER IN-CABINET EQUIPMENT, ACTUATION LOOPS, DETECTOR HOUSINGS, ACTUATION WIRING, CONDUIT AND HANDHOLES TO REMAIN.
3. ALL SIGNAL STRAIN POLES SHALL BE REMOVED AND SALVAGED.
4. ALL EXISTING SPAN, CANTENARY AND TETHERS SHALL BE REMOVED.
5. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED AND SALVAGED.
6. ALL EXISTING SPAN MOUNTED SIGNAL SIGNS SHALL BE REMOVED AND SALVAGED.
7. ALL EXISTING PEDESTRIAN SIGNAL PEDESTALS, PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS W/ SIGN SHALL BE REMOVED AND SALVAGED. ALL EXISTING PEDESTAL FOUNDATIONS SHALL BE REMOVED.
8. SOME EXISTING SIGNAL EQUIPMENT THAT IS NOT BEING MODERNIZED BY THIS PROJECT IS NOT SHOWN FOR CLARITY.
9. GRANT STREET SOUTH OF NORTHWESTERN AVENUE MAY BE CONVERTED TO TWO-WAY TRAFFIC IN THE FUTURE. THEREFORE, THE VERTICAL POLES FOR THE SIGNAL CANTILEVER ARMS SHALL ALLOW FOR FUTURE CONVERSIONS TO LONGER OR SHORTER CANTILEVER ARMS. POSSIBLE FUTURE CONVERSIONS INCLUDE:
   SOUTHBOUND APPROACH ALONG GRANT STREET: EXTEND FROM 30' ARM TO 35' ARM.
   NORTHBOUND APPROACH ALONG GRANT STREET: SHORTEN FROM 45' ARM TO 35' ARM.

THOMAS S. VANDERBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderberg 3-23-15
DESIGN ENGINEER DATE

DESIGNED: TSV DRAWN: JDM
CHECKED: CWW CHECKED: TSV

SIGNAL DETAIL
NORTHWESTERN AVE. & GRANT ST.
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
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FAX 317-713-4616
www.BFSEngr.com

Butler Fairman Seufert CIVIL ENGINEERS

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JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
NA	
SURVEY BOOK	SHEET
	37 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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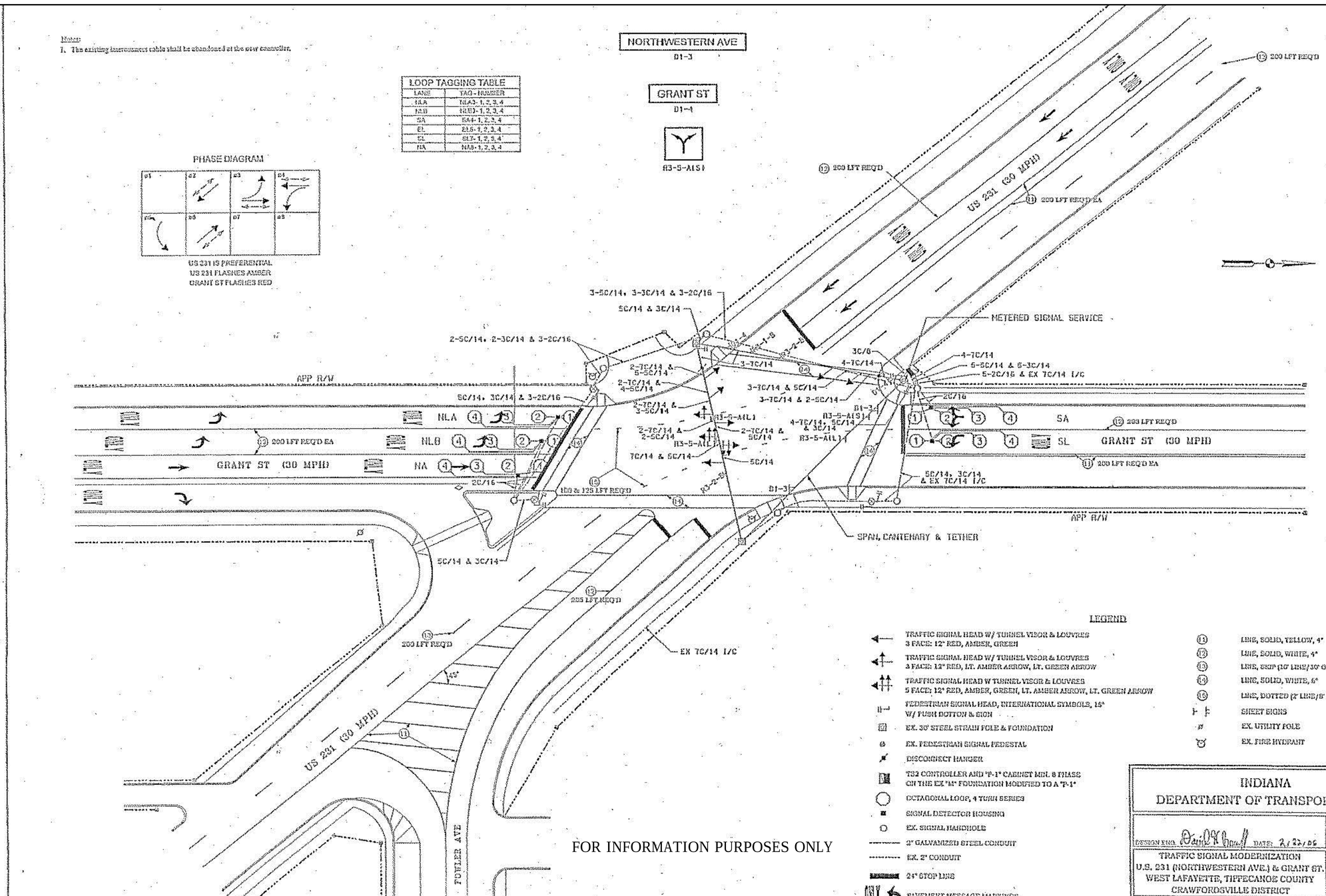
Notes:
1. The existing interconnect cable shall be abandoned at the new controller.

LOOP TAGGING TABLE	
LANE	TAG - NUMBER
NLA	NLA3-1, 2, 3, 4
NLB	NLB3-1, 2, 3, 4
SA	SA4-1, 2, 3, 4
SL	SL5-1, 2, 3, 4
SL	SL7-1, 2, 3, 4
NA	NA8-1, 2, 3, 4

PHASE DIAGRAM

US 231 IS PREFERENTIAL
US 231 FLASHES AMBER
GRANT ST FLASHES RED



FOR INFORMATION PURPOSES ONLY

LEGEND

- TRAFFIC SIGNAL HEAD W/ TUNNEL VISOR & LOUVRES, 3 FACE: 12" RED, AMBER, GREEN
- TRAFFIC SIGNAL HEAD W/ TUNNEL VISOR & LOUVRES, 3 FACE: 12" RED, LT. AMBER ARROW, LT. GREEN ARROW
- TRAFFIC SIGNAL HEAD W TUNNEL VISOR & LOUVRES, 5 FACE: 12" RED, AMBER, GREEN, LT. AMBER ARROW, LT. GREEN ARROW
- PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOLS, 15" W/ PUSH BOTTON & SIGN
- EX. 30' STEEL STRAIN POLE & FOUNDATION
- EX. PEDESTRIAN SIGNAL PEDESTAL
- DISCONNECT HANGER
- TS2 CONTROLLER AND "P-1" CABINET MIN. 8 PHASE ON THE EX "M" FOUNDATION MODIFIED TO A "P-1"
- OCTAGONAL LOOP, 4 TURN SERIES
- SIGNAL DETECTOR HOUSING
- EX. SIGNAL HANDHOLE
- 2" GALVANIZED STEEL CONDUIT
- EX. 2" CONDUIT
- 24" STOP LINE
- PAVEMENT MESSAGE MARKINGS
- 11 LINE, SOLID, YELLOW, 4"
- 12 LINE, SOLID, WHITE, 4"
- 13 LINE, SKIP (10' LINE/30' GAP), WI
- 14 LINE, SOLID, WHITE, 6"
- 15 LINE, DOTTED (2' LINE/8' GAP), \
- SHEET SIGNS
- EX. UTILITY POLE
- EX. FIRE HYDRANT

INDIANA
DEPARTMENT OF TRANSPORTA

DESIGN ENG. Adam D. Hall DATE: 2/27/06

TRAFFIC SIGNAL MODERNIZATION
U.S. 231 (NORTHWESTERN AVE.) & GRANT ST.
WEST LAFAYETTE, TIPPECANOE COUNTY
CRAWFORDSVILLE DISTRICT

RECOMMENDED FOR APPROVAL: 3-23-15
DESIGN ENGINEER DATE

DESIGNED: TSV DRAWN: JDM
CHECKED: CWW CHECKED: TSV

SIGNAL DETAIL
NORTHWESTERN AVE. & GRANT ST.
WEST LAFAYETTE INDIANA

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8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
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Butler Fairman & Seufert CIVIL ENGINEERS

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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	38 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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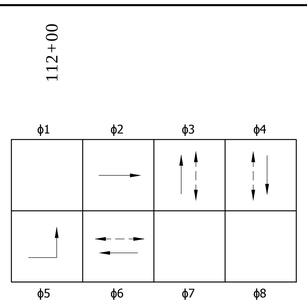
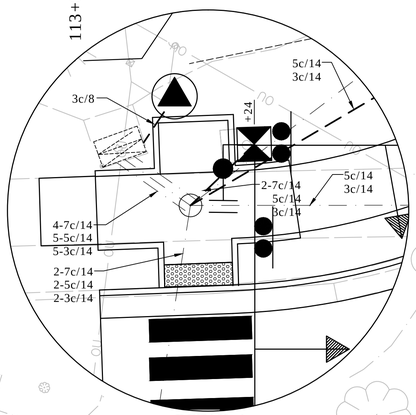


PHASE DIAGRAM



DETAIL A

EXISTING LOOP TAG TABLE	
LANE	TAG NUMBER
NL	NBLT5 - 1,2,3
NA,NB	NA, B2 - 1,2,3,1,2,3
SR	SBRT6
SA	SA - 1,2,3
EA	EA4 - 1,2,3
EA	EA4 - 4
EB	EB4 - 1,2,3
EB	EB4 - 4
WA	WA3 - 1,2

112+00 113+00 114+00 115+00 116+00 117+00 118+00

CHERRY LANE (40 mph)

EB EA

P.C. Sta. 111+84.39 "B"

P.T. Sta. 5+04.70 "C"

DETAIL A

LINE "B"

LINE "C"

ATENNA FOR RADIO INTERCONNECT (ALTERNATE 4)

Sign Type R10-15

Sign Type D3-1c

Sign Type D3-1a

Sign Type R10-12

NL/NA

NB

SR

SB

SA

NORTHWESTERN AVENUE (35 mph)

WA

P.O.C. Sta. 114+74.14 "B" =
P.O.T. Sta. 6+00.00 "C"

LEGEND

- TRAFFIC SIGNAL HEAD, 3 FACE, 12": RED, AMBER, GREEN, POLYCARBONATE, W/BACKPLATE AND TAPE
- TRAFFIC SIGNAL HEAD, 5 FACE, 12": RED, AMBER, GREEN, LT. AMBER ARROW, LT. GREEN ARROW, POLYCARBONATE, W/BACKPLATE AND TAPE
- COUNTDOWN PEDESTRIAN SIGNAL HEAD, 18" INTERNATIONAL SYMBOLS AND ACCESSIBLE PEDESTRIAN PUSHBUTTON W/ R10-3e SIGN ON EXTENSION BRACKET
- 10' SIGNAL PEDESTAL ON "A" FOUNDATION
- SIGNAL CANTILEVER STRUCTURE AND FOUNDATION
- 1 — 25' SIGNAL CANTILEVER ARM
- 2 — 30' SIGNAL CANTILEVER ARM
- SIGNAL HANDHOLE, TYPE II
- EXISTING SIGNAL HANDHOLE, TYPE I
- EXISTING LOOP, 4-TURN SERIES
- EXISTING CONTROLLER AND "P-1" CABINET ON "P-1" FOUNDATION
- EXISTING DETECTOR HOUSING
- 2" CONDUIT
- EXISTING 2" CONDUIT
- ANTENNA FOR RADIO INTERCONNECT (ALTERNATE 4)
- SERVICE POINT IN COMMERCIAL PEDESTAL
- MAST ARM OR POLE MOUNTED SIGN

1. ADJUST EXISTING SIGNAL HANDHOLE TO GRADE.
2. EXISTING SIGNAL CABINET, CABINET FOUNDATION, CONTROLLER, OTHER IN-CABINET EQUIPMENT, ACTUATION LOOPS, DETECTOR HOUSINGS, ACTUATION WIRING, CONDUIT AND HANDHOLES TO REMAIN.
3. ALL SIGNAL STRAIN POLES SHALL BE REMOVED AND SALVAGED. THE EXISTING STRAIN POLE FOUNDATION IN THE SOUTHWEST CORNER SHALL BE REMOVED. THE ABANDONED STRAIN POLE FOUNDATION IN THE NORTHEAST CORNER SHALL BE REMOVED 18" BELOW FINISHED GRADE.
4. ALL EXISTING SPAN, CANTENARY AND TETHERS SHALL BE REMOVED.
5. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED AND SALVAGED.
6. ALL EXISTING SPAN MOUNTED SIGNAL SIGNS SHALL BE REMOVED AND SALVAGED.
7. ALL EXISTING PEDESTRIAN SIGNAL PEDESTALS, PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS W/ SIGN SHALL BE REMOVED AND SALVAGED. ALL EXISTING PEDESTAL FOUNDATIONS SHALL BE REMOVED.
8. SOME EXISTING SIGNAL EQUIPMENT THAT IS NOT BEING MODERNIZED BY THIS PROJECT IS NOT SHOWN FOR CLARITY.
9. THE EXISTING LOOP TAG TABLE WAS OBTAINED FROM THE EXISTING DETECTOR RACK LABLES. THE NORTHBOUND APPROACH LEFT-TURN PHASE (PHASE 5) SHALL CONTINUE TO BE CALLED BY THE EXISTING DETECTOR CONFIGURATION.
10. THE TRAFFIC SIGNAL SERVICE POINT SHALL BE LOCATED IN A COMMERCIAL PEDESTAL AS DEFINED BY THE TECHNICAL SPECIFICATIONS IN THE PROJECT MANUAL.
11. THE EASTBOUND APPROACH SIGNAL HEADS SHALL PROVIDE A MINIMUM CLEARANCE OF 17'-6" BETWEEN THE HEADS AND THE PRIVATE DRIVEWAY GRADE.

