BRIDGE UNSPECIFIED
BRF-461-1(9)--38-82

LETTING DATE
10-18-2022

SCOTT Co.

INDEX OF SHEETS

IOWA DOT

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

SCOTT COUNTY

BRIDGE UNSPECIFIED

Duck Creek 0.4 mi S of US 6 in Davenport (NB)

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

REVISIONS

TOTAL
PROJECT IDENTIFICATION NUMBER
16-82-461-010
PROJECT NUMBER
BRF-461-1(9)--38-82
R.O.W. PROJECT NUMBER
NHSN-461-1(10)--2R-82

For Project Location Map
Refer to Sheet No. A.2

DESIGN DATA URBAN		
2021 AADT	22,100	V.P.D.
2041 AADT	25,200	V.P.D.
20-- DHV	--	V.P.H.
TRUCKS	2	%
Total Design ESALs	--	

D3 – Date: 8–2–19

D5 – Date: 11–8–19

PRELIMINARY PLANS

Subject to change by final design.

D2 PLAN – Date: 7–2–19

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER A.1

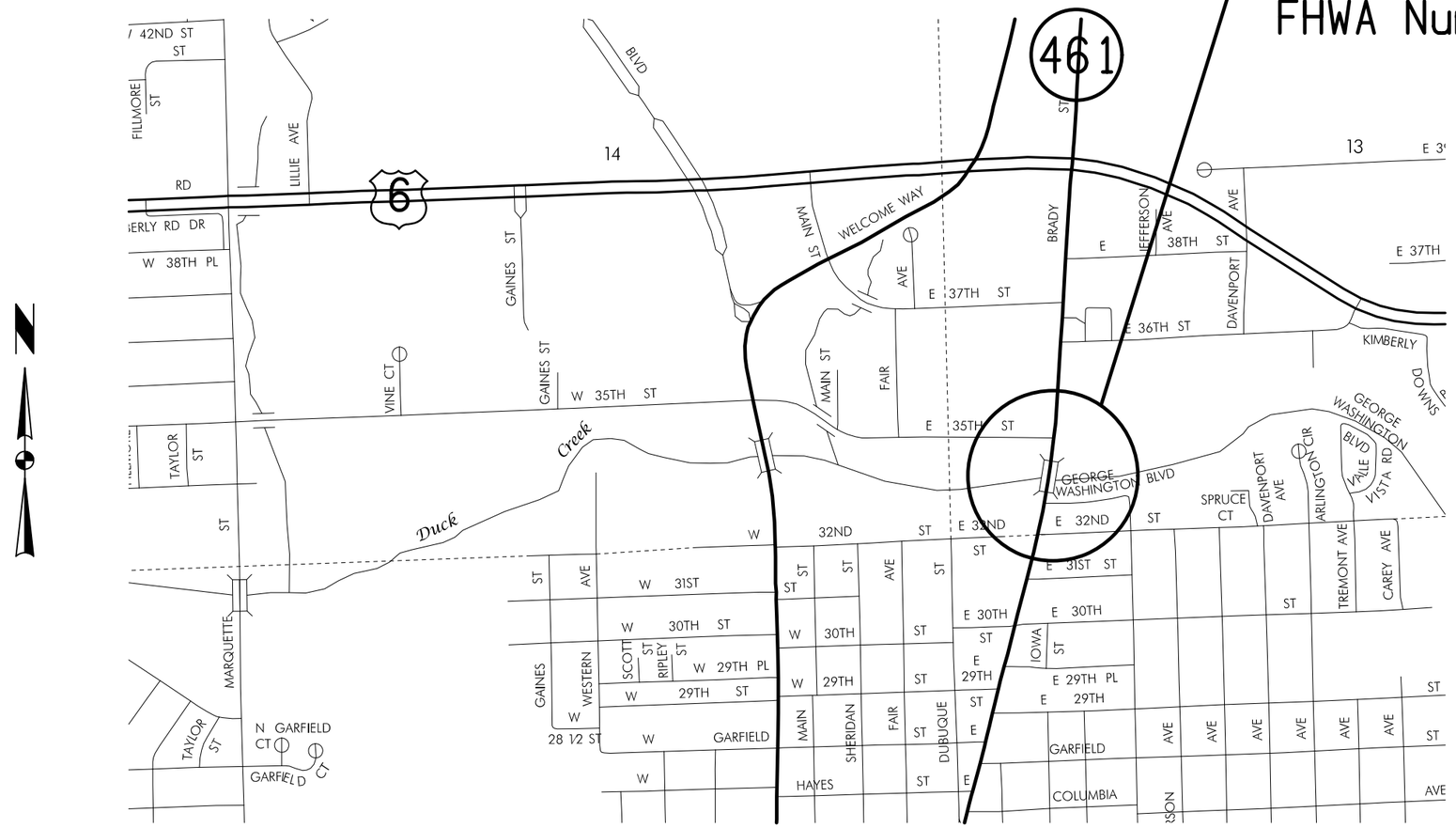
1:02:23 PM 6/26/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_A01.dgn

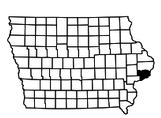
STA. 2004+90.44

Project Location

M.P. 120.10

FHWA Number 46940





LOCATION MAP SCALE

0 0.1 0.2 0.3

Miles

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER A.2

1:02:26 PM 6/26/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_A01.dgn

FIELD EXAM CHECKLIST

Speed Limit during construction?

Clearing and Grubbing by area or unit?
If by unit, need District to provide count.

Are there existing drainage problems?

Are there areas adjacent to the project where additional drainage work needs to be done?

Is special erosion control needed (riprap, silt ditches, silt dikes, silt curtain, etc.)

Note condition of existing storm sewer.

Note any special features not shown on plans. Do any of the utilities need to be relocated (power/telephone poles)? Permanently or temporarily?

Are there any historical items within the project?

Any patching need to be done? Is the District going to provide patching locations?

Bike Path:

1. Clearance under bridge?
2. Elevation above streambed?
3. Paved Shoulder?
4. Limits of articulated mat?
5. Drainage?

Temporary connection to E. Geo. Washington Blvd. west & ent's at south end:
Rock? Paved?

TBR layout south of bridge?

IOWA DEPARTMENT OF TRANSPORTATION

TO OFFICE: District 6 **DATE:** August 7, 2017

ATTENTION: Jim Schnoebelen **PROJECT:** Scott County
BRF-461-1(9)--38-82
PIN: 16-82-461-010

FROM: Kevin K. Patel

OFFICE: Design

SUBJECT: Project Concept Statement; (Final Approval, D0)

This project involves the replacement of the northbound IA 461 bridge (Maint No. 8220.1R061) over Duck Creek, 0.4 miles South of U.S. 6 in Davenport.

A concept review was held on Friday, April 28, 2017. Those present included Newman Abuissa, Roger Walton, and Mark Brandl from the District 6 Office; Dave Mulholland from the Office of Bridges and Structures; and Kevin Patel and Seana Godbold from the Office of Design.

The existing bridge will be replaced with a 196' x 48' continuous concrete slab bridge with 5' and 11.4' sidewalks. A section of recreational trail that extends under the south side of the bridge will be replaced as it is anticipated that this will be damaged during construction. The new bridge will be constructed on the existing horizontal and vertical alignment. Traffic will be maintained by staged construction. The preliminary cost for this alternative is $3,005,900.

This alternative maintains two lanes of traffic at all times (see attached concept for details). An alternative that maintained one lane of traffic was discussed; however, this option was dismissed from further consideration. Right of way will be required.

The Draft Project Concept Statement was sent out for review and comment with concerns to be resolved by Thursday, August 3rd, 2017. Comments received during the review period have been considered and resolved.

This project is recommended for construction in FY 2021. The Office of Bridges and Structures will coordinate plan preparation with assistance from the Office of Design.

KKP: skg
Attach.
cc:

C. Purcell	M. J. Kennerly	K. D. Nicholson
M. E. Ross	S. J. Megivern	A. A. Welch
N. M. Miller	C. C. Poole	N. L. McDonald
G. A. Novey	D. R. Claman	P. Lu
A. Abu-Hawash	M. A. Swenson	M. J. Sankey
R. A. Younie	D. R. Tebben	B. D. Hofer
K. Brink	D. L. Newell	B. E. Azeltine
M. E. Khoda	S. J. Gent	T. D. Crouch
J.W. Laaser-Webb	W.A. Sorenson	D. E. Sprengeler
E. C. Wright	K. A. Yanna	D. McDonald
C. L. Cutler	D. Mulholland	J. J. Tjaden
N. M. Abuissa	T. M. Storey	R. R. Walton
S. W. Flockhart	M. Sloppy	M. J. Donovan
V. A. Brewer	FHWA	

FINAL PROJECT CONCEPT STATEMENT

On IA 461 Over Duck Creek 0.4 Miles S. of U.S. 6 in Davenport

Scott County
BRF-461-1(9)--38-82
PIN: 16-82-461-010
Maint. No. 8220.1R061
FHWA No. 46940

Highway Division
Office of Design

Kevin K. Patel, P.E.
515-239-1540

August 7, 2017

I. STUDY AREA

A. Project Description

This project involves the replacement of the northbound IA 461 bridge (Maint. No. 8220.1R061) over Duck Creek, 0.4 miles south of U.S. 6 in Davenport.

The existing bridge will be replaced with a continuous concrete slab bridge that is 196' x 48' with 5' and 11.4' sidewalks. Traffic will be maintained using staged construction. The preliminary cost for this alternative is $3,005,900.

B. Need for Project

The existing 153' long by 48' wide concrete slab bridge was built in 1952. The deck was first overlaid in 1972 and overlaid again in 1988. The existing overlay is at the end of its useful service life. The bridge is functionally obsolete due to the deck geometry. The bridge was designed for live loads below current standards; therefore, this bridge should be replaced.

Looking west

Looking south

C. Present Facility

The existing structure is a 153' x 48' concrete slab bridge constructed in 1952.

IA 461 was originally paved with 18'-wide 7" PCC pavement in 1929, complete with curb and gutter. The roadway was widened to 48' in 1952 with 6" PCC integral pavement (49' back to back pavement section/69' top width including 10' shoulders). HMA resurfacing was completed in 1983 with a 3" lift.

D. Traffic Estimates

The 2021 and 2041 average daily traffic estimates are 22,100 ADT with 2% trucks and 25,200 ADT with 2% trucks, respectively.

E. Sufficiency Ratings

IA 461 is classified as a "Commercial & Industrial" route and is a maintenance service level "B" road. The federal bridge sufficiency rating is 73.2.

F. Access Control

Access rights will be acquired for this project. Four accesses will be impacted; the east entrance to The Rack Restaurant, the south and north entrances to Arby's, and the south entrance to the Davenport Stadium.

G. Crash History

During the five-year study period from January 1, 2010 through December 31, 2014, there were 13 crashes near the project location; which included 5 rear-end and 5 side-swipe collisions, 2 run off the road crashes and 1 failure to yield making a left turn.

II. PROJECT CONCEPT

A. Replace with a bridge while maintaining 2 lanes of traffic.

The existing northbound 153' x 48' steel I-beam bridge with 5' wide sidewalks on each side will be replaced with a 196' x 48' continuous concrete slab bridge with a 5' sidewalk on the east side and a 11.4' sidewalk on the west side. The sidewalk on the west side is 6.4' wider than necessary since staged construction, requires a wider bridge deck to maintain two lanes of traffic.

The typical cross section, adjacent to the bridge, will consist of four 12' lanes, providing a 49' back of curb to back of curb roadway.

The new bridge will be constructed on the existing horizontal and vertical alignment. The new 70'-long bridge approach sections will be removed and replaced.

New bridge end drains will be installed on each quadrant of the bridge. The new bridge end drains will tie in the existing storm sewer system. Temporary storm sewer intakes will be required in order to accommodate drainage for the pavement widening on the west side. These temporary intakes will be removed after stage one construction is complete and the new intakes will be installed with the new curb and gutter during stage two.

There is a recreational trail that extends under the south side of the bridge. It is anticipated that approximately 170 ft. of this trail may incur some damage due to construction activities and therefore will require replacement. The profile of this trail may need to be lowered to provide a minimum of 10' of vertical clearance in order to provide enough head room for bicyclists. Concrete slope protection will be placed on both bridge berm slopes. The area between the recreation trail and the concrete slope protection under the south side of the bridge will also be paved to minimize maintenance. Beyond the 3' edge of the shoulder of the recreational trail, articulated block mat will extend down the banks of Duck Creek. An additional 130' section of recreational trail will be relocated to tie into IA 461.

There are 4 accesses off of IA 461 (Brady Street) that will either need to be modified or closed due to conflicts with the new bridge, sight distance concerns, or impacts to the functional area of the IA 461/ E. 35th Street intersection.

The Rack Restaurant access off IA 461, at the southeast quadrant of the bridge, will be closed as the new, longer bridge and the proposed turned down end section of barrier rail prohibits the entrance from remaining open. A new access will be constructed off of E. George Washington Boulevard. Additional review may be required regarding the internal circulation of the restaurant parking lot and to ensure that vehicles turning into

this access do not negatively affect the operation of the IA 461/ E. George Washington Boulevard intersection.

The Arby's south entrance, on the northwest quadrant of the bridge, should be closed as the sight distance requirement is not met. Furthermore, the sight distance requirement for the northern access to Arby's is also not met. The north access is within the functional area of the adjacent E. 35th Street/ IA 461 intersection and may negatively affect the operation of the intersection. Therefore, the north entrance will also be closed. Access to Arby's would be maintained via E. 35th Street.

Sight distance is not met at the south access to the Davenport Stadium, on the NE quadrant of the bridge. The south access should be modified such that it provides for right in movements only.

Utility companies, with utilities within the DOT right of way, will be responsible for removal and replacement of hydrants, power poles, overhead lines, lighting, and any other subsurface utilities. There may be additional utilities outside of the DOT right of way that may require relocation. Special attention should be given to the large utility poles on the east side of the bridge.

Apply erosion control and rural seeding and fertilizing to all disturbed areas.

Traffic will be maintained by staged construction requiring two lanes of traffic be maintained for both stages of construction.

It appears that right of way will be required for this project.

Bridge Items	Estimated Cost
New Bridge	$ 1,282,500
Bridge Stage Construction – 10% Bridge Rep. Cost	128,200
Remove Existing Bridge	77,000
Structural Steel Pedestrian Hand Rail	50,800
Fence, chain-link, vinyl coated	10,500
Erosion Stone	1,200
Revetment	36,000
Steel Sheet Pile for Abutments – 1,200 sf @ $40/sf	48,000
Mobilization - 10%	163,400
Contingency - 15%	269,700
Bridge Total	**$ 2,067,300**
Roadway Items	
Removal of Pavement	$18,100
Removal of Curb & Gutter	3,050
Removal of Sidewalk	2,200

Clearing & Grubbing	250
Excavation, Class 13 Waste	4,100
Temporary Concrete Barrier	8,100
Intakes	5,600
Concrete Roadway Pipe – 30”	8,550
Apron – 30”	500
Bridge End Drains	35,650
Special Backfill	7,350
Concrete Slope Protection	29,500
Articulated Block Mat, 4”	15,800
Bridge Approach Section	131,200
PCC Curb & Gutter	26,500
PCC Pavement – 8” (includes driveways)	42,250
Recreational Trail, 5” PCC	14,050
PCC Sidewalk – 4”	8,650
Seeding	1,900
Erosion control	50,000
Right of Way (includes closure of entrances)	120,000
Traffic Control @ 5%	26,660
Mobilization @ 5%	26,660
Staging @30%	176,000
M&C @ 30%	176,000
Roadway Total	**$938,600**
Project Total	**$ 3,005,900**

B. Staging Details

The proposed bridge would be constructed in two stages:

Stage 1: The first stage requires the removal of the western 14.2’ of the existing bridge deck (cut 9.8’ west of the centerline). Two 12’ lanes of traffic will be maintained on the remaining 31.5’ of the existing bridge as a 27.7’ section, of the new bridge, is constructed.

Stage 2: The second stage requires using the proposed sidewalk to provide a surface for two 11’ traffic lanes along the west side of the bridge. To accommodate the shift of two 11’ lanes, over the new portion of the bridge, removal of the adjacent roadway curb and gutter and sidewalk will be required. Temporary pavement will then be required to accommodate traffic. The temporary pavement will consist of 8” PCC pavement on 12” of special backfill. This pavement will then be removed and the curb and gutter reinstalled at the completion of the project.

Sheet pile will be required to accommodate the proposed staging.

C. Recommendations

It is recommended that the present structure be replaced, as described above.

D. Construction Sequence

It is anticipated that all work on this project will be awarded to one prime contractor. The Office of Bridges and Structures will coordinate the plan preparation with assistance from the Office of Design.

E. ADA Accommodations

There are sidewalks adjacent to IA 461 on all four quadrants of the existing bridge which will be impacted therefore, ADA accommodations are planned in conjunction with this project. There will be an 11.4’ on the west side and a 5’ on the east side sidewalk on the IA 461 bridge which will require transitions to the existing sidewalk system. The sidewalk on the west side is 6.4’ wider than necessary in order to maintain two lanes of traffic for the construction staging of this project.

A TL-2 barrier rail (TxDOT T411) will be used between vehicular traffic and the sidewalk. This barrier rail is ADA compliant and meets the requirements for a 40 mph design speed.

F. Special Considerations

As right of way will be required for this project, a phase I archaeological survey will be required.

Conduits for private utility companies, attached to the side of the bridge, are to be relocated prior to construction.

The Office of Location and Environment has performed an office review of the project area and has determined that a Section 404 Permit will be required.

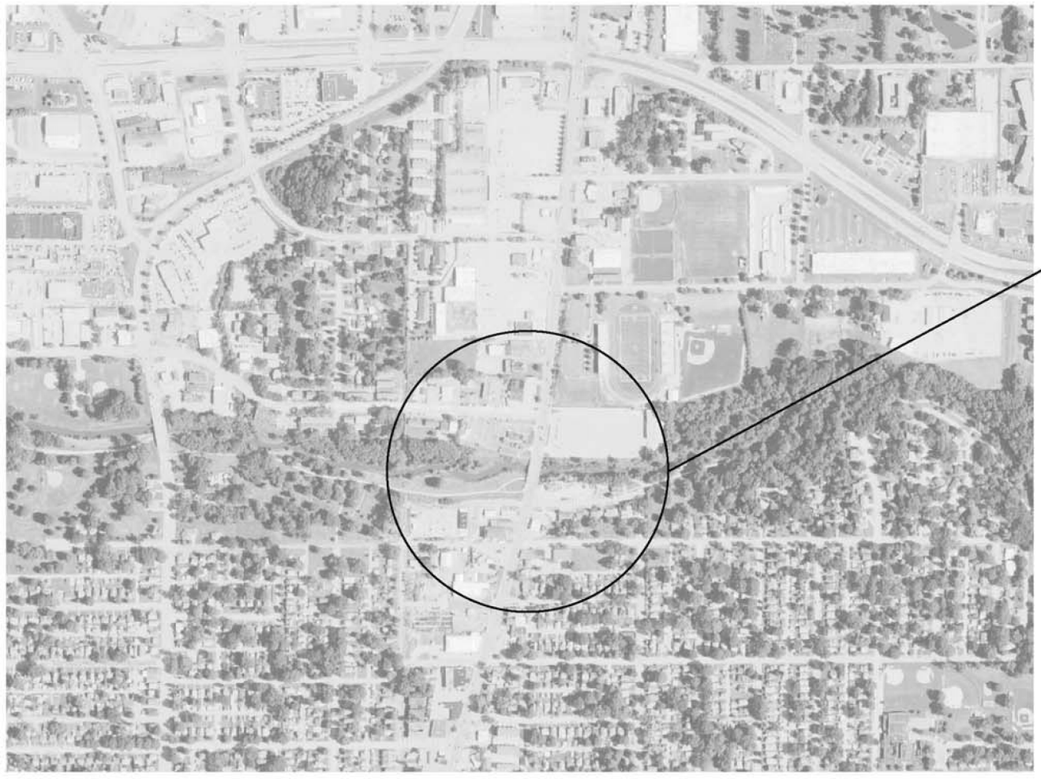
F. Program Status

Site data has been developed by the Office of Design. This project is listed in the 2018-2022 Iowa Transportation Improvement Program, with $2,400,000 programmed for replacement in FY 2021. Costs for this project will be eligible for bridge replacement funds. A schedule of events will be developed following approval of the Project Concept.

KKP: skg

SCOTT COUNTY

N



STA 158+45.00
FHWA 46490
MAINT. 8220.1R061
DESIGN 651

DUCK CREEK 0.4 MILES SOUTH
OF US 6 IN DAVENPORT (NORTHBOUND)
BRF-461-1(9)--38-82
PIN: 16-82-461-010

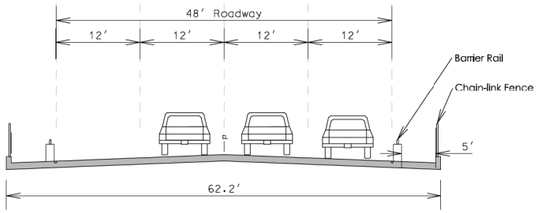
WINFIELD TWP.
T-78N R-3E
SECTION 13

Cross Sections for Scott County Project BRF-461-1(9)--38-82

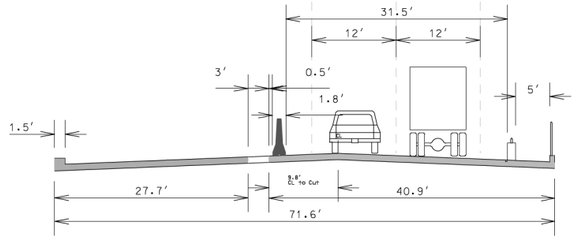
Over Duck Creek 0.4 miles South of U.S. 6 in Davenport (NB)

