

January 20, 2017

Alan Rathbun Director, Pipeline Safety Utilities & Transportation Commission 1300 S. Evergreen Park Dr. S.W PO Box 47250 Olympia, WA 98504-7250

Subject: WAC 480-93-020 – Request for Approval – Toppenish-Zillah Transmission Line Replacement

Dear Mr. Rathbun:

Pursuant to the requirements of WAC 480-93-020 Proximity Considerations, Cascade Natural Gas Corporation (CNGC) requests approval to operate a replaced section of six inch pipeline at a Maximum Allowable Operating Pressure (MAOP) of 400 psig within 100 feet of existing structure intended for human occupancy.

### **Proposed Scope of Work:**

Yakima County has informed Cascade Natural Gas of proposed construction plans for a Cheyne Road improvement project located in rural Yakima County about 2 miles north of the city of Zillah. The improvement project parallels the existing 6-inch Toppenish-Zillah Transmission Line where a 400 foot segment of 6-inch pipeline will have to be replaced. Approximately 400 feet of the pipeline will be replaced in a previously established 8 foot wide pipeline easement paralleling Cascade's existing 6-inch Toppenish-Zillah Transmission Line. The replacement section of the 6-inch pipeline will begin at station 36+75 and proceed to station 40+75 of the Yakima County plans. This pipeline operates at an MAOP of 400 psig. Approximately 400 feet of the new pipeline will be installed using standard excavated trench. The complete route is depicted on the attached aerial map, titled Toppenish-Zillah Transmission Line Relocate – Project Route (Figure #1).

The proposed section of 6-inch pipeline will be designed with a minimum component rating of 720 psig and will be pressure tested to a minimum of 1080 psig following Cascade's established testing procedures, above the design specifications of previously installed 6-inch Toppenish-Zillah Transmission Line pipelines, which will ultimately connect together to form one continuous pipeline system. The MAOP of the 6-inch pipeline will continue to be 400 psig. At the proposed MAOP of 400 psig, the maximum stress level of the 400-foot replaced section pipe and pipeline fittings will be 9.1% of the specified minimum yield strength. Thus, this pipeline section will be classified as high pressure distribution main. There will be 100% NDT performed on the newly installed section of pipeline.

Specifications of the 6-inch pipeline are as follows:

- 400 feet of 6" x 0.280" API 5L Grade X-52 steel line pipe with fusion bonded epoxy coating.
- All fittings (elbows, tees, caps, etc.) will be a minimum standard weight, ANSI 16.9 WPHY-52.
- All components (valves, line stoppers, etc.) will be ANSI Class 300 with a maximum working pressure rating of 720 psig.

#### **Proximity:**

The proposed pipeline will be installed within 100 feet of the existing building as shown on Figure 1. This would be 36 feet from the residence at 1860 Cheyne Rd, Zillah. It is not possible to increase the distance between the proposed pipeline and the building at this location within the existing utility easement.

#### **Alternatives:**

An alternative to the chosen route would be to re-route the pipe around the 100-foot radius from the single family residence at 1860 Cheyne Rd. This would extend the southernmost tie-in point at a minimum of 40 feet from station 36+75 to station 36+35 according to Yakima County's plans. Alternate route would need a private easement on Parcel# 201124-22402. The alternate route is not considered practical as existing pipeline and pipeline easements are in place and the alternate route would expose the pipeline to additional risk on private property and agricultural machinery. Aerial map can be referenced, titled Toppenish-Zillah Transmission Line Relocate – Alternate Route.

#### **Closing:**

Cascade respectfully requests your approval to move forward with the installation of the proposed 6-inch Toppenish-Zillah Transmission Line project which is scheduled to begin construction at the end of March, 2017. If you have any questions or require additional information, feel free to contact me at (509) 734-4576 or via email at mike.eutsey@cngc.com

Sincerely,

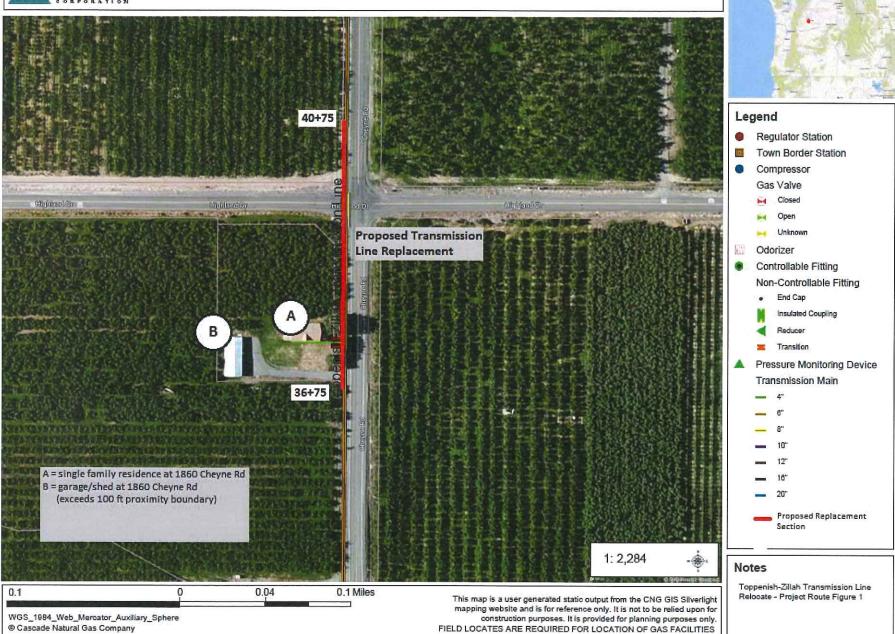
Mike Eutsey Director, Operations Services Cascade Natural Gas

CC: Eric Martuscelli Steve Kessie Jeremy Ogden

**Enclosures** 



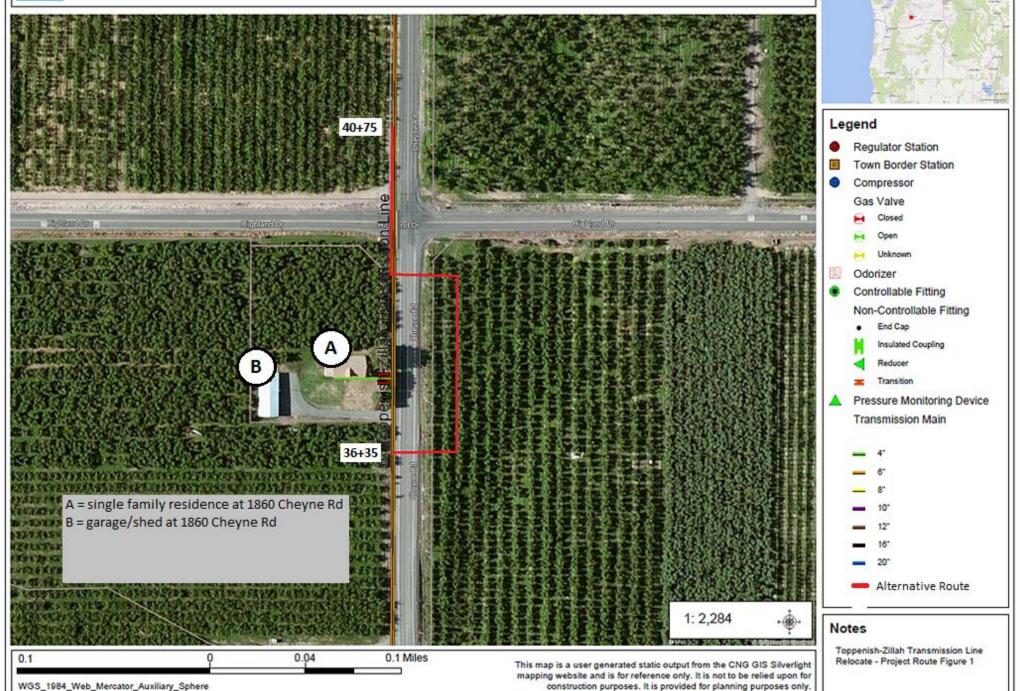
# Toppenish-Zillah Transmission Line Relocate - Project Route Figure 1