THOMAS S. VANDERVEEN REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderveen 3-23-15
DESIGN ENGINEER DATE

DESIGNED: TSV DRAWN: JDM
CHECKED: CWW CHECKED: TSV

SIGNAL DETAIL
NORTHWESTERN AVE. & CHERRY LANE
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
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FAX 317-713-4616
www.BFSEngr.com

Butler Fairman & Seufert CIVIL ENGINEERS

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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
NA	
SURVEY BOOK	SHEET
	39 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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LOOP TAGGING TABLE		
LANE	TAG	NUMBER
EL	EL3	-1,2,3
EL	EL3	-4
EA	EA3	-1,2,3
EA	EA3	-4
NA/NB	NAB2	-1,2,1,2
SA/SB	SAB2	-1,2,1,2
WA	WA4	-1,2

NBLT - 1

EX.3c/8 SPARE

EX.4-5c/14; 2-3c/14; 2-5c/14

3c/14; 5c/14; EX.4-5c/14

EX.3-2c/16; 4-2c/16

WIRING DETAIL not to scale

S.R. 126 (CHERRY LANE)

35 mph

13.6m

2-2c/16

DH

INTERCEPT EXISTING CONDUIT WITH A NEW HANDHOLE

4-2c/16

3.1m

EX. SERVICE POINT

SEE WIRING DETAIL

3c/14; 5c/14; EX.4-5c/14

3c/14; 5c/14; EX.2c/16

3c/14; 5c/14; EX.7-5c/14

3c/14; 5c/14; EX.4-5c/14

3c/14; 5c/14; EX.8-5c/14

3c/14; 5c/14; EX.3-5c/14

3c/14; 5c/14; EX.5-5c/14

3c/14; 5c/14; EX.2-5c/14

3c/14; 5c/14; EX.5c/14

4.6m

EX.2c/16

EX. SPAN, CATENARY & TETHER CABLE

U.S. 231 (NORTHWESTERN AVE.)

35 mph

NB

SB

SA

NA

WA

7.2m

3c/14; 5c/14

5.4m

EX.2c/16

1.2m

2.0m

REMOVE 7.2m OF EXISTING STOP LINE, EXTEND CENTER LINE AND LANE LINE MARKINGS TO NEW STOP LINE.

NBLT 12/15/15

U.S. 231

FLUSH CURB

2.9m

2.2m

1.3m

1.5m

INTERCEPT ONE OF THE EXISTING CONDUIT STUBS OUTSIDE THE STRAIN POLE FOUNDATION.

PHASE DIAGRAM

Ø1 Ø2 Ø3 Ø4

U.S. 231 (NORTHWESTERN AVE.) IS PREFERENTIAL
U.S. 231 (NORTHWESTERN AVE.) FLASHES AMBER
S.R. 126 (CHERRY LANE) FLASHES RED

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6 Ø7 Ø8

UTILITY LEGEND

- LUMINAIRE
- MH UTILITY MANHOLE
- GV GAS VALVE
- WV WATER VALVE
- FIRE HYDRANT
- UTILITY POLE
- SB DRAINAGE INLET
- G GAS LINE
- W WATER LINE
- S STORM LINE

ALL UTILITIES SHOWN ARE BURIED UNLESS NOTED

LEGEND

- EXISTING TRAFFIC SIGNAL HEAD, 3 FACE, 305mm, RED, AMBER, GREEN
- EXISTING 9.1m STEEL STRAIN POLE AND FOUNDATION
- EXISTING DISCONNECT HANGER
- DH EXISTING SIGNAL DETECTOR HOUSING
- DH SIGNAL DETECTOR HOUSING
- EXISTING SIGNAL HANDHOLE
- SIGNAL HANDHOLE
- EXISTING SYSTEM LOCAL CONTROLLER AND CABINET, MENU DRIVEN, 8 PHASE ON EXISTING FOUNDATION (Model)
- 3.0m PEDESTAL AND BASE ON PEDESTAL FOUNDATION
- PEDESTRIAN SIGNAL INDICATION, 450mm (INT'L. SYMBOL)
- PEDESTRIAN PUSH BUTTON ASSEMBLY WITH R10-4D SIGN
- EXISTING STOP LINE, 600mm
- STOP LINE, THERMOPLASTIC, 600mm
- ① CROSSWALK LINE, THERMOPLASTIC, 150mm
- ② LINE, THERMOPLASTIC, SOLID, YELLOW, 100mm
- ③ LINE, THERMOPLASTIC, SOLID, WHITE, 100mm
- EXISTING SIGNAL CONDUIT
- CONDUIT, STEEL, GALVANIZED, 50mm
- EXISTING LOOP DETECTOR, OCTAGONAL, 760mm x 760mm
- LOOP DETECTOR, OCTAGONAL, 760mm x 760mm
- EXISTING PAVEMENT MESSAGE MARKINGS
- APPROXIMATE RIGHT OF WAY
- EXISTING CURB RAMP

FOR INFORMATION PURPOSES ONLY

3565.50

Pflum, Klausmeier & Gehrum Consultants, Inc.
47 SOUTH PENNSYLVANIA STREET
INDIANAPOLIS, INDIANA 46204
(317) 634-1555

COMM. NO. 01-079-081

Thomas E. Ford 2-8-01

DESIGNED: TEF	DRAWN: MAF
CHECKED:	CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION
U.S. 231 at S.R. 126 (CHERRY LANE)
W. LAFAYETTE, TIPPECANOE CO., CRAWFORDSVILLE DIST.

SCALE	BRIDGE FILE
1 : 200	
	DESIGNATION
	0900190
SURVEY BOOK	SHEETS
	2 of 4
CONTRACT	PROJECT
T-25177	STI-421-5(G)

RECOMMENDED FOR APPROVAL: _____ 3-23-15
DESIGN ENGINEER DATE

DESIGNED: TSV	DRAWN: JDM
CHECKED: CWW	CHECKED: TSV

SIGNAL DETAIL
NORTHWESTERN AVE. & CHERRY LANE
WEST LAFAYETTE INDIANA

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8450 WESTFIELD BLVD., SUITE 300
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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	40 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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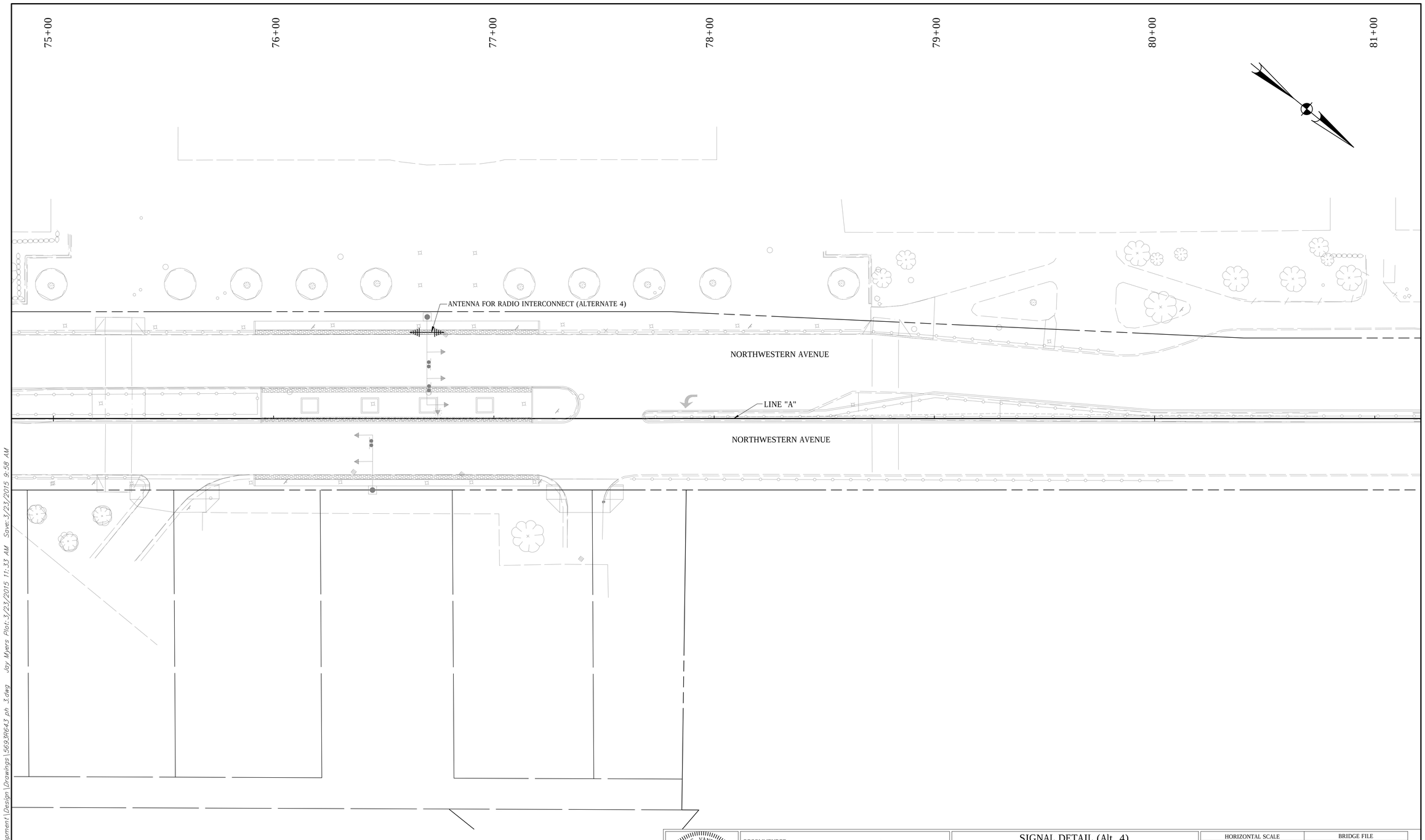

LEGEND

ANTENNA FOR RADIO INTERCONNECT (ALTERNATE 4)

S. VANDENBERG — REGISTERED — No. 10606544 — State of INDIANA — PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vandenberg 3-23-15
DESIGN ENGINEER DATE

DESIGNED: TSV DRAWN: JDM
CHECKED: JCS CHECKED: TSV

SIGNAL DETAIL (Alt. 4)
NORTHWESTERN AVE. & PEDESTRIAN MIDBLOCK
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
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Butler Fairman & Seufert CIVIL ENGINEERS

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JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 41 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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81+00

82+00

83+00

84+00

85+00

86+00

87+00

STADIUM AVENUE

ANTENNA FOR RADIO INTERCONNECT (ALTERNATE 4)

NORTHWESTERN AVENUE

LINE "A"

NORTHWESTERN AVENUE

INSTALL SUPPLIED MASTER CONTROLLER (ALT. 3 AND ALT. 4)

STADIUM AVENUE

OU

OU

OU

LEGEND

ANTENNA FOR RADIO INTERCONNECT (ALTERNATE 4)

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S. VANDERBERG — REGISTERED — No. 10606544 — State of INDIANA — PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderberg 3-23-15
DESIGN ENGINEER — DATE

DESIGNED: TSV DRAWN: JDM

CHECKED: JCS CHECKED: TSV

SIGNAL DETAIL (Alt. 4)
NORTHWESTERN AVE. & STADIUM AVE.
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
TEL 317-713-4615
FAX 317-713-4616
www.BFSEngr.com