Maintaining two lanes of traffic

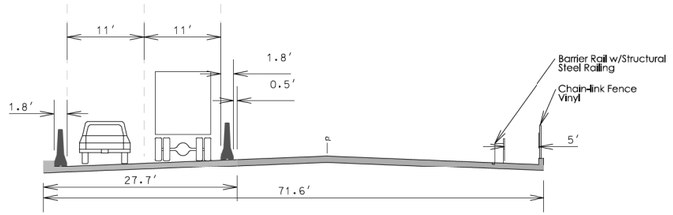
Existing Typical Section



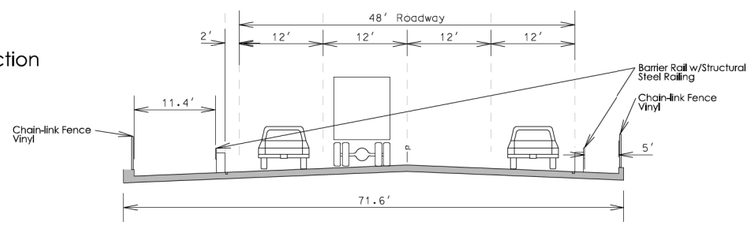
Stage 1



Stage 2



Finished Section

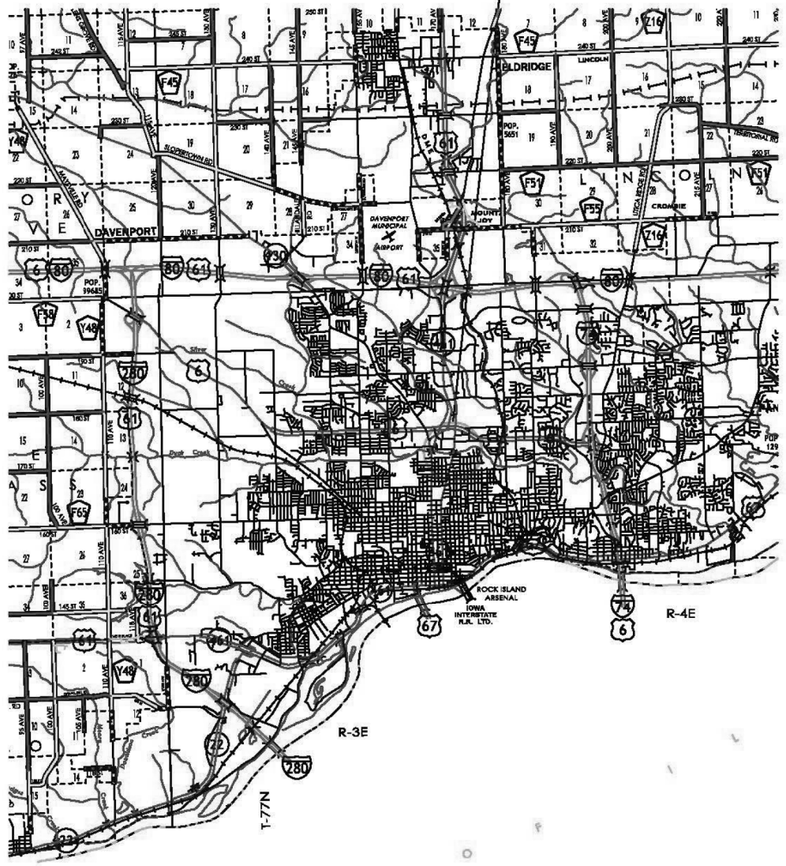


Legend

- Under Construction
- Driving Surface

SCOTT COUNTY

STA 158+45.00
FHWA 46490
MAINT. 8220.1R061
DESIGN 651

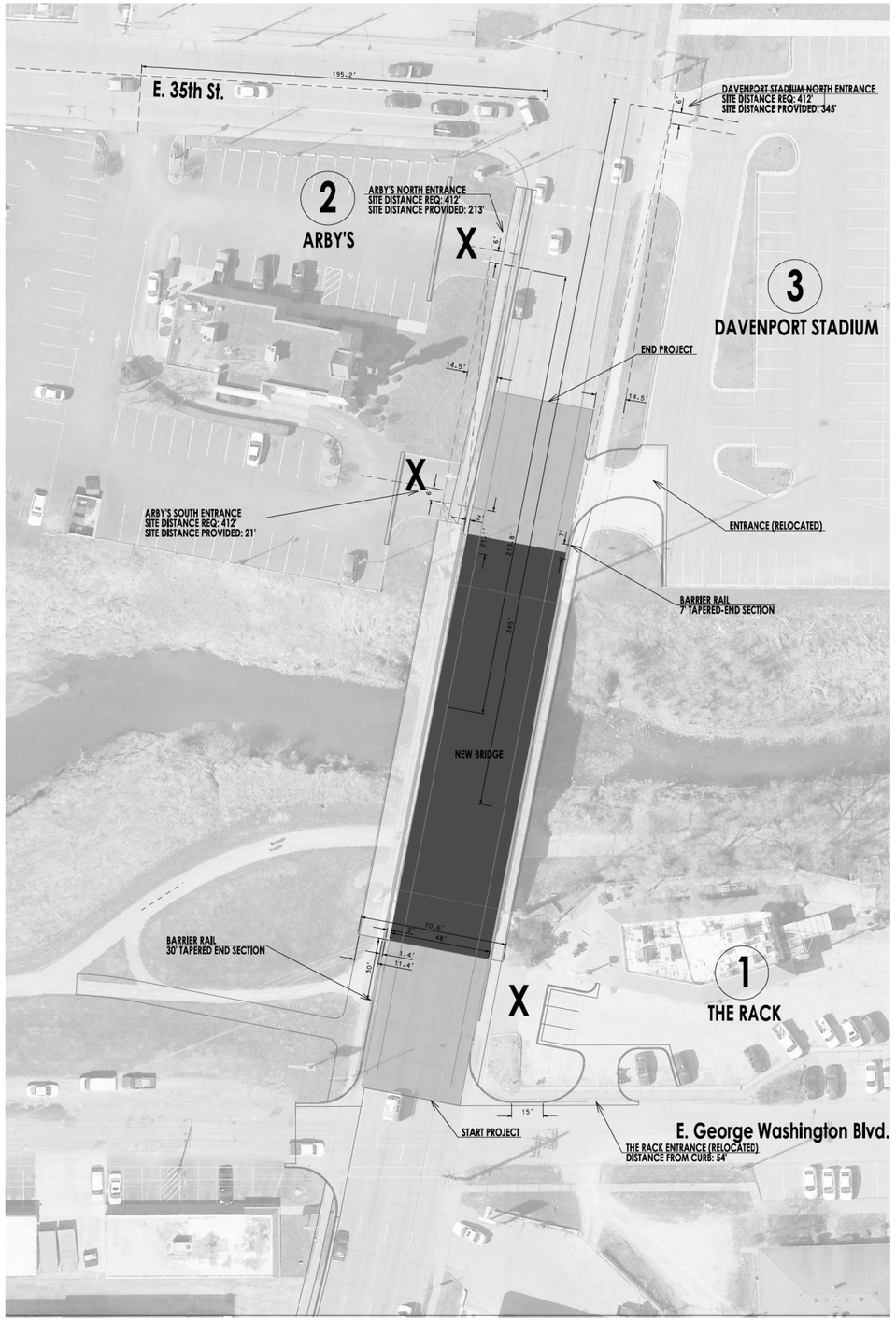


DUCK CREEK 0.4 MILES SOUTH
OF US 6 IN DAVENPORT (NORTHBOUND)
BRF-461-1(9)--38-82
PIN: 16-82-461-010

82

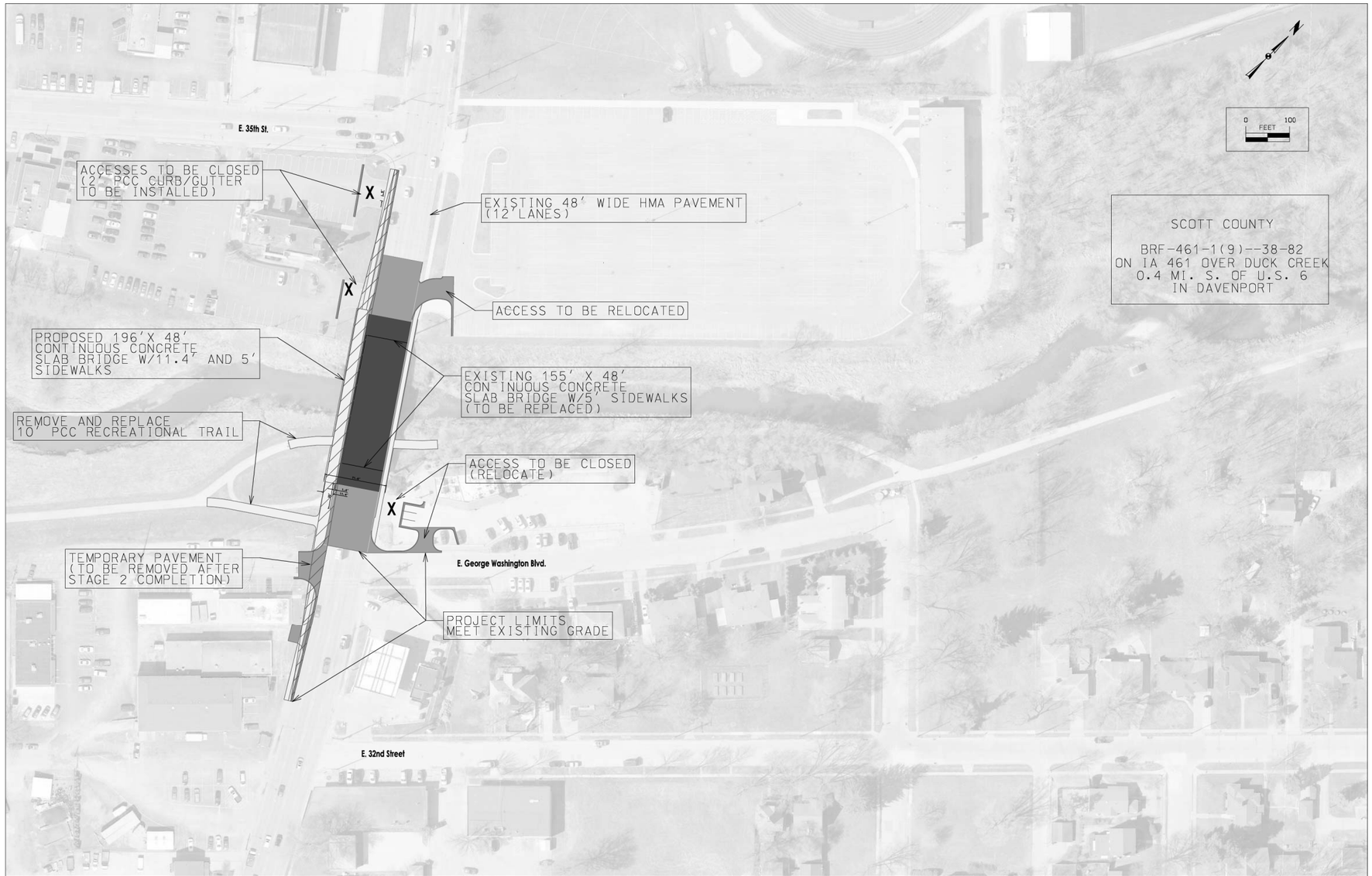
FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER A.9

1:03:28 PM 6/26/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_A01.dgn



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER A.10

1:03:42 PM 6/26/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_A01.dgn



PREDESIGN • CADD • PRODUCED	STATE OF IOWA	FHWA 7	FISCAL YEAR 2021	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER 1

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER A.11

1:03:49 PM 6/26/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_A01.dgn

Roadway				
PIN Number	16-82-461-010		**Submittal Date**	
Project Number	BRF-461-1(9)--38-82			**Approval Date**
District	District 6	**Assistant District Engineer**	Ken Yanna	
County	SCOTT	**or**		
Route	IA 461	**Office Director**		
Location	Davenport			
Work Type	Bridge Replacement Concept			
Segment Manager	Kevin Patel			
Designer	Seana Godbold			

Design Manual Section 1C-1
Last Updated: 05-26-17

Urban Multilane Roadways (Urban Arterials)

Design Element		Preferred	Acceptable Criteria	Project Values
Design speed (mph)		The anticipated posted speed limit	30	40
Maximum superelevation rate (Refer to Section 2A-2)		4%	8%	NA
Design lane width (ft)		12	11	12
Full depth paved width (ft)	Outside lane	Design lane width + curb and gutter unit or 14 feet for roadways with shoulders, 12' if using full depth shoulders	Match design lane width	12
	Inside lane(s)	Design lane width + curb and gutter unit. 12' for roadways without a curb and gutter unit	Match design lane width	12
Right turn lane or an auxiliary lane (ft)		12	10	NA
Left turn lane (ft)	With raised or painted median	12 ft + median	10 ft + median	NA
	With depressed median	12	10	NA
Two-way left turn lane (ft)		14	11	NA
Parking lane width (ft)		10	7	NA
Pavement cross-slope (on tangent sections)	Through lanes	2%, However, when adjacent lanes slope in the same direction, increase slope by 0.5% per lane up to 3%	1.5% minimum, 3% maximum	2.5%/3%
	Auxiliary and turn lanes	3%	3% maximum	NA
	Crown break at centerline	4%	4% maximum	4%
Shoulder cross-slope (on tangent sections)	Shoulders	4%	Shoulder cross-slope cannot be less than the adjacent lane, 6% max for paved or granular shoulders, 8% max for earth shoulders	NA
	Curb and gutter units	Match pavement cross-slope	6% maximum	Match cross-slope
	Parking lanes	1% greater than pavement cross-slope	6% maximum	NA
Curb type (Refer to Section 3C-2)	Design speed ≤ 45 mph	6-inch standard	any shape	6" standard
Foreslope (For fill areas greater than 40 ft, contact the Soils Design Section for assistance)	Adjacent to shoulder	10:1 for 4' then 6:1	3:1	NA
	Beyond standard ditch depth and design clear zone	3.5:1	3:1	NA
	Curbed roadways	2%	not steeper than 3:1	NA
Backslope (For cut areas greater than 25 feet, contact the Soils Design Section for assistance with backslope benches.)		3:1	2.5:1	NA
Transverse Slopes	w/ drainage structures	8:1	6:1	NA
	w/o drainage structures	10:1	6:1	NA
Ditches (Refer to Section 3G-1)	Outside ditch (depth x width) (ft)	5 x 10	--	NA
Median width (ft) (Refer to Section 3E-1)		See Section 3E-1	0	NA
Bridge width—new*	Bridge length ≤ 200 ft	design lane widths + effective shoulder widths or design lane width + 3 ft each side in curb and gutter section	design lane widths + effective shoulder widths or curb-to-curb width in curb and gutter section**	48'
	Bridge length > 200 ft	design lane widths + effective shoulder widths or design lane width + 3 ft each side in curb and gutter section	design lane widths + 4 ft offset each side for roadways with shoulders or curb-to-curb width in curb and gutter section**	NA
Bridge width—existing*		design lane widths + no less than 2 ft left and right	design lane widths + 2 ft left and right of the design widths	48'
Vertical clearance (ft) (above lanes, shoulders and 25 feet left and right of the center of railroad tracks)	Over primary	16.5	16	NA
	Over non-primary	16.5 at interchange locations, 15 at all other locations	14	NA
	Over railroad	23.3	23.3	NA
	Sign truss and pedestrian crossings	17.5	17	NA
Structural Capacity		Contact Office of Bridges and Structures	Contact Office of Bridges and Structures	
Level of Service		C	D	

*FHWA notification via email is required if acceptable criteria is not met on the NHS system (No formal design exception required)
** If travel lanes are less than 12 ft wide contact the Methods Section for assistance.

Design year ADT =	

Design Manual Section 1C-1
Last Updated: 05-26-17

Effective Shoulder Width and Type for Multilane Arterials

Preferred (Values shown in feet)					Acceptable (Values shown in feet)					Project Values
	Rural Roadways		Urban Roadways			Rural Roadways		Urban Roadways		
Auxiliary lanes or turn lanes with shoulders	6		6		Auxiliary lanes or turn lanes with shoulders	6		0		NA
Turn lanes with curbs	6		See Section 3C-2		Turn lanes with curbs	6		0		NA
Expressways	Outside		Median Side		Expressways	Outside		Median Side		
	Effective Shoulder Width	Paved Width	Effective Shoulder Width	Paved Width		Effective Shoulder Width	Paved Width	Effective Shoulder Width	Paved Width	
Routes where bicycles are to be accommodated	10	10	6	6	Routes where bicycles are to be accommodated	8	4	4	4	(1)
On roadways approaching urban areas (due to increased bike traffic)	10	10	6	6						
On all curves with a superelevation rate of 7.0% or greater	10	10	6	6	On all other Expressways (Multilane Arterials)	8	2*	4	4	
On roadways with design year ADT > 6500 vpd	10	6	6	6						
On all other Expressways (Multilane Arterials)	10	4	6	4						

*Requires safety edge-See Section 3C-6
Curbs should be located beyond the outer edge of the effective shoulder width in rural areas
Refer to Section 3C-2 for curb offsets in urban areas

Notes:

(1) Matches existing roadway

Roadway Design Speed (mph) =	

Design Manual Section 1C-1
Last Updated: 05-26-17

Design Criteria for Low Speed Roadways

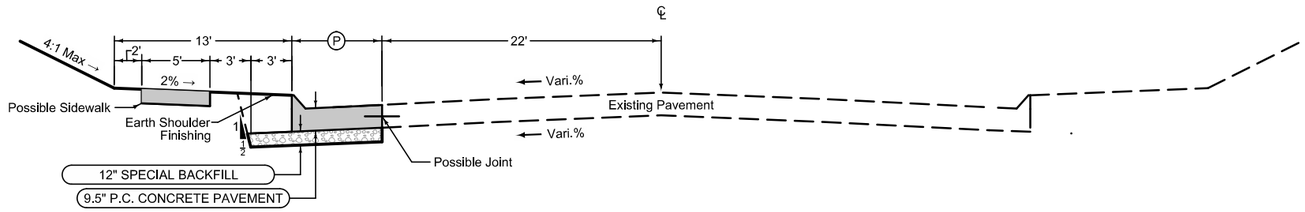
Design Element			Preferred Criteria Design Speed, mph					Acceptable Criteria Design Speed, mph					Project Values
			25	30	35	40	45	25	30	35	40	45	
Stopping sight distance (ft) (Refer to Section 6D-1)			155	200	250	305	360	155	200	250	305	360	>305
Minimum horizontal curve radius (ft) and superelevation rate (Refer to Sections 2A-2 and 2A-3)	Method 2 superelevation and side friction distribution	e = 4% max	See Table 10 in Section 2A-3					--					NA
	Method 5 superelevation and side friction distribution	e_{max} = 6%	144	231	340	485	643	144	231	340	485	643	NA
		e_{max} = 8%	--	--	--	--	--	134	214	314	444	587	NA
Minimum vertical curve length (ft) (Refer to Section 2B-1)			75	90	105	120	135	75	90	105	120	135	400'
Minimum rate of vertical curvature (K) (Refer to Section 2B-1)	crest vertical curves		12	19	29	44	61	12	19	29	44	61	
	sag vertical curves	roadways without fixed-source lighting	26	37	49	64	79	26	37	49	64	79	NA
		roadways with fixed-source lighting	26	37	49	64	79	14	20	27	35	44	NA
Minimum gradient (%)	(Refer to Section 2B-1)		0.5					0.3% with a curb, 0.0% without a curb					0.75%
Maximum gradient (%)	(Refer to Section 2B-1)	Urban roadways	5					--	9	8	8	7	0.75%
		Rural roadways						--	--	--	6	6	
Clear zone			See "Preferred Clear Zone" table in Section 8A-2					See "Acceptable Clear Zone" table in Section 8A-2					16'

Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

			2_Curb_ 10-17-17
STATION TO STATION		(P) Feet	Curb Type See PV-102
2001+54.50	2003+20.94	2.5	6" Std.
2006+59.94	2007+79.61	2.5	6" Std.



See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

U.S. 461

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER B.1

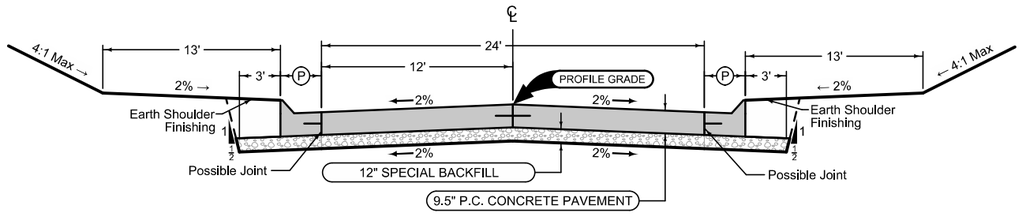
7:58:38 AM 7/12/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_B01.dgn

Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

			2_Curb_ 10-17-17
STATION TO STATION		(P) Feet	Curb Type See PV-102
4000+96.45	4001+25.63	3.5	6" Std.



Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

			2_Curb_ 10-17-17
STATION TO STATION		(P) Feet	Curb Type See PV-102
4000+96.45	4001+25.63	3.5	6" Std.

Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

	2P_ 10-19-10
STATION TO STATION	
4000+96.45	4001+25.63

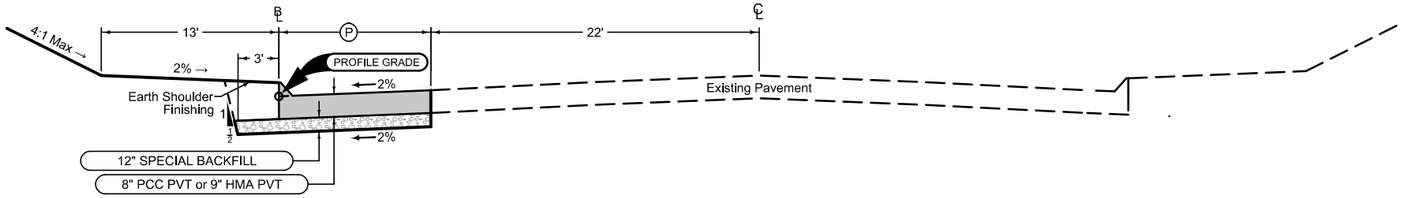
E. GEORGE WASHINGTON BLVD.

Detour

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

			2_Curb_ 10-17-17
STATION TO STATION		(P) Feet	Curb Type See PV-102
10015+22.44	10017+57.07	2.5'-15.7'	6" Std.
10019+56.06	10021+44.42	15.7'-7.7'	6" Std.

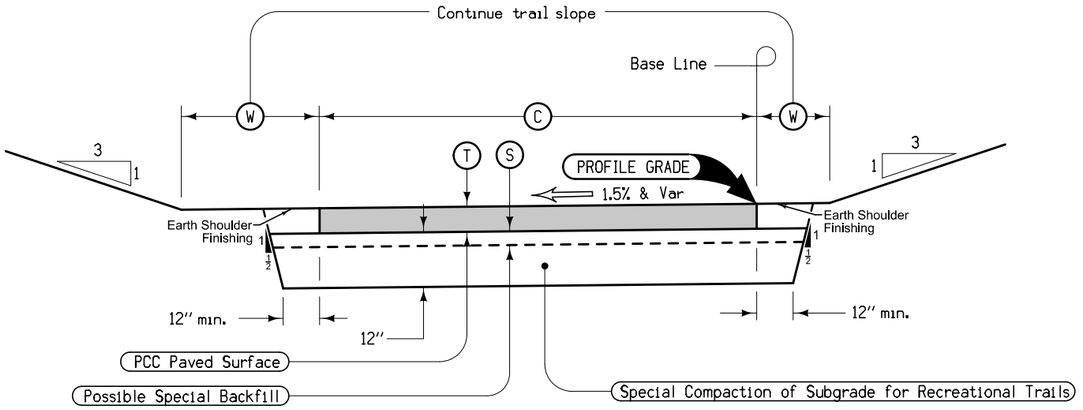


See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

E. GEORGE WASHINGTON BLVD. & DETOUR

7402 A
MODIFIED



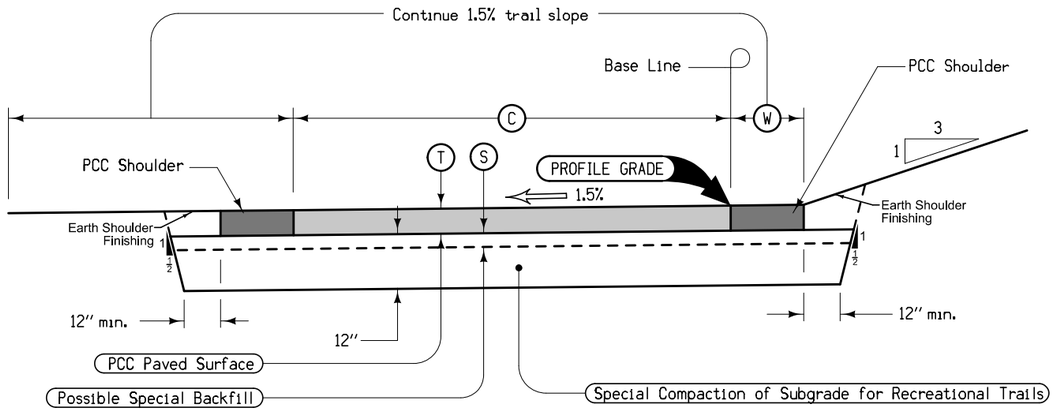
PAVEMENT THICKNESS		
Pavement Type	Trail Width (C)	(T)
PCC	10′	5″

Notes:
Bid item is "Recreational Trail".