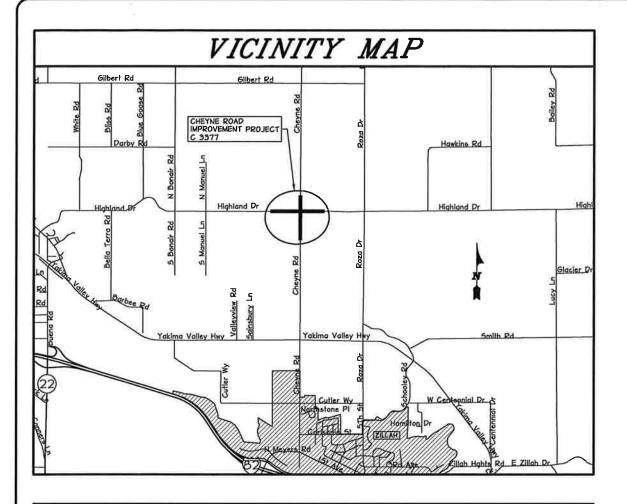


@ Cascade Natural Gas Company

# Toppenish-Zillah Transmission Line Relocate - Alternative Route



FIELD LOCATES ARE REQUIRED FOR LOCATION OF GAS FACILITIES



Back of Ditch				Oil			-0-
Back of Walk		Ex. Berm		Power-Aerial Power-Underground			P
Berm-existing Bot. of Ditch-existina		Ex Ditch		Property Line		P	P
CL-New Road		LA PIIGI		Railroad Tracks	111111111111111111111111111111111111111		
CL-Existing Road				R/W		-2/1	
Curb				Sanitary Sewer			- 5
DID-existing		е		Section Line-Approx.			. — –
Edge of Oil				Section Line-Quarter			
Existing R/W		- turby 6M		Section Line-Sixteenth			
Fence-Barbed		( * * * <del>* × × × × × × × ×</del>	<del></del>	Shoulder-existing			Ex. Shoulder -
Fence-Board				Steam	-	-STE	-51E
Fence_Chain				Storm Drain		p	_ D
<del>S</del> as		-G G -		Telephone-Aerial			T
Grape Line				Telephone-Underground	4	-1-	т-
Guardrail Gutter				Television-Aerial	,	TV	
Gurrer Hop Line				Television-Underground Toe-existing		14	Ex. for
rriaation				Water			W
New Edge of Road		<u>_</u>		Junction Box, Type	ı 🛛	- Alle	
Anchor	<del></del>	IrrigBlow	Ŷ	SanDrainfield	<b>⊕</b>	TelePedestal	-∆-
Bench Mark	<b>+</b>	IrrigPump	8	SanManhole	€	TelePole	-
Catch Basin	CB	IrrigStandpipe	<b>⊗</b>	SanSeptic		TeleVault	T
Control Point	<del>•</del>	IrrigSprinkler		Section Corner	- <b>&amp;</b> -	Tree-Con.	<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>
DID-Inlet	⊗	IrrigValve	Ň	Service Pole	Ō	Tree-Dec.	€
DID-Manhole	0	Mailbox	(IMB)	Shrub	*	Tv-Cabox	TV
Gas-Meter	Ō	Orchard	$\odot$	Sign		Water-Faucet	8
Gas-Valve	M	Power-Jbox	वि	Storm-Manhole	69	Water-Fire Hyd.	♦
Grape-Pole	0	Power-Panel	PANEL	Stream Barb	e <del>mp</del>	Water-Meter	æ
Hedge	$\langle \tilde{\cdot} \rangle$	Power-Pole	<u> </u>	Stream Sill	CHICAGO	Water-Valve	Ø
High Water	<b>A</b>	Property Corner	<u>-</u>	Street Light	<b>₽</b> Х	Water-Well	Õ
Hop-Pole	•	Riprap	<b>##</b>	Surface Inlet	୍ଡି	Water Surface	ă
Invert Elev.	œ	Rockery	CDC	TeleManhole	TMH	Yard Light	ğ

# CHEYNE ROAD IMPROVEMENT PROJECT C 3377

FEDERAL AID NO:STPR D395(002)

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#### IOTES:

- I) THESE PLANS ARE FOR THE ESTABLISHMENT OF ROAD RIGHT OF WAY ONLY. PROPERTY BOUNDARIES ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.
- 2) ROAD APPROACH DESIGNS ARE APPROXIMATE. CHANGES MAY BE MADE BASED ON FINAL DESIGN OF ROADWAY.



CHEYNE ROAD
IMPROVEMENT
PROJECT
STPR-D395(002)
CHEYNE ROAD &
HIGHLAND DRIVE
INTERSECTION
C 3377

PREPARED UNDER THE DIRECTION OF:

27388

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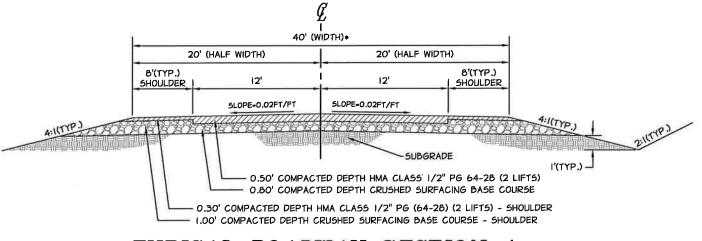
COUNTY ENGINEER
DATE: 10/9/12

KIM PF	AFF	
DRAWN J. MATI		CHECKED BY: K. PFAFF
REVISION:		

RIGHT OF WAY PLANS VICINITY MAP, INDEX, \$ LEGEND

SHEET 1 OF 17

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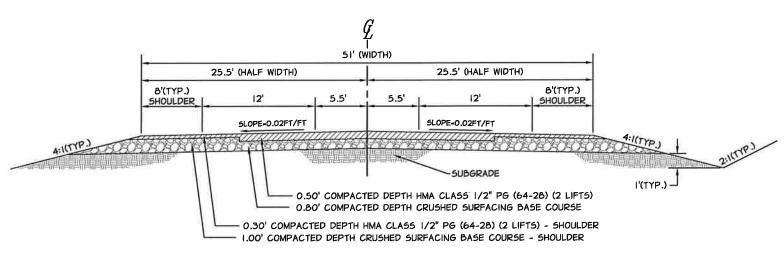
# TYPICAL ROADWAY SECTION A

CHEYNE ROAD:

STA. 27+50 TO STA. 34+75 STA. 43+75 TO STA. 46+17

\* CHEYNE ROAD: 5TA. 34+75 (40' WIDTH) TAPER TO 5TA. 37+50 (51' WIDTH) STA. 41+00 (51' WIDTH) TAPER TO STA. 43+75 (40' WIDTH)

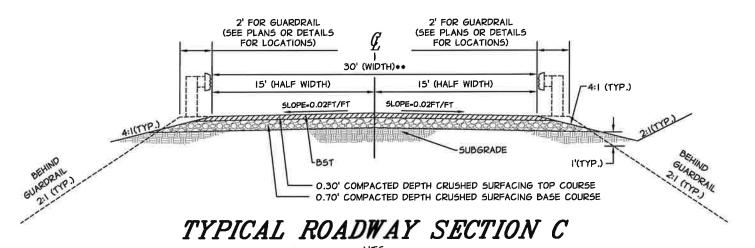
• HIGHLAND DRIVE: 5TA, 22+25 TO 5TA, 23+76

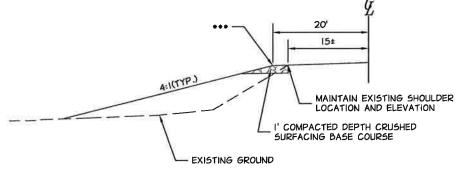


# TYPICAL ROADWAY SECTION B

HIGHLAND DRIVE ROAD:

CHEYNE ROAD: STA. 37+50 TO STA. 41+00





## DETAIL SHOULDER REBUILD

NT5

CHEYNE ROAD: 5TA. 26+65 LT. TO 5TA. 27+50 LT.

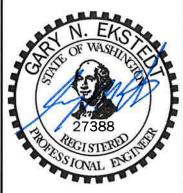
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STATION	OFFSET	SHOULDER ELEVATION
26+65	20' LT.	917.34
26+75	20' LT.	917.49
27+00	20' LT.	917.82
27+25	20' LT.	918.12
27+50	20' LT.	918.39



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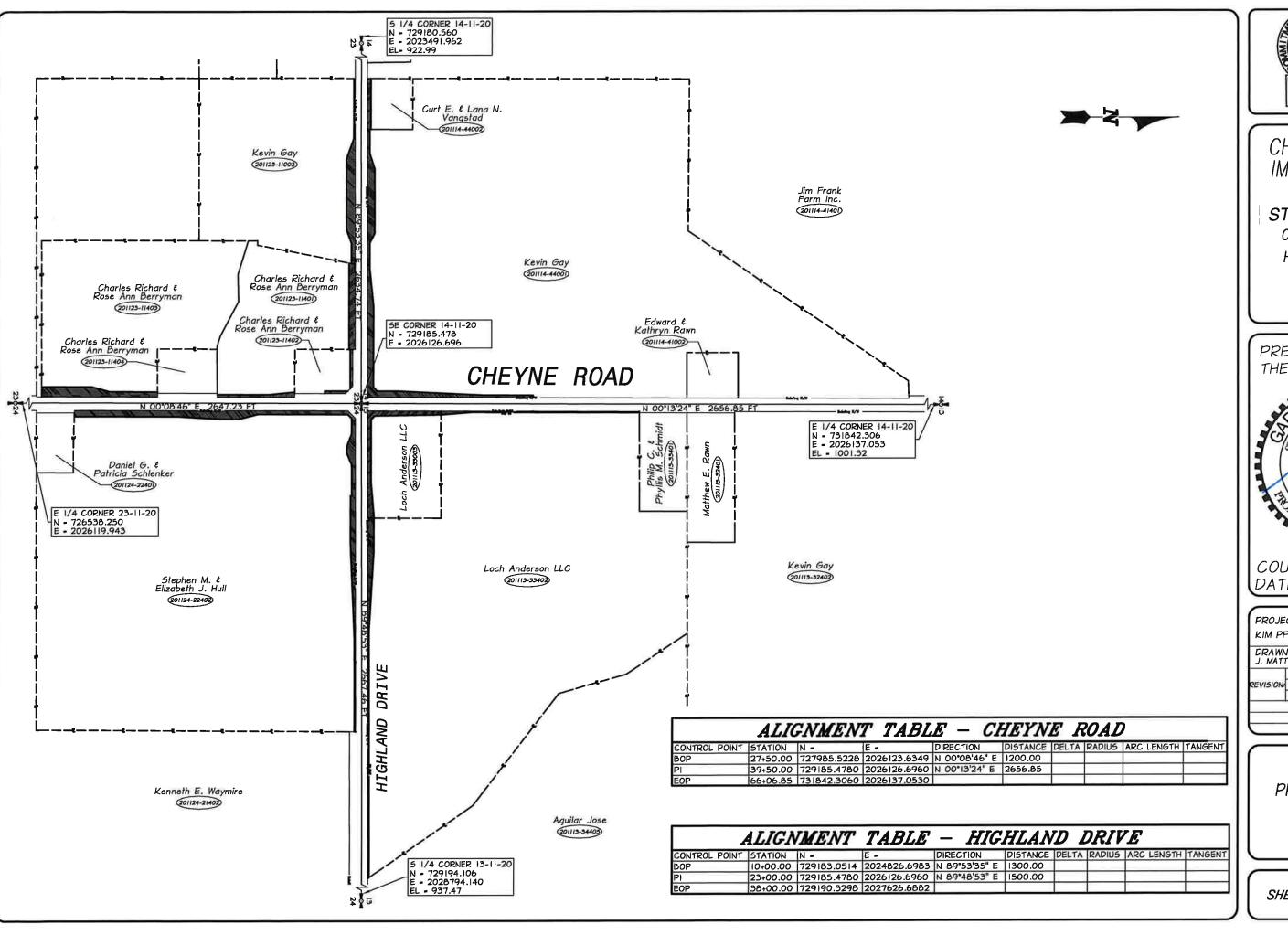
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TYPICAL ROADWAY SECTIONS