Butler Fairman & Seufert CIVIL ENGINEERS

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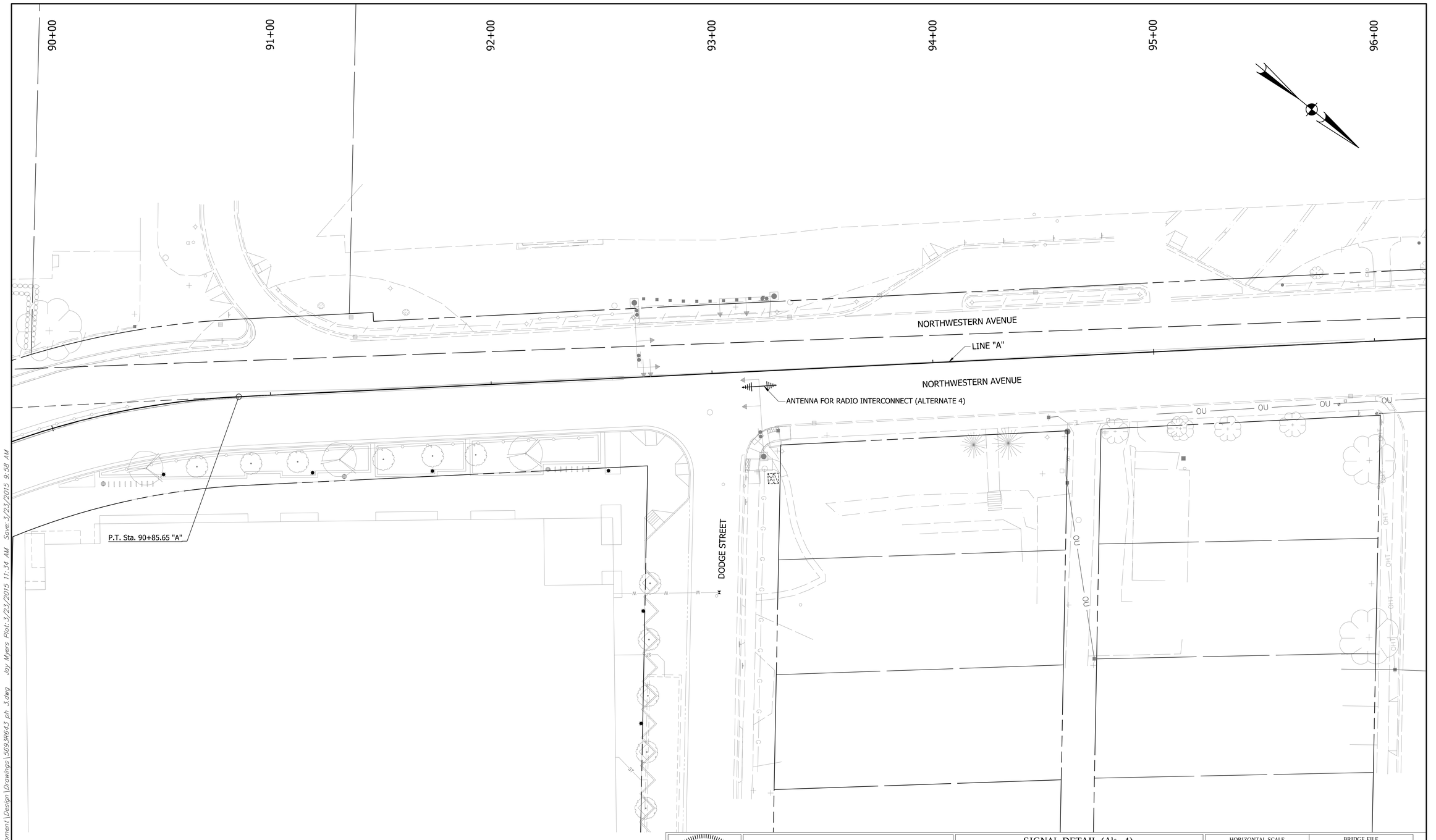
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 42 OF 72
CONTRACT	PROJECT

BFS NO. 5693



LEGEND

ANTENNA FOR RADIO INTERCONNECT (ALTERNATE 4)

U:\5693\ProjDevelopment\Design\Drawings\5693R643 ph 3.dwg Jay Myers Plot:3/23/2015 11:34 AM Save:3/23/2015 9:58 AM

THOMAS S. VANDENBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vandenberg 3-23-15
DESIGN ENGINEER DATE

DESIGNED: TSV DRAWN: JDM
CHECKED: JCS CHECKED: TSV

SIGNAL DETAIL (Alt. 4)
NORTHWESTERN AVE. & DODGE ST.
WEST LAFAYETTE INDIANA

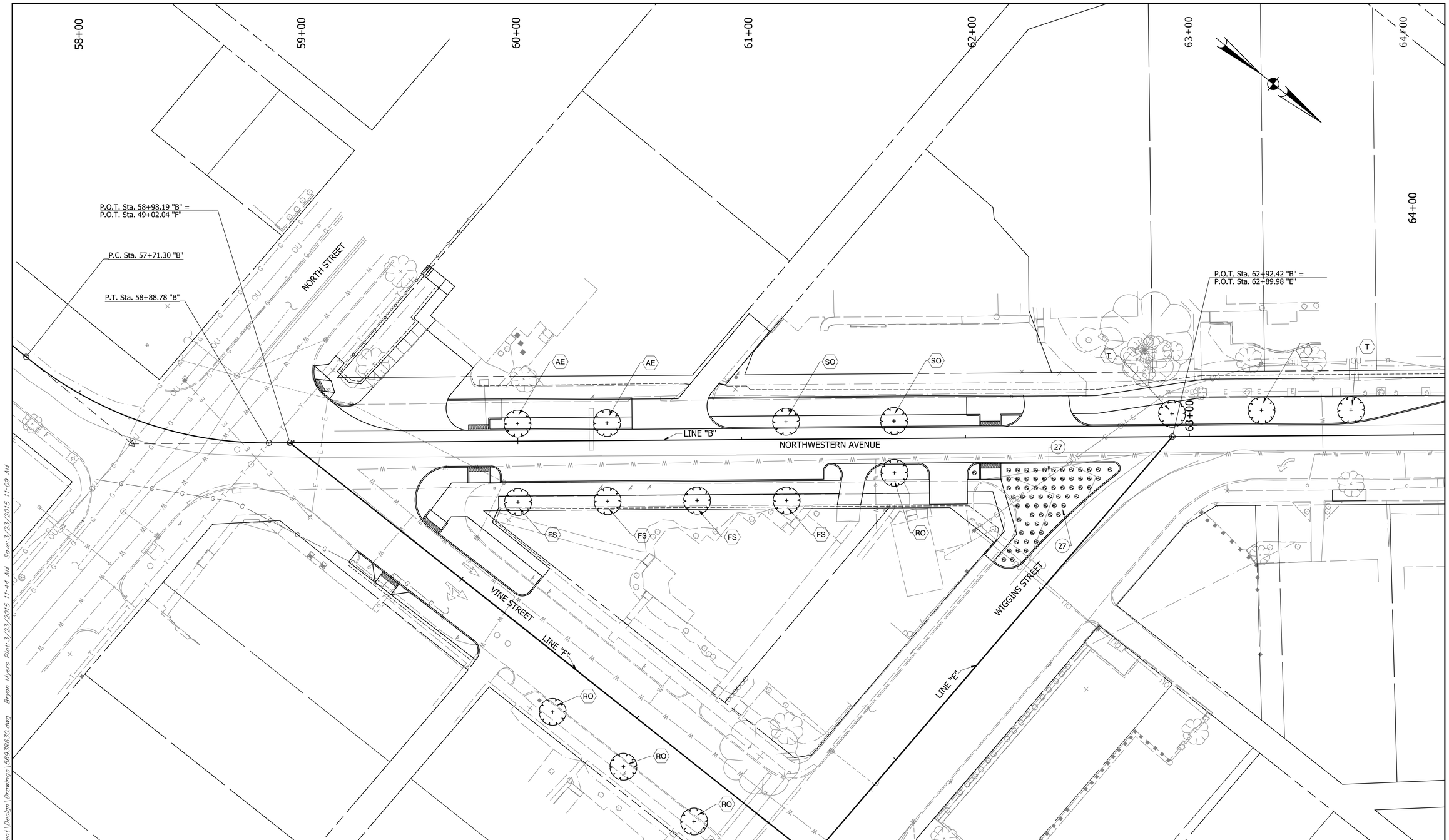
Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
TEL 317-713-4615
FAX 317-713-4616
www.BFSEngr.com

BF&S Butler Fairman Seufert CIVIL ENGINEERS

Branch Locations
FORT WAYNE 260-459-1532
JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 43 OF 72
CONTRACT	PROJECT

BFS NO. 5693



LEGEND

(27) LANDSCAPING

NOTE: See Plan Sheet 47 For Tree Identification Key.

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LANDSCAPE DETAIL
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

Headquarters
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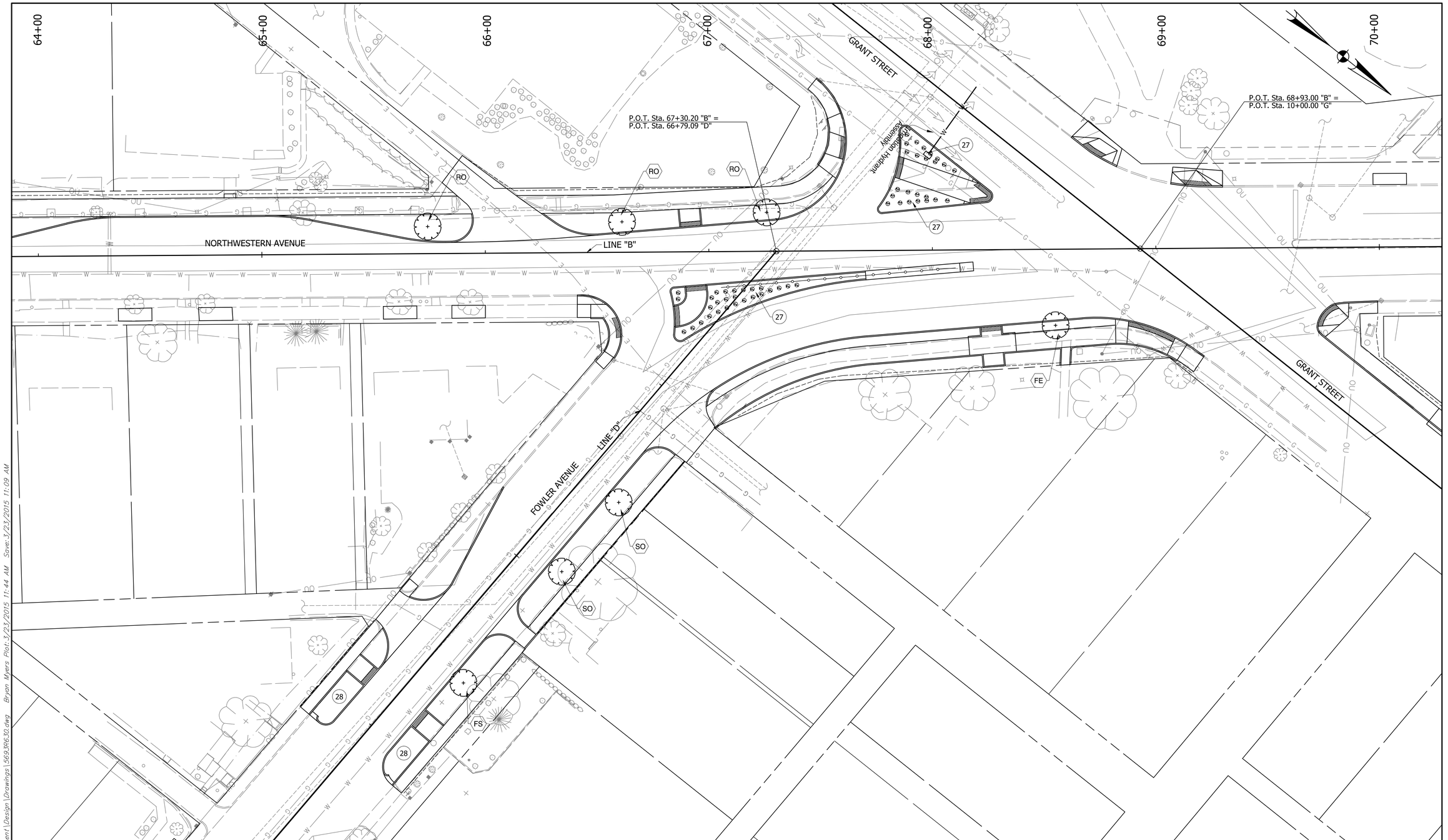
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 44 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\ProjDevelopment\Design\Drawings\5693R630.dwg Bryan Myers Plot:3/23/2015 11:44 AM Save:3/23/2015 11:09 AM



LEGEND

(27) LANDSCAPING

(28) RAIN GARDEN

NOTE: See Plan Sheet 47 For Tree Identification Key.