STATION TO STATION		PAVEMENT TYPE	(C) Feet	(S) Inches	(W) TURF SHLDR Left	Right
9000+57.83	9002+25.00	PCC	10	-	6′	3′

TYPICAL CROSS SECTION RECREATIONAL TRAIL - BP1

7402 B
MODIFIED

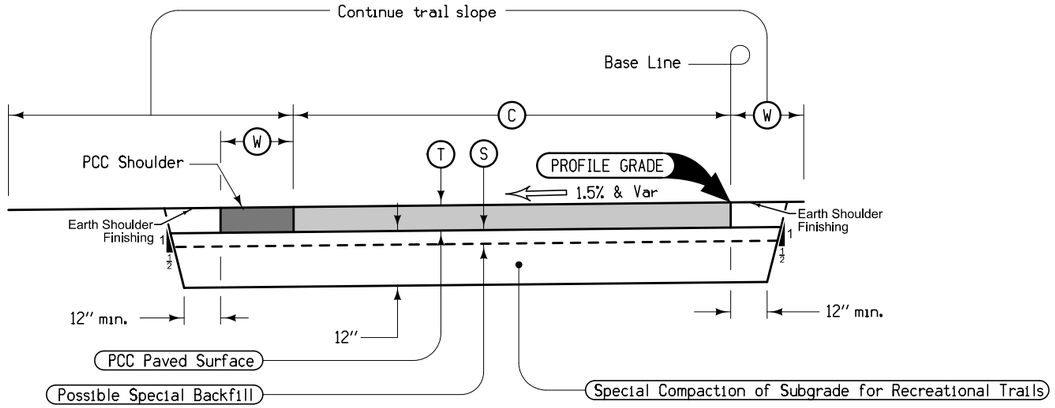


PAVEMENT THICKNESS		
Pavement Type	Trail Width (C)	(T)
PCC	10′	5″

STATION TO STATION		PAVEMENT TYPE	(C) Feet	(S) Inches	(W) PCC SHLDR Left	Right
9002+25.00	9003+49.00	PCC	10	-	3′	3′

TYPICAL CROSS SECTION RECREATIONAL TRAIL - BP1

7402 C
MODIFIED

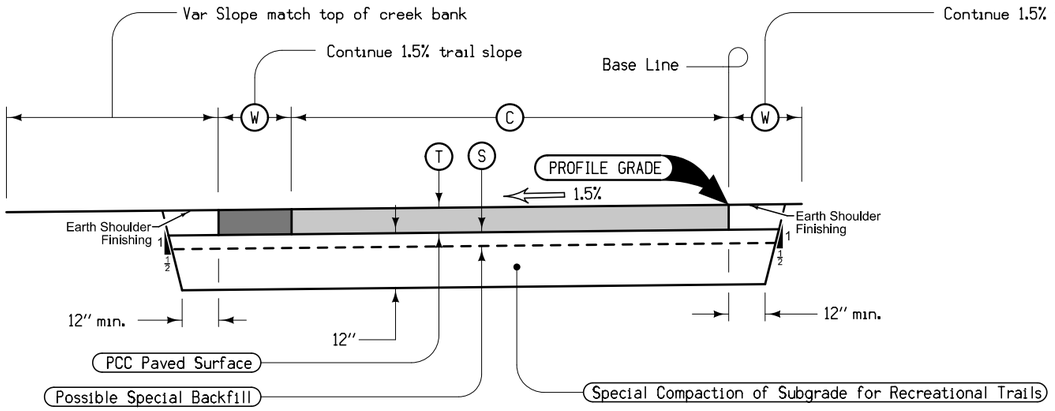


PAVEMENT THICKNESS		
Pavement Type	Trail Width (C)	(T)
PCC	10′	5″

STATION TO STATION		PAVEMENT TYPE	(C) Feet	(S) Inches	(W) SHLDR Left	Right
9003+49.00	9003+55.00	PCC	10	-	3′	Var
9004+15.00	9004+20.00	PCC	10	-	3′	Var

TYPICAL CROSS SECTION RECREATIONAL TRAIL - BP1

7402 D
MODIFIED

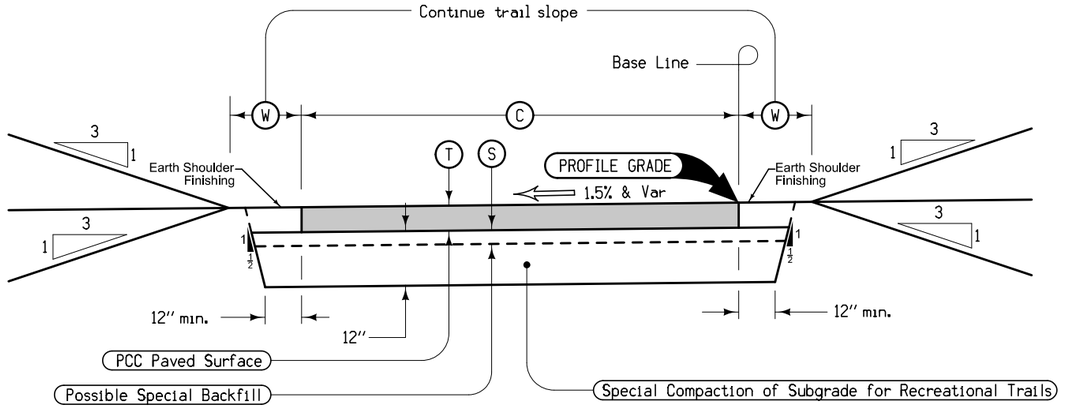


PAVEMENT THICKNESS		
Pavement Type	Trail Width (C)	(T)
PCC	10'	5"

STATION TO STATION		PAVEMENT TYPE	(C) Feet	(S) Inches	(W) SHLDR Left	(W) SHLDR Right
9003+55.00	9004+15.00	PCC	10	-	3'	Var

TYPICAL CROSS SECTION RECREATIONAL TRAIL - BP1

7402 E
MODIFIED



PAVEMENT THICKNESS		
Pavement Type	Trail Width (C)	(T)
PCC	10'	5"

Notes:
Bid item is "Recreational Trail".

STATION TO STATION		PAVEMENT TYPE	(C) Feet	(S) Inches	(W) TURF SHLDR Left	(W) TURF SHLDR Right
9010+57.92	9012+21.13	PCC	10	-	3'	3'

TYPICAL CROSS SECTION RECREATIONAL TRAIL - BP2

SURVEY SYMBOLS

- CP Control Point
- FENO FENO Monument
- BM Bench Mark
- TP TPD Telephone Pedestal
- FO1D Fiber Optic Co. 1 - Quality D
- GL1D Gas Line Co. 1 - Quality D
- GV GV Gas Valve
- FHD Fire Hydrants
- WV WV Water Valve
- WL1D Water Line Co. 1 - Quality D
- MH Utility Access (Manhole)
- UE Utility Elevation
- ST1D Storm Sewer Co. 1 - Quality D
- IN Storm Sewer Intake
- TV1D TV Cable Co. 1 - Quality D
- EL1D Electric Line Co. 1 - Quality D
- BL Topo Breakline
- PRO Profile Shot
- PLG Location of General Photo
- SOP Size of Pipe or Culvert
- PIP Pipe Culvert
- TIL Tile Line
- OUT Tile Outlet
- INB Storm Sewer Beehive Intake
- LIN Miscellaneous Line
- BNK Stream Bank
- D Centerline Draw or Stream (Down)
- EW Edge of Water
- DU Centerline Draw or Stream (Up)
- SP Stream Profile
- TW Top of Water
- WC Wild Card (Misc. Field Shot)
- REF Reference Tie Point
- SWK Sidewalk
- CU Back of Curb
- GU Gutter In Front of Curb
- EP Edge of Paved Roads (ML or SR)
- CON Concrete or A/C Slab
- ENP Edge Paved Entrance & Park Lot
- BRG Bridge
- BCL Bridge Centerline
- C Centerline BL of Road (ML or SR)
- ENT Centerline BL of Entrance
- TRL Trail
- BBB Bottom of Bridge Beam
- SHR Shrub
- TDC Tree Deciduous
- SIGN SI Sign
- PPA Power Pole Co. 1
- LUM Luminaire
- TSL Traffic Signal and Luminare
- TSG Traffic Signal
- PR Electic Riser Pole
- MIS Miscellaneous
- BLD Building or Foundation
- GDL Guard Rail Steel
- FCL Chain Link and Security Fence
- UB UB Utility Box
- BD Bridge Deck
- GR Ground Shot
- RET Retaining Walls
- BLS Bridge Low Steel
- SCR Section Corner
- SCR Section Corner
- C Centerline BL of Road (ML or SR)
- Default_Curve Default Curve Feature
- Default Default Feature

UTILITY LEGEND

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING	**Design Color No.**	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right

Reference Point
Station
Survey Line
Section Corner
Ground Line Intercept
Saw Cut
Guardrail
Trench Drain
HighTension Cable Guardrail
Sheet Pile
Pavement Removal
Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND

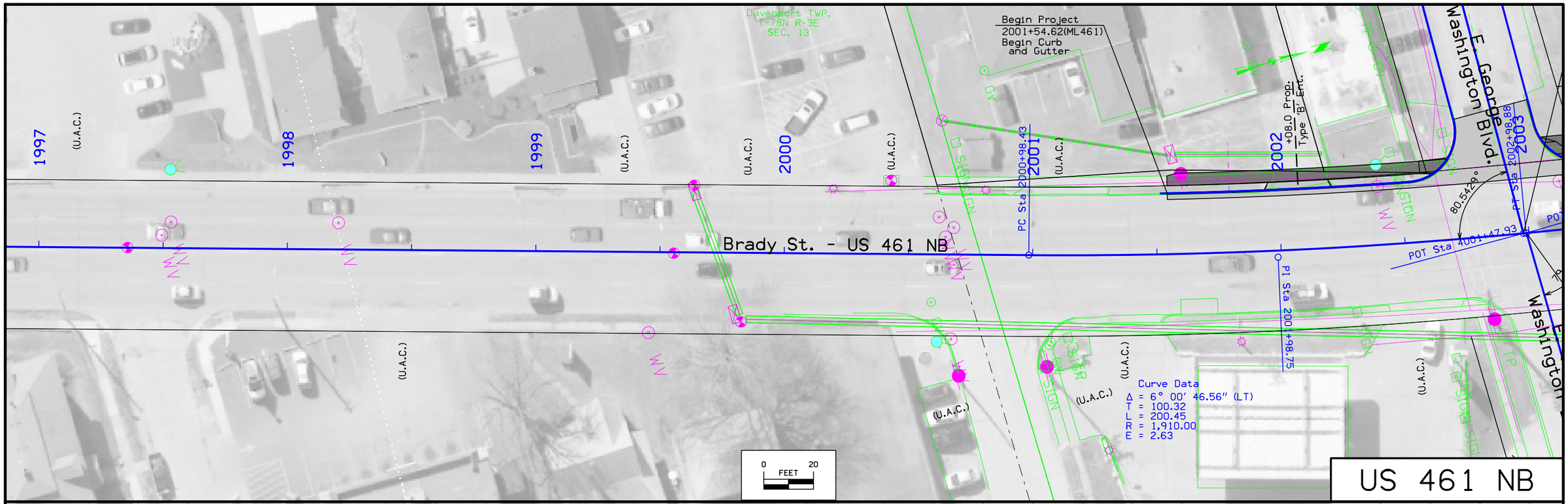
- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- C/A Access Control
- Property Line

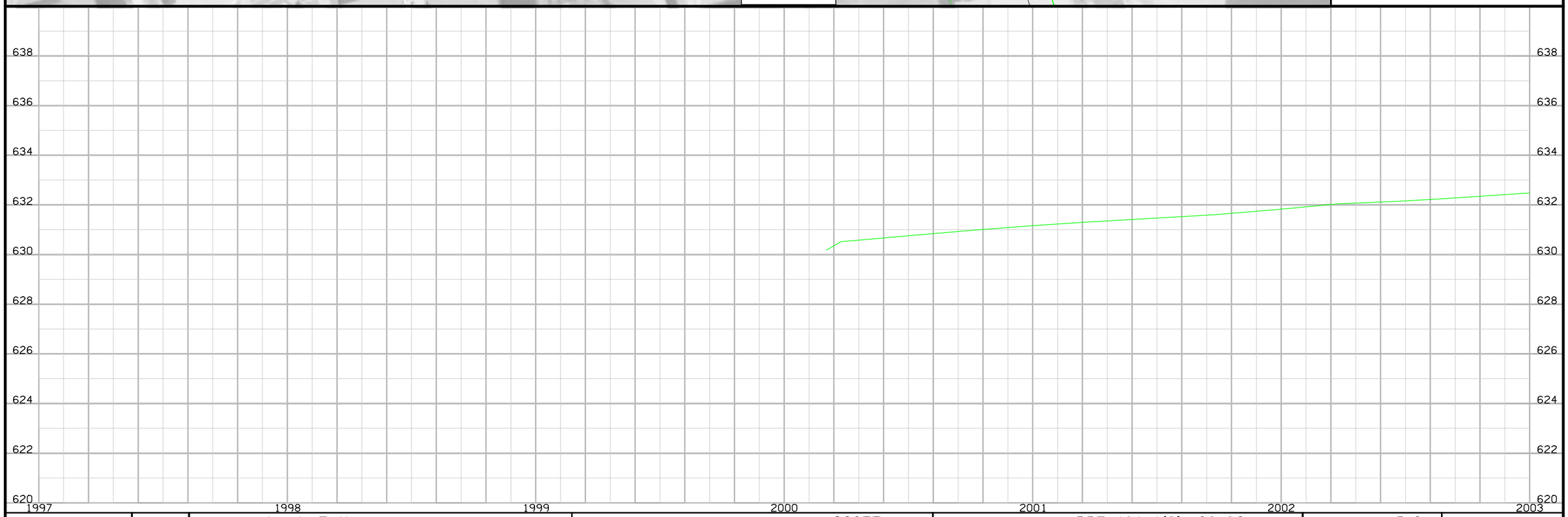
PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)

FILE NO.	ENGLISH	DESIGN TEAM Jia \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER D.1

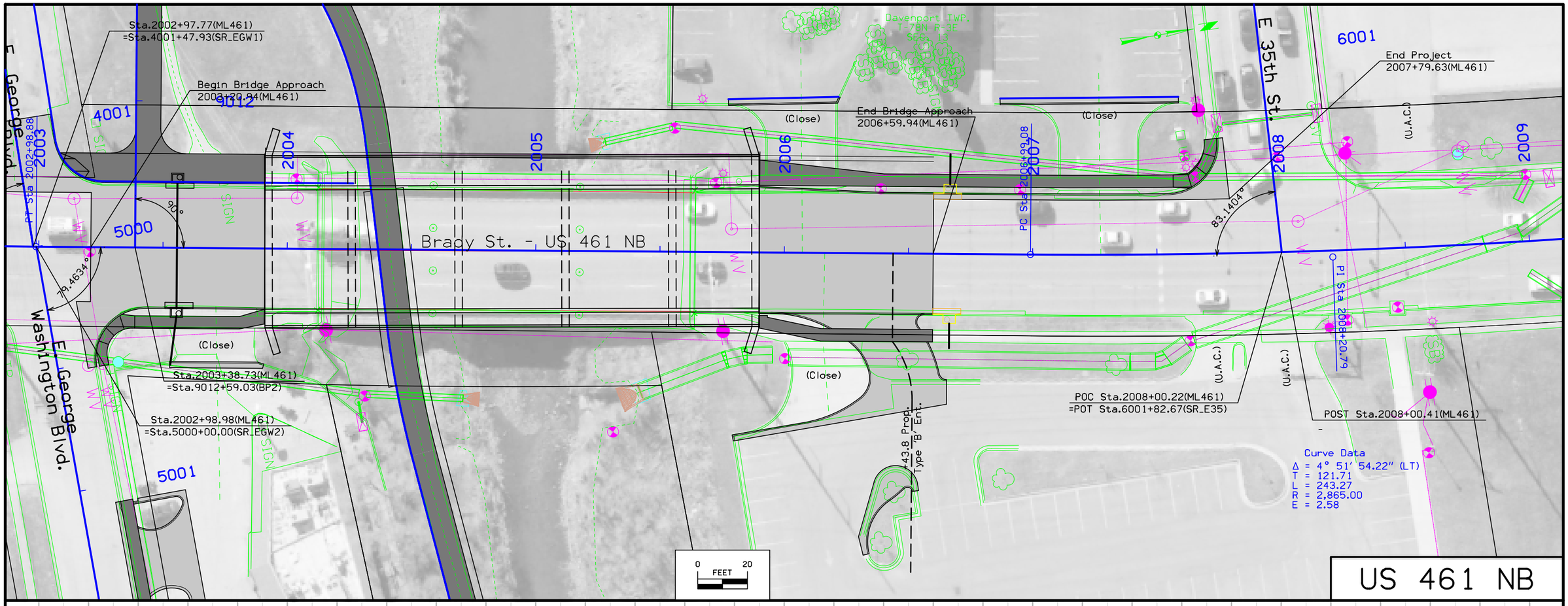
10:08:08 AM 6/14/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009__LGD.dgn



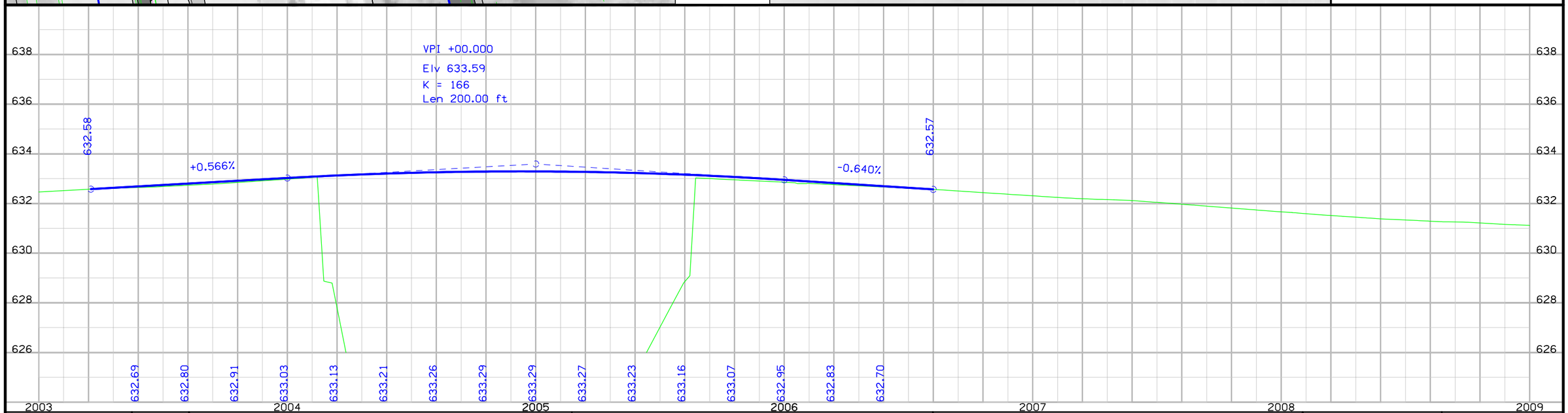


FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER D.2

2:45:04 PM 7/1/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_D02.dgn

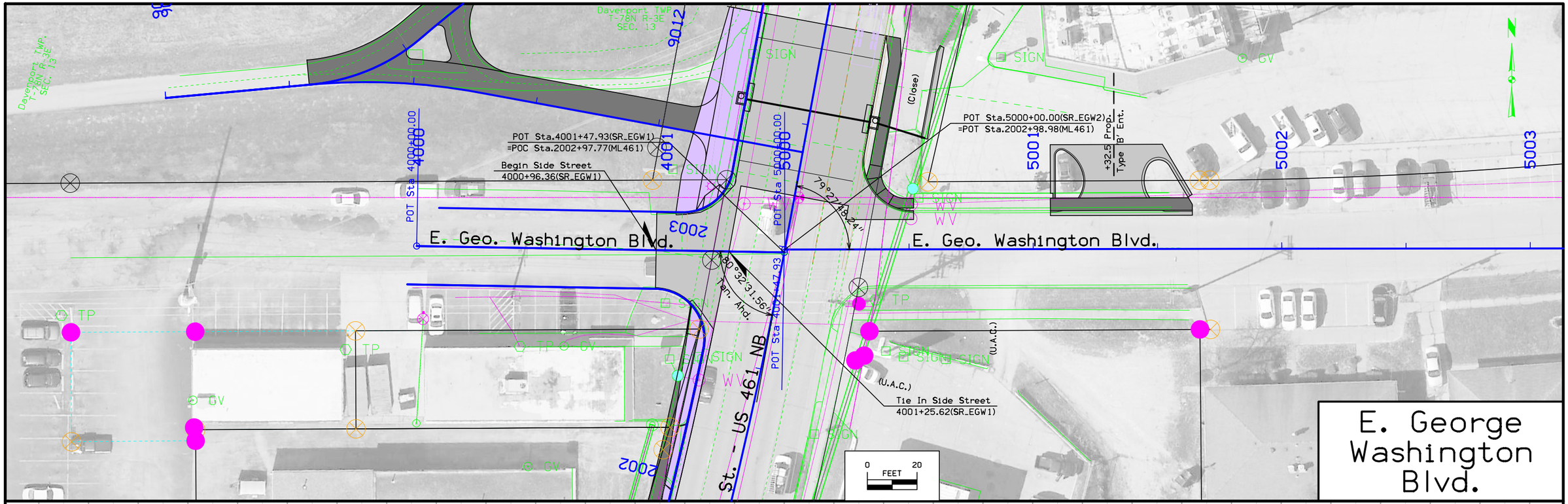


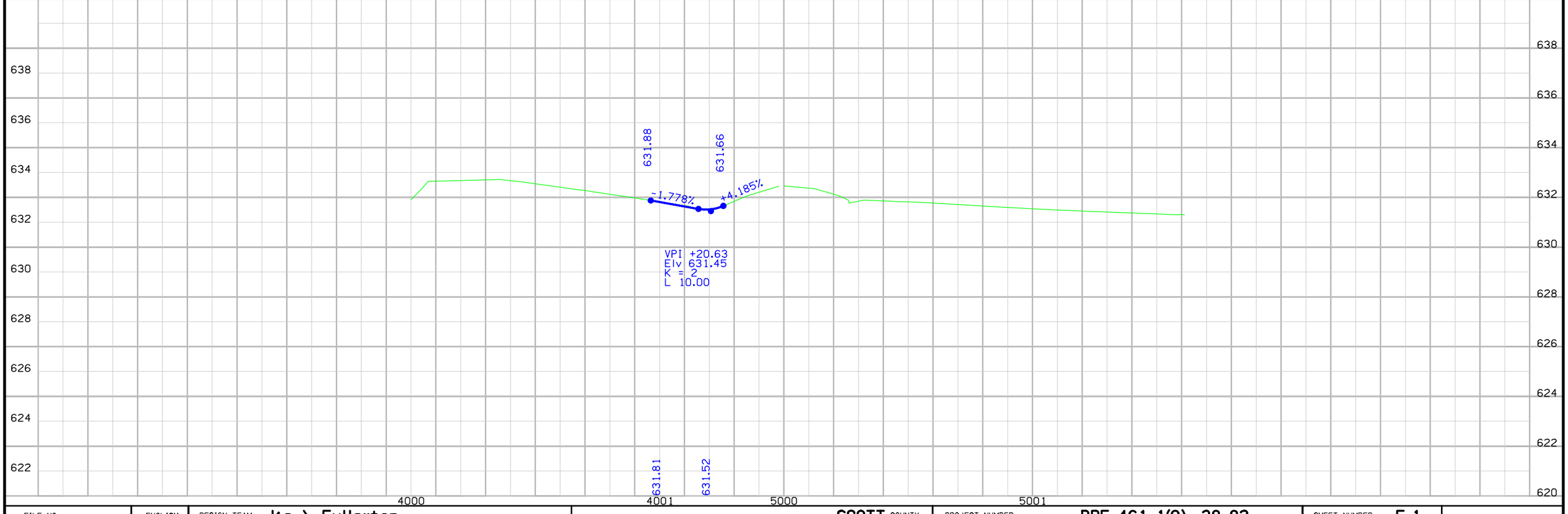
US 461 NB



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER D.3

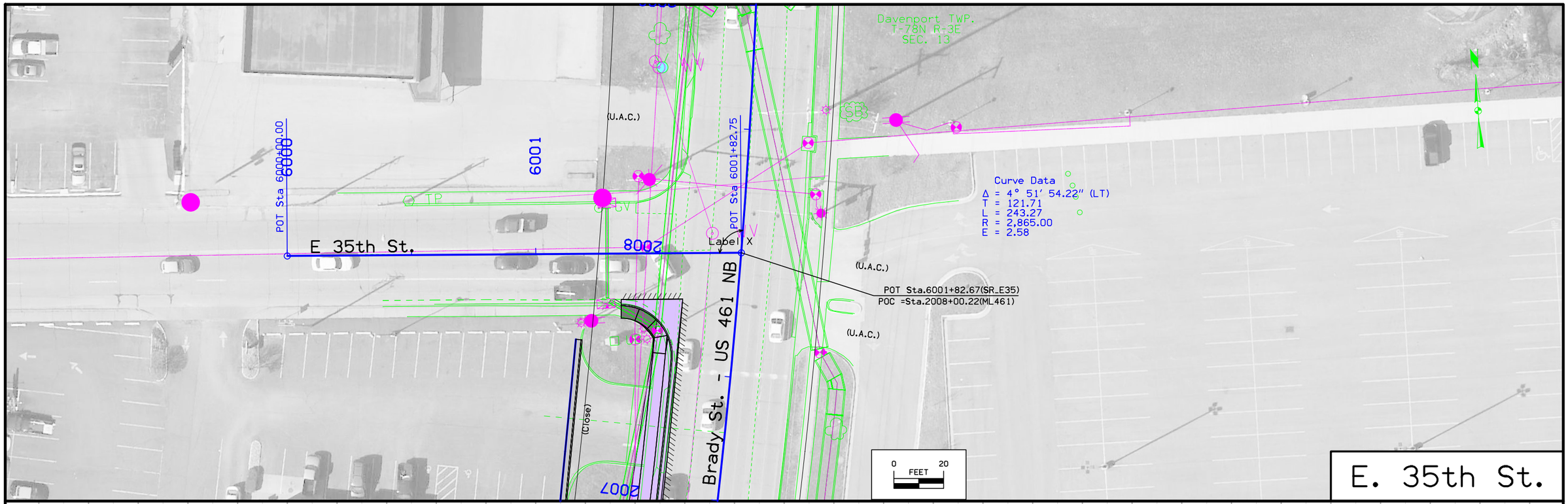
4:17:38 PM 7/1/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_D03.dgn