SHEET 2 OF 17

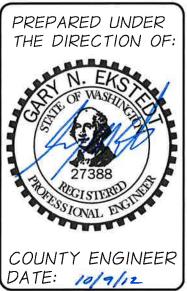
•• HIGHLAND DRIVE ROAD: STA. 32+25 (30' WIDTH) TAPER TO EOP STA. 33+00.00 (MATCH EXISTING WIDTH)

BOP STA. 10+50 TO STA. 22+25 STA. 23+76 TO STA. 32+25





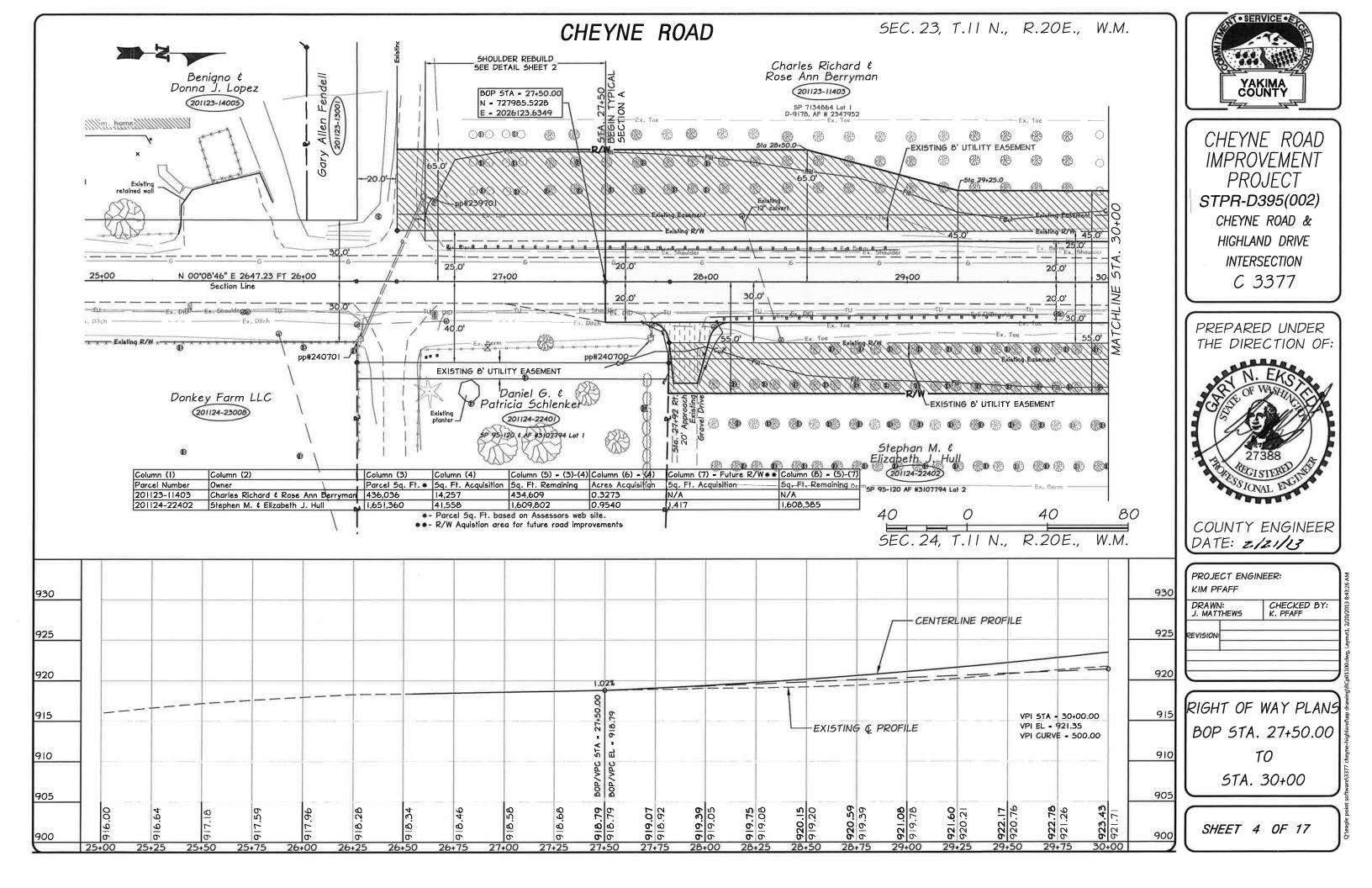
CHEYNE ROAD IMPROVEMENT PROJECT STPR-D395(002) CHEYNE ROAD & HIGHLAND DRIVE INTERSECTION C 3377