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

LANDSCAPE DETAIL
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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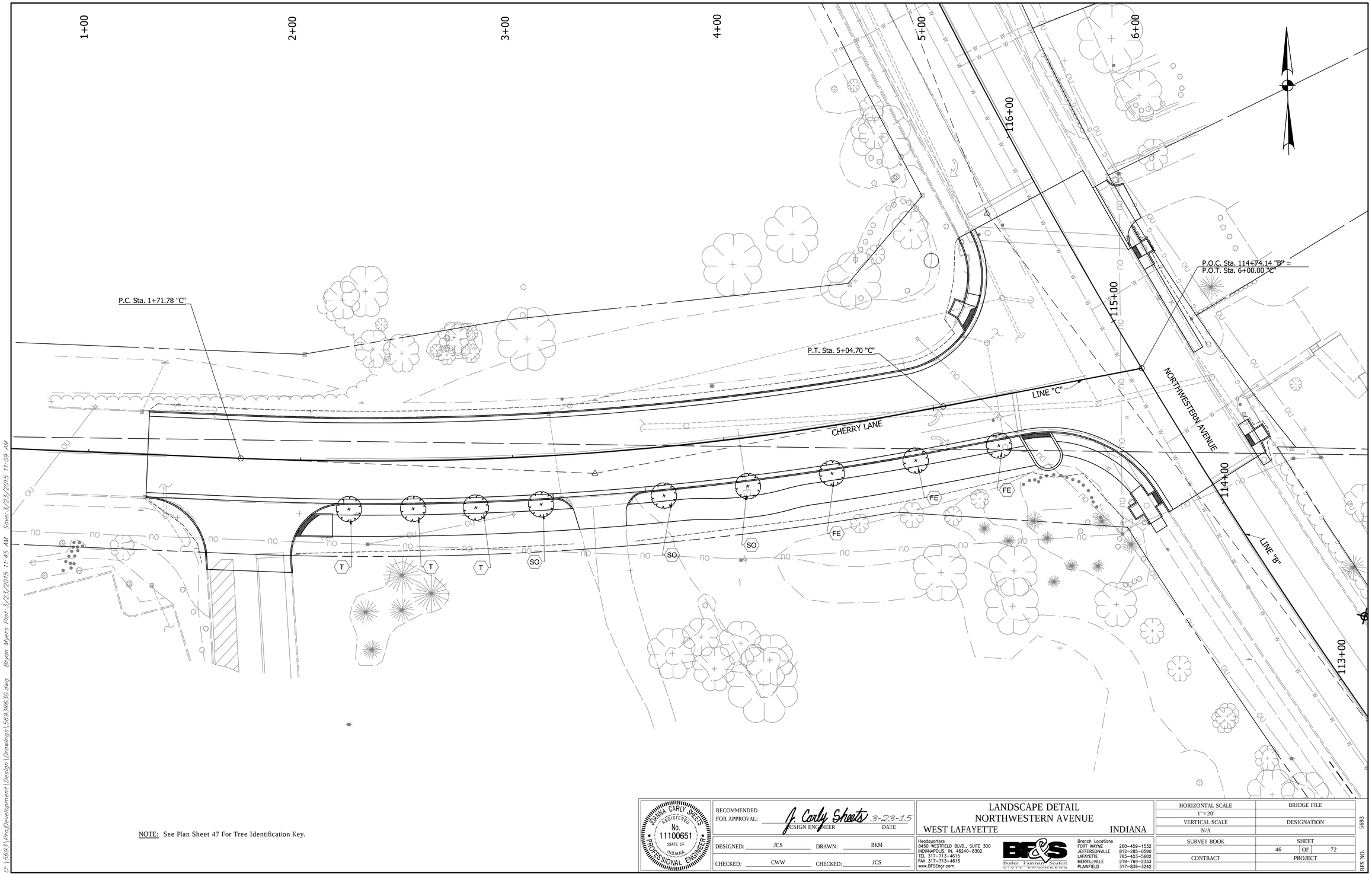
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	45 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\Pro\Development\Design\Drawings\569356.30.dwg Bryan Myers Plot: 3/23/2015 11:44 AM Save: 3/23/2015 11:09 AM



NOTE: See Plan Sheet 47 For Tree Identification Key.

JOANNA CARLI SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LANDSCAPE DETAIL
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	46 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\Pro Development\Design\Drawings\5693R6-30.dwg Bryon Myers Plot:3/23/2015 11:45 AM Save:3/23/2015 11:09 AM

TREE IDENTIFICATION
KEY

KEY	LATIN NAME	COMMON NAME	SIZE	QTY
AE	ULMUS CHINENESIS ALLEE ELM	ALLEE ELM	2"-2.5" cal.	2
FE	LIQUIDAMBAR STYRACIFLUA "ROTUNDILOBA"	FRUITLESS SWEETGUM	2"-2.5" cal.	1
FS	ULMUS "FRONTIER"	FRONTIER ELM	2"-2.5" cal.	5
RO	QUERCUS RUBRA	NORTHERN RED OAK	2"-2.5" cal.	7
SO	QUERCUS BICOLOR	SWAMP WHITE OAK	2"-2.5" cal.	7
T	LIRIODENDRON	TULIP	2"-2.5" cal.	6

NOTE: Refer to City Standards for Additional Information and Requirements.

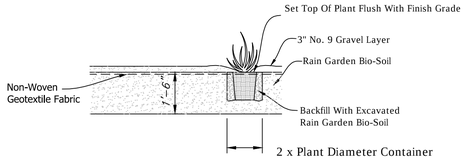
RAIN GARDEN PLANT SCHEDULE

QTY	LATIN NAME	COMMON NAME	COLOR	SPACING
110	IRIS VIRGINICA 'SHREVEI'	BLUE FLAG IRIS	BLUE/ PURPLE	24" O.C.

LANDSCAPING PLANT SCHEDULE

LOCATION	QTY	LATIN NAME	COMMON NAME	SPACING
WIGGINS INTERSECTION	67	JUNIPERUS VIRINIANA "GREY OWL"	GREY OWL RED CEDAR	48" O.C.
FOWLER INTERSECTION	28	JUNIPERUS VIRINIANA "GREY OWL"	GREY OWL RED CEDAR	48" O.C.
GRANT INTERSECTION	24	JUNIPERUS VIRINIANA "GREY OWL"	GREY OWL RED CEDAR	48" O.C.

NOTE:
1. When Space is Available Plant 3' off Back of Curb.
2. Cover Landscape Area with 3" Shredded Hardwood Bark Mulch.



RAIN GARDEN PLANTING DETAIL
NOT TO SCALE

NOTE:
1. Contractor Shall Connect The Bio-Soil Mix to The Underground Sand-Gravel Layer by Drilling Two Evenly Spaced, 3 Ft. x Approximately 2 IN. Diameter Auger Through The Silty Loam Layer, Per Rain Garden. Void Shall be Filled with Bio-Soil Mix.

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LANDSCAPE DETAIL
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WEST LAFAYETTE INDIANA

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	47 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\ProDevelopment\Design\Drawings\5693Re30.dwg Bryan Myers Plot:3/23/2015 11:45 AM Save:3/23/2015 11:09 AM

58+00
59+00
60+00
61+00
62+00
63+00
64+00

P.O.T. Sta. 58+98.19 "B" =
P.O.T. Sta. 49+02.04 "F"

P.C. Sta. 57+71.30 "B"

P.T. Sta. 58+88.78 "B"

NORTH STREET

CIRCUIT B

HANDHOLE W/
TYPE A CONNECTION

+44

2

+48

4-1c/4

3

+78

P.O.T. Sta. 62+92.42 "B" =
P.O.T. Sta. 62+89.98 "E"

4

+23

LINE "B"

NORTHWESTERN AVENUE

HANDHOLE W/
TYPE B CONNECTION

CIRCUIT B

4-1c/4

HANDHOLE W/
TYPE A CONNECTION

4-1c/4

CIRCUIT B

+10

6

+29

1

HANDHOLE W/
TYPE B CONNECTION

+15

+50

5

VINE STREET

LINE "F"

WIGGINS STREET

LINE "E"

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 1 ON NON BREAK AWAY ANCHOR BASE
- LIGHTING STRUCTURE NO. 2 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- EXISTING HANDHOLE
- PROPOSED HANDHOLE

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JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	48 OF 72
CONTRACT	PROJECT

BFS NO. 5693

64+00
65+00
66+00
67+00
68+00
69+00
70+00
LINE "G"
GRANT STREET
P.O.T. Sta. 67+30.20 "B" =
P.O.T. Sta. 66+79.09 "D"
P.O.T. Sta. 68+93.00 "B" =
P.O.T. Sta. 10+00.00 "G"
Hydrant Assembly
HANDHOLE W/
TYPE A CONNECTION
CIRCUIT A
4-1c/4
EXISTING HANDHOLE W/
TYPE B CONNECTION.
SPLICE INTO EXIST. CIRCUIT A
HANDHOLE W/
TYPE B CONNECTION
NORTHWESTERN AVENUE
LINE "B"
CIRCUIT B
4-1c/4
HANDHOLE W/
TYPE A CONNECTION
EXISTING HANDHOLE W/
TYPE A CONNECTION
HANDHOLE W/
TYPE A CONNECTION
CIRCUIT B
4-1c/4
HANDHOLE W/
TYPE B CONNECTION
GRANT STREET
FOWLER AVENUE
LINE "D"
+15
+05
+05
+10
+94
8
9
10
11
12
13

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 2 ON NON BREAK AWAY ANCHOR BASE
- LIGHTING STRUCTURE NO. 3 ON NON BREAK AWAY ANCHOR BASE
- EXISTING SERVICE POINT, TYPE II (120/240V)
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- EXISTING HANDHOLE
- PROPOSED HANDHOLE

J: \5093\ProjDevelopment\Design\Drawings\5693R651.dwg Bryan Myers Plot: 3/23/2015 11:45 AM Save: 3/20/2015 10:17 AM

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 49 OF 72
CONTRACT	PROJECT

BFS NO. 5693

69+00 70+00 71+00 72+00 73+00 74+00 75+00

HANDHOLE W/
TYPE A CONNECTION

CIRCUIT A

4-1c/4

+94

L3

NORTHWESTERN AVENUE

EXISTING HANDHOLE W/
TYPE B CONNECTION.
SPLICE INTO EXIST. CIRCUT A

LINE "A"

EXISTING HANDHOLE W/
TYPE A CONNECTION

NORTHWESTERN AVENUE

CIRCUIT B

4-1c/4

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 2 ON NON BREAK AWAY ANCHOR BASE
- EXISTING SERVICE POINT, TYPE II (120/240V)
- LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- EXISTING HANDHOLE
- PROPOSED HANDHOLE
- PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

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JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

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8450 WESTFIELD BLVD., SUITE 300
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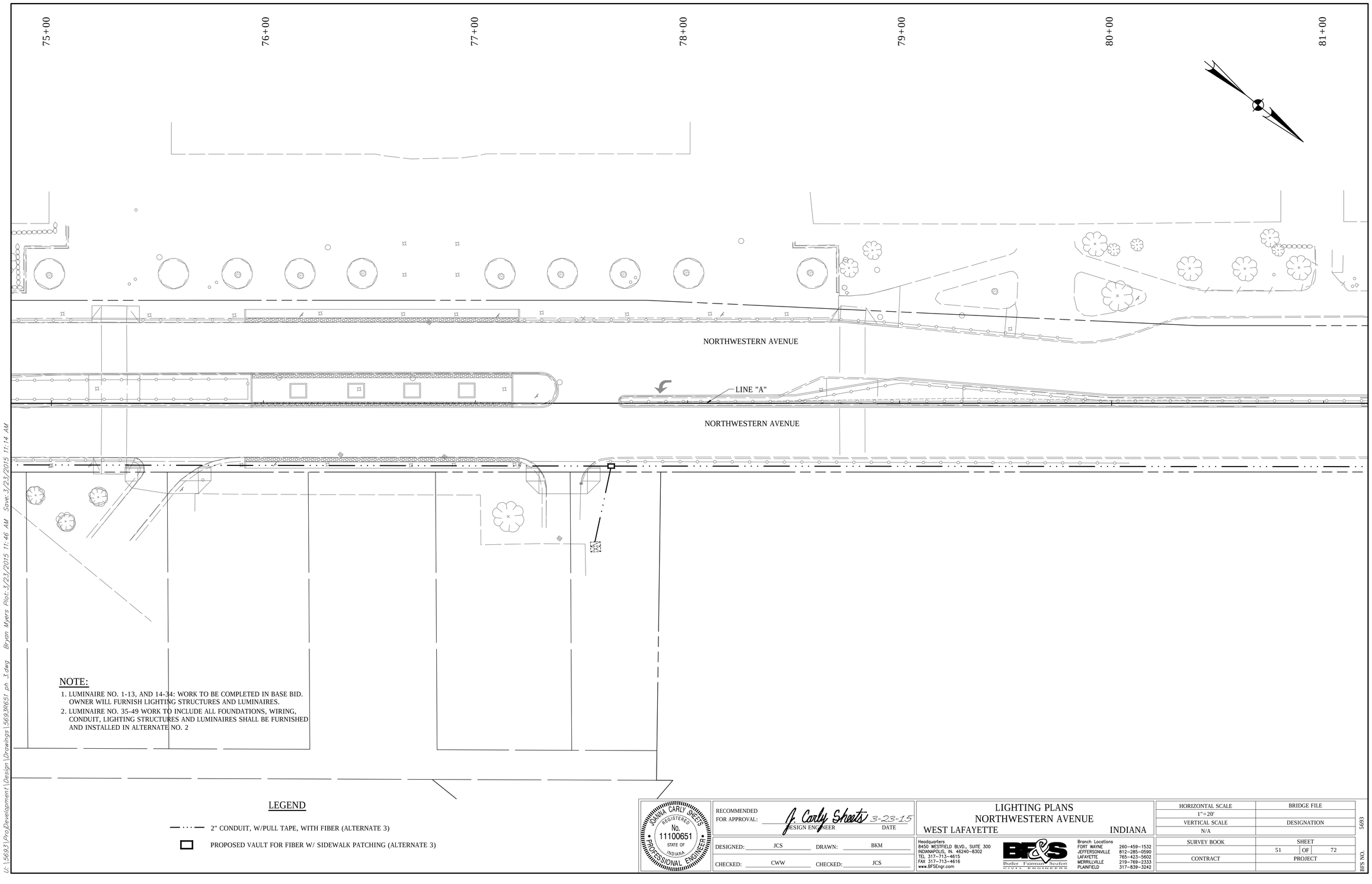
PLAINFIELD 317-839-3242