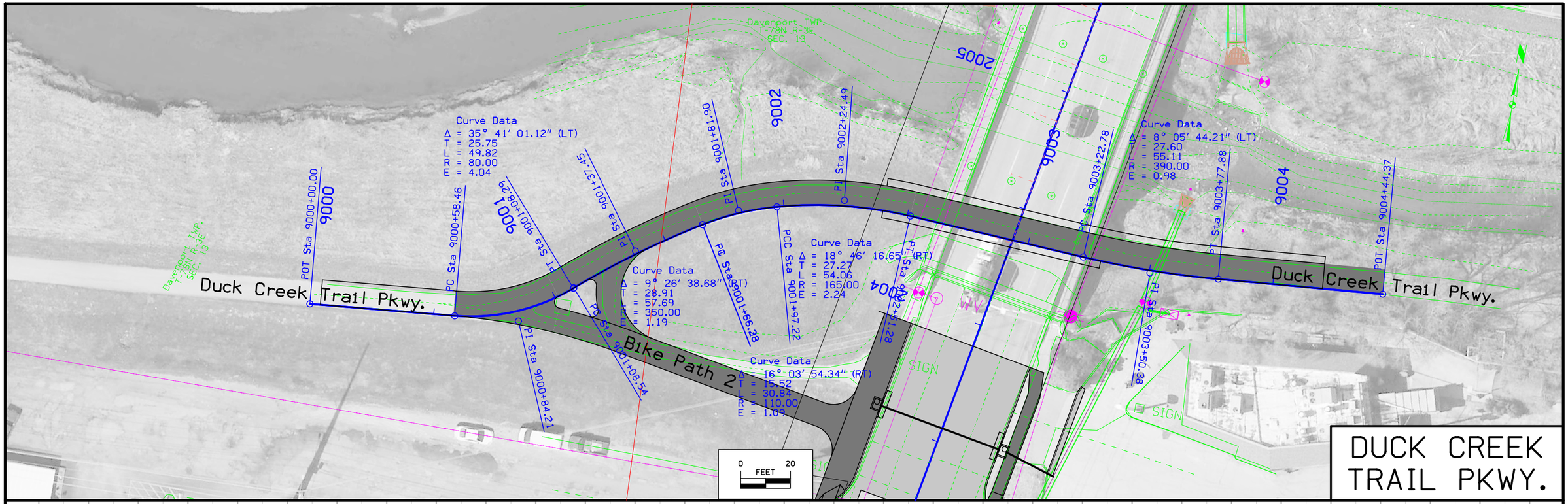
FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER E.1

4:50:15 PM 7/1/2019 adewolf pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_E01.dgn



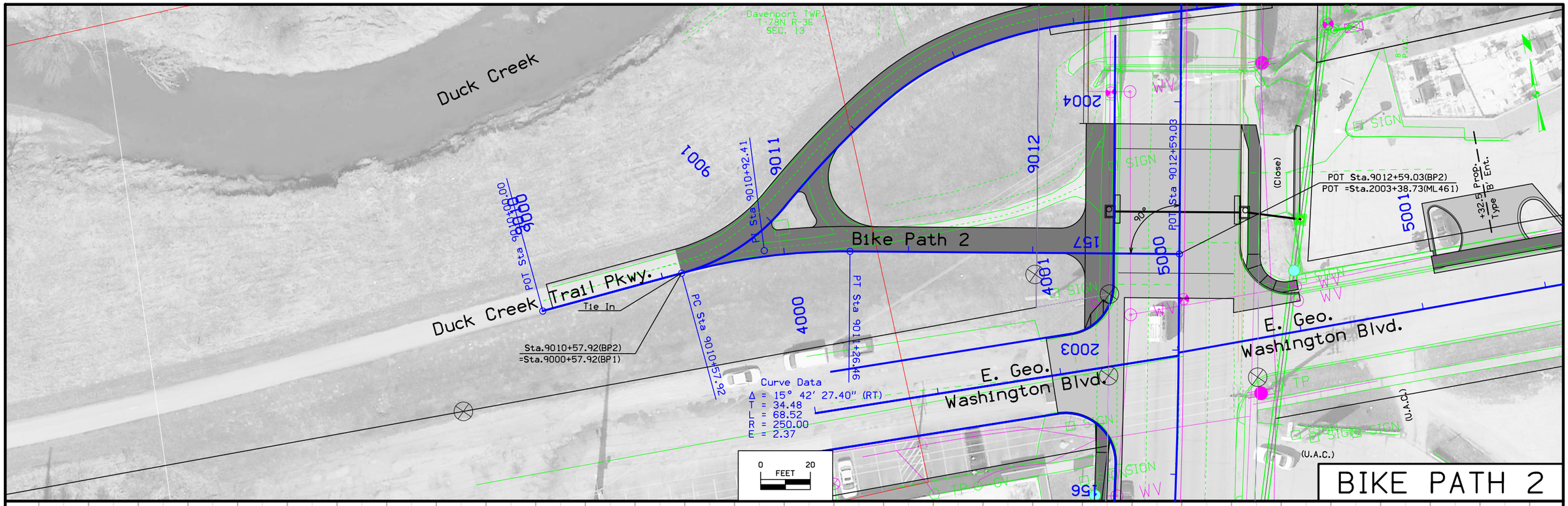
FILE NO.	ENGLISH	DESIGN TEAM Jia \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER E.2

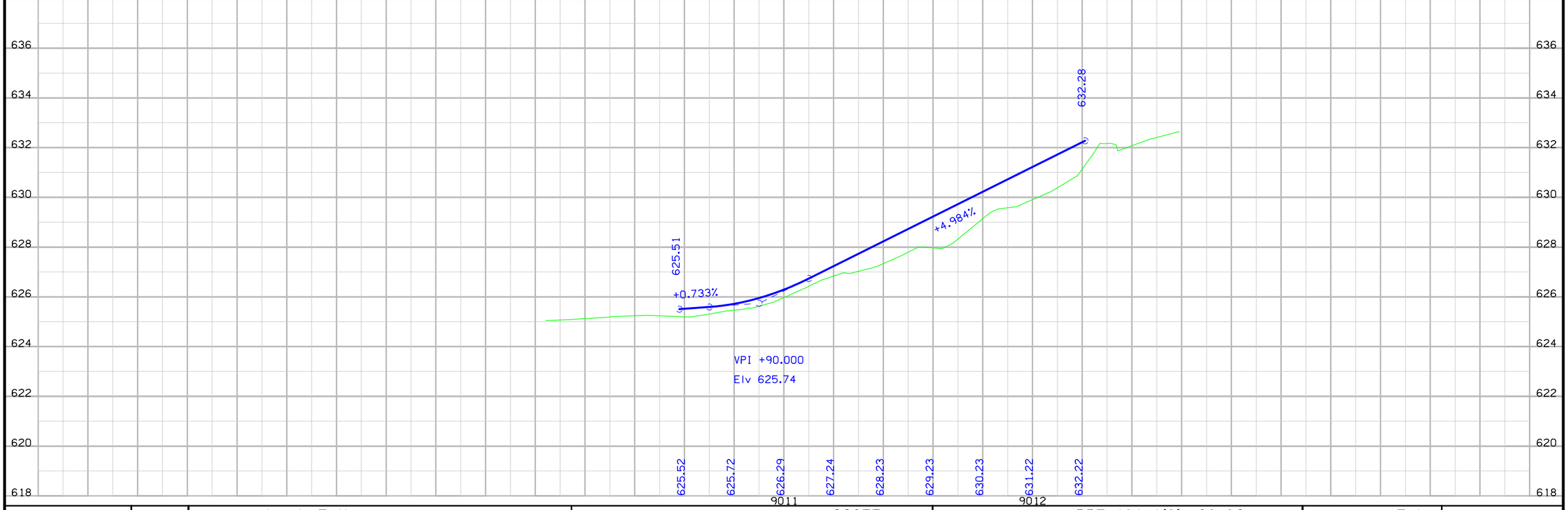
4:50:32 PM 7/1/2019 adewolf pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_E02.dgn



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER E.3

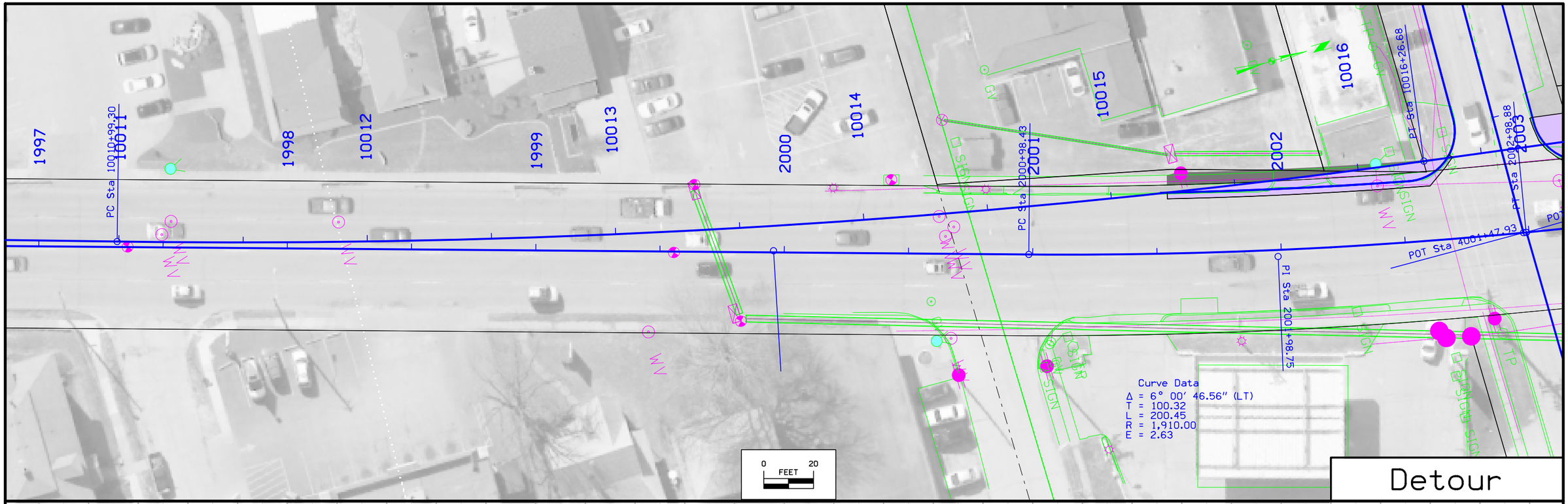
7:47:16 AM 7/12/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_E03.dgn





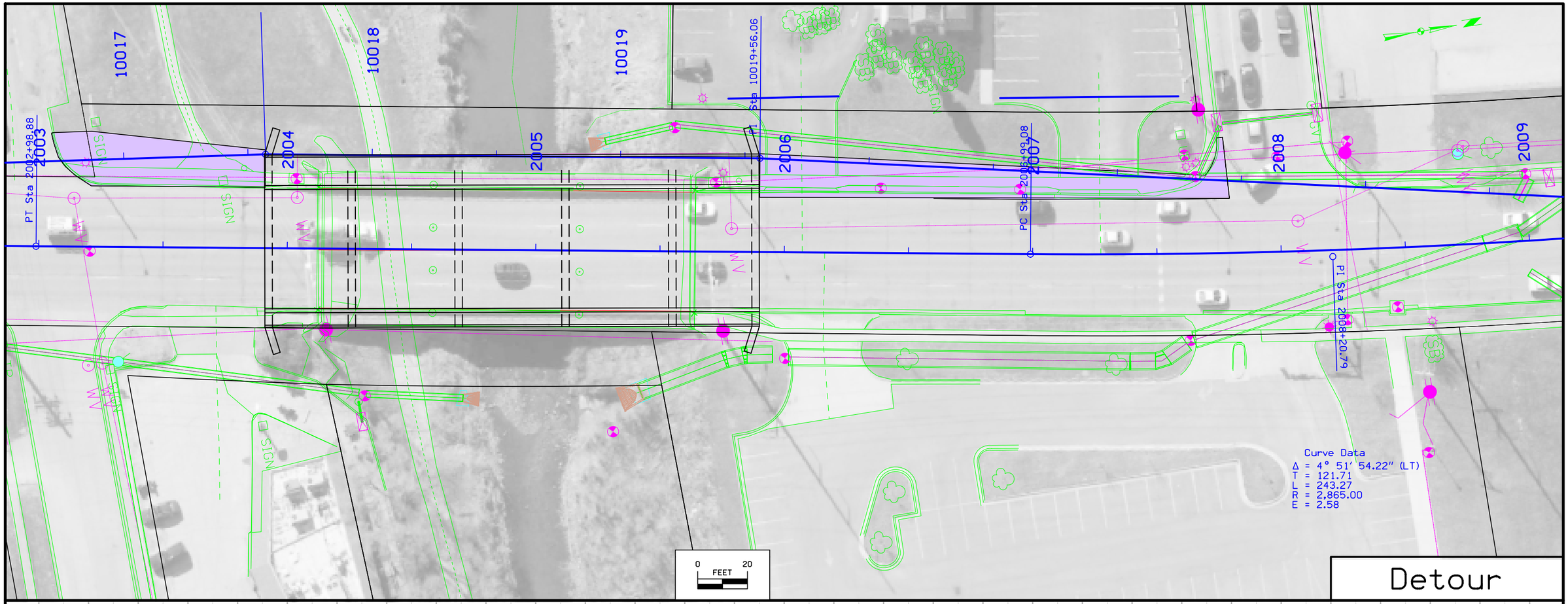
FILE NO.	ENGLISH	DESIGN TEAM Jia \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER E.4

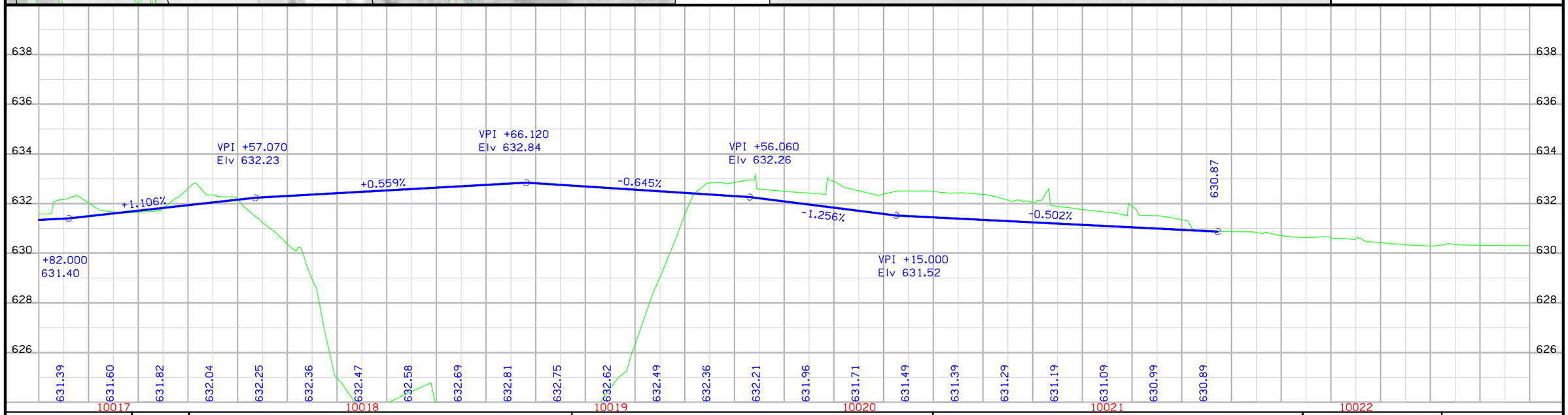
7:50:21 AM 7/12/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_E04.dgn



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER F.1

2:04:40 PM 7/1/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_F01.dgn





FILE NO.	ENGLISH	DESIGN TEAM		COUNTY	PROJECT NUMBER	SHEET NUMBER
		J1a \ Fullarton	SCOTT		BRF-461-1(9)--38-82	F.2

2:10:52 PM 7/1/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_F02.dgn

Scott County
BRF-461-1(9)—38-82
Highway 61 / Brady Street
Duck Creek 0.4 mi S of US 6 in Davenport (NB)
PIN 16-82-461-010
Sap-0463.3

Party Personnel

Norm Miller – Party Chief
Jonathan Miranda- Party Chief
Charles Hughes - Assistant Survey Party Chief
Dan Messerich – Design Technician Specialist

Date(s) of Survey

Begin Date 12/21/17
End Date 12/20/18

General Information

Measurement units for this survey are US survey feet. This survey is for proposed bridge replacement of the northbound IA 461 bridge (Maint. No. 8220.1R061) over Duck Creek, 0.4 miles south of U.S. 6 in Davenport. Project datum and control information is provided by Design Survey Office. This project is a Full Field DTM without Photo control.

Vertical Control

Vertical datum for this survey is NAVD88 (Computed using Geoid12B). GRS80 Ellipsoidal Height was computed at project Pt. Feno 78 by doing 6-hour static observations. The project control is relative to nearby Iowa RTN Base Stations.

This survey observed 2 NGS Control Monuments with published NAVD88 heights to compare to local ground control:

NGS 2nd order class I mark designated RIC 031 has a published Elev. Of 562.14
Survey Elev. = 562.313

NGS 2nd order class 0 mark designated G 70 has a published Elev. Of 780.10
Survey Elev. = 780.198

This survey observed 2 local area county Control Monuments with published NAVD88 heights to compare to local ground control:

Scott County Control mark GPS 414 has a published Elev. of 635.030
Survey Elev. = 635.317

Scott County Control mark GPS 414 has a published Elev. of 731.291
Survey Elev. = 731.646

No As-Built Plan benchmarks could be located. The As-Built plans for Project No. U-927 Design No.751 appears to be on a different vertical datum, below 100.00 feet. As-Built elevations do not match the surveyed elevations.

Horizontal Control

The project coordinate system for this survey is Iowa RCS Zone 11 (U.S. Survey Feet). This survey control is relative to IaRTN reference stations. IaRTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011) for Epoch 2010.00. Coordinates were determined by conducting a six-hour static observation. Additional control points were placed throughout the project using a GNSS Base-Rover setup relative to point Feno 78.

Point Name	Northing	Easting	Elevation	Description
TP 300	8063982.963	21489043.224	584.468	FNG MAG NAIL ON SIDEWALK. THIS MAG NAIL WAS USE TO RELATE TO ELEVATION FROM MARK @ US POSTAL OFFICE BULDING PID= MG0321. SEE HTTPS://WWW.NGS.NOAA.GOV/CGI-BIN/DS_MARK.PRL?PIDBOX=MG0321
FENO 78	8074966.258	21490011.035	625.688	SET FENO TYPE MONUMENT 73 FEET NORTH OF A NAIL SET ON CL OF GEORGE WASHINGTON BLVD. 6 FEET EAST OF A STEEL FENCE POST @ SPLIT IN BIKE PATH. 27 FEET SOUTHEAST OF A STEEL SIGN POST <NO MOW PRAIRIE STREAM BUFFER>. 132.5 FEET WEST OF A NAIL IN BIKE PATH A/C. 26 FEET EAST OF NAIL SET ON CL OF BIKE PATH IN CRACK WHERE A/C SLAB ENDS AND CONC SLAB BEGINS.
D414	8074614.278	21494983.650	635.317	FND SCOTT COUNTY GPS MONUMENT. SEE HTTP://WWW.SCOTTCOUNTYIOWA.US/GIS/PUB/DOCUMENTS/GPS_CONTROL/20160114_SCOTT_COUNTY_2015_MONUMENT_RECORDS.PDF
648	8084840.612	21481722.019	731.464	FND SCOTT COUNTY GPS MONUMENT. SEE HTTP://WWW.SCOTTCOUNTYIOWA.US/GIS/PUB/DOCUMENTS/GPS_CONTROL/20160114_SCOTT_COUNTY_2015_MONUMENT_RECORDS.PDF

Alignment Information

The horizontal alignment for this survey is a retrace of As-built Plans No. U297-(2) File No. 14843 (1951 Plans). Survey stationing was equated to the plan South Pier at STA

CONTROL POINT VICINITY MAP

This map is a guide to the vicinity of the primary project control points

Primary control is for use with RTK base stations and for RTN validation.

Future surveys will use primary project control to establish temporary control as needed for construction or other surveying applications.

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 11

Coordinate listing from next sheet will be used with IaRTN for monument recovery. No other reference ties are given.

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER G.2

2:19:12 PM 5/2/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_G01.dgn

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 11

Point Name	Northing	Easting	Elevation	Description
TP 300	8063982.963	21489043.224	584.468	FNG MAG NAIL ON SIDEWALK. THIS MAG NAIL WAS USE TO RELATE TO ELEVATION FROM MARK @ US POSTAL OFFICE BULDING PID= MG0321. SEE HTTPS://WWW.NGS.NOAA.GOV/CGI-BIN/DS_MARK.PRL?PIDBOX=MG0321
FENO 78	8074966.258	21490011.035	625.688	SET FENO TYPE MONUMENT 73 FEET NORTH OF A NAIL SET ON CL OF GEORGE WASHINGTON BLVD. 6 FEET EAST OF A STEEL FENCE POST @ SPLIT IN BIKE PATH. 27 FEET SOUTHEAST OF A STEEL SIGN POST <NO MOW PRAIRIE STREAM BUFFER>. 132.5 FEET WEST OF A NAIL IN BIKE PATH A/C. 26 FEET EAST OF NAIL SET ON CL OF BIKE PATH IN CRACK WHERE A/C SLAB ENDS AND CONC SLAB BEGINS.
D414	8074614.278	21494983.650	635.317	FND SCOTT COUNTY GPS MONUMENT. SEE HTTP://WWW.SCOTTCOUNTYIOWA.US/GIS/PUB/DOCUMENTS/GPS_CONTROL/20160114_SCOTT_COUNTY_2015_MONUMENT_RECORDS.PDF
648	8084840.612	21481722.019	731.464	FND SCOTT COUNTY GPS MONUMENT. SEE HTTP://WWW.SCOTTCOUNTYIOWA.US/GIS/PUB/DOCUMENTS/GPS_CONTROL/20160114_SCOTT_COUNTY_2015_MONUMENT_RECORDS.PDF

108-23A
08-01-08

TRAFFIC CONTROL PLAN

Two Mainline lanes of traffic shall be maintained at all times.
One lane of traffic will be maintained on E. George Washington Blvd. at all times.
Sidewalks and bikepaths will be closed during construction.

113-2
04-16-13

PEDESTRIAN PATH CLOSURES

Refer to TC-601.

*Assumes 6 foot wide barricade.
Closures may need to be removed and re-established.

Location	Side	Type III Barricades* No.	Remarks
2001+50	Lt.	1	US 461
2003+30	Rt.	1	US 461
2007+70	Rt.	1	US 461
2007+80	Lt.	1	US 461
4000+80	Rt.	1	E George Washington Blvd.
5002+00	Lt.	1	E George Washington Blvd.
6001+00	Rt.	1	E. 35th St.
9000+50	Lt.	1	Bikepath 1
9004+50	Lt.	1	Bikepath 1

111-01
04-17-12

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
None Provided	

108-26A
08-01-08

STAGING NOTES

Stage 1A:
Traffic Control:
Shift two lane mainline traffic onto east side lanes.
Close mainline entrances to Arby's northwest of bridge, and bike paths.
Maintain alternating two-way traffic on E. George Washington Blvd. to the west.
Construction:
Construct west side of bridge, partial west side bridge approaches, and temporary connection to E. George Washington Blvd. to the west.
Construct new entrance to restaurant on north side of E. George Washington Blvd. to the east.

Stage 1B:
Traffic Control:
Maintain alternating two-way traffic on E. George Washington Blvd. to the west.
Construction:
Construct partial west side bridge approaches south of bridge.

Stage 2A:
Traffic Control:
Shift two lane mainline traffic onto detour and new bridge.
Close mainline entrance to The Rack Restaurant southeast of bridge.
Open side street entrance to The Rack Restaurant southeast of bridge.
Construction:
Construct east side of bridge, entrance to stadium northeast of bridge, and sidewalk northeast of bridge.

Stage 2B:
Traffic Control:
Maintain alternating two-way traffic on E. George Washington Blvd. to the east.
Construction:
Construct partial east side bridge approaches south of bridge.
Construct northeast return of East George Washington Blvd., and sidewalk southeast of bridge.

Stage 3:
Traffic Control:
Shift three lane mainline traffic onto east side lanes.
Construction:
Remove detour.
Construct sidewalk, and curb and gutter on west side.
Construct East George Washington Blvd. to the west, and southwest E. 35th St. return.
Construct bikepaths.

Stage 4:
Open Project to normal traffic.