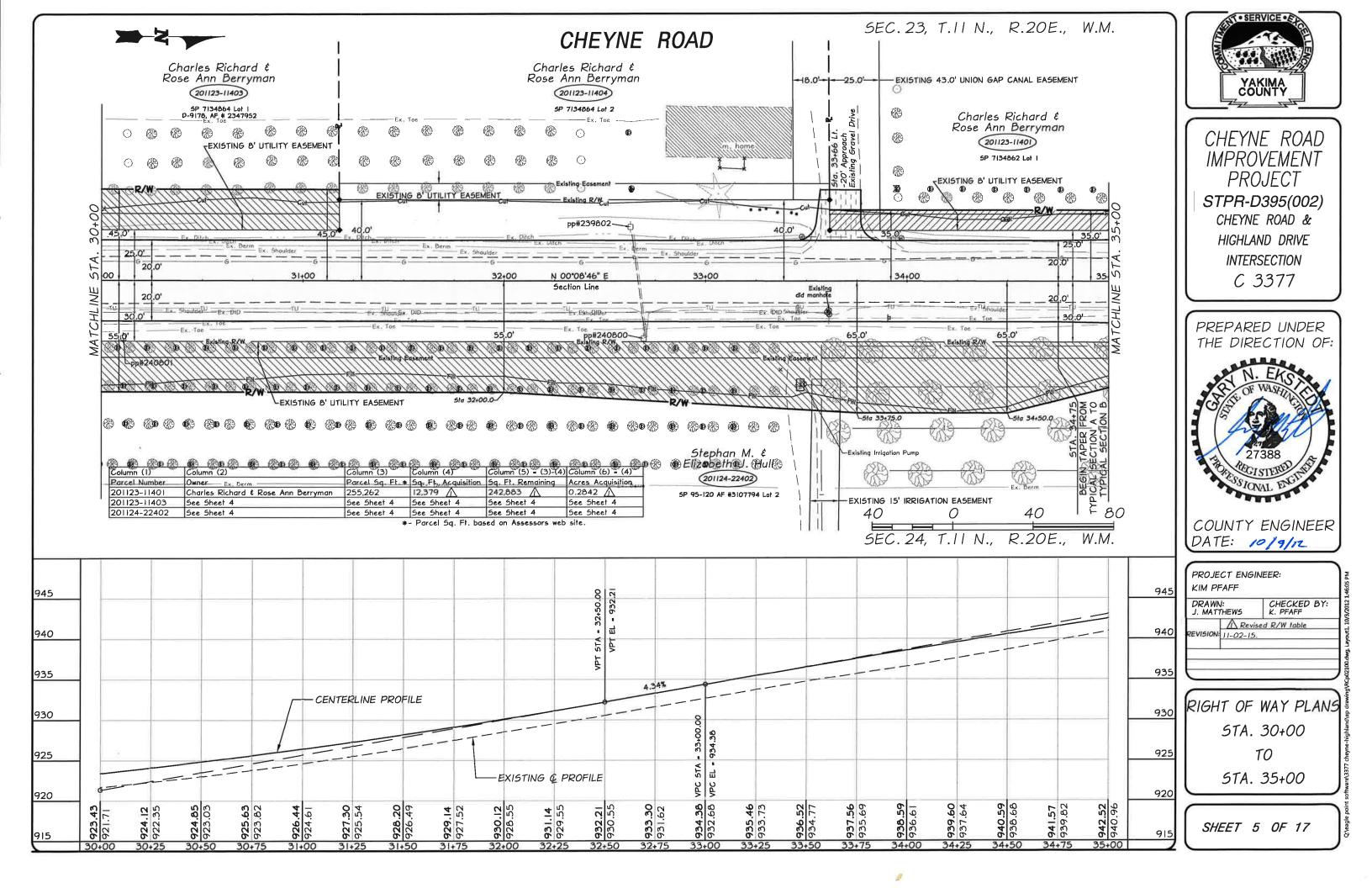


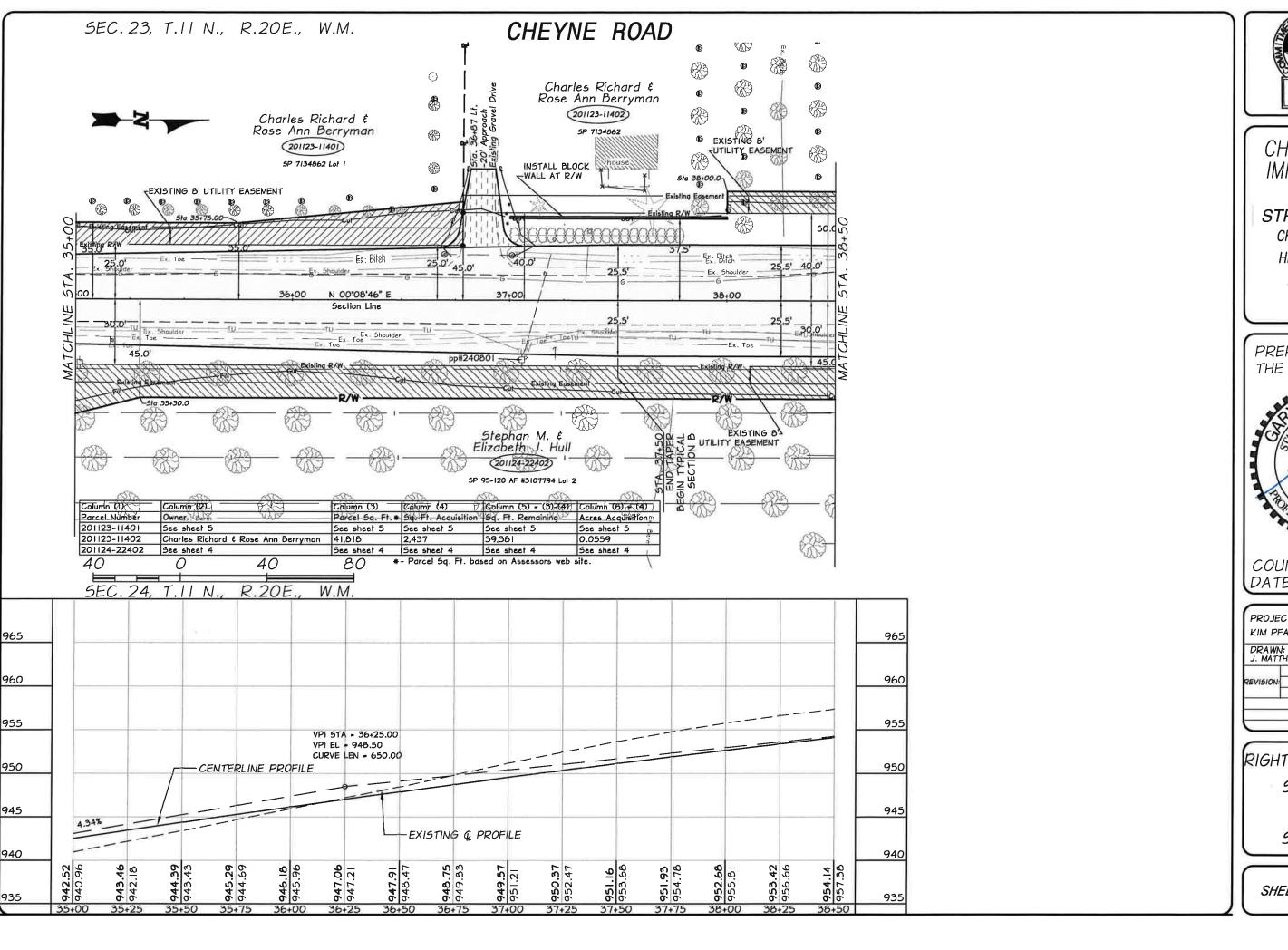
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PROJECT AREA PLAN

SHEET 3 OF 17









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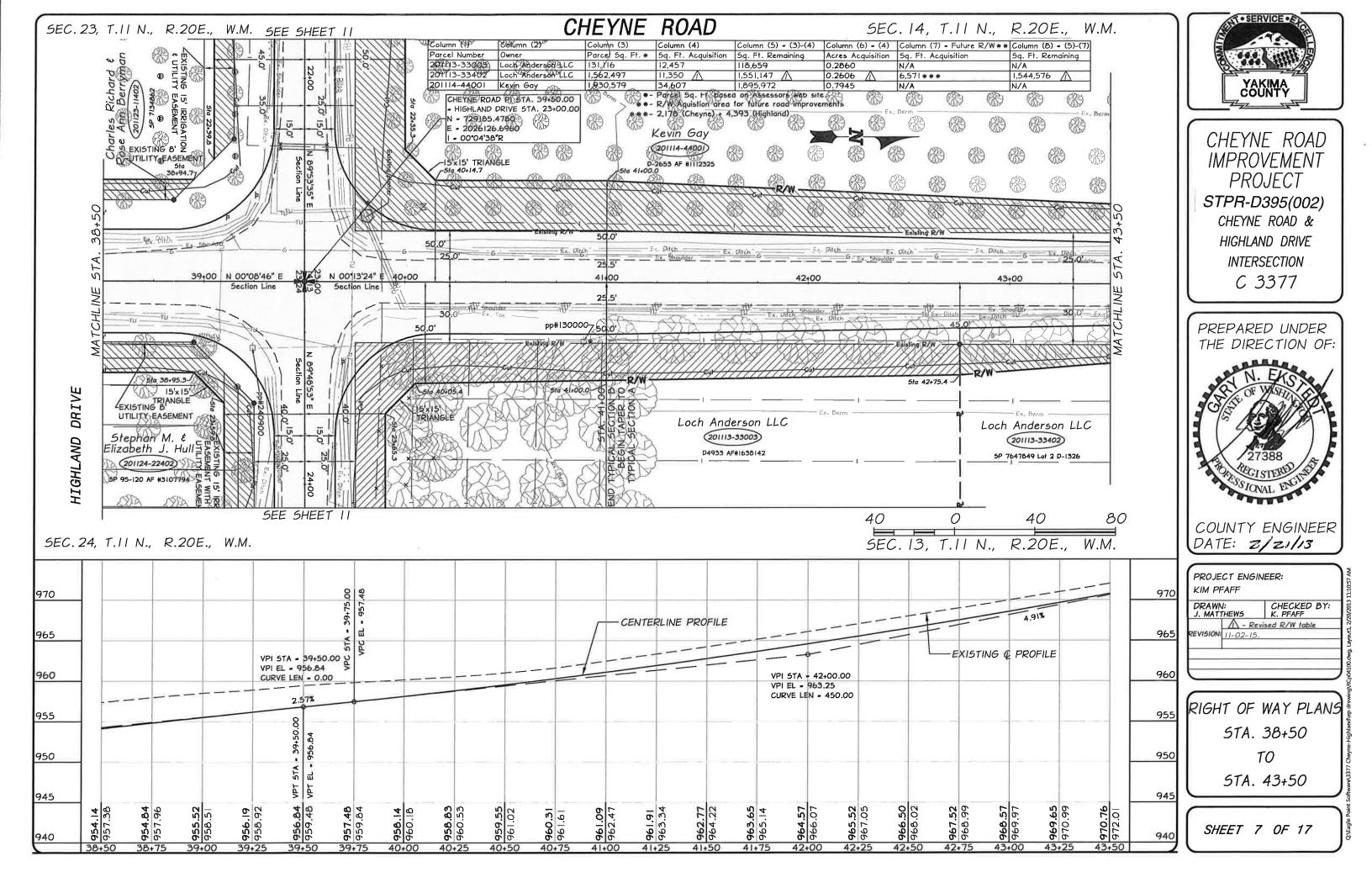