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	50 OF 72
CONTRACT	PROJECT

BFS NO. 5693



NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)

PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

JOANNA CARLY SHEETS
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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	51 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\Pre Development\Design\Drawings\5693fr651 ph 3.dwg Bryan Myers Plot: 3/23/2015 11:46 AM Save: 3/23/2015 11:14 AM

81+00

82+00

83+00

84+00

85+00

86+00

87+00

STADIUM AVENUE

NORTHWESTERN AVENUE

LINE "A"

NORTHWESTERN AVENUE

CONNECT FIBER TO
EXISTING CABINET

STADIUM AVENUE

OU

NO

OU

OU

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)

PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

J:\5693\ProDevelopment\Design\Drawings\5693R651 ph 3.dwg Bryan Myers Plot:3/23/2015 11:46 AM Save:3/23/2015 11:14 AM

JOHNNA CARLI SHEETS
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No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
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LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	52 OF 72
CONTRACT	PROJECT

BFS NO. 5693

87+00

88+00

89+00

90+00

91+00

92+00

NORTHWESTERN AVENUE
LINE "A"

NORTHWESTERN AVENUE

P.C. Sta. 88+57.00 "A"

EVERGREEN STREET

P.T. Sta. 90+85.65 "A"

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)

PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

J:\5693\ProDevelopment\Design\Drawings\5693R651 ph 3.dwg Bryon Myers Plot:3/23/2015 11:46 AM Save:3/23/2015 11:14 AM

JOANNA CARLY SHEETS
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RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	53 OF 72
CONTRACT	PROJECT

BFS NO. 5693

92+00 93+00 94+00 95+00 96+00 97+00 98+00

LINE "B"

NORTHWESTERN AVENUE

HANDHOLE W/ 3 TYPE A CONNECTIONS & 1 TYPE B CONNECTION. SPLICE INTO EXISTING CIRCUIT A

CIRCUIT A,B, C & D

16-1c/4

HANDHOLE W/ TYPE A CONNECTIONS

HANDHOLE W/ TYPE A CONNECTIONS

16-1c/4

CIRCUIT A, B, C & D

CONNECT FIBER TO EXISTING CABINET

CIRCUIT A

+50

+68

+18

+74

14

15

16

17

DODGE STREET

MERIDIAN STREET

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2.

LEGEND

- LIGHTING STRUCTURE NO. 2 ON NON-BREAK AWAY ANCHOR BASE
- EXISYING SERVICE POINT, TYPE II (120/240V)
- LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- PROPOSED HANDHOLE
- PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

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JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
TEL 317-713-4615
FAX 317-713-4616
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BF&S Butler Fairman & Seufert CIVIL ENGINEERS

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LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	54 OF 72
CONTRACT	PROJECT

BFS NO. 5693

98+00
99+00
100+00
101+00
102+00
103+00
104+00
ONLY
ONLY
28
+07
29
+57
P.C. Sta. 102+98.56 "B"
HANDHOLE W/ TYPE A CONNECTION
CIRCUIT A
4-1c/4
CIRCUIT A
NORTHWESTERN AVENUE
LINE "B"
4-1c/4
& D
HANDHOLE W/ TYPE A CONNECTIONS
HANDHOLE W/ TYPE A CONNECTIONS
16-1c/4
CIRCUIT A, B, C & D
HANDHOLE W/ 3 TYPE A & 1 TYPE B CONNECTIONS
HANDHOLE W/ TYPE A CONNECTIONS
HANDHOLE W/ TYPE A CONNECTIONS
16-1c/4
CIRCUIT A, B, C & D
+87
18
+55
19
+26
20
CHELSEA ROAD
BEXLEY ROAD
OU
OU

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 2 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- PROPOSED HANDHOLE

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JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	55 OF 72
CONTRACT	PROJECT

BFS NO. 5693

104+00
105+00
106+00
107+00
108+00
109+00
110+00
29
30
31
21
22
23
+88
+15
+18
+65
+45
4-1c/4
CIRCUIT A
16-1c/4
CIRCUIT A, B, C & D
HANDHOLE W/ TYPE A CONNECTIONS
NORTHWESTERN AVENUE
NORTHRIDGE DRIVE
P.T. Sta. 108+75.18 "B"
LINE "B"
OU
OHT
W
G
E

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 2 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- PROPOSED HANDHOLE

DONNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
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PLAINFIELD 317-839-3242

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	56 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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110+00
111+00
112+00
113+00
114+00
115+00
116+00
CHERRY LANE
LINE "C"
LINE "B"
NORTHWESTERN AVENUE
P.C. Sta. 111+84.39 "B"
P.T. Sta. 5+04.70 "C"
P.O.C. Sta. 114+74.14 "B" =
P.O.T. Sta. 6+00.00 "C"
HANDHOLE W/ TYPE A CONNECTION
HANDHOLE W/ TYPE A CONNECTION
CONNECT FIBER TO EXISTING CABINET
CIRCUIT A
4-1c/4
CIRCUIT A
4-1c/4
CIRCUIT A, B, C & D
16-1c/4
CIRCUIT A, B, C & D
16-1c/4
CIRCUIT A, B, C & D
16-1c/4
CIRCUIT B, C & D
12-1c/4
+96
+06
+18
+06
+19
+44
24
25
26
27
32
33
34

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 2 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- EXISTING HANDHOLE
- PROPOSED HANDHOLE
- PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	57 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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116+00
117+00
118+00
119+00
120+00
121+00
122+00
HILLCREST ROAD
P.T. Sta. 119+62.34 "B"
LINE "B"
NORTHWESTERN AVENUE
CIRCUIT D
4-1c/4
HANDHOLEW/ TYPE A CONNECTIONS
HANDHOLE W/ TYPE A CONNECTIONS
HANDHOLE W/ TYPE A CONNECTIONS
CIRCUIT B, C & D
12-1c/4
CIRCUIT B & C
8-1c/4
CIRCUIT B, C & D
12-1c/4
CIRCUIT B, C & D
12-1c/4
+76
+01
+37
+42
+19
35
36
37
38
39
HILLCREST ROAD

NOTE:

1. LUMINAIRE NO. 1-13, AND 34-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 4 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- PROPOSED HANDHOLE

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JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

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DESIGN ENGINEER DATE

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CHECKED: CWW CHECKED: JCS

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WEST LAFAYETTE INDIANA

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 58 OF 72
CONTRACT	PROJECT

BFS NO. 5693

122+00
123+00
124+00
125+00
126+00
127+00
128+00

50 +50
51 +92
52 +76
40 +63
41 +17

4-1c/4 CIRCUIT D
4-1c/4 CIRCUIT D
NORTHWESTERN AVENUE
LINE "B"
8-1c/4 CIRCUIT B & C
8-1c/4 CIRCUIT B & C
HANDHOLE W/ TYPE A CONNECTIONS
HANDHOLE W/ TYPE A CONNECTIONS
CIRCUIT B & C 8-1c/4
CARROLTON BLVD.

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 1 ON NON BREAK AWAY ANCHOR BASE
- LIGHTING STRUCTURE NO. 2 ON NON BREAK AWAY ANCHOR BASE
- LIGHTING STRUCTURE NO. 3 ON NON BREAK AWAY ANCHOR BASE
- LIGHTING STRUCTURE NO. 4 ON NON BREAK AWAY ANCHOR BASE
- SERVICE POINT, TYPE II (120/240V)
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- EXISTING HANDHOLE
- PROPOSED HANDHOLE
- PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

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JOANNE CARLY SHEATS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheats 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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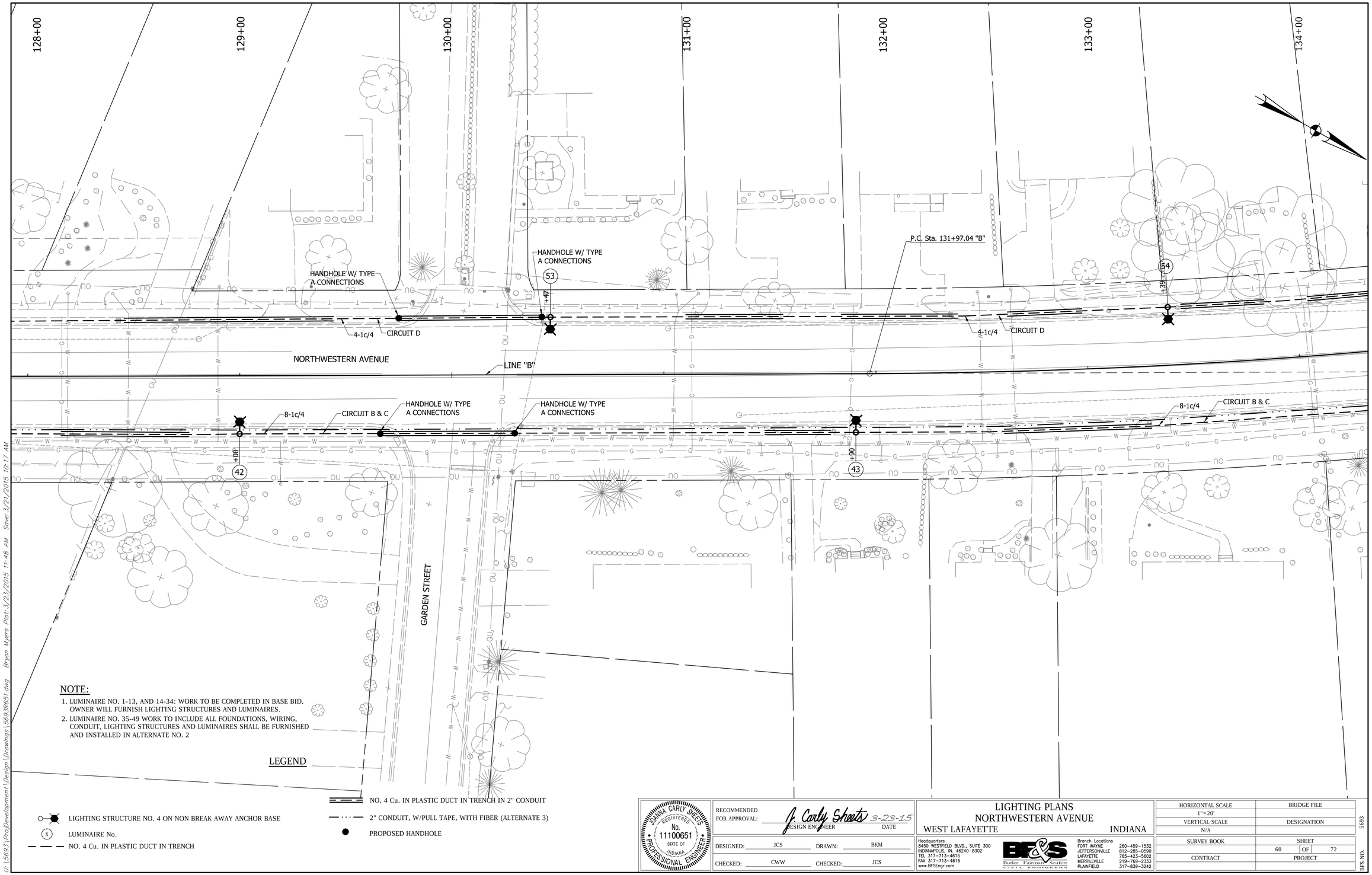
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 59 OF 72
CONTRACT	PROJECT

BFS NO. 5693



NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
2. LUMINAIRE NO. 35-49 WORK TO INCLUDE ALL FOUNDATIONS, WIRING, CONDUIT, LIGHTING STRUCTURES AND LUMINAIRES SHALL BE FURNISHED AND INSTALLED IN ALTERNATE NO. 2

LEGEND

- LIGHTING STRUCTURE NO. 4 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- PROPOSED HANDHOLE

JOANNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER — DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

LIGHTING PLANS
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	60 OF 72
CONTRACT	PROJECT