CROSS SECTION VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading

CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

	Pavement Removal		Proposed Granular Shoulder
	Proposed Granular Subbase		Temporary Shoulder
	Proposed Special Backfill		Existing Shoulder Strengthening
	Temporary Barrier Rail		Permanent Barrier Rail
			Channelizing Device

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White
Violet	(15)	Temporary barrier rail, Unpinned
Flush Orange	(228)	Temporary barrier rail, Pinned

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Pink, Dark	(13)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

●	Channelizing Device		Crash Cushion (Temp or Perm)
✕	Drum		Traffic Signal
◘	Temporary Lane Separator		Flagger
◆	Tubular Marker		Temporary Floodlighting
♦	Channelizer Marker		Traffic Sign
△	Concrete Barrier Marker		Type III Barricade
ς	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Sand Barrel Layout	1	Lane Identification

NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

TRAFFIC CONTROL AND STAGING LEGEND AND SYMBOL INFORMATION SHEET

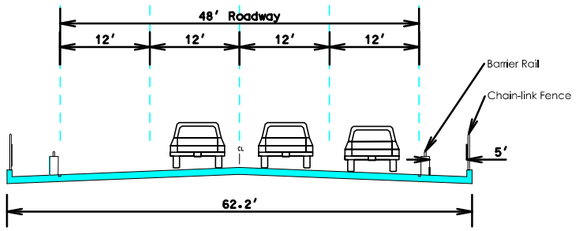
(COVERS SHEET SERIES J)

Cross Sections for Scott County Project BRF-461-1(9)--38-82

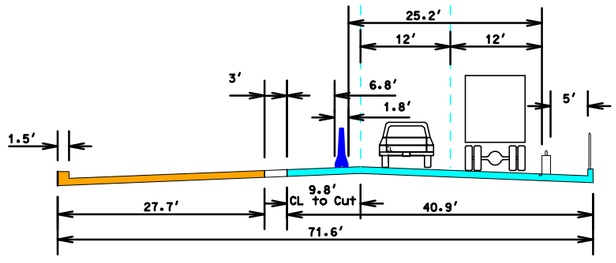
Over Duck Creek 0.4 miles South of U.S. 6 in Davenport (NB)

Maintaining two lanes of traffic

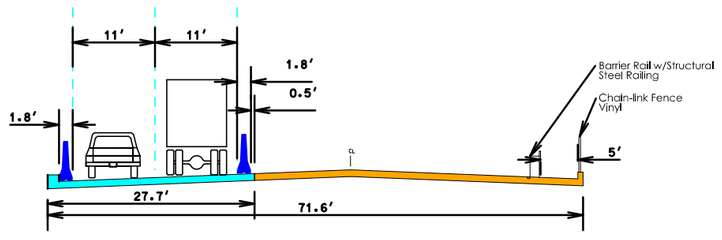
Existing Typical Section



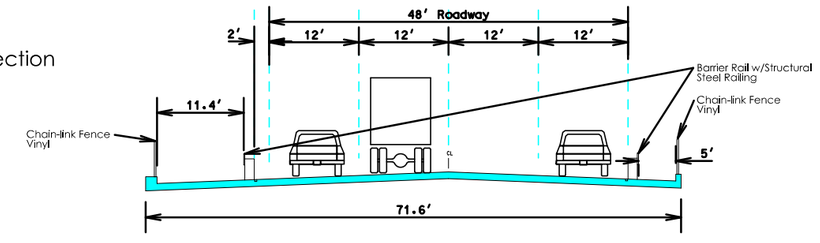
Stage 1



Stage 2



Finished Section



Legend

- Under Construction
- Driving Surface

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.3

3:35:49 PM 6/18/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J03.dgn

E 30th St.

Brady St. - US 461 NB

E 29th St.

E 30th St.

1991 (U.A.C.) 1992 1993 1994 1995 (U.A.C.) 1996

1997 (U.A.C.) 1998 1999 (U.A.C.) (U.A.C.) 2000 (U.A.C.) 2001 (U.A.C.) 2002

+08.0 Prop. Type 'B' Ent.

Brady St. - US 461 NB

E 31st St.

E 32nd St.

(U.A.C.)

SEC. LINE

0 FEET 20

STAGE 1A

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.4

5:41:15 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J04.dgn

Sta.2002+97.77(ML461)
=Sta.4001+47.93(SR_EGW1)

Sta.2002+98.98(ML461)
=Sta.5000+00.00(SR_EGW2)

4001
2003
2004
2005
2006
2007
2008
6001
5000
5001
2009
2010
2011
2012
2013
2014

STAGE 1A

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.5

5:41:35 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J05.dgn

1991
(U.A.C.)
1992
1993
1994
1995
(U.A.C.)
1996
(U.A.C.)
(U.A.C.)
1997
(U.A.C.)
1998
1999
(U.A.C.)
(U.A.C.)
2000
(U.A.C.)
2001
(U.A.C.)
2002
+08.0 Prop.
Type 'B' Emt.
(U.A.C.)
(U.A.C.)
(U.A.C.)
(U.A.C.)
0 FEET 20

STAGE 1B

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.6

5:41:49 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J06.dgn

Sta.2002+97.77(ML461)
=Sta.4001+47.93(SR_EGW1)

Sta.2002+98.98(ML461)
=Sta.5000+00.00(SR_EGW2)

4001
2003
2004
2005
2006
2007
2008
6001
5000
5001
2009
2010
2011
2012
2013
2014

STAGE 1B

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.7

5:42:05 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J07.dgn

E 30th St.

Brady St. - US 461 NB

E 29th St.

E 30th St.

1991 (U.A.C.) 1992 1993 1994 1995 (U.A.C.) 1996

POT Sta 10010+00.00

10010

1997 (U.A.C.) 1998 10012 1999 10013 (U.A.C.) (U.A.C.) 2000 10014 (U.A.C.) 2001 (U.A.C.) 10015 2002 10016

PC Sta 10010+99.30

10011

PC Sta 2000+98.43

Begin Project
2001+54.62(ML461)
Begin Curb
and Gutter

+08.0 Prop.
Type 'B' Ent.

PT Sta 10016+26.68

PI Sta 2001+98.75

(U.A.C.) (U.A.C.) (U.A.C.) (U.A.C.) (U.A.C.)

APPROX. SEC. LINE

Curve Data
Δ = 6° 00′ 46.56″ (LT)
T = 100.32
L = 200.45
R = 1,910.00
E = 2.63

0 20
FEET

STAGE 2A

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.8

5:42:19 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J08.dgn

Sta.2002+97.77(ML461)
=Sta.4001+47.93(SR_EGW1)

E. Geo. Washington Blvd.

4001

9012

2003

2004

2005

2006

2007

2008

E 35th St.

6001

5000

Brady St. - US 461 NB

(Close)

(Close)

(Close)

(Close)

(U.A.C.)

(U.A.C.)

(U.A.C.)

(U.A.C.)

(U.A.C.)

Sta.2002+98.98(ML461)
=Sta.5000+00.00(SR_EGW2)

5001

43.80 Prop. Type 'B' Ent.

2009

2010

2011

2012

2013

2014

Brady St. - US 461 NB

STAGE 2A

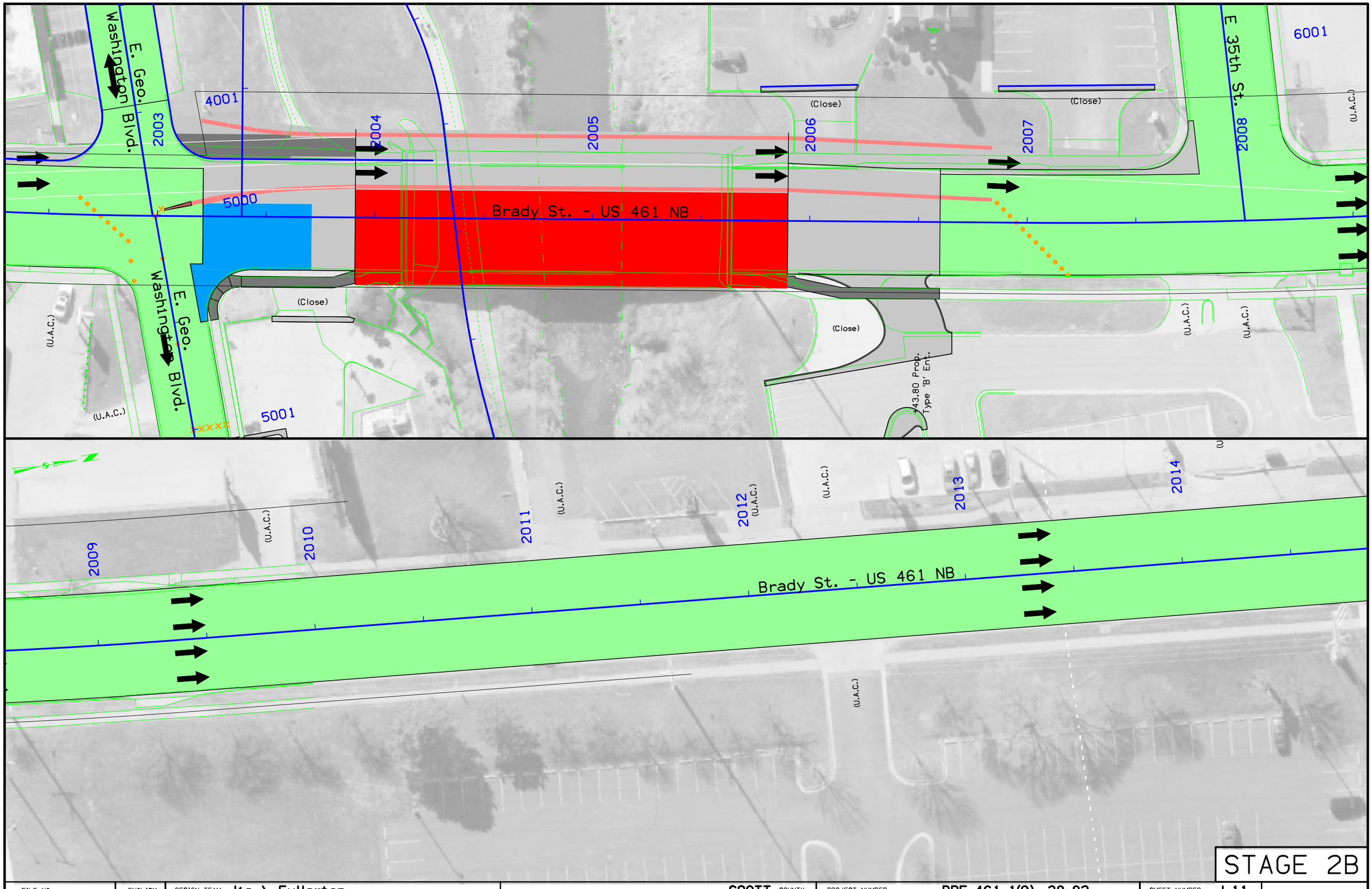
FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.9

5:42:34 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J09.dgn

STAGE 2B

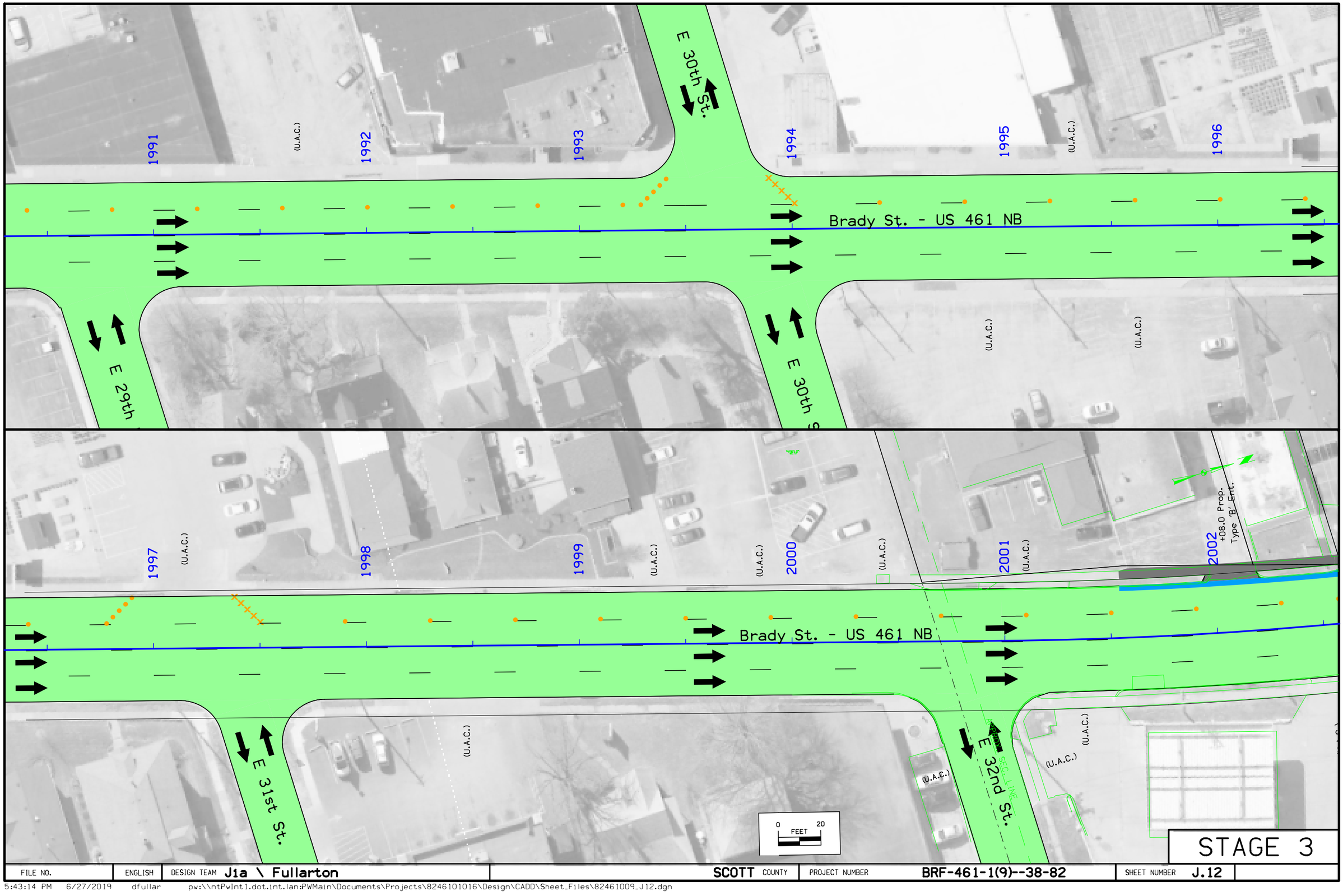
FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.10

5:42:47 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J10.dgn



FILE NO.	ENGLISH	DESIGN TEAM Ji a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.11

5:43:01 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J11.dgn



STAGE 3

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.12

5:43:14 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J12.dgn

Sta.2002+97.77(ML461)
=Sta.4001+47.93(SR_EGW1)

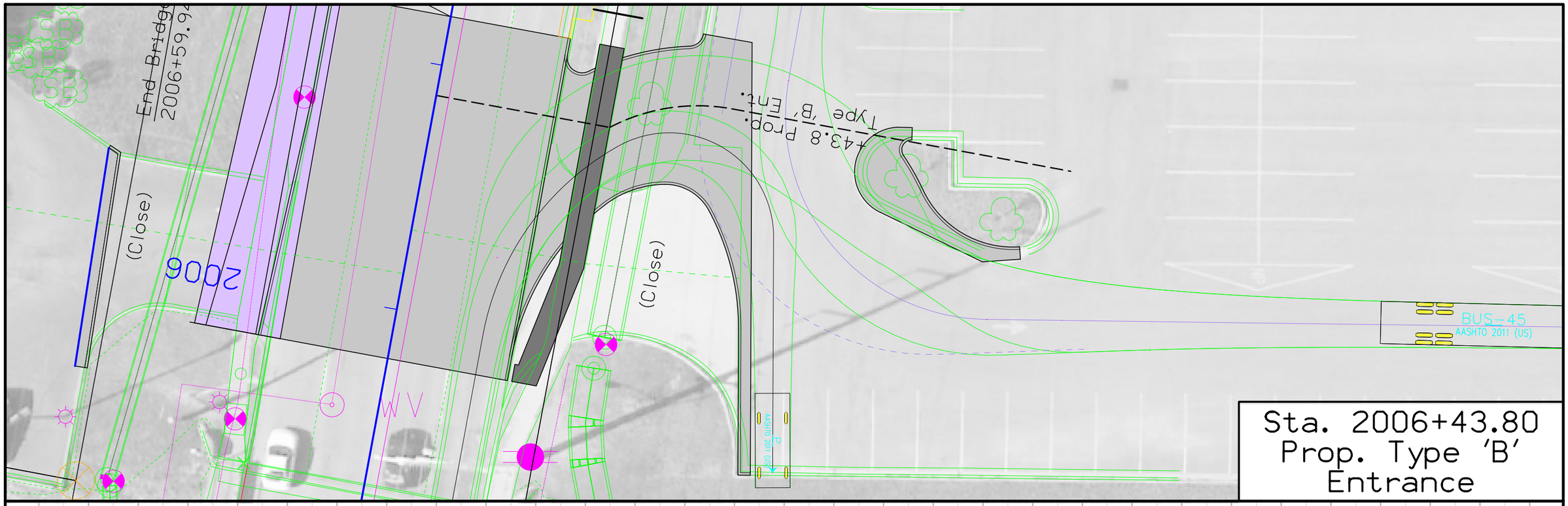
Sta.2002+98.98(ML461)
=Sta.5000+00.00(SR_EGW2)

4001
2003
2004
2005
2006
2007
2008
6001
5000
5001
2009
2010
2011
2012
2013
2014

STAGE 3

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER J.13

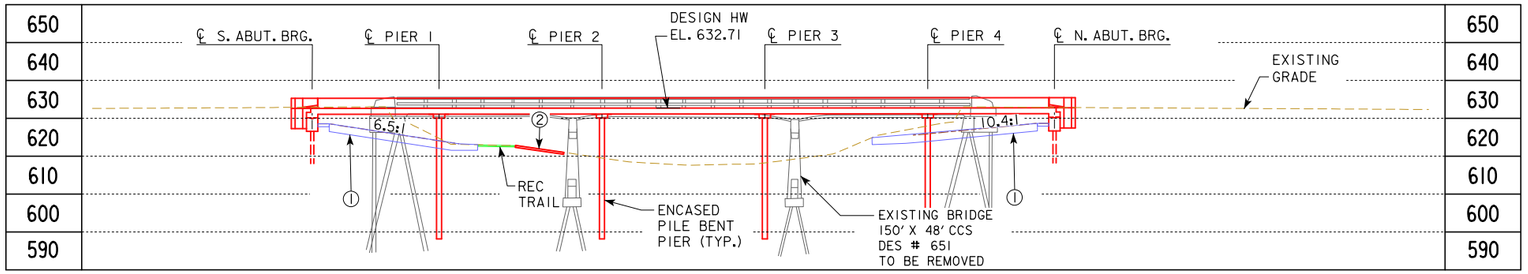
5:43:29 PM 6/27/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_J13.dgn



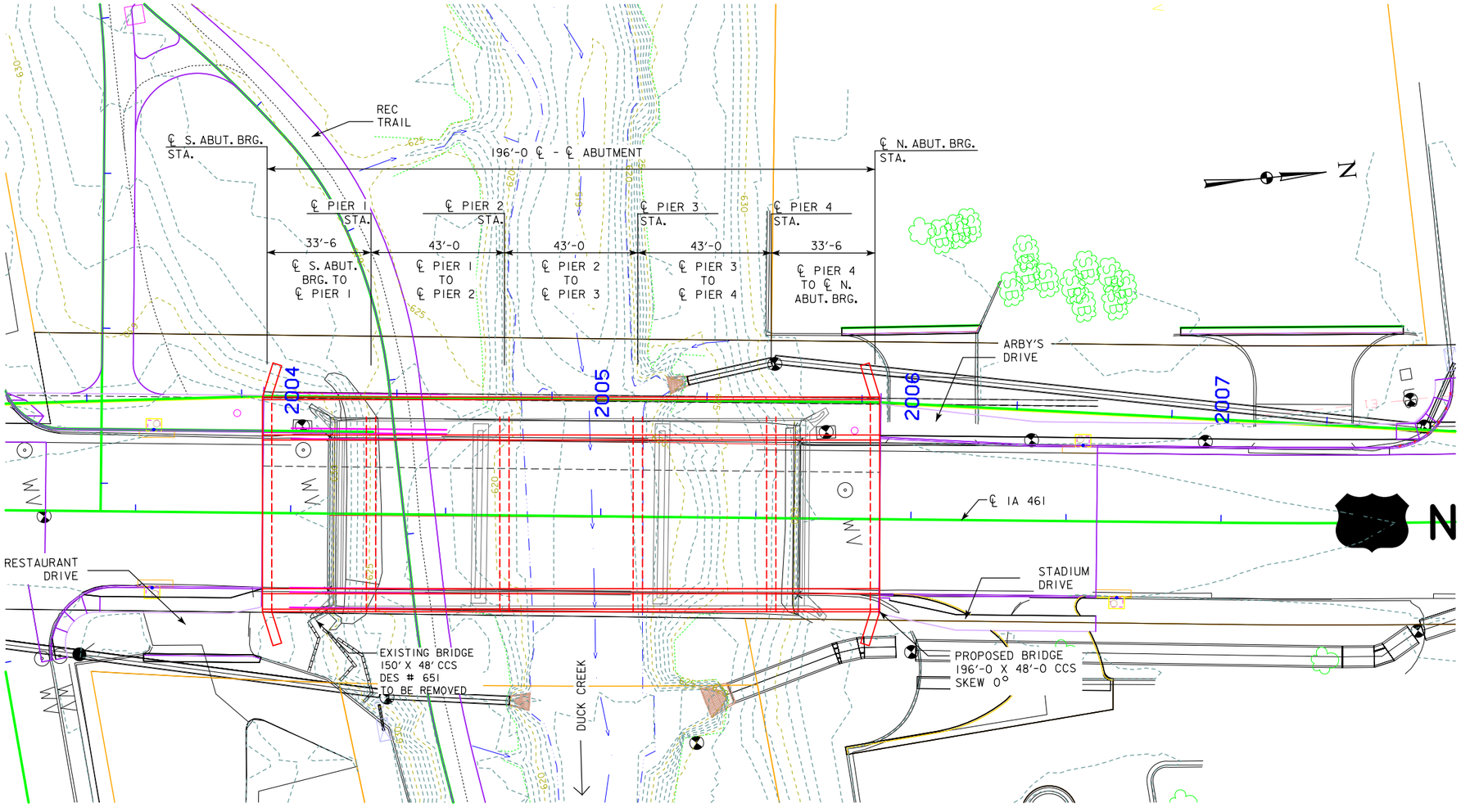
FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER U.1

4:28:26 PM 7/1/2019 dfullar pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_U01.dgn

BENCH MARK NO.



LONGITUDINAL SECTION ALONG ℄ APPROACH ROADWAY



SITUATION PLAN

0 ENGLISH 40
SCALE IN FEET

① CONCRETE SLOPE PROTECTION

② ARTICULATED BLOCK MAT EROSION PROTECTION

HYDRAULIC DATA

DRAINAGE AREA = 41.5 SQ. MI.
STREAM SLOPE = 7.4 FT./MI.
AVG. LOW WATER STAGE = ???.?

Q_{50} = 9,710 CFS
STAGE = 631.66
BACKWATER = 0.35 FT.
AVG. BRIDGE VELOCITY = 5.2 FPS

Q_{100} = 12,200 CFS
STAGE = 632.71
BACKWATER = 0.37 FT.
AVG. BRIDGE VELOCITY = 4.1 FPS

Q_{500} = 18,780 CFS
STAGE = 635.79
CALCULATED CHECK SCOUR = ???.?

ROADWAY OVERTOP
STA. ???+??