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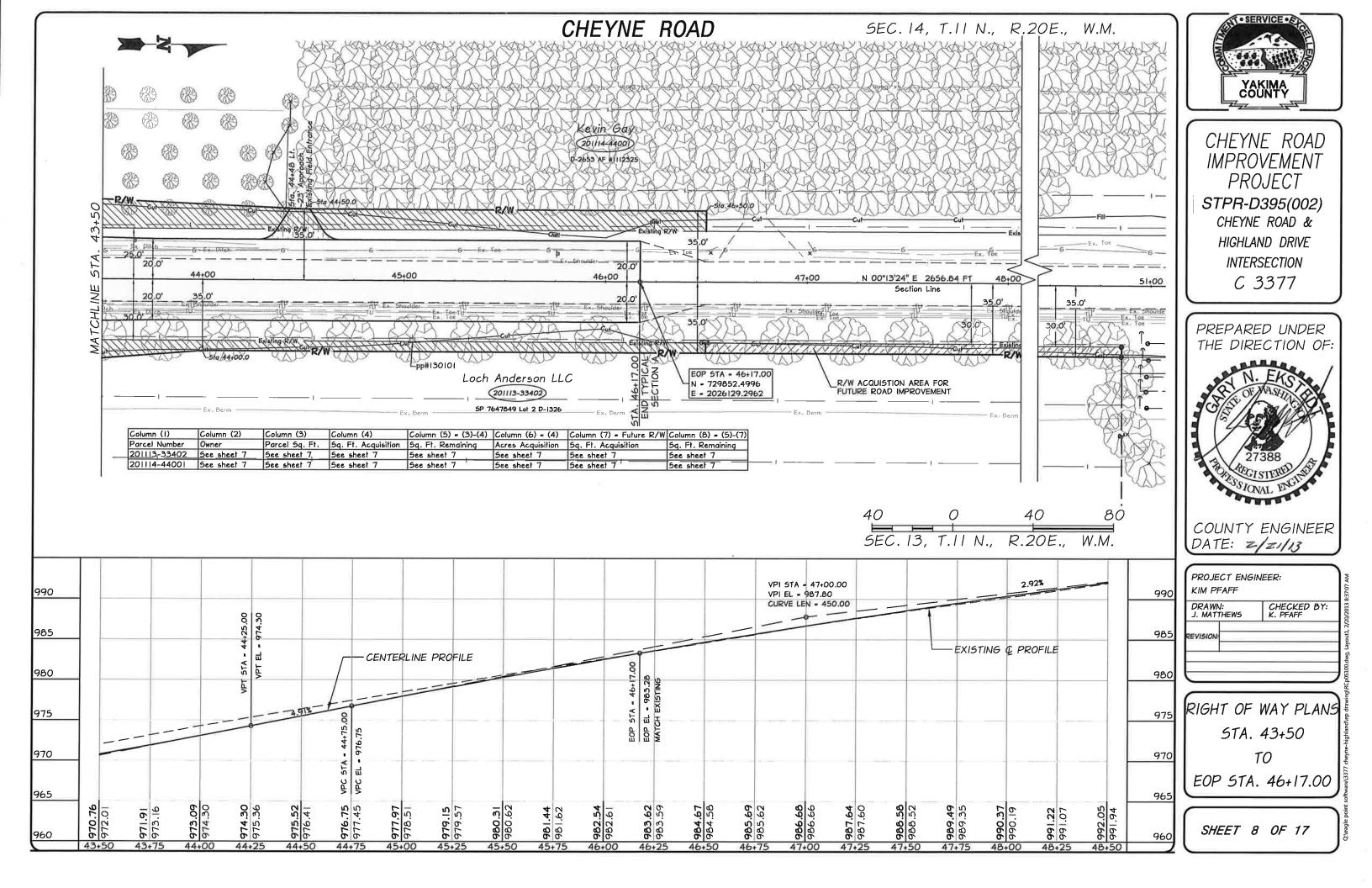
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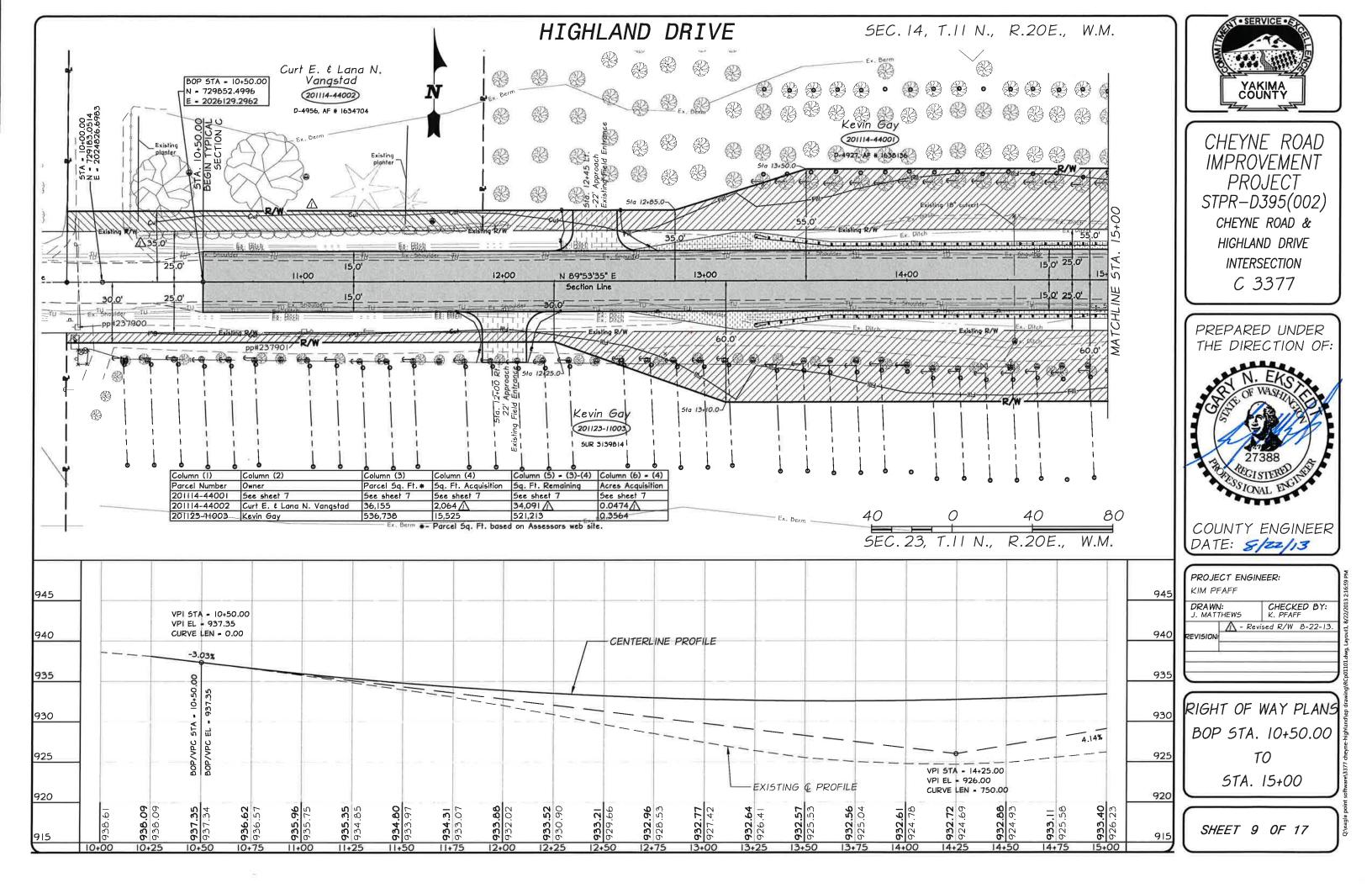
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J. MATTHEWS	K. PFAFF
REVISION:	