BES NO. 5693

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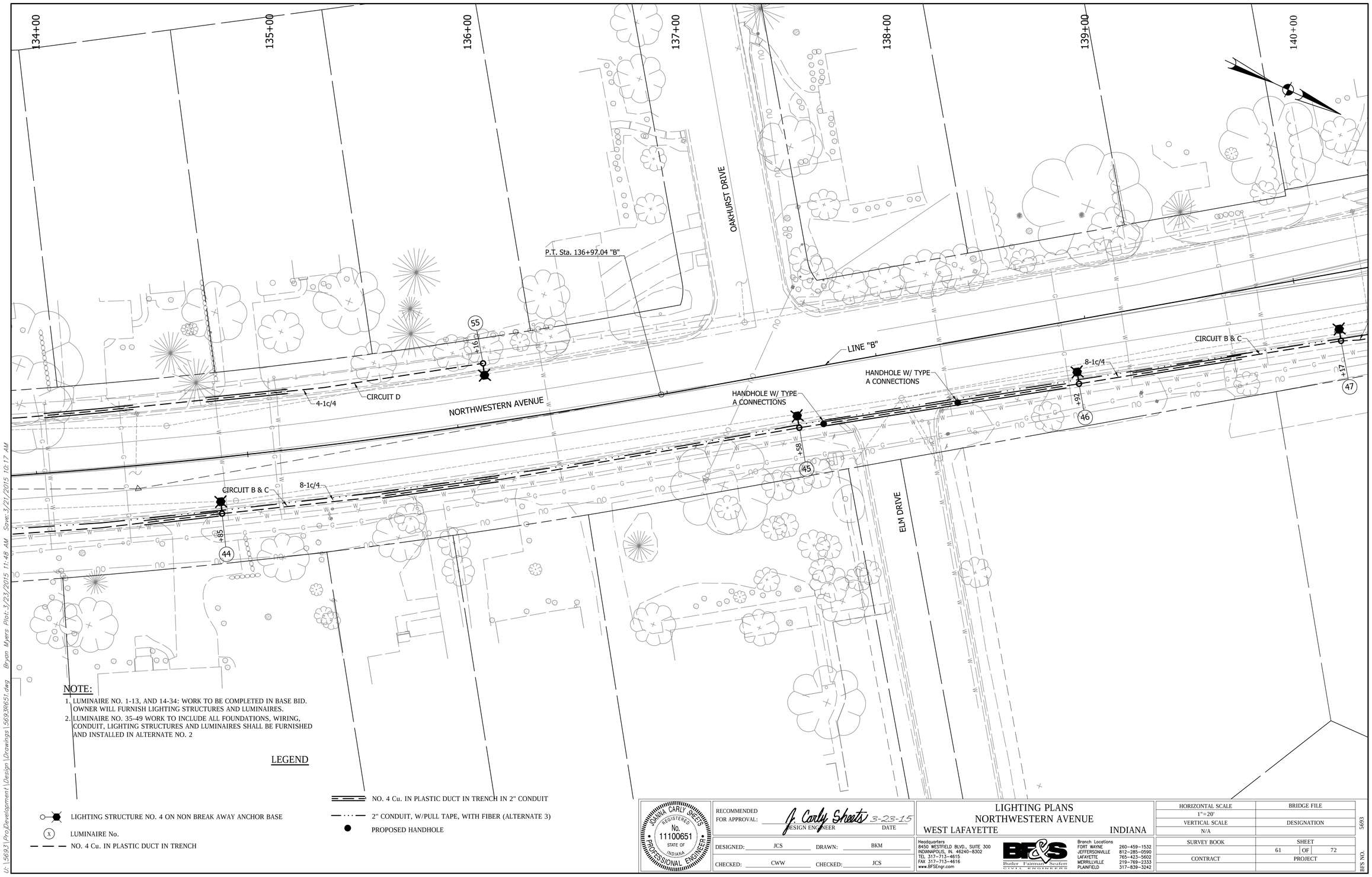

NOTE:

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LEGEND

- LIGHTING STRUCTURE NO. 4 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- PROPOSED HANDHOLE

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JOMMA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	61 OF 72
CONTRACT	PROJECT

BFS NO. 5693

140+00
141+00
142+00
143+00
144+00
145+00
146+00

NORTHWESTERN AVENUE

LINE "B"

P.O.T. Sta. 146+00.00 "B"

LINDBERG ROAD

CONNECT FIBER TO EXISTING CABINET

LINDBERG ROAD

CIRCUIT B & C
8-1c/4
+17
47

CIRCUIT B & C
8-1c/4
+56
48

CIRCUIT B & C
8-1c/4
+45
49

NOTE:

1. LUMINAIRE NO. 1-13, AND 14-34: WORK TO BE COMPLETED IN BASE BID. OWNER WILL FURNISH LIGHTING STRUCTURES AND LUMINAIRES.
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LEGEND

- LIGHTING STRUCTURE NO. 4 ON NON BREAK AWAY ANCHOR BASE
- (X) LUMINAIRE No.
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH
- NO. 4 Cu. IN PLASTIC DUCT IN TRENCH IN 2" CONDUIT
- 2" CONDUIT, W/PULL TAPE, WITH FIBER (ALTERNATE 3)
- PROPOSED HANDHOLE
- PROPOSED VAULT FOR FIBER W/ SIDEWALK PATCHING (ALTERNATE 3)

JOANNA CARLI SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

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HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET 62 OF 72
CONTRACT	PROJECT

BFS NO. 5693

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	LUMINAIRE NO.	1	2	3	4	5	6	7	8	9	10	11	12	13
	CONNECTION TYPE	1	2	2	1	1	2	1	2	2	1	2	1	1
	POLE SET BACK (ft) FROM BACK OF CURB	11	2	3	5	2	8	22	2	2	5	2	2	4
	TOP FOUNDATION ELEVATION WITH RESPECT TO TOP OF CURB (ft)	0.22	0.04	0.04	0.10	0.04	0.16	0.44	0.04	0.04	0.10	0.04	0.04	0.08
ROADWAY LUMINAIRE CIRCUIT A-1 & A-2	CIRCUIT CONNECTION													R
	MAST ARM LENGTH (ft)													5
	LUMINAIRE E.M.H. (ft)													30
ROADWAY LUMINAIRE CIRCUIT B-1 & B-2	CIRCUIT CONNECTION	R	B	R	B	R	B	R	R	B	R	B	R	
	MAST ARM LENGTH (ft)	0	0	0	5	0	0	5	5	5	5	5	5	
	LUMINAIRE E.M.H. (ft)	14	14	14	30	14	14	30	30	30	30	30	30	

LIGHTING PERFORMANCE CRITERIA

	LIGHTING STRUCTURE		
	NO. 1	NO. 2	NO. 3
LAMP TYPE	58-89W LED	100-140W LED	100-140W LED
AVERAGE MAINTAINED ILLUMINANCE (EL)	1.00	1.00	1.00
LAMP LUMEN DEPRECIATION FACTOR (LDD)	0.87	0.87	0.87
LUMINAIRE DIRT DEPRECIATION FACTOR (LDD)	0.90	0.90	0.90
UNIFORMITY RATIO	4:1	4:1	4:1
PAVEMENT CLASSIFICATION	R	R	R

LIGHTING SERVICE POINT

SERVICE POINT	MAIN BREAKER	BRANCH CIRCUIT	COMPUTED BRANCH CIRCUIT AMPERAGE	BRANCH CIRCUIT BREAKER RATING
Existing Approx. Sta. 69+80	100 AMP	A	12.87 AMPS*	30 AMPS
		B	9.36 AMPS	30 AMPS

*Computation includes existing luminaires on the circuit

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JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15 DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: JAF

CHECKED: CWW CHECKED: JCS

LIGHTING TABLE
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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FAX 317-713-4616
www.BFSEngr.com

Butler Fairman Seufert CIVIL ENGINEERS

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JEFFERSONVILLE 812-285-0590
LAFAYETTE 765-423-5602
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
NA	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	63 OF 72
CONTRACT	PROJECT

BFS NO. 5693

		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	LUMINAIRE NO.	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	CONNECTION TYPE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	POLE SET BACK (ft) FROM BACK OF CURB	7	7	10	9	7	7	7	6	2	5	5	7	11	2	3	3	2	2	2	2	15
	TOP FOUNDATION ELEVATION WITH RESPECT TO TOP OF CURB (ft)	0.14	0.14	0.20	0.18	0.14	0.14	0.14	0.12	0.04	0.10	0.10	0.14	0.22	0.04	0.06	0.06	0.04	0.04	0.04	0.04	0.30
ROADWAY LUMINAIRE CIRCUIT A-1 & A-2	CIRCUIT CONNECTION	B	R	B	R	B	R	R	B	R	B	R	B	R	B	R	B	R	B	R	B	R
	MAST ARM LENGTH (ft)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	LUMINAIRE E.M.H. (ft)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
ROADWAY LUMINAIRE CIRCUIT C-1 & C-2	CIRCUIT CONNECTION																					
	MAST ARM LENGTH (ft)																					
	LUMINAIRE E.M.H. (ft)																					
ROADWAY LUMINAIRE CIRCUIT D-1 & D-2	CIRCUIT CONNECTION																					
	MAST ARM LENGTH (ft)																					
	LUMINAIRE E.M.H. (ft)																					

		35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
	LUMINAIRE NO.	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
	CONNECTION TYPE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	1
	POLE SET BACK (ft) FROM BACK OF CURB	3	2	2	2	7	2	3	3	3	2	2	2	2	2	2	3	2	2	2	2	3
	TOP FOUNDATION ELEVATION WITH RESPECT TO TOP OF CURB (ft)	0.06	0.04	0.04	0.04	0.14	0.04	0.06	0.06	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.06	0.04	0.04	0.04	0.04	0.06
ROADWAY LUMINAIRE CIRCUIT A-1 & A-2	CIRCUIT CONNECTION																					
	MAST ARM LENGTH (ft)																					
	LUMINAIRE E.M.H. (ft)																					
ROADWAY LUMINAIRE CIRCUIT C-1 & C-2	CIRCUIT CONNECTION	R	B	R	B	R	B	R	B	R	B	R	B	R	B	R						
	MAST ARM LENGTH (ft)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6						
	LUMINAIRE E.M.H. (ft)	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24						
ROADWAY LUMINAIRE CIRCUIT D-1 & D-2	CIRCUIT CONNECTION																B	R	B	R	B	R
	MAST ARM LENGTH (ft)																6	6	6	6	6	6
	LUMINAIRE E.M.H. (ft)																24	24	24	24	24	24

LIGHTING PERFORMANCE CRITERIA

LIGHTING STRUCTURE

	NO. 2	NO. 4
LAMP TYPE	100-140W LED	112-131W LED
INITIAL LAMP LUMEN (LL)	9,021	
AVERAGE MAINTAINED ILLUMINANCE (EL)	1.00	
LAMP LUMEN DEPRECIATION FACTOR (LDD)	0.87	
LUMINAIRE DIRT DEPRECIATION FACTOR (LDD)	0.90	
UNIFORMITY RATIO	5:1	
PAVEMENT CLASSIFICATION	R	

LIGHTING SERVICE POINT

SERVICE POINT	MAIN BREAKER	BRANCH CIRCUIT	COMPUTED BRANCH CIRCUIT AMPERAGE	BRANCH CIRCUIT BREAKER RATING
Existing Approx. Sta. 94+50	100 AMP	A	19.89 AMPS *	30 AMPS
		B	**	30 AMPS
		C	10.00 AMPS	30 AMPS
		D	3.75 AMPS	30 AMPS

*Computation includes existing luminaires on the circuit
**Electric line for GFI outlets

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: JAF
CHECKED: CWW CHECKED: JCS

LIGHTING TABLE
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
NA	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	64 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\ProjDevelopment\Design\Drawings\5693R651.dwg Bryan Myers Plot: 3/23/2015 11:48 AM Save: 3/21/2015 10:17 AM

58+00 59+00 60+00 61+00 62+00 63+00 64+00

BEGIN PROJECT
P.O.T. Sta. 59+08.65 "B"

P.O.T. Sta. 58+98.19 "B" =
P.O.T. Sta. 49+02.04 "F"

P.C. Sta. 57+71.30 "B"

NORTH STREET

Sign Type W11-2 & W16-7p
"Ped. X-ing" & Arrow"

+88

Relocate Sign

Remove Pole & Relocate Signs

Sign Type W11-2 & W16-7p
"Ped. X-ing" & Arrow"

+16

P.O.T. Sta. 62+89.98 "E"

Sign Type OD-1-1a

+50
9.00'

+50

25'

LINE "B"

NORTHWESTERN AVENUE

52

22'

20' (Typ.)

9" (Typ)

22'

52

Sign Type W1-8 (2)
"Chevrons"

+66

46

Exist.

+50

Sign Type OD-1-1b

52

P.T. Sta. 58+88.78 "B"

Sign Type W11-2 & W16-7p
"Ped. X-ing" & Arrow"

+60 "F"

Remove Pavement Markings

VINE STREET

50

+65

LINE "F"

WIGGINS STREET

LINE "E"

LEGEND

(46) LINE, THERMOPLASTIC, SOLID WHITE, 4"
(48) LINE, THERMOPLASTIC, BROKEN WHITE, 4"
(50) PAVEMENT MESSAGE MARKING, THERMOPLASTIC, LANE INDICATION ARROW
(52) TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK, WHITE, 24"
GROUND MOUNTED SHEET SIGN
30' STEEL STRAIN POLE AND FOUNDATION
SPAN MOUNTED SIGN
EXISTING PAVEMENT MARKING REMOVAL

NOTE :

New Outside Curb Shall Be Painted Yellow, As Directed By Engineer.