LOCATION

IA 461 OVER DUCK CREEK
T-78N R-3E
SECTION 13
DAVENPORT TOWNSHIP
SCOTT COUNTY
CITY OF DAVENPORT
BRIDGE MAINT. NO. 8220.1R061
LATITUDE °
LONGITUDE °

TRAFFIC ESTIMATE

2014 AADT	23,000	V.P.D.
202_ AADT	_	V.P.D.
202_ DHV	_	V.P.H.
TRUCKS	_	%
TOTAL DESIGN ESALs	_	

D2

DESIGN FOR 0° SKEW

196'-0 X 48'-0 CONTINOUS CONCRETE SLAB BRIDGE W\ 5'-0 EAST SIDEWALK AND 11'-5 WEST SIDEWALK

SITUATION PLAN

STATION JUNE 2019

SCOTT COUNTY

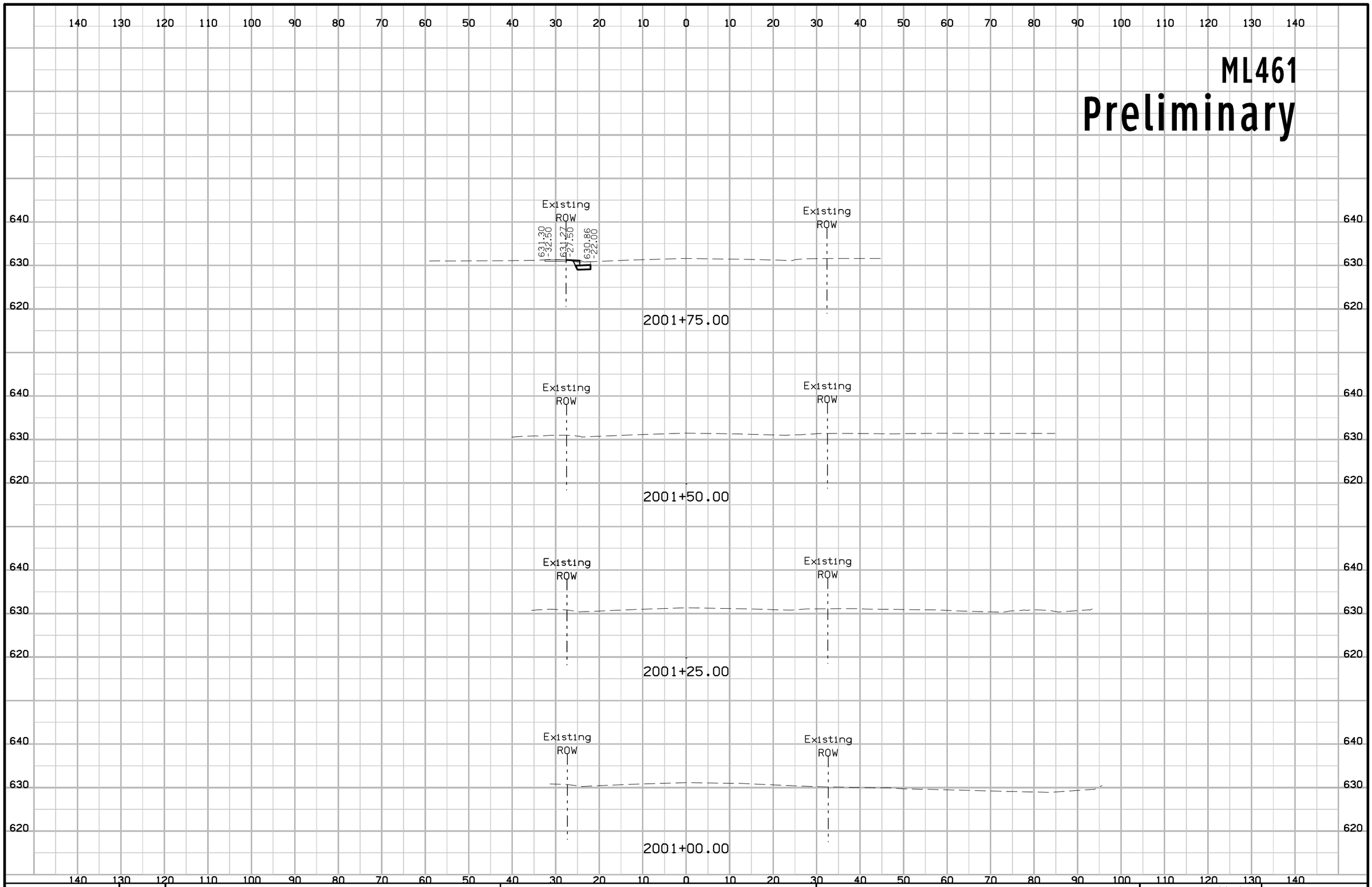
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 1 FILE NO. ? DESIGN NO. ?

DESIGN TEAM | SCOTT COUNTY | PROJECT NUMBER BRF-461-1(9)--38-82 | SHEET NUMBER V.1

6/21/2019 10:39:22 AM dmulho1 pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\BRPrelim\DOT\82461009.str D2 11x17_pdf.pltcfg

ML461
Preliminary

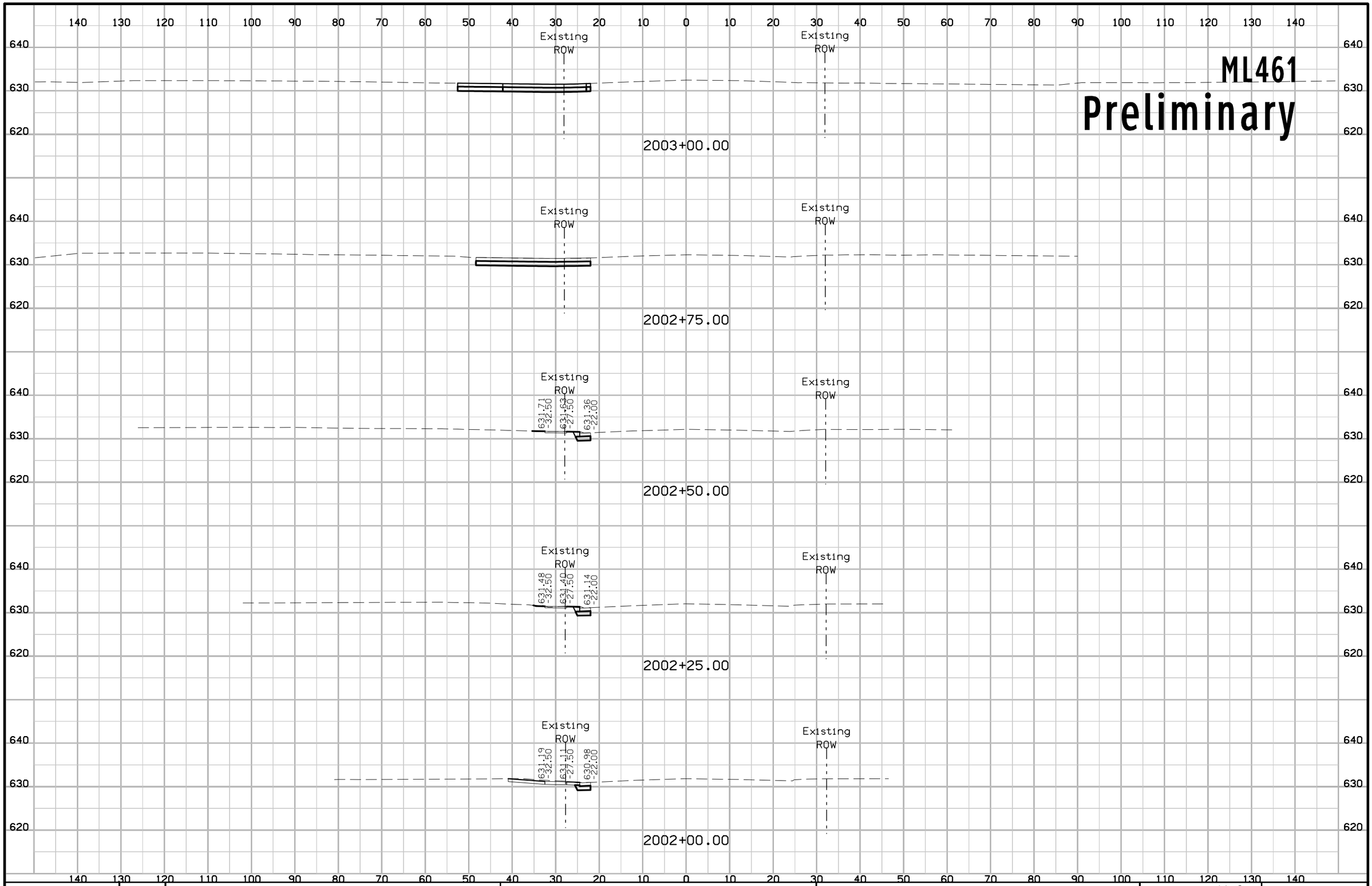


FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER W.1

1:08:17 PM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_W02.dgn

ML461

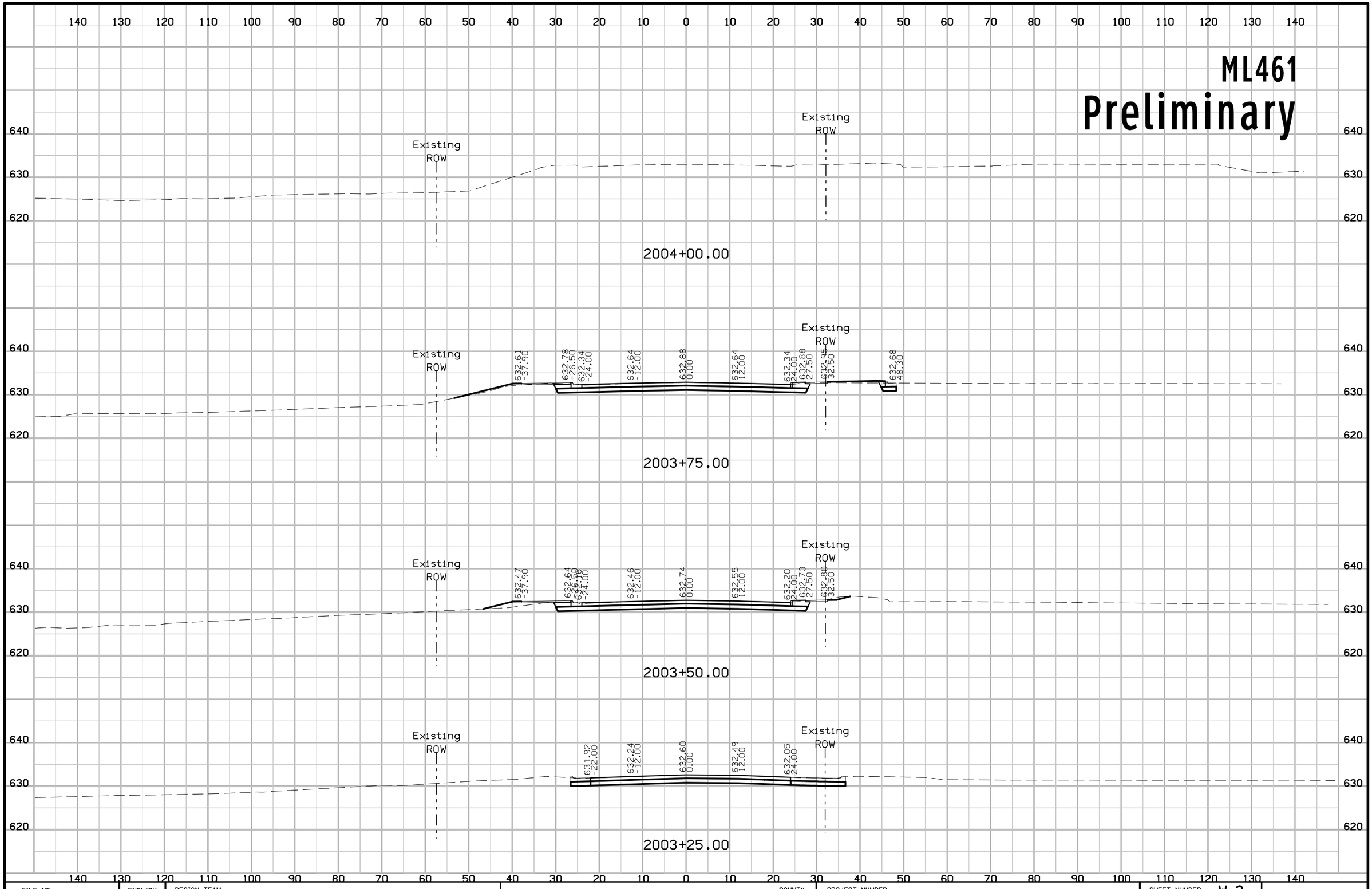
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER W.2

1:08:17 PM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_W02.dgn

ML461
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER W.3

1:08:18 PM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_W02.dgn

ML461

Preliminary

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

630
620
610

Existing ROW

Existing ROW

2005+00.00

630
620
610

Existing ROW

Existing ROW

2004+75.00

630
620

Existing ROW

Existing ROW

2004+50.00

630
620

Existing ROW

Existing ROW

2004+25.00

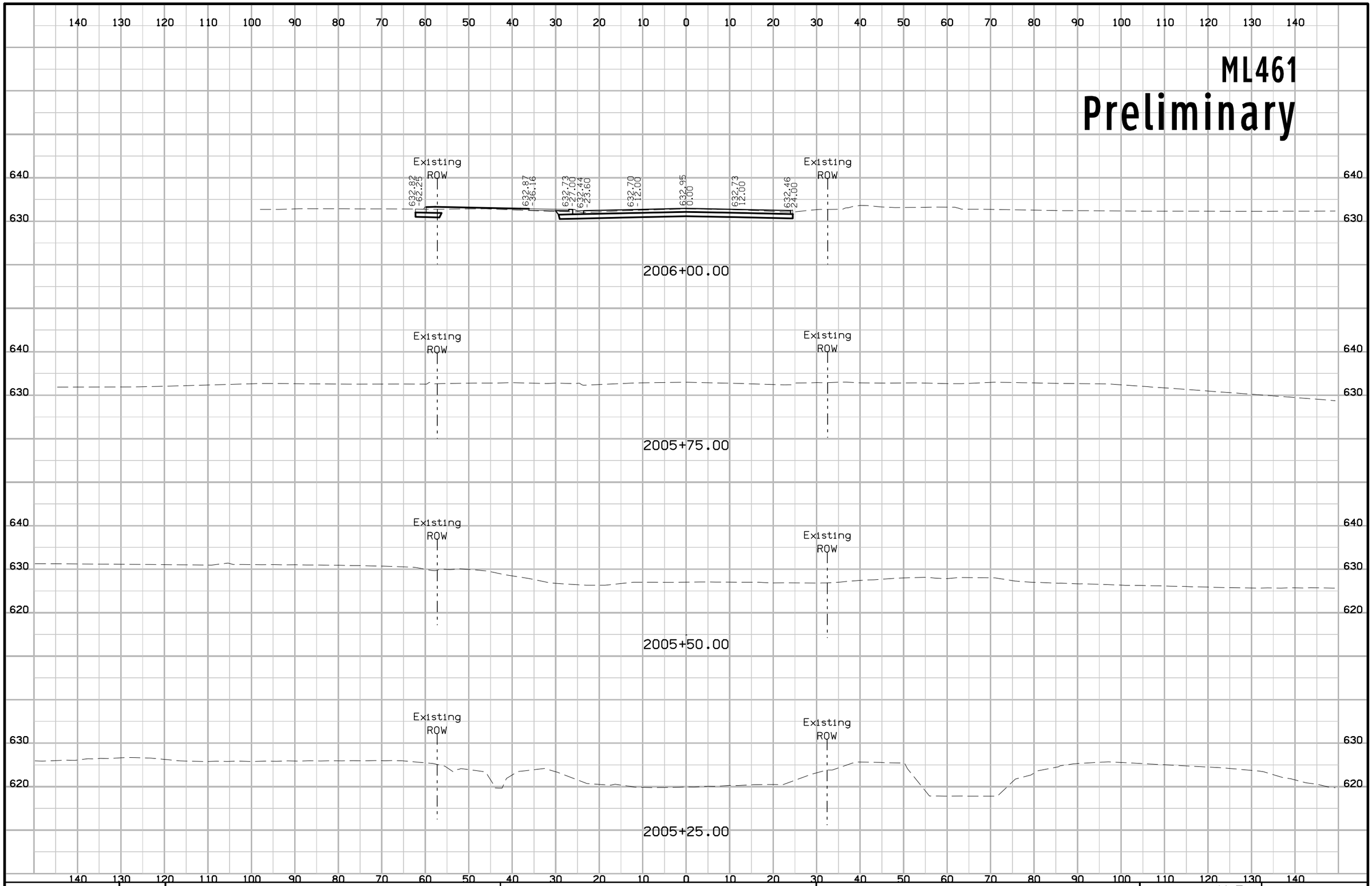
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER W.4

1:08:19 PM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_W02.dgn

ML461

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER W.5

1:08:19 PM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_W02.dgn

ML461

Preliminary

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

640 630 620

Existing ROW

632.65 -62.97

632.02 -32.00

631.95 -27.00

631.63 -22.00

Existing ROW

2007+00.00

Existing ROW

632.19 -32.00

632.12 -27.00

631.80 -22.00

Existing ROW

2006+75.00

Existing ROW

632.33 -32.00

632.26 -27.00

631.96 -22.00

632.31 -12.00

632.63 0.00

632.48 12.00

632.09 24.00

Existing ROW

2006+50.00

Existing ROW

632.60 -33.56

632.50 -27.00

632.20 -22.60

632.50 -12.00

632.79 0.00

632.60 12.00

632.28 24.00

Existing ROW

2006+25.00

FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER W.6

1:08:20 PM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_W02.dgn

ML461
Preliminary

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

640
630
620

Existing ROW

Existing ROW

2008+00.00

Existing ROW

Existing ROW

2007+75.00

Existing ROW

632.19
-63.37

631.59
-31.96

631.51
-26.96

631.19
-21.96

Existing ROW

2007+50.00

Existing ROW

632.41
-63.27

631.80
-31.98

631.73
-26.98

631.41
-21.98

Existing ROW

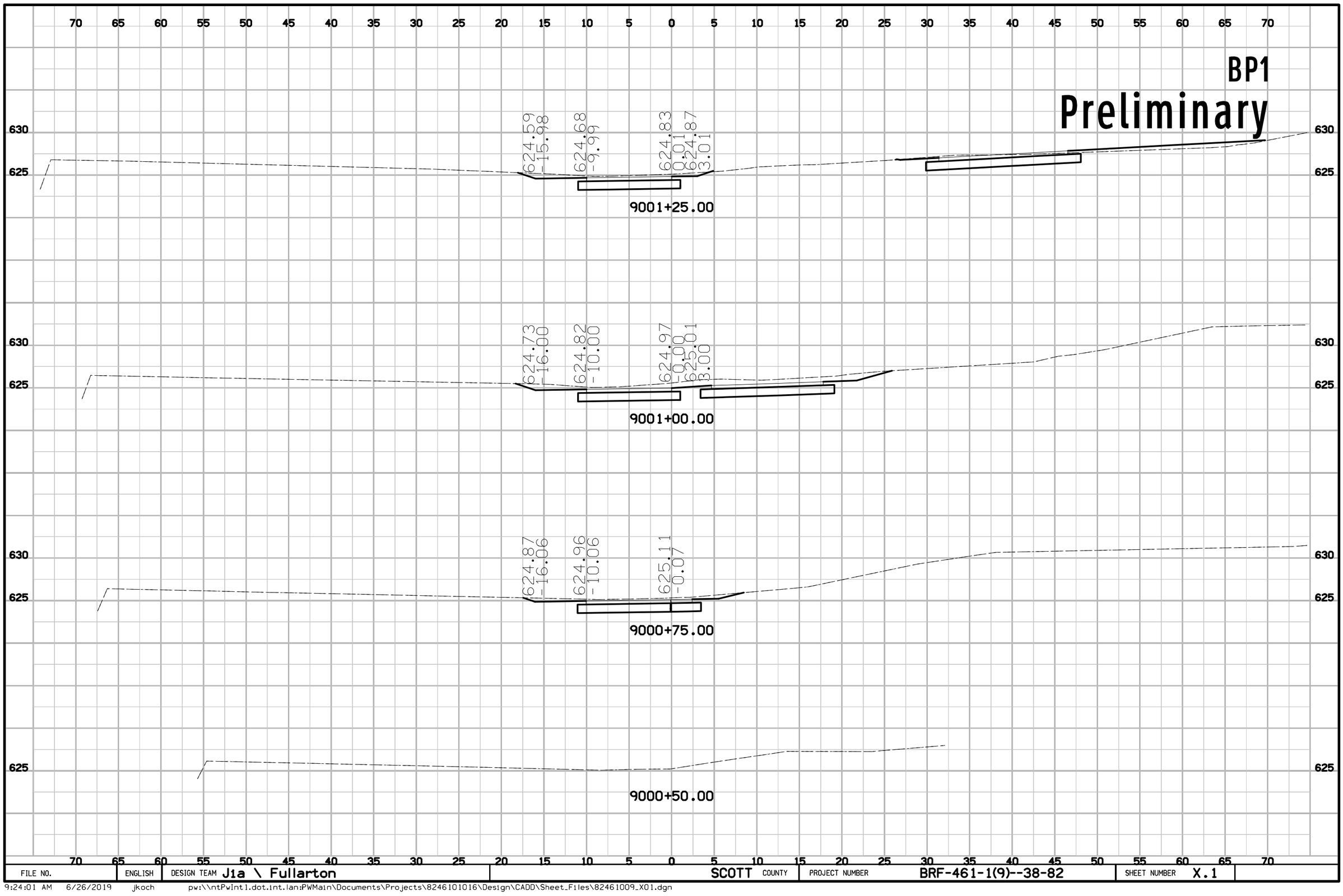
2007+25.00

FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER W.7

1:08:20 PM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_W02.dgn

BP1

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.1

9:24:01 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X01.dgn

BP1

Preliminary

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

630 625 620 615

624.18 -16.00 624.27 -10.00 624.42 0.00 624.46 3.00

9002+00.00

630 625 620

624.31 -15.98 624.40 -9.98 624.55 0.02 624.60 3.02

9001+75.00

630 625 620

624.45 -16.00 624.54 -10.00 624.69 0.00 624.74 3.00

9001+50.00

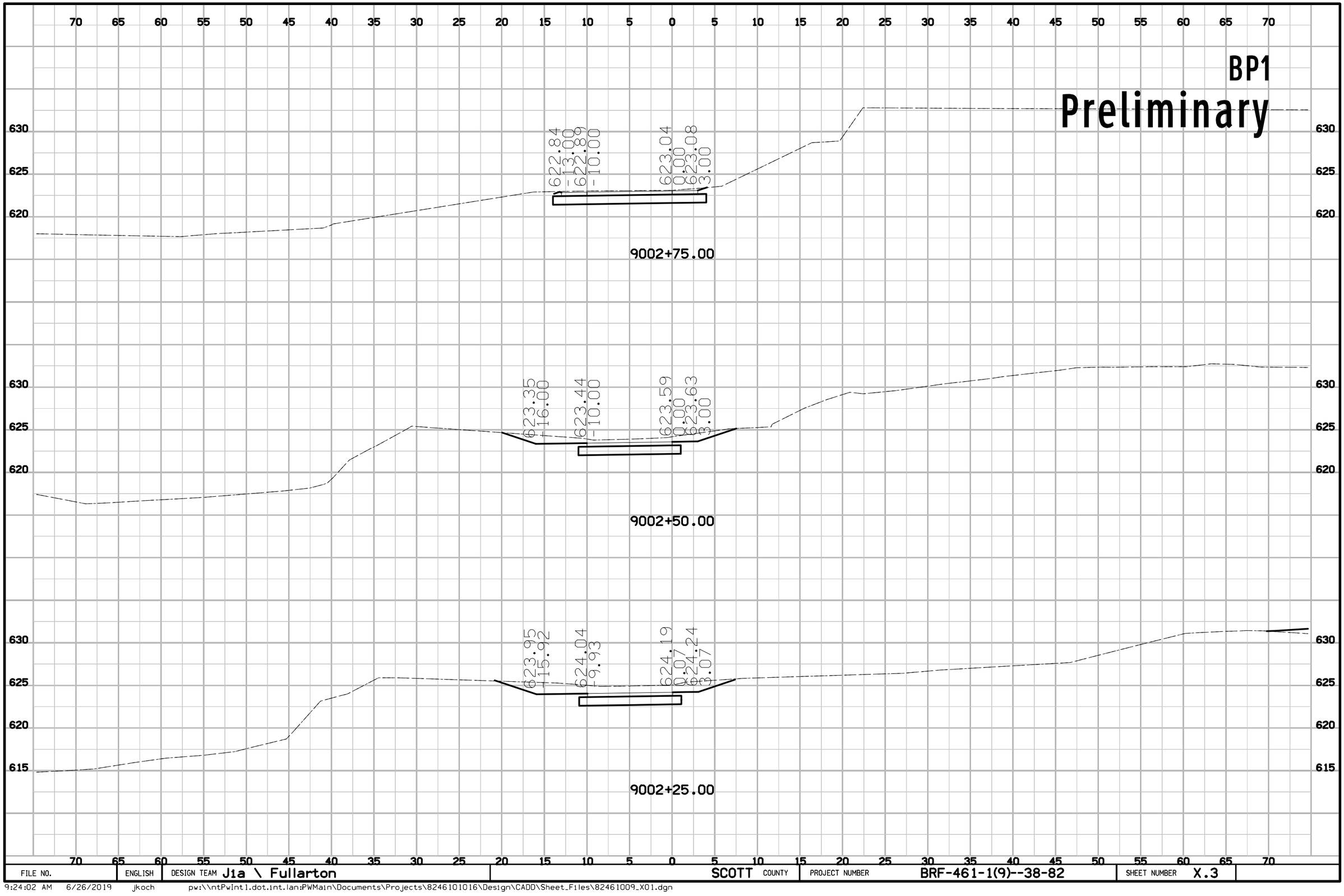
70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.2

