1/12/16

WAIBEL RANCHES LETTER OF SUPPORT for OWRD WATER DEVELOPMENT ACCOUNT LOAN AND GRANT APPLICATION

Project name: ALLEN CREEK PIPELINE

Waibel Ranches(WR) is aware of and agree to and support this project and is pursuing a grant from OWRD for $382,400 / 54% of the total $ 706,900. WR will fund the other 46% of the project either as cash or in-kind work on the project.

This letter is for the support of the construction of a pipeline to take water from Allen Cr Reservoir and deliver it without the present 30% water loss to the BSP Inc. property approximately 2.46 miles(13,000 ft.) to the west.

Waibel Ranches is and has been involved in several large projects to enhance the viability of water resources and their efficient use, and to the property they own and control. This pipeline will avoid reservoir storage needed to offset the 30% losses in the existing ditch, shifting storage to improved water supply reliability for irrigation and other beneficial reservoir uses. The estimated evaporation loss and seepage on the current open ditch is 300 acre feet / year. This 300 AF of water will improve supply reliability for late season, which is otherwise low, and will improve soil moisture conditions and recharge for the river system during otherwise late season dry conditions.

WR has increased the labor force on the ranch by approximately 300% and these types of projects are allowing for more agricultural production and consequently a larger labor force. The "local economic multiplier" according to OSU is approximately 2. Thus for every dollar for farm gate value generated in the area we see another $1.00 of indirect and induced economic activity. For the year 2015 WR received approximately $1.3m for cattle sales x 2 = $2.6m released into the community.

Starting in 2013 (year of purchase by WR) a Proper Functioning Condition (PFC) evaluation on North Fork Crooked River in Big Summit Prairie along with other streams on deeded property was conducted by Wayne Elmore, Steve Leonard and Mike Lunn (WR funded).This PFC was the basis for successfully acquiring a Technical Assistance grant(TA) from OWEB. This TA funded engineering help for beginning restoration of Big Summit Prairie (BSP). We completed the TA and have applied for a grant to carry out the necessary tasks for the first phase of restoration construction. This application will be reviewed on January 14, 2016.

Plans are in place for increased capacity in two existing reservoirs and construction of three others. These storage projects in North Fork Crooked River (NFCR) will improve late season instream flow conditions of the NFCR. Late season irrigation, which is otherwise limited, uncertain or impossible, with resulting run off water into the river channel will benefit all wildlife and livestock and will benefit fishing in the "scenic" and "wild" designations of NFCR.

NRCS funding was sought under the Sage Grouse Initiative and WR was able to cut and lop approximately 3900 acres of juniper all of which was on deeded land.

WR has sprayed and reseeded approximately 1800 acres of land encumbered with Medusahead Rye. We have plans to continue the treatment of Medusahead until it is under control. This project is appr. 30% complete and will continue for several more years.

This letter identifies the evidence of the commitment of WR to make the ecosystem better for the aesthetic value as well as wildlife, livestock and the socio economics of the community.

Thankyou,

Brad Waibel date 1-18-16

_Brad Waibel / Waibel Ranches/Waibel Properties

Julie Waibel date 1-18-16

_Julie Waibel / Waibel Ranches/Waibel Properties

Oregon
Kate Brown, Governor

Department of Forestry
Central Oregon District
Prineville Unit
PO Box 670
3501 NE 3rd St.
Prineville, OR 97754
541-447-5658
FAX 541-447-1469
www.oregon.gov/ODF/centraloregon

"STEWARDSHIP IN FORESTRY"

01/19/2016

Waibel Ranches LLC
8055 SW Powel Butte Hwy
Powell Butte, Or 97753

To who it may concern,

The Oregon Department of Forestry strongly supports the Crooked River Watershed Council and Waibel Ranches LLC Allen Creek Pipeline project. Water conservation is and will continue to be an important resource issue. Conserving water in Big Summit Prairie will help improve all resources on the Prairie.

Sincerely,

Stuart Otto
Stewardship Forester
Oregon Department of Forestry
Prineville, OR

CRWC
CROOKED RIVER WATERSHED COUNCIL

498 SE Lynn Blvd.
Prineville, Oregon 97754

Phone: (541) 447-8567 **Fax**: (541) 416-2115

contact@crwc.info
www.crookedriver.deschutesriver.org

Oregon Water Resources Department
Attention: Jon Unger, Water Resources Grant Administrator
725 Summer Street NE, Suite A
Salem, OR 97301

January 13, 2016

Dear Jon and OWRD personnel and reviewers:

This letter is in regard to the proposed application by Waibel Ranches for the Oregon Water Resources Deparment's Water Supply Development Account. The proposed irrigation system improvements from that project will provide many benefits to the irrigation system, fish and wildlife habitat, and watershed function of the streams on Big Summit Prairie.