U:\5693\ProDevelopment\Design\Drawings\5693W671.dwg Bryan Myers Plot: 3/23/2015 11:49 AM Save: 3/21/2015 10:19 AM

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CHECKED: JCS

PAVEMENT MARKING & SIGNAGE
NORTHWESTERN AVENUE
WEST LAFAYETTE INDIANA

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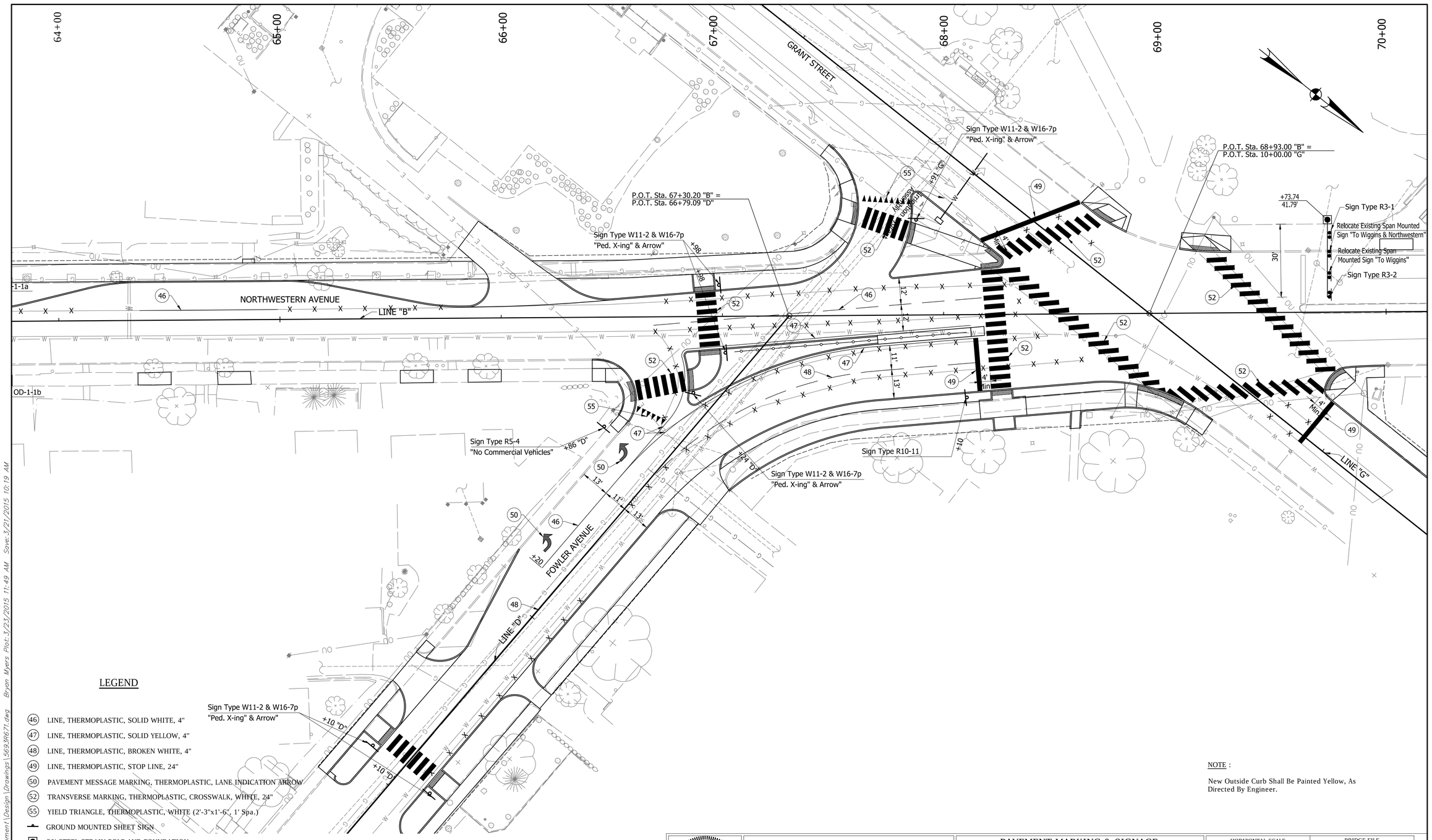
MERRILLVILLE 219-769-2333
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
NA	
SURVEY BOOK	SHEET
	65 OF 72
CONTRACT	PROJECT

BFS NO. 5693



LEGEND

- (46) LINE, THERMOPLASTIC, SOLID WHITE, 4"
- (47) LINE, THERMOPLASTIC, SOLID YELLOW, 4"
- (48) LINE, THERMOPLASTIC, BROKEN WHITE, 4"
- (49) LINE, THERMOPLASTIC, STOP LINE, 24"
- (50) PAVEMENT MESSAGE MARKING, THERMOPLASTIC, LANE INDICATION ARROW
- (52) TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK, WHITE, 24"
- (55) YIELD TRIANGLE, THERMOPLASTIC, WHITE (2'-3"x1'-6", 1' Spa.)
- GROUND MOUNTED SHEET SIGN
- 30' STEEL STRAIN POLE AND FOUNDATION
- SPAN MOUNTED SIGN

NOTE :

New Outside Curb Shall Be Painted Yellow, As Directed By Engineer.

JOHNNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CHECKED: JCS

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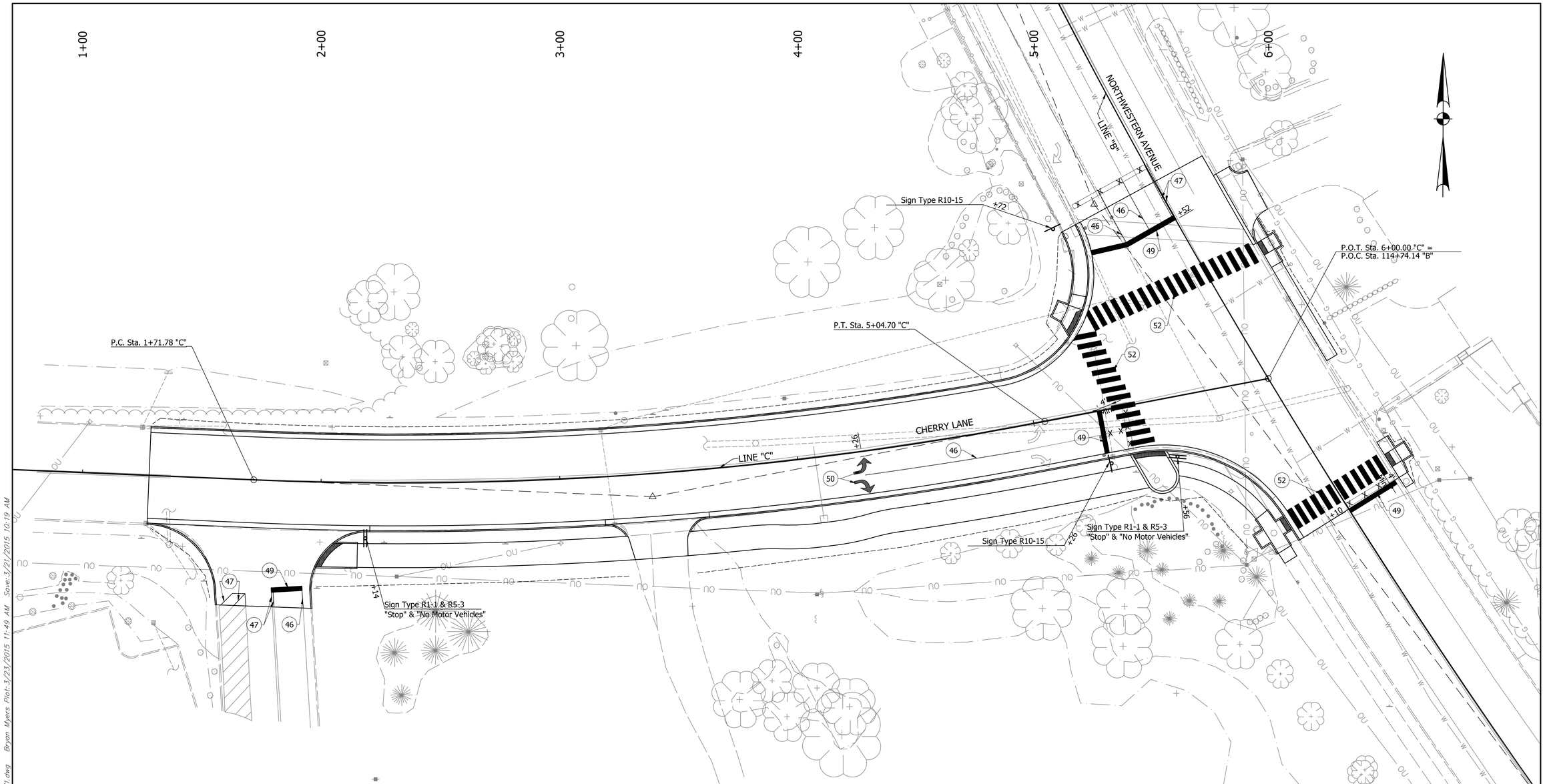
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
NA	
SURVEY BOOK	SHEET
	66 OF 72
CONTRACT	PROJECT

BFS NO. 5693

U:\5693\ProDevelopment\Design\Drawings\5693R671.dwg Bryan Myers Plot:3/23/2015 11:49 AM Save:3/21/2015 10:19 AM



U:\5693\Pro Development\Design\Drawings\569.3R671.dwg Bryan Myers Plot:3/23/2015 11:49 AM Save:3/21/2015 10:19 AM

LEGEND

- (46) LINE, THERMOPLASTIC, SOLID WHITE, 4"
- (47) LINE, THERMOPLASTIC, SOLID YELLOW, 4"
- (49) LINE, THERMOPLASTIC, STOP LINE, 24"
- (50) PAVEMENT MESSAGE MARKING, THERMOPLASTIC, LANE INDICATION ARROW
- (52) TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK, WHITE, 24"
- GROUND MOUNTED SHEET SIGN

JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

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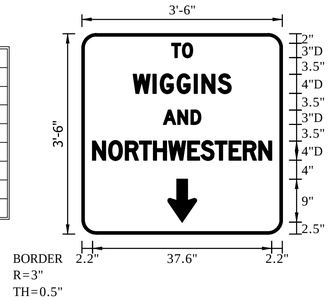
PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	67 OF 72
CONTRACT	PROJECT

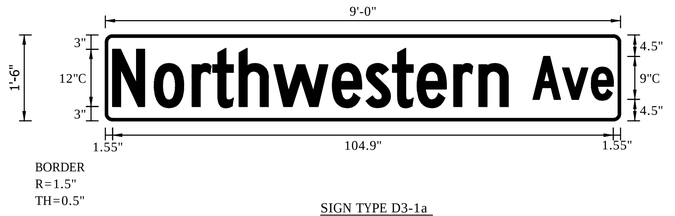
BFS NO. 5693

SIGN NUMBER	OD1–1a
WIDTH x HGHT.	3'–6" x 3'–6"
BORDER WIDTH	0.5"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White



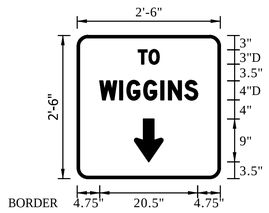
SIGN TYPE OD1-1a

SIGN NUMBER	D3–1a
WIDTH x HGHT.	9'–0" x 1'–6"
BORDER WIDTH	0.5"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White



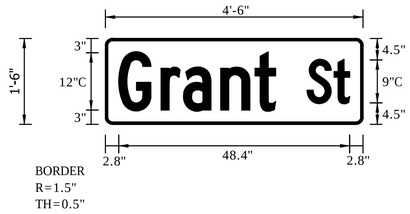
SIGN TYPE D3-1a

SIGN NUMBER	OD1–1b
WIDTH x HGHT.	2'–6" x 2'–6"
BORDER WIDTH	0.5"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White



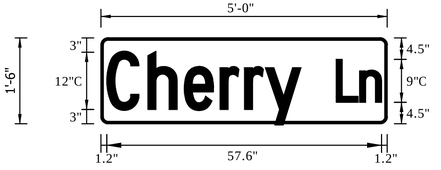
SIGN TYPE OD1-1b

SIGN NUMBER	D3–1c
WIDTH x HGHT.	4'–6" x 1'–6"
BORDER WIDTH	0.5"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White



SIGN TYPE D3-1b

SIGN NUMBER	D3–1b
WIDTH x HGHT.	5'–0" x 1'–6"
BORDER WIDTH	0.5"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White



SIGN TYPE D3-1c

U:\5693\ProDevelopment\Design\Drawings\5693R631.dwg Bryan Myers Plot:3/23/2015 11:49 AM Save:3/21/2015 10:11 AM

JOANNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15 (DESIGN ENGINEER / DATE)

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

SIGNAL DETAIL
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WEST LAFAYETTE INDIANA

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PLAINFIELD 317–839–3242

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
NA	
SURVEY BOOK	SHEET
	68 OF 72
CONTRACT	PROJECT