9:24:01 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X01.dgn

BP1

Preliminary

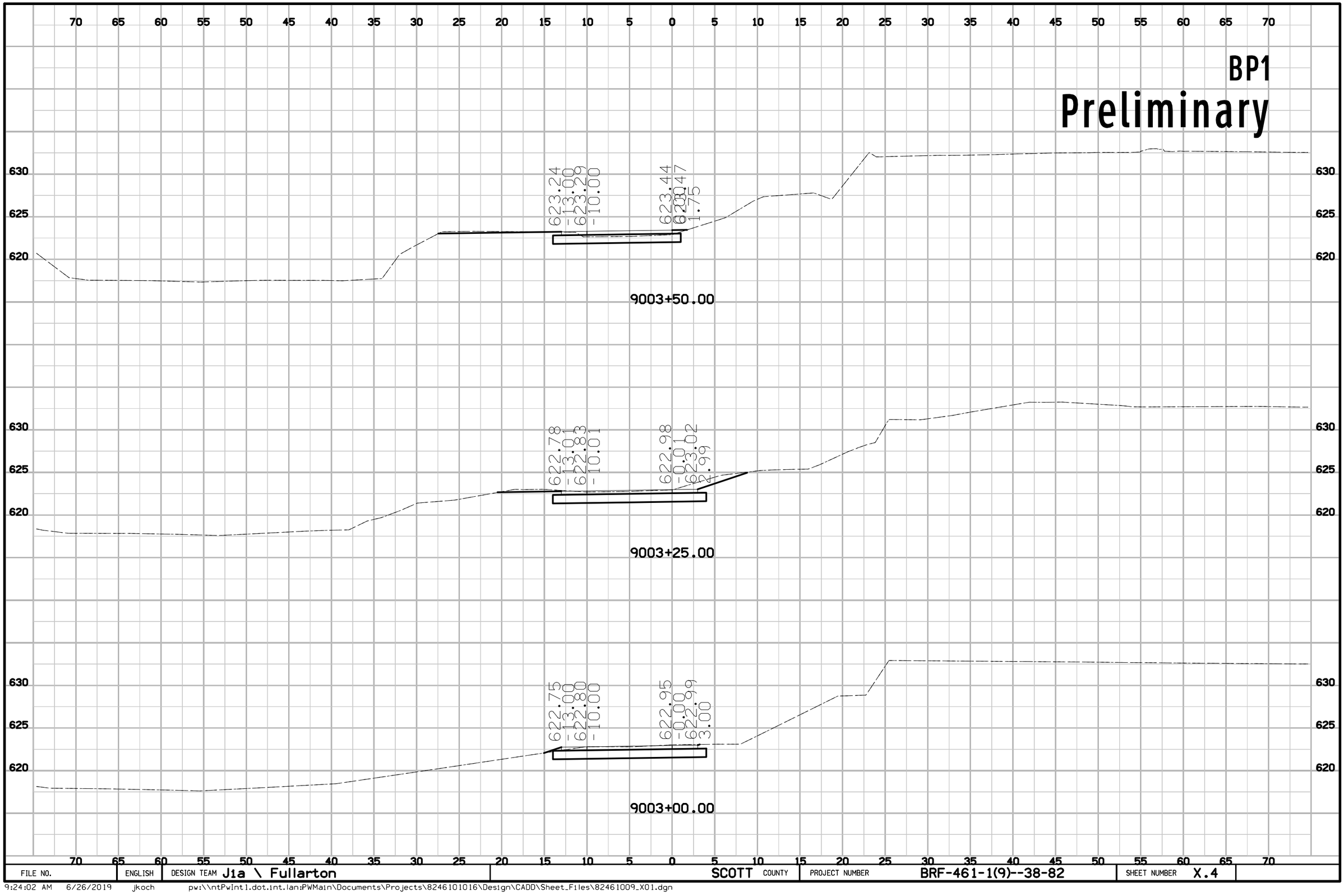


FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.3

9:24:02 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X01.dgn

BP1

Preliminary

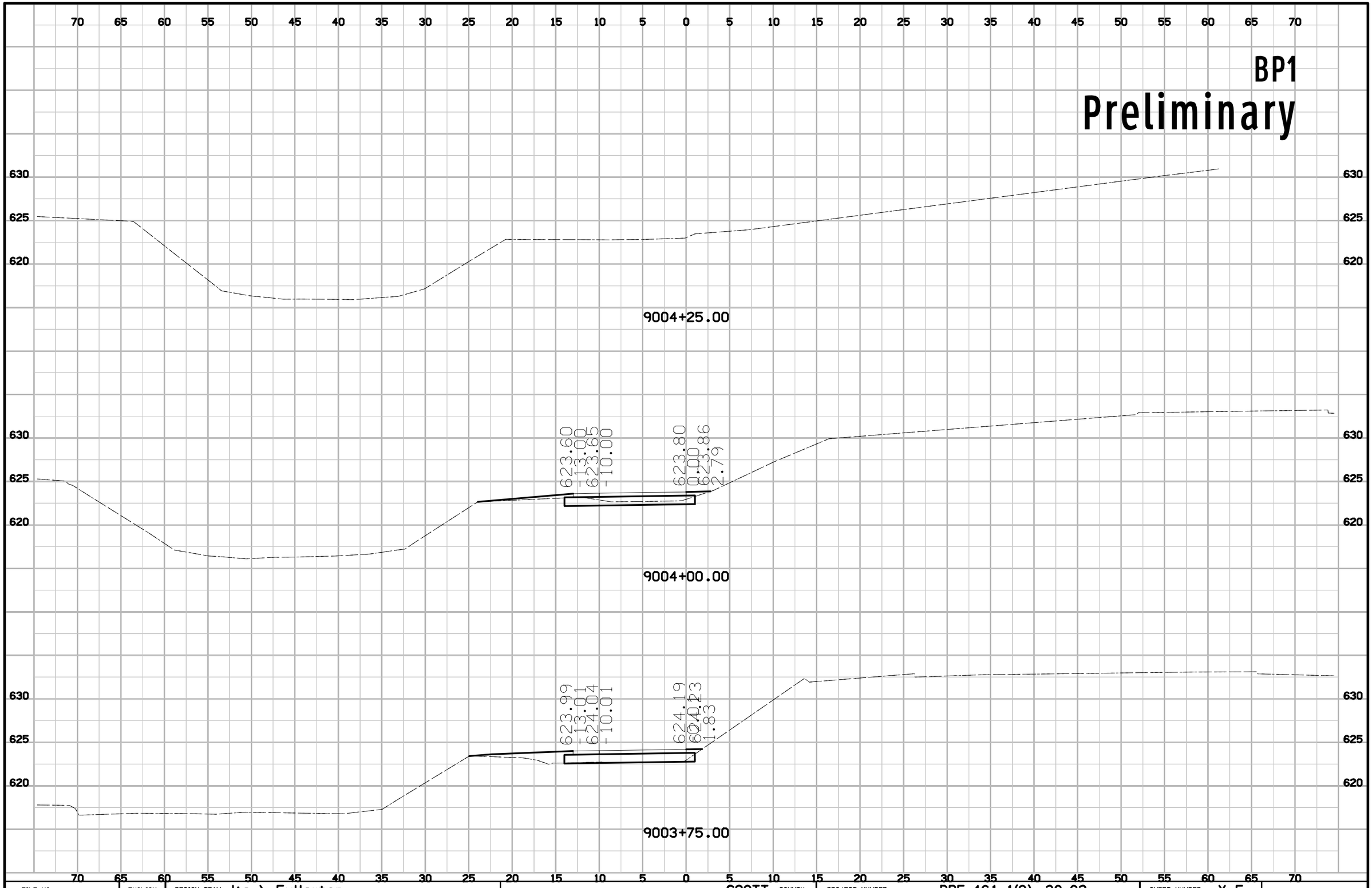


FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.4

9:24:02 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X01.dgn

BP1

Preliminary

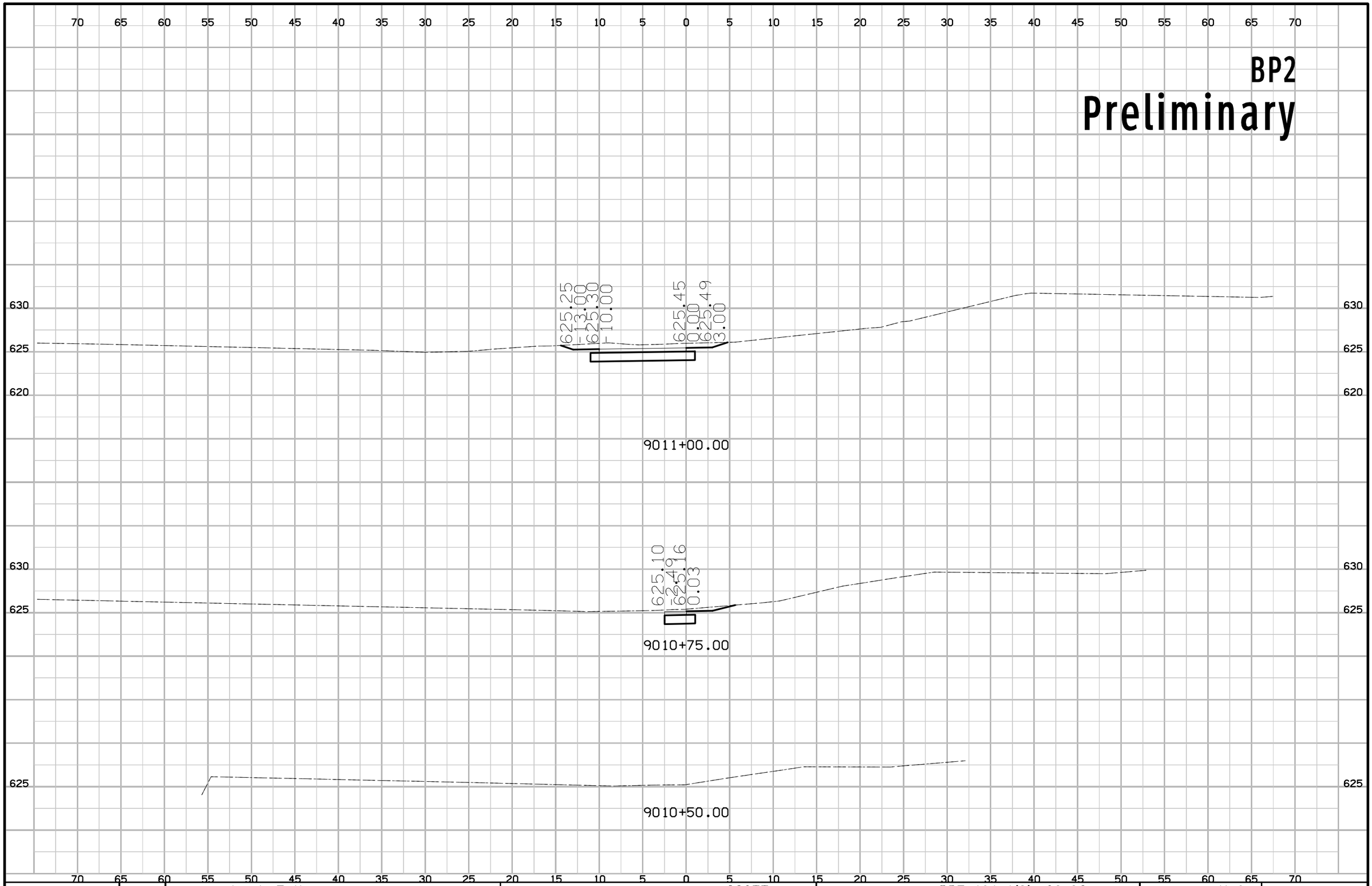


FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.5

9:24:03 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X01.dgn

BP2

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.6

11:21:16 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X02.dgn

BP2

Preliminary

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

635 630 625 620

629.37
-13.00
629.41
-10.00

629.56
-0.00
629.61
3.00

9011+75.00

635 630 625 620

627.90
-13.00
627.94
-10.00

628.09
0.00
628.14
3.00

9011+50.00

630 625 620

626.43
-12.98
626.47
-9.98

626.62
0.01
626.67
3.01

9011+25.00

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.7

11:21:17 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X02.dgn

BP2

Preliminary

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

630
625
620

9012+50.00

630
625
620

9012+25.00

630.84
-13.00
630.89
-10.00

631.04
0.00
631.08
3.00

635
630
625
620

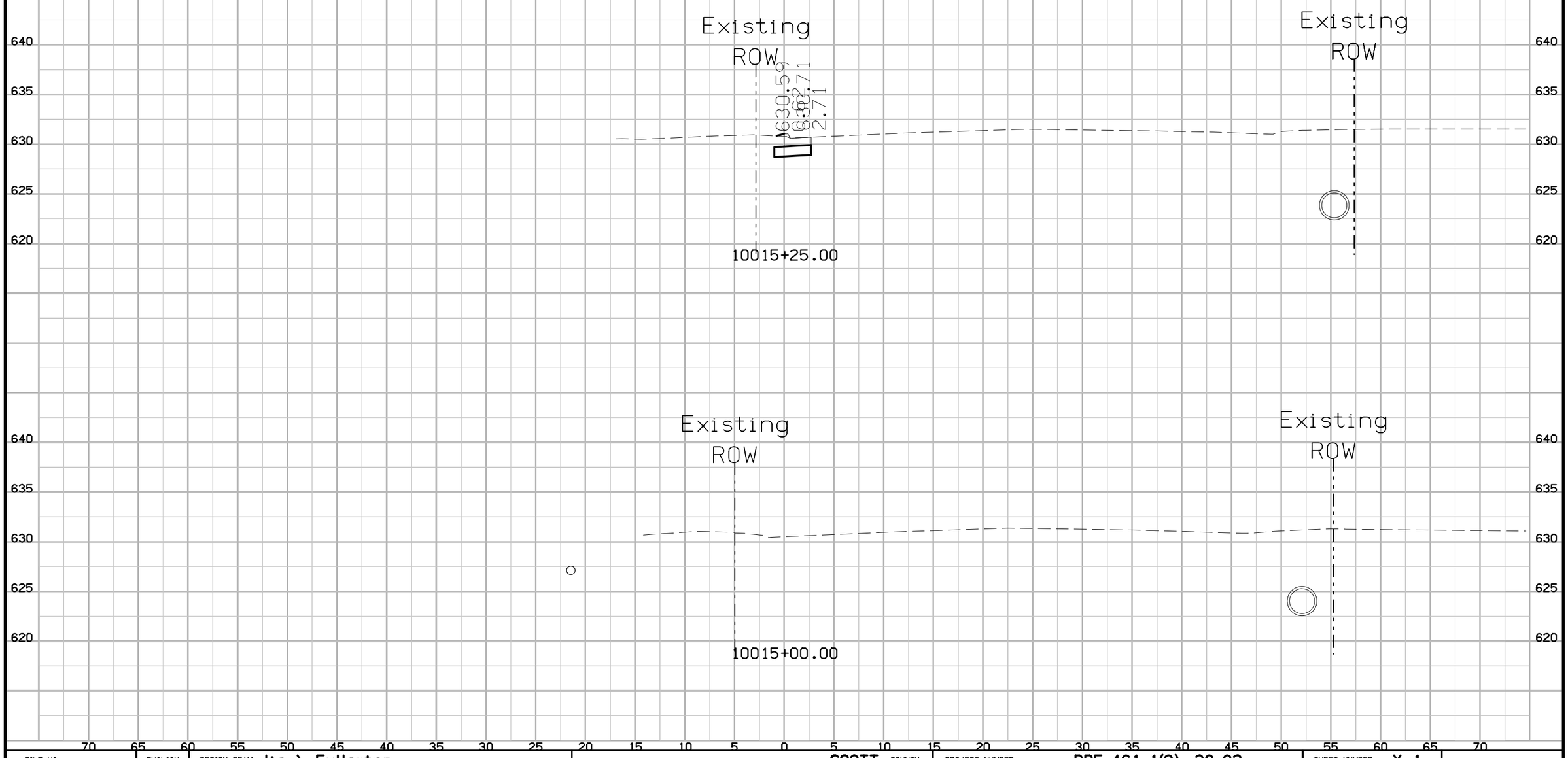
9012+00.00

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER X.8

11:21:17 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_X02.dgn

DET1
Preliminary

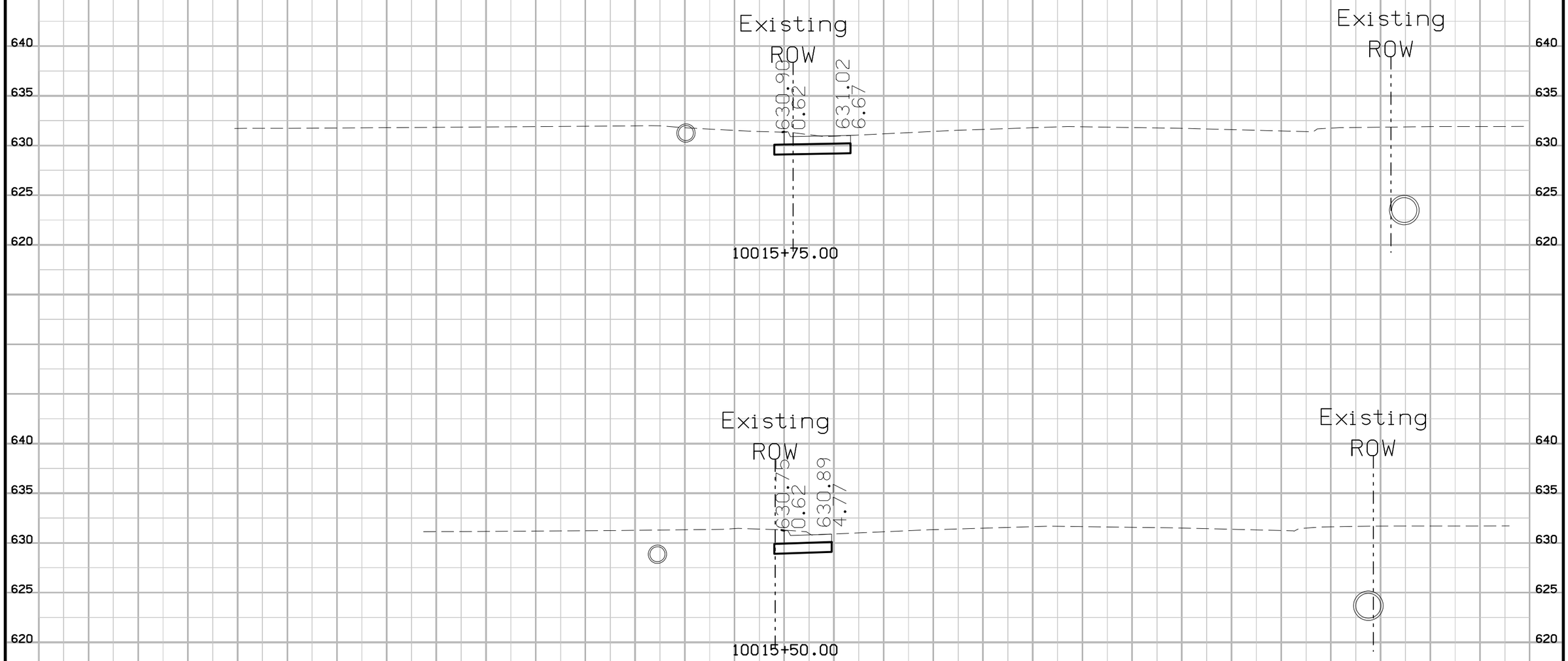


FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.1

11:15:23 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

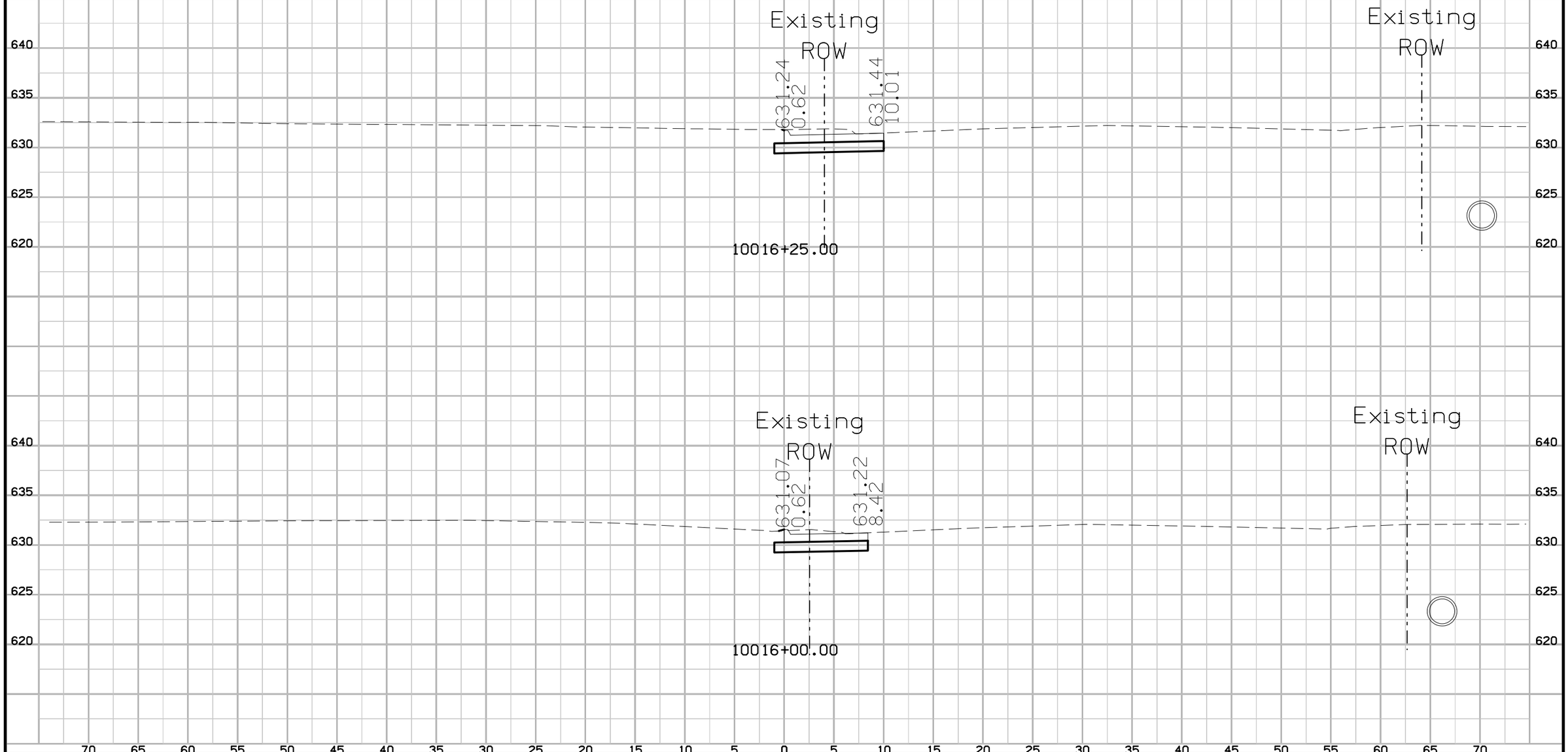
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.2