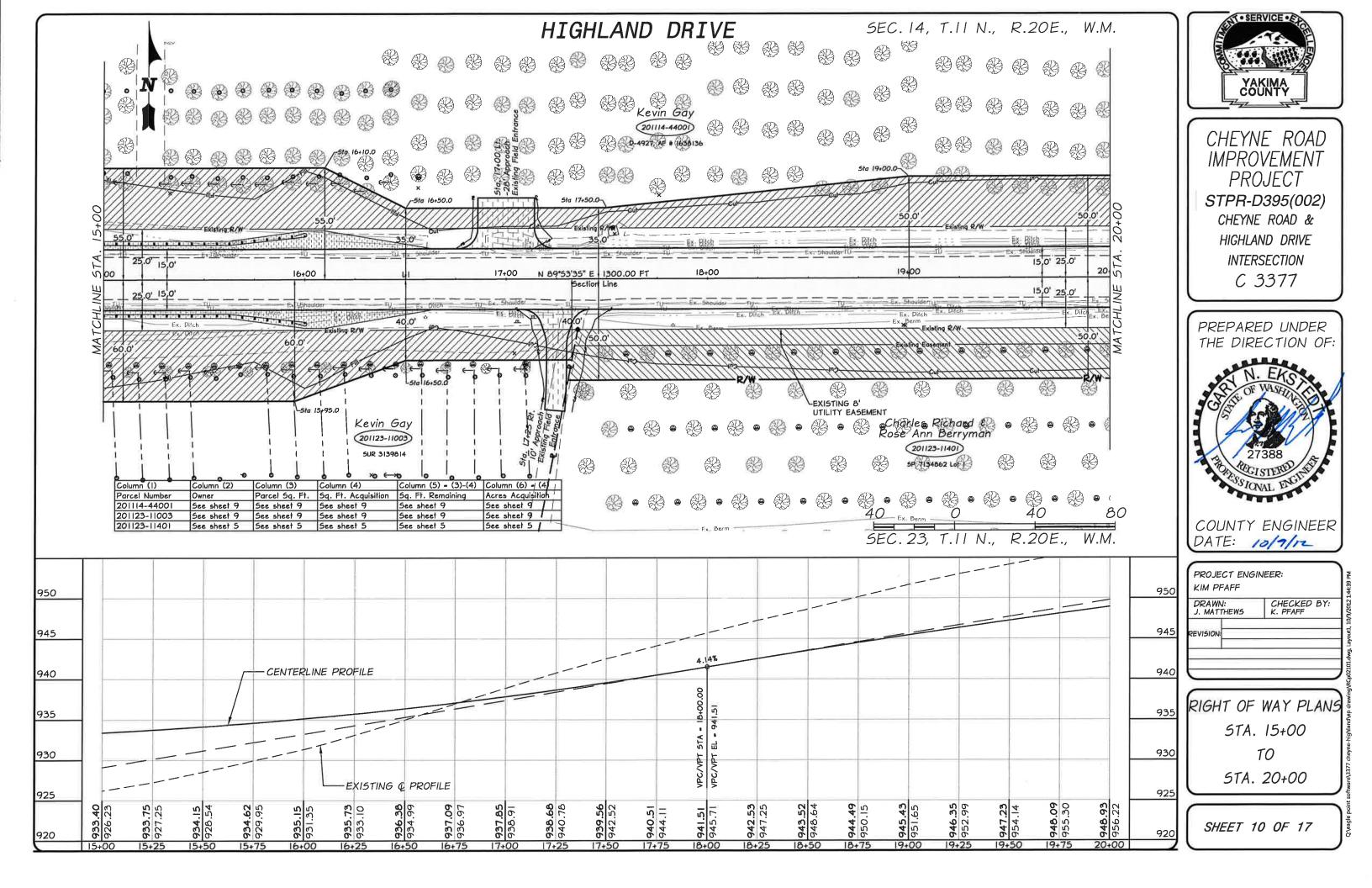
RIGHT OF WAY PLANS STA. 35+00 TO STA. 38+50