BFS NO. 5693

SHEET SIGN & POST SUMMARY

SIGN										POST						REMARKS
PLAN SHEET NO./LINE	SIGN LOCATION STA.	SIGN CODE	SIGN SIZE (in.)	ENCAPSULATED LENS METAL THICKNESS AND SIGN AREA (SFT)			ENCLOSED LENS METAL THCKNESS AND SIGN AREA (SFT)			SQUARE						
										2" x 2" x 14 Ga.						
				THCKNESS OF METAL (IN.)			THCKNESS OF METAL (IN.)			REINFORCED			UNREINFORCED			
				0.080	0.100	0.125	0.080	0.100	0.125	POST LENGTH (FT.)			POST LENGTH (FT.)			
										1	2	TOTAL	1	2	TOTAL	
LINE "B"	59+88 Lt.	W11-2	36 x 36		9					11						*Fluorescent Background*
		W16-7p	12 x 24	2												*Fluorescent Background*
	62+16 Lt.	W11-2	36 x 36		9					11						*Fluorescent Background*
		W16-7p	12 x 24	2												*Fluorescent Background*
	62+66 Rt.	W1-8	24 x 18	3						9						
	62+66 Rt.	W1-8	24 x 18	3						9						
	63+50 Rt.	OD1-1a	42 x 42		12.25											*Overhead*
	63+50 Rt.	OD1-1b	30 x 30	6.25												*Overhead*
	66+98 Lt.	W11-2	36 x 36		9					11						*Fluorescent Background*
		W16-7p	12 x 24	2												*Fluorescent Background*
	66+98 Rt.	W11-2	36 x 36		9					11						*Fluorescent Background*
		W16-7p	12 x 24	2												*Fluorescent Background*
	68+10 Lt.	D3-1b	54 x 18		6.75											*Overhead*
	68+10 Lt.	R3-1	36 x 36		9											*Overhead*
	68+10 Lt.	R3-2	36 x 36		9											*Overhead*
	68+10 Rt.	R10-15	30 x 30	6.25						9.5						
	68+69 Lt.	D3-1a	108 x 18			13.5										*Overhead*
	68+69 Lt.	R3-6(L/R)	30 x 36		7.5											*Overhead*
	68+69 Lt.	R3-5(L)	30 x 36		7.5											*Overhead*
	68+98 Rt.	D3-1a	108 x 18			13.5										*Overhead*
	68+98 Rt.	R3-5(L)	30 x 36		7.5											*Overhead*
	68+98 Rt.	R3-5(L)	30 x 36		7.5											*Overhead*
	69+74 Lt.	OD1-1a														*Relocate, Overhead*
	69+74 Lt.	OD1-1b														*Relocate, Overhead*
	69+74 Lt.	R3-1	36 x 36		9											*Overhead*
	69+74 Lt.	R3-2	36 x 36		9											*Overhead*
	69+90 Rt.	D3-1b	54 x 18		6.75											*Overhead*
	69+90 Rt.	R3-5(L)	30 x 36		7.5											*Overhead*
	69+90 Rt.	R3-6(L/R)	30 x 36		7.5											*Overhead*
	69+90 Rt.	R3-2	36 x 36		9											*Overhead*
	69+90 Rt.	R10-11	36 x 48		12											*Overhead*
	114+23 Rt.	R10-15	30 x 30	6.25												*Overhead*
	114+23 Rt.	D3-1a	108 x 18			13.5										*Overhead*
	114+24 Lt.	R10-15	30 x 30	6.25												*Overhead*
	114+24 Lt.	D3-1c	60 x 18		7.5											*Overhead*
	115+28 Rt.	R10-12	30 x 36		7.5											*Overhead*
	115+28 Rt.	D3-1c	60 x 18		7.5											*Overhead*
	115+72 Lt.	R10-15	30 x 30	6.25						9.5						
LINE "C"	2+19 Rt.	R1-1	18 x 18	2.25						9						
		R5-3	24 x 24	4												
	5+26 Rt.	R10-15	30 x 30	6.25						9.5						
	5+56 Rt.	R1-1	18 x 18	2.25						9						
		R5-3	24 x 24	4												
LINE "D"	64+10 Lt.	W11-2	36 x 36		9					11						*Fluorescent Background*

JOANNA CARLY SHEETS REGISTERED No. 11100651 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

SIGN TABLE
NORTHWESTERN AVENUE
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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	69 OF 72
CONTRACT	PROJECT

BFS NO. 5693

J:\5693\ProjDevelopment\Design\Drawings\5693R085.dwg Bryan Myers Plot: 3/23/2015 11:49 AM Sovet: 3/23/2015 7:27 AM

PAVEMENT MARKINGS

FROM STATION	TO STATION	THERMOPLASTIC SOLID WHITE, 4"	THERMOPLASTIC SOLID YELLOW, 4"	THERMOPLASTIC BROKEN WHITE, 4"	THERMOPLASTIC BROKEN YELLOW, 4"	THERMOPLASTIC SOLID WHITE, 6"	THERMOPLASTIC SOLID YELLOW, 8"	THERMOPLASTIC SOLID WHITE, 8"	THERMOPLASTIC SKIP WHITE, 4" (3' Line, 5' Spa.)	THERMOPLASTIC DOTTED WHITE, 12" (3' Line, 5' Spa.)	TRANSVERSE MARKINGS, THERMOPLASTIC, YIELD TRIANGLE, WHITE	TRANSVERSE MARKINGS CROSSHATCH LINE, 12"	TRANSVERSE MARKINGS, THERMOPLASTIC, STOP BAR, 24"	TRANSVERSE MARKINGS, THERMOPLASTIC CROSSWALK, WHITE 24"	PVMNT. MESSAGE THERMOPLASTIC LANE INDICATION ARROW	LINE, REMOVE	PAVEMENT MESSAGE MARKING, REMOVE
		LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	SYS
LINE "B"																	
59+18	59+50															32	
59+80														16			
59+93	61+36	22															
62+10														16			
62+54	62+81															29	
63+63	64+36															73	
64+36	64+99	63															
64+99	65+79															80	
66+68	68+17			149													
66+68	68+63															525	
66+84	68+17		128														
66+93														24			
67+69	68+17		45	45													
68+11													24				
68+24														54			
68+56														82			
69+49														77			
114+10													23			23	
114+18														44			
115+26														72			
115+42													39				
115+42	115+78	54	54														
115+78																35	
LINE "C"																	
01+60	01+70		25														
01+81			12														
01+81	01+93												13				
01+93		7															
04+26															2		
04+26	04+92	66															
05+28													18				
05+28	05+38															26	
05+38														52			
LINE "D"																	
63+94	66+80															465	
64+16														22			
64+21	66+80			271													
65+20	65+74	54															
65+30															1		
65+74	66+80		200														
65+83															1		
66+05											14						
66+17														22			
LINE "E"																	
61+92	62+90	123															
61+92	62+80															88	
LINE "F"																	
49+75														26			
50+00																	10
50+64															2		
LINE " G"																	
08+75											22						
08+80														20			
09+30	09+67															46	
09+32													42				
09+44														48			
10+60														58			
10+70	10+88															36	
10+85													24				
TOTAL		389	464	465							36		183	633	6	1458	10

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DONNA CARLY SHEETS — REGISTERED — No. 11100651 — STATE OF INDIANA — PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM

CHECKED: CWW CHECKED: JCS

MISCELLANEOUS TABLES
NORTHWESTERN AVENUE
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PLAINFIELD 317-839-3242

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	70 OF 72
CONTRACT	PROJECT

BFS NO. 5693

SUMMARY OF QUANTITIES AND APPROACH TABLE

LOCATION (STATION)	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	SURFACE BEYOND R/W LINE			GRADE		EXCAVATION		HMA FOR APPROACHES/PATH					QC/QA HMA MATERIAL FOR MAINLINE						HMA FOR TEMP. PAVEMENT				SUBGRADE TREATMENT TYPE 1B	SUBGRADE TREATMENT TYPE II	SUBGRADE TREATMENT TYPE III	ASPHALT MATERIAL FOR		COMPACTED AGGREGATE FOR BASE NO. 53		PAVEMENT REMOVAL	PCCP FOR APPROACHES 6 IN.	PCCP FOR APPROACHES 9 IN.	REMARKS
					COMPACTED AGGREGATE BASE	HMA	CONCRETE					HMA TYPE "A" FOR APPROACH		HMA TYPE "A" SURFACE	HMA TYPE "A" INTERMEDIATE	HMA FOR ISLANDS TYPE "A"	3, 70, SURFACE 9.5mm	2, 70, INTERMEDIATE 19.0mm	3, 76, BASE 25.0mm	3, 76, BASE 25.0mm	5, 76, INTERMEDIATE C19.0mm		HMA TYPE "B"	HMA TYPE "B"	HMA TYPE "A"	HMA TYPE "A"				PRIME COAT	TACK COAT						
												LBS. PER SYD.					LBS. PER SYD.						LBS. PER SYD.									DEPTH				
								1	2	CUT	FILL+25%	110	330	140	220	110	165	275	275	330	220	110	440	440	330	220						3 IN.	6 IN.			
		FEET	FEET	FEET				%	%	CYS.	CYS.	SYS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	SYS.	SYS.	SYS.	TONS	TONS	SYS.	SYS.	SYS	SYS	SYS.	
LINE "B"										290	581						60														0.2	1243		1674			
59+34 Lt.	Cl. III	27	45	10,10			X	2	Ex.	39																		177								177	
60+72 Lt.	Cl. III	13	20	10,20				-1.2		10																		111								111	
61+48 Rt.	Cl. I	10.5	7	5,3				1		4																		24							24		
61+92 Rt.	Cl. I	16	18.5	5,5				-0.7		6																		36							36		
62+36 Lt.	Cl. III	20	13.5	10,10				0.4		9																		35								35	
64+75 Lt.	Cl. III	12	220																									206								206	Bus Bump Out
66+28 Lt.	Cl. III	16	39	30,10			X	0.6		25																		114								114	
115+45 Rt.	Cl. I	18	11.5	10,5			X	2	6	5																		30							30		
LINE "C"																																					
1+77 Rt.	Cl. III	40	33	30,25			X	8.33	2	44																		179								179	
3+41 Rt.	Cl. III	22	15.5	10,10				1.6	2	11																		45								45	
	Multi-Use Trail													24	38														344		0.1		344				
Line "D"																																140		459			
64+46 Lt.	Cl. III	16	16	15,15				1.5		10																		40								40	
64+75 Rt.	Cl. I	8	16	10,10				1.6		3																		19							19		
65+91 Rt.	Cl. III	20	16	10,10				8.33	2	11																		45								45	
LINE "F"																																37					
LINE "G"																																50					
70+96 Lt.	Cl. I	88	7					2		18																		72							72		
TOTAL										485	581			24	38		60											1,133	344		0.30	1,470	344	2,133	181	952	

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JOANNA CARLY SHEETS
REGISTERED
No. 11100651
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: J. Carly Sheets 3-23-15
DESIGN ENGINEER DATE

DESIGNED: JCS DRAWN: BKM
CHECKED: CWW CHECKED: JCS

APPROACH TABLE
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HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	71 OF 72
CONTRACT	PROJECT

BFS NO. 5693

STRUCTURE DATA

STRUCTURE NUMBER	LOCATION				SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	SKEW	FLOWLINE			SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCUTRE BACKFILL	REVETMENT RIPRAP	CONCRETE CLASS "A" FOR STRUCTURES	PIPE END SECTION	GEOTEXTILE	GRATED BOX END SECTION		SAFETY METAL END SECTION		RIM ELEVATION	CONNECT TO STRUCTURE	REMARKS
	STATION	LEFT	RIGHT	CROSS						COVER	UP STREAM	DOWN STREAM																
					IN.			FEET		FEET	ELEV.	ELEV.	YEAR				CYS.	TONS	CYS.	EA.	SYS.	TYPE	EA.	SLOPE	EA.			
10	59+14.6 "B"	x			12	2	Inlet Type C-15	9		3.5	605.46	605.41	75	NA	7	2	6.2											Connect to Existing Structure
11	59+94.5 "B"	x			12	2	Inlet Type F-7	14		2.3	607.93	607.86	75	NA	7	2	7.6									611.45	12	
12	59+94.5 "B"	x			12	2	Inlet Type C-15	18		2.2	607.76	607.67	75	NA	7	2	9.5										13	
13	59+94.5 "B"		x		12	2	Inlet Type C-15																					Connect Existing Pipes
14	60+07.9 "B"		x		12	2	Inlet Type B-15	34		1.1	608.12	607.95	75	NA	7	2	13.6											Connect to Existing Structure
15	60+91.0 "B"	x			12	2	Inlet Type E-7	93		2.5	608.68	608.18	75	NA	7	2	52.1									613.06	11	
16	67+01.7 "B"		x		15	2	Inlet Type C-15	6		3.0	606.46	606.43	75	NA	7	2												Connect to Existing Structure
17	67+54.1 "B"	x			12	2	Inlet Type B-15	2		1.7	608.40	608.38	75	NA	7	2	0.9											Connect to Existing Structure
18	09+10.4 "G"		x																									Adjust Casting to Grade
19	05+29.9 "C"		x																									Adjust Casting to Grade
20	05+19.9 "C"	x																										Adjust Casting to Grade
21	115+57.6 "B"	x					Storm Sewer Manhole, Inlet																					
22	03+18.3 "C"	x																										Adjust Casting to Grade
23	03+21.9 "C"		x																									Adjust Casting to Grade
24	03+28.6 "C"	x																										Adjust Casting to Grade
25	11+75.5 "G"	x																										Adjust Casting to Grade
	Alternate 1																											
15A	66+52.0 "B"		x		12	2	Inlet Type B-15	6																				Connect to Existing Structure

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VERTICAL SCALE	DESIGNATION
N/A	
SURVEY BOOK	SHEET
	72 OF 72
CONTRACT	PROJECT

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