11:15:24 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1
Preliminary

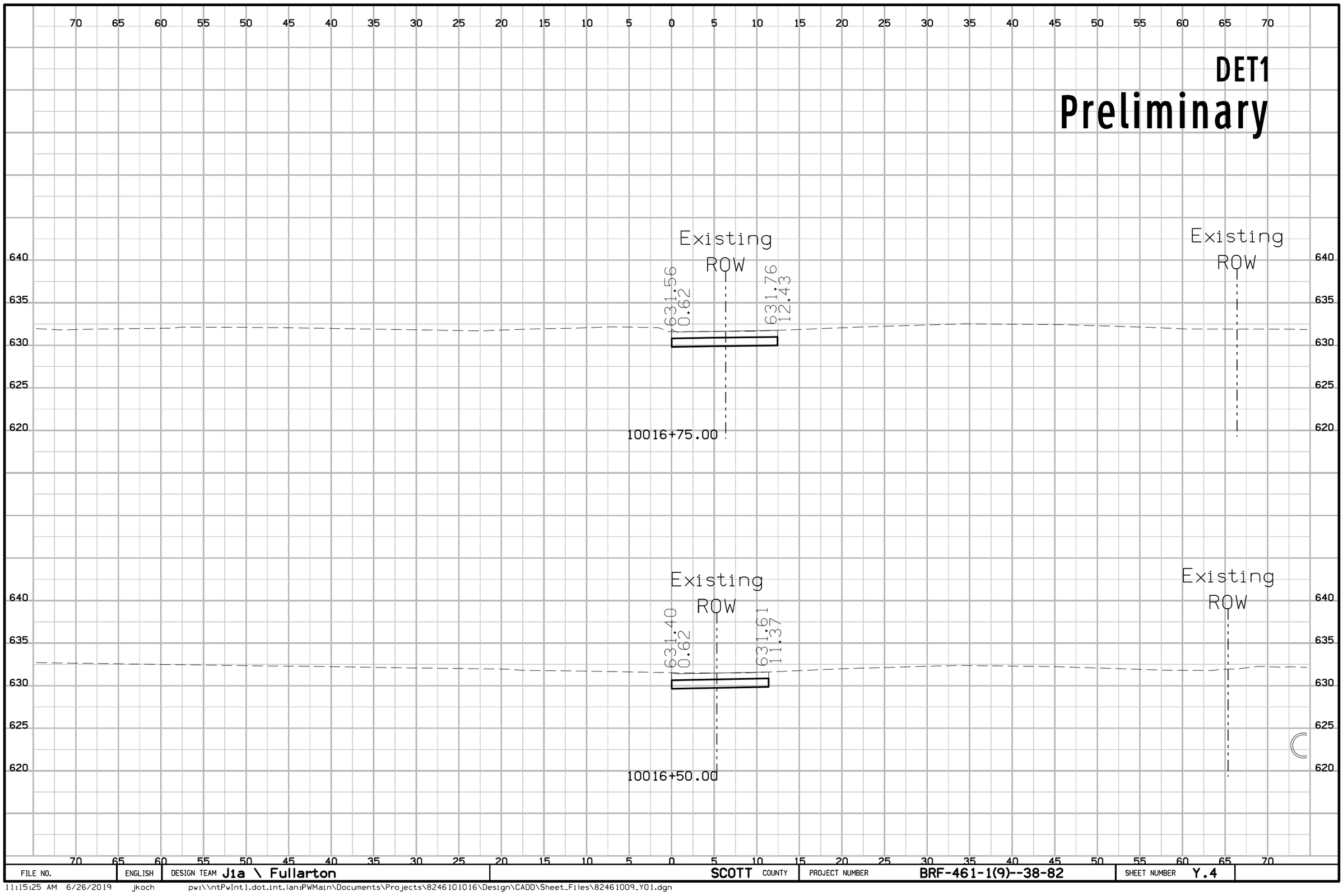


FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.3

11:15:24 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

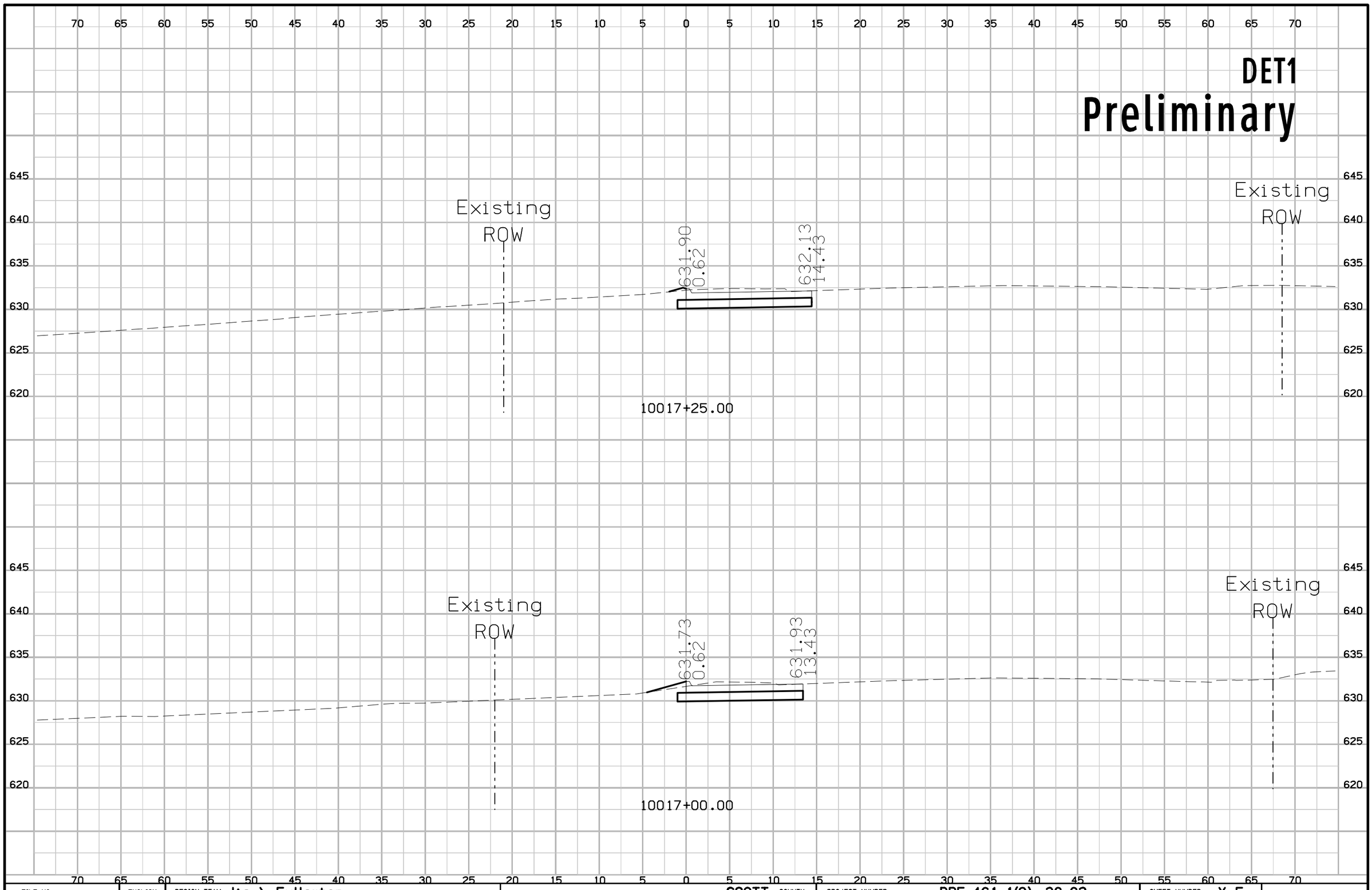
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.4

11:15:25 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.5

11:15:26 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

Preliminary

DET1

Existing ROW

Existing ROW

10017+75.00

Existing ROW

632.06
0.62

632.33
15.43

Existing ROW

10017+50.00

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.6

11:15:26 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

Preliminary

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

635
630
625
620
615

Existing ROW

Existing ROW

10018+25.00

635
630
625
620
615

Existing ROW

Existing ROW

10018+00.00

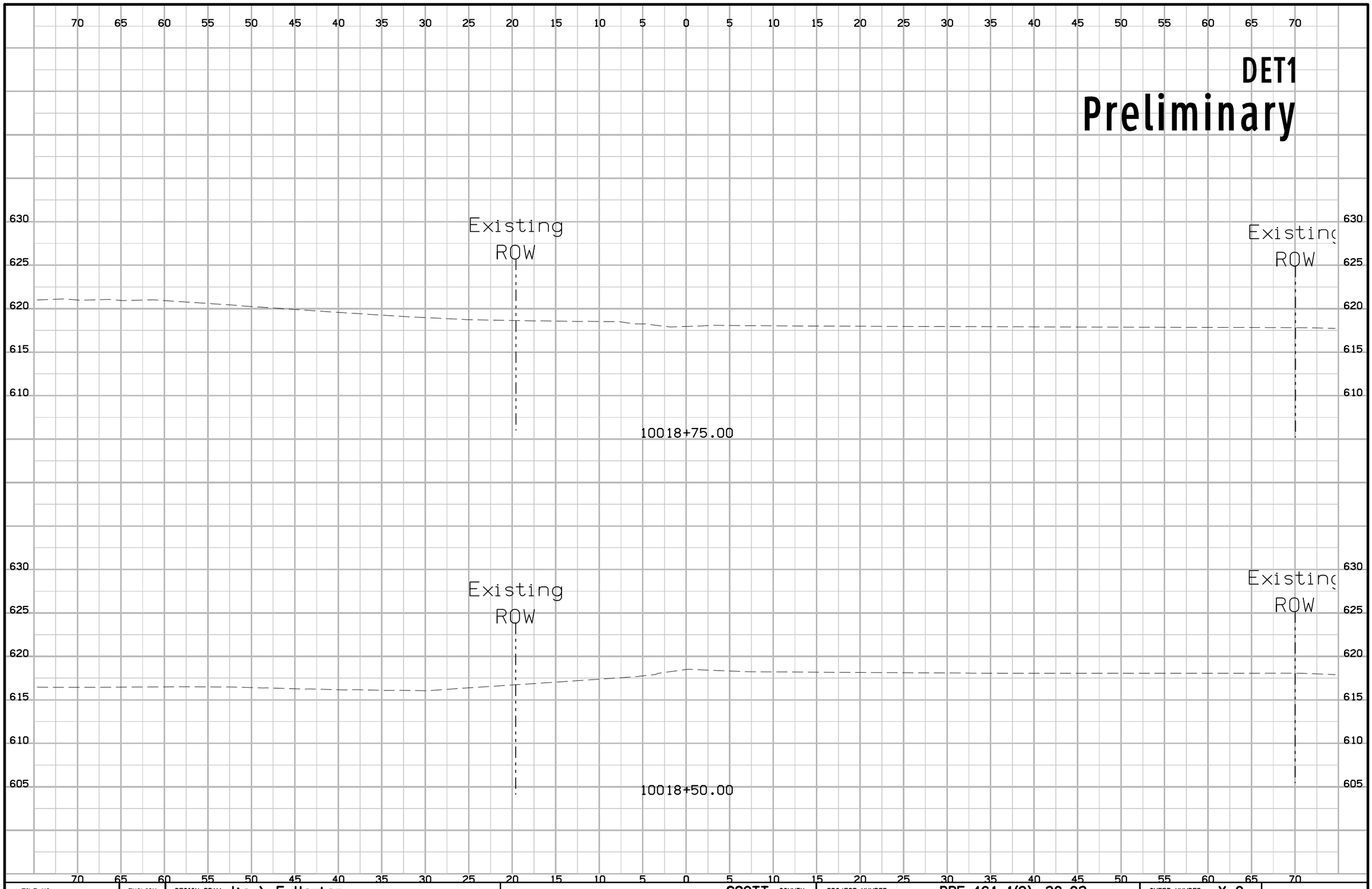
70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.7

11:15:27 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.8

11:15:27 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

Preliminary

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

640
635
630
625
620

Existing
ROW

Existing
ROW

10019+25.00

635
630
625
620
615

Existing
ROW

Existing
ROW

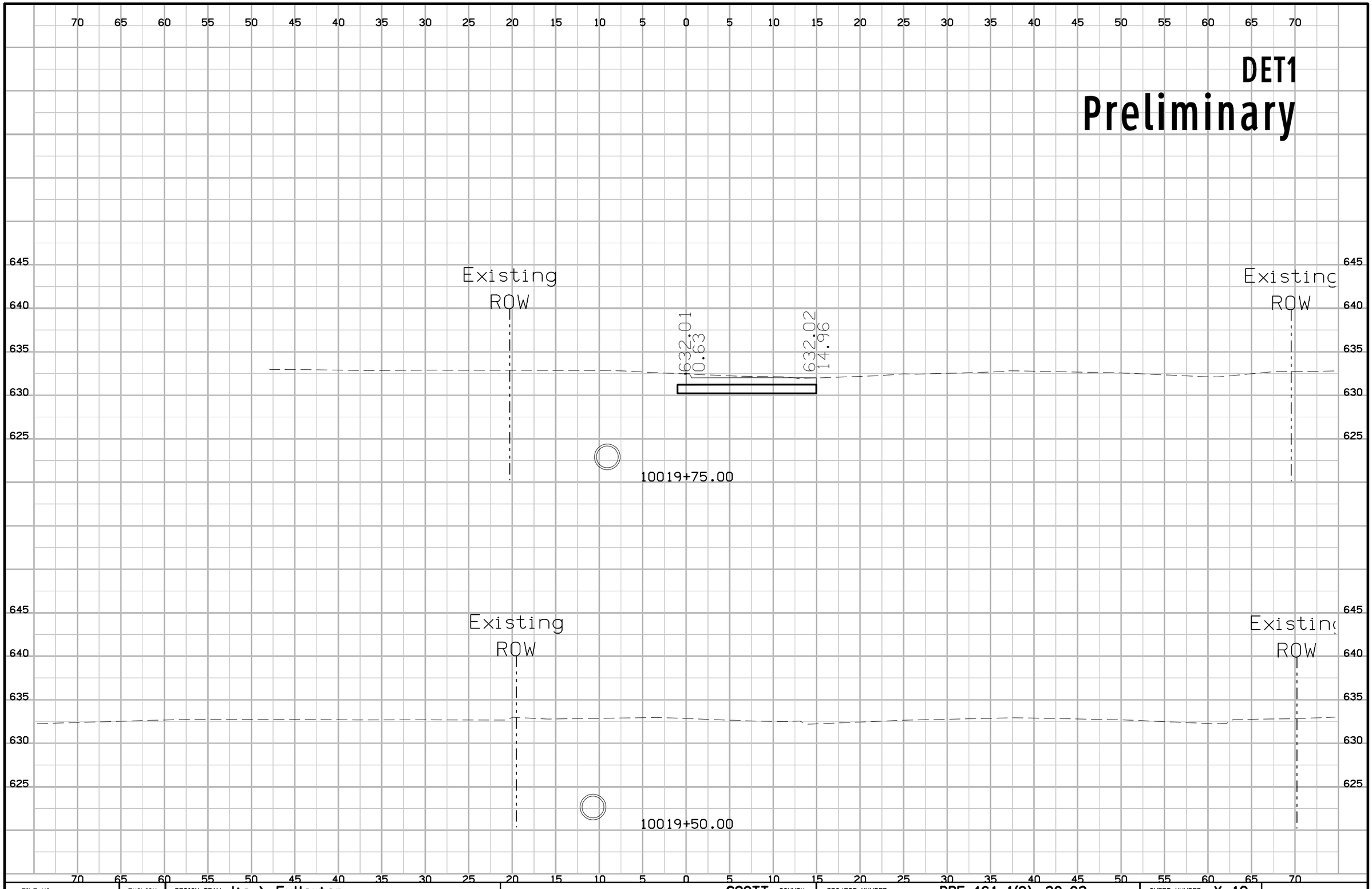
10019+00.00

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.9

11:15:28 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.10

11:15:28 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

Preliminary

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

645 640 635 630 625

Existing ROW

631.67
0.63
631.86
12.96

Existing ROW

10020+25.00

645 640 635 630 625

Existing ROW

631.84
0.63
631.92
13.96

Existing ROW

10020+00.00

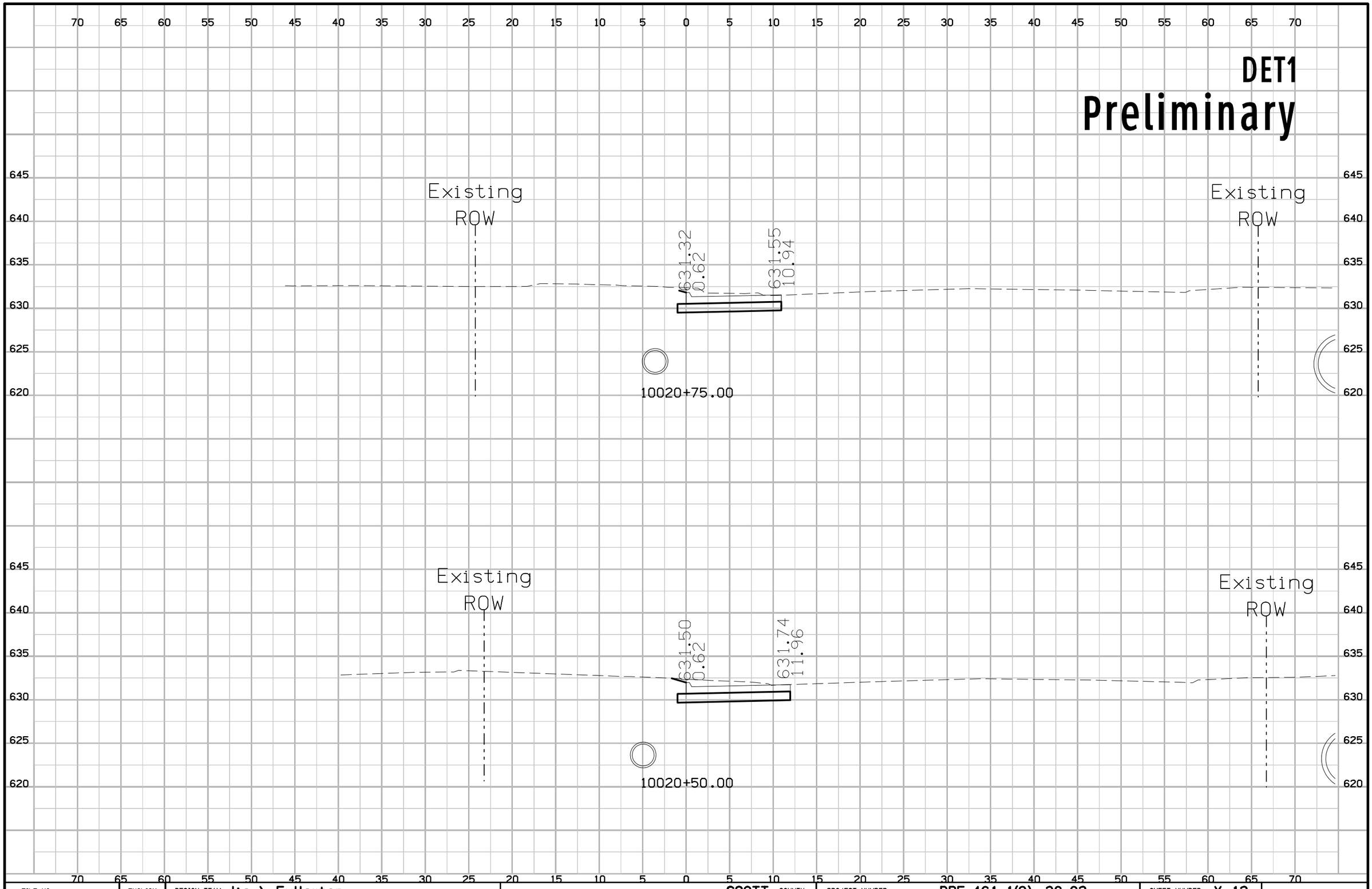
70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.11

11:15:29 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

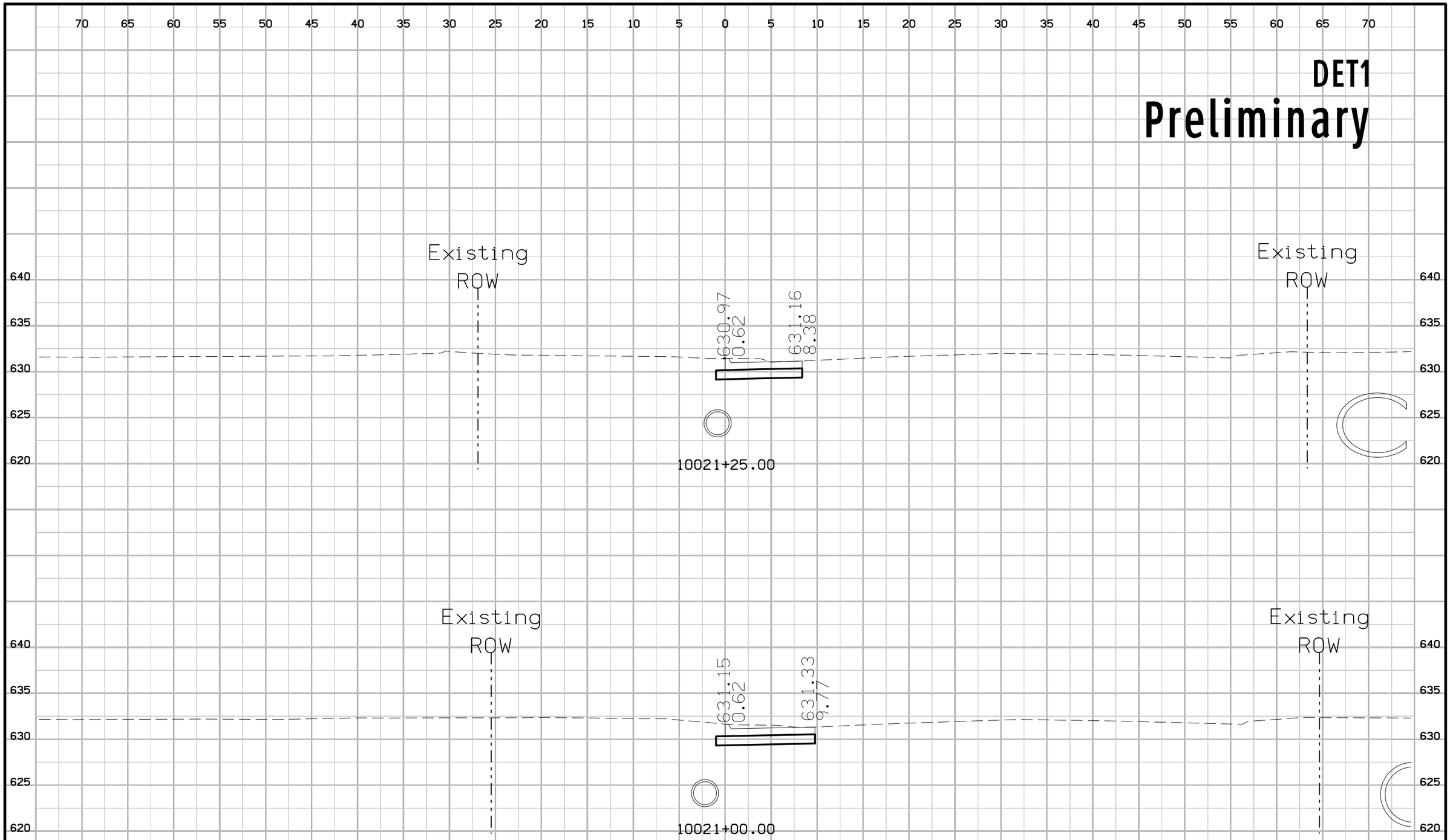
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.12

11:15:29 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1
Preliminary

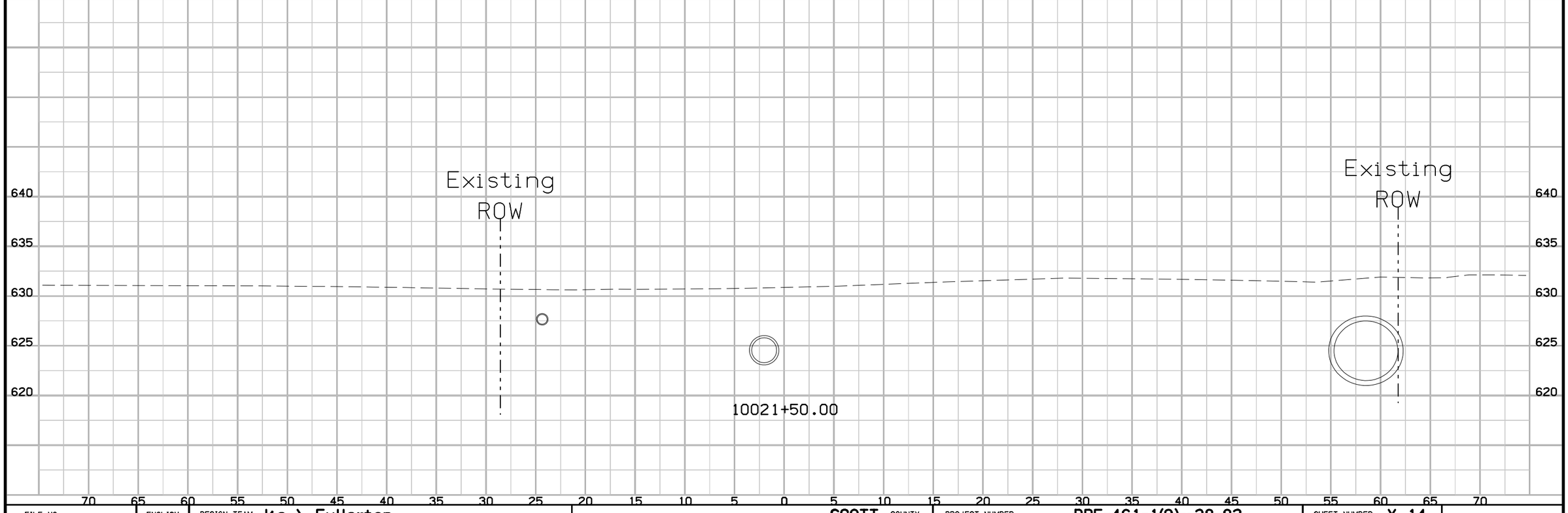


FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.13

11:15:30 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn

DET1

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM J1a \ Fullarton	SCOTT COUNTY	PROJECT NUMBER BRF-461-1(9)--38-82	SHEET NUMBER Y.14

11:15:30 AM 6/26/2019 jkoch pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\8246101016\Design\CADD\Sheet_Files\82461009_Y01.dgn