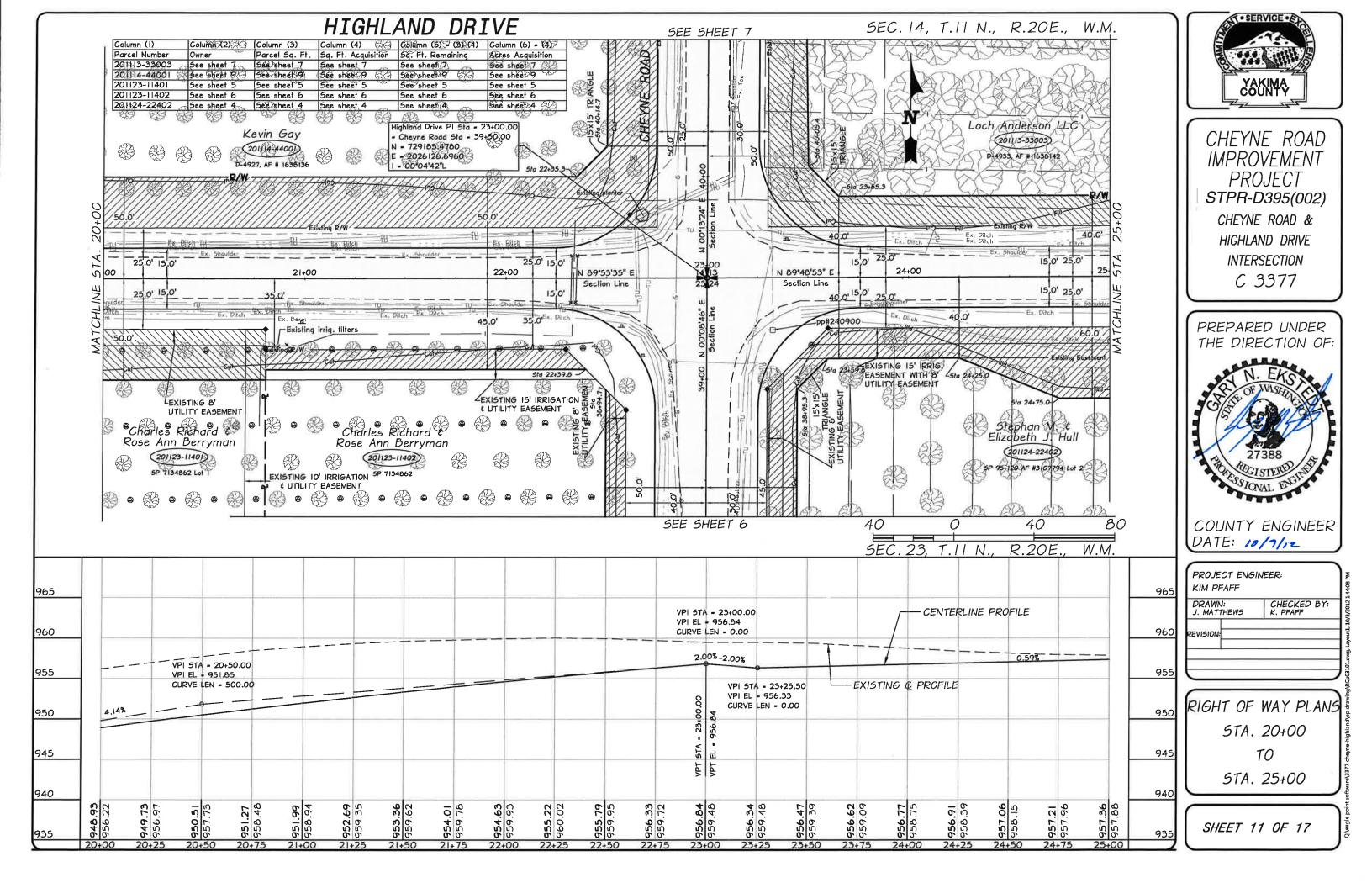
SHEET 6 OF 17

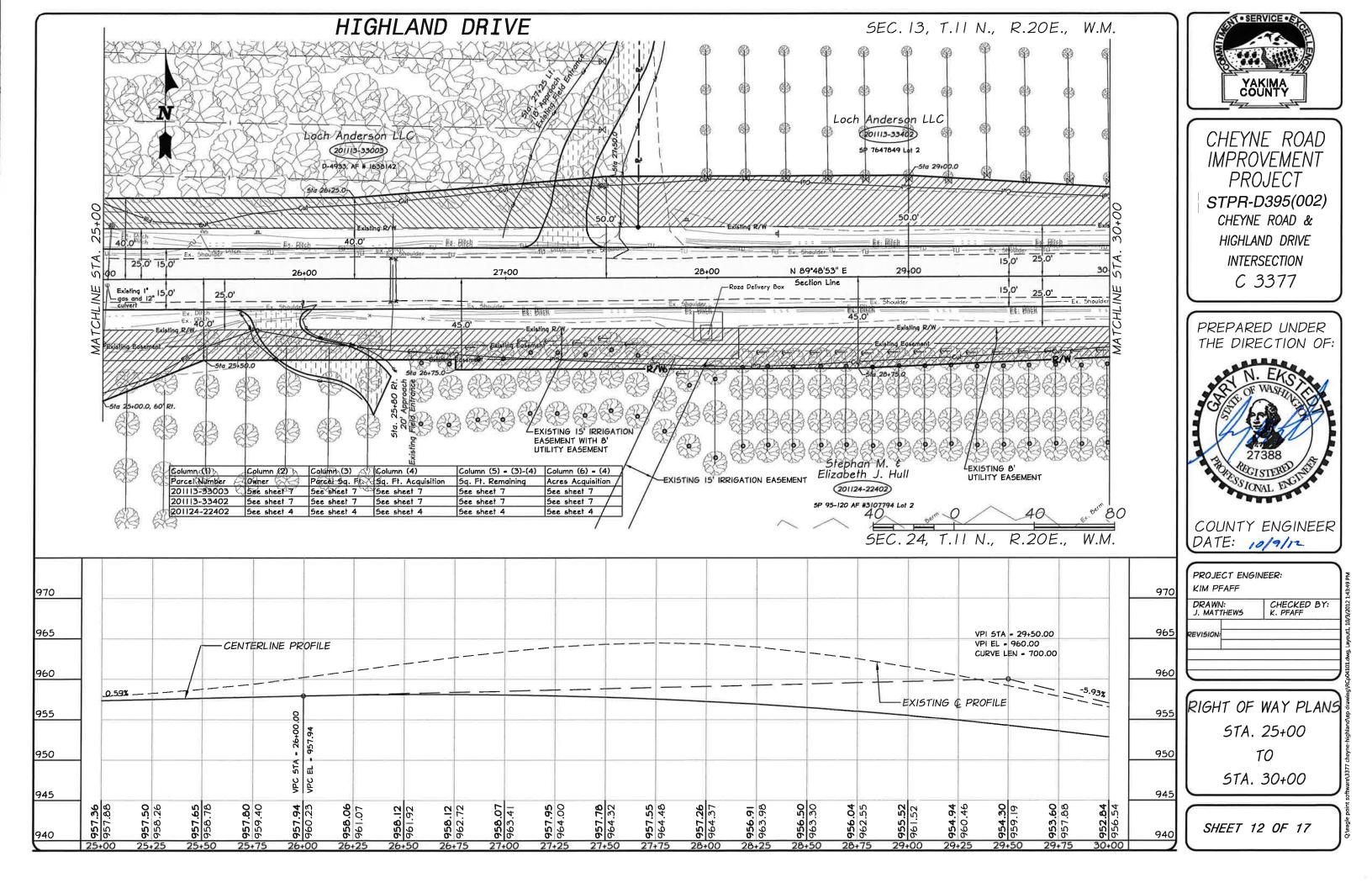


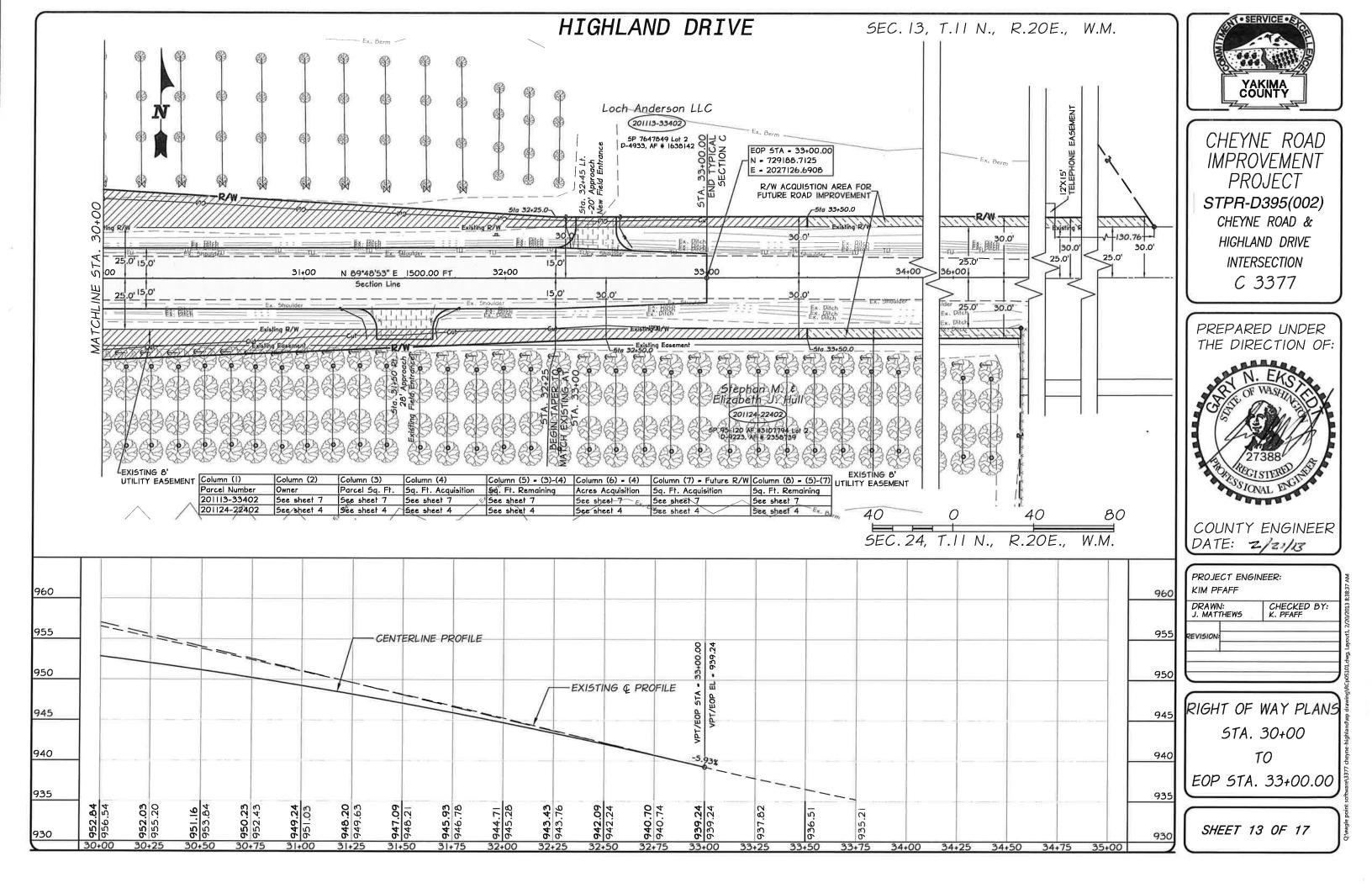


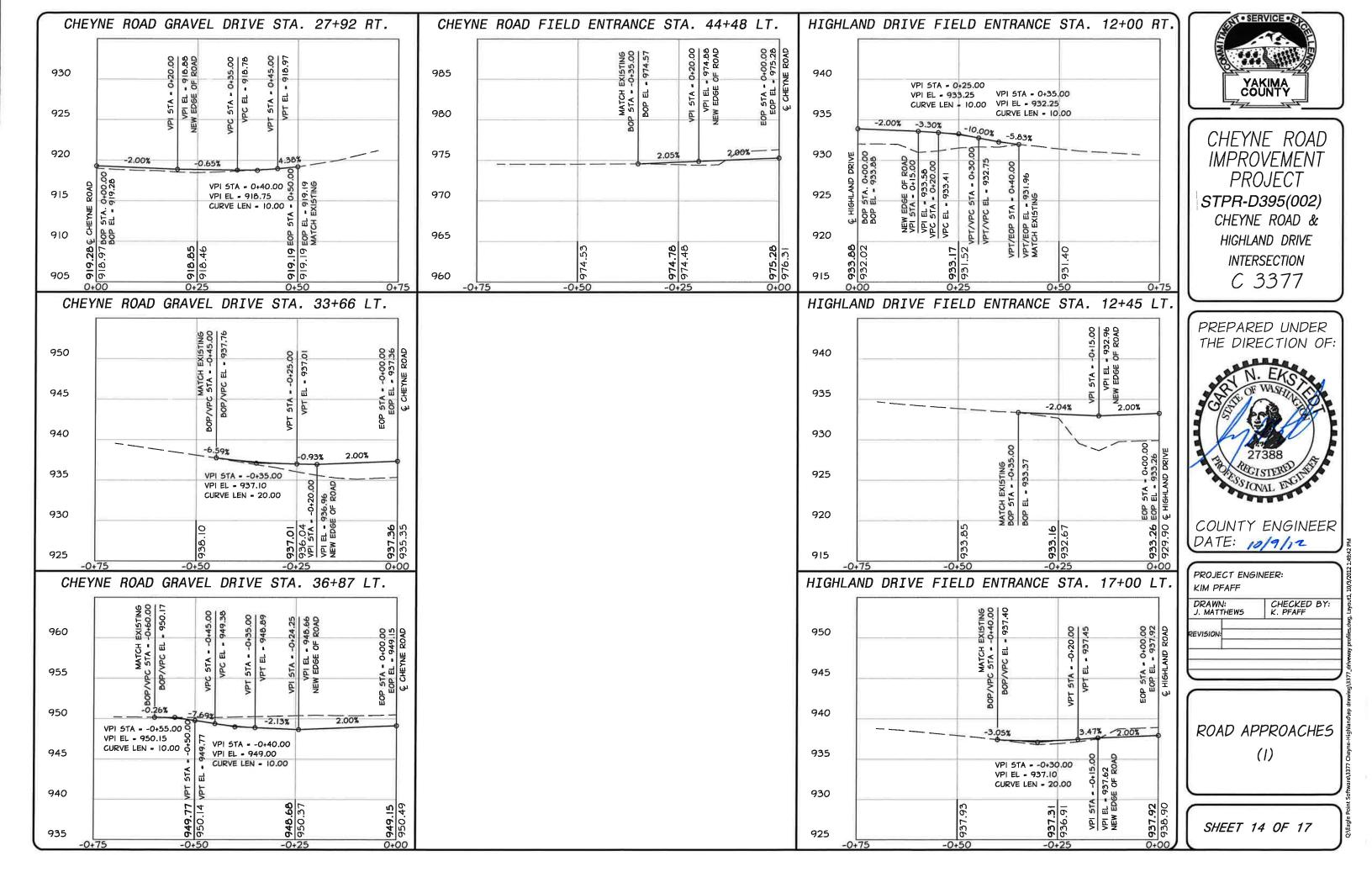




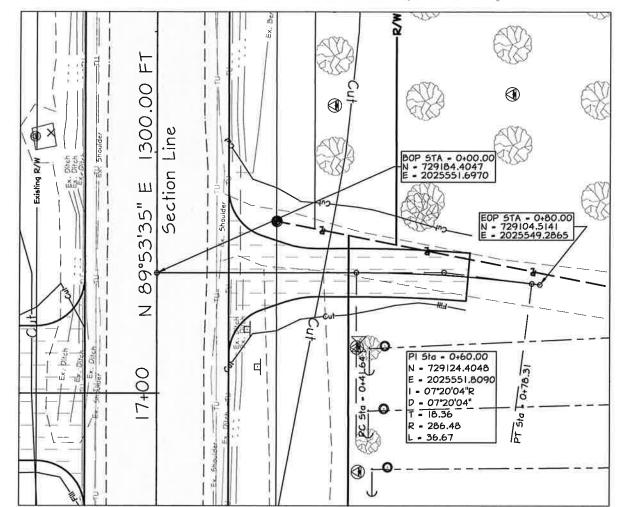


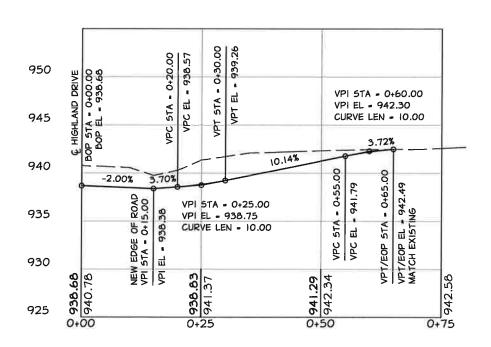




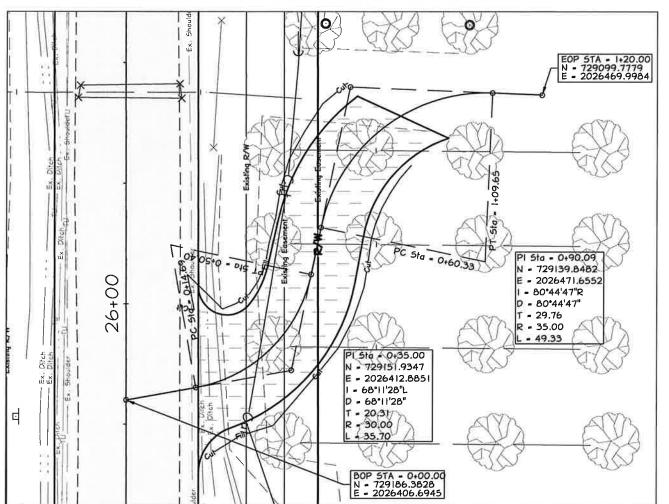


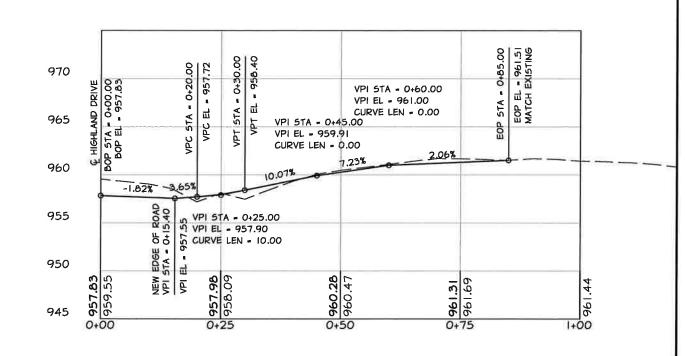
#### HIGHLAND DRIVE FIELD ENTRANCE STA. 17+25 RT.