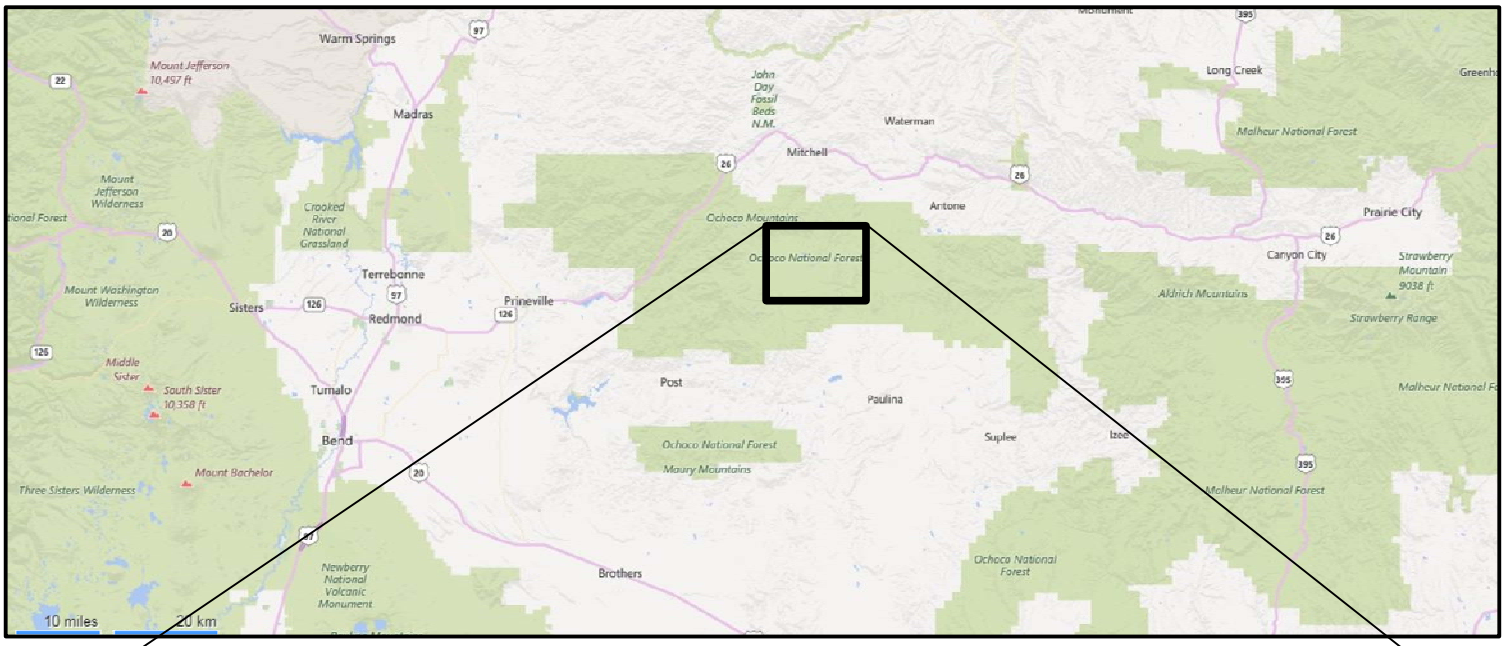
The Crooked River Watershed Council has been working with Waibel Ranches since 2014 on a long term restoration plan for the ranch properties on Big Summit Prairie, with an all-encompassing approach to improve agricultural management (both irrigation and livestock), riparian condition and function, instream habitat, and upland condition and function. We were awarded an Oregon Watershed Enhancement Board (OWEB) Technical Assistance grant in 2015 to carry out this work, and to date we have completed the majority of the fieldwork and we are synthesizing this work into the final restoration plan. In addition, we currently have a grant application in review by OWEB to initiate the first phase of the restoration work (tentatively planned for summer 2016-fall 2017) that will include riparian fencing, instream habitat structures, and water developments for livestock water to better manage livestock and increase late season instream flows.