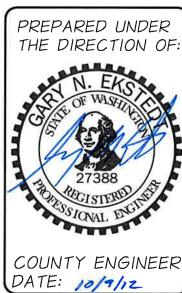
#### HIGHLAND DRIVE FIELD ENTRANCE STA. 25+80 RT.

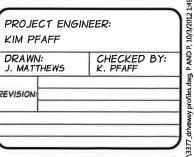






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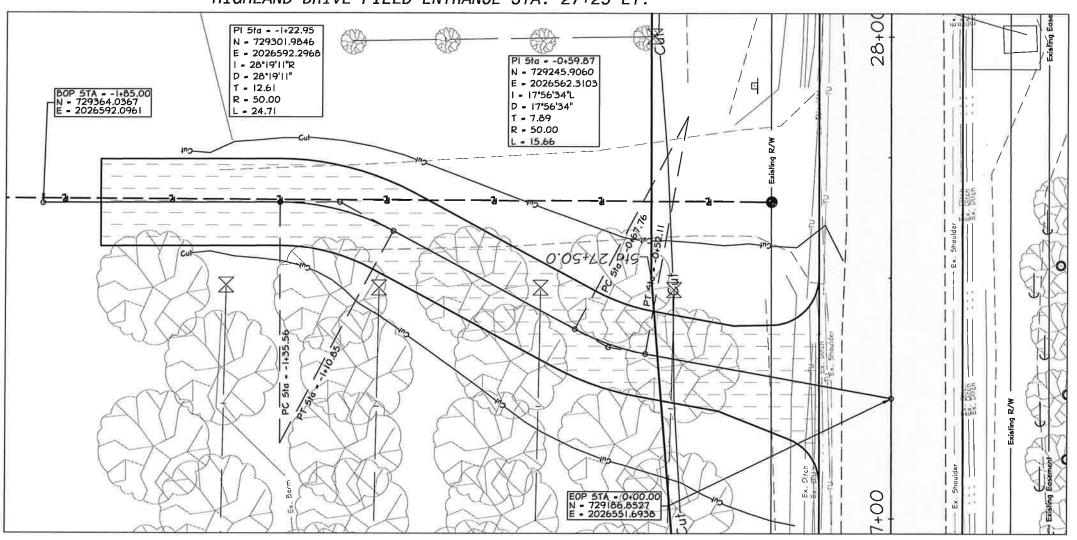


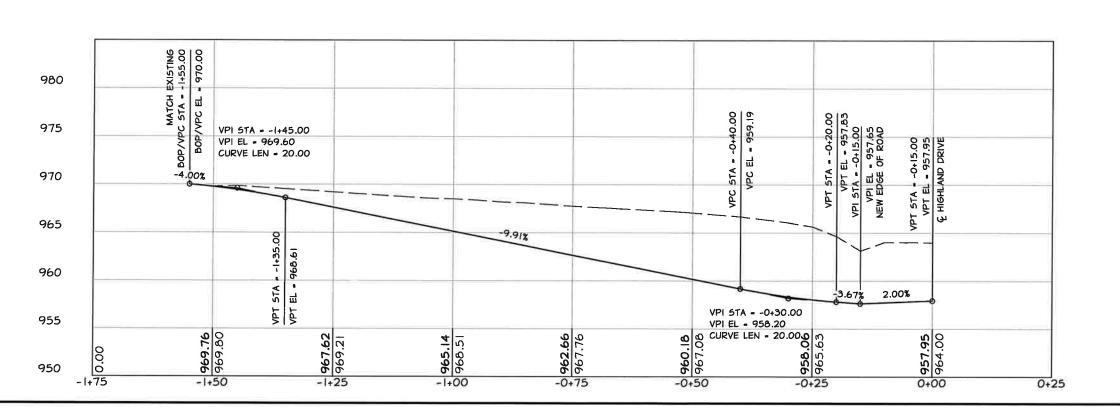


ROAD APPROACHES (2)

SHEET 15 OF 17

## HIGHLAND DRIVE FIELD ENTRANCE STA. 27+25 LT.







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COUNTY ENGINEER DATE: 10/4/12

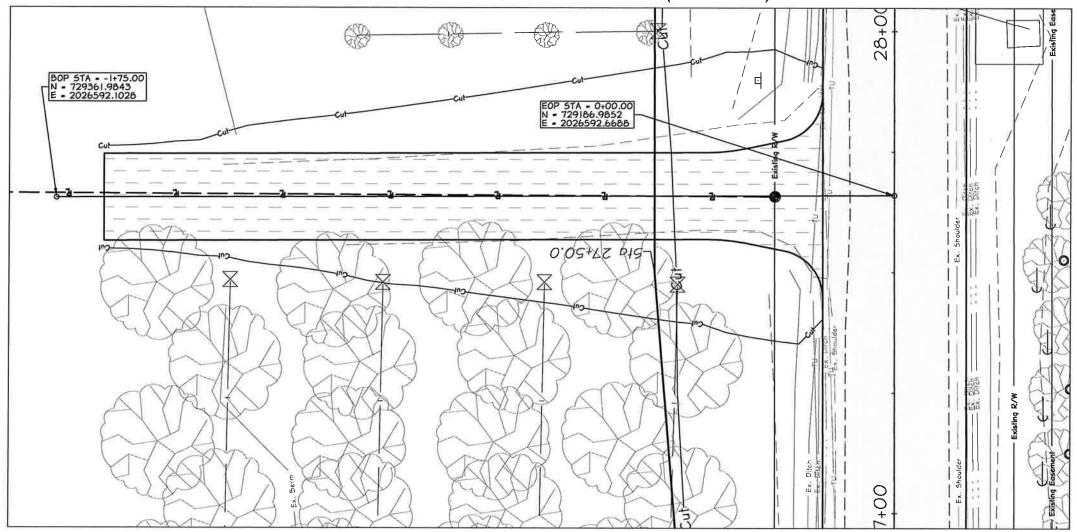
PROJECT ENG KIM PFAFF	INEER:
DRAWN: J. MATTHEWS	CHECKED BY: K. PFAFF
REVISION:	

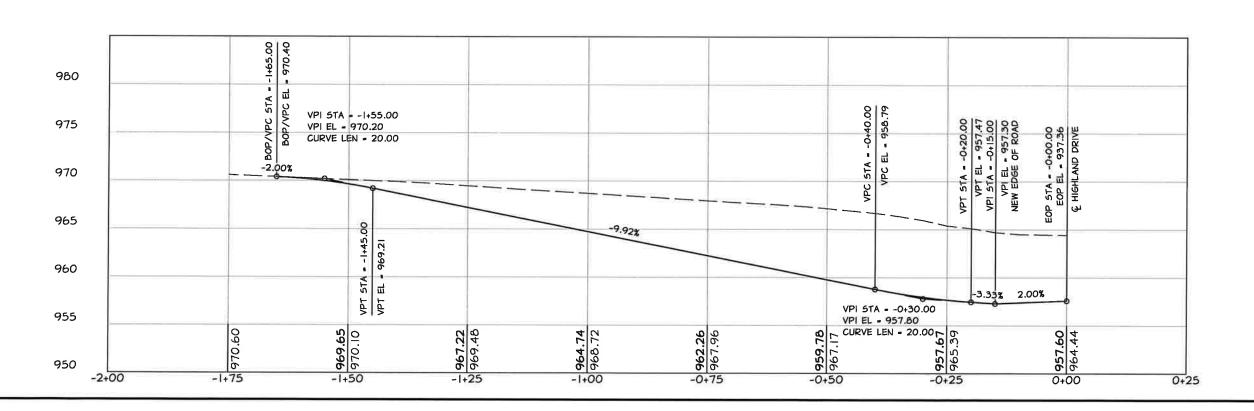
ROAD APPROACH
(3)

SHEET 16 OF 17

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## HIGHLAND DRIVE FIELD ENTRANCE STA. 27+66 LT. (ALTERNATE)







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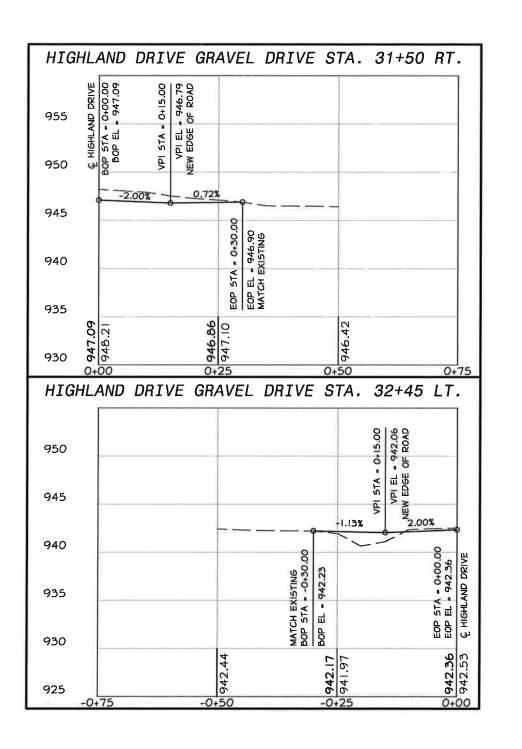
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COUNTY ENGINEER DATE: 10/9/12

PROJECT ENG KIM PFAFF	INEER:
DRAWN: J. MATTHEWS	CHECKED BY: K. PFAFF
REVISION:	

ROAD APPROACH
(3A)

SHEET 16A OF 17





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COUNTY ENGINEER
DATE: 12/9/12

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REVISION:	

ROAD APPROACHES
(4)

SHEET 17 OF 17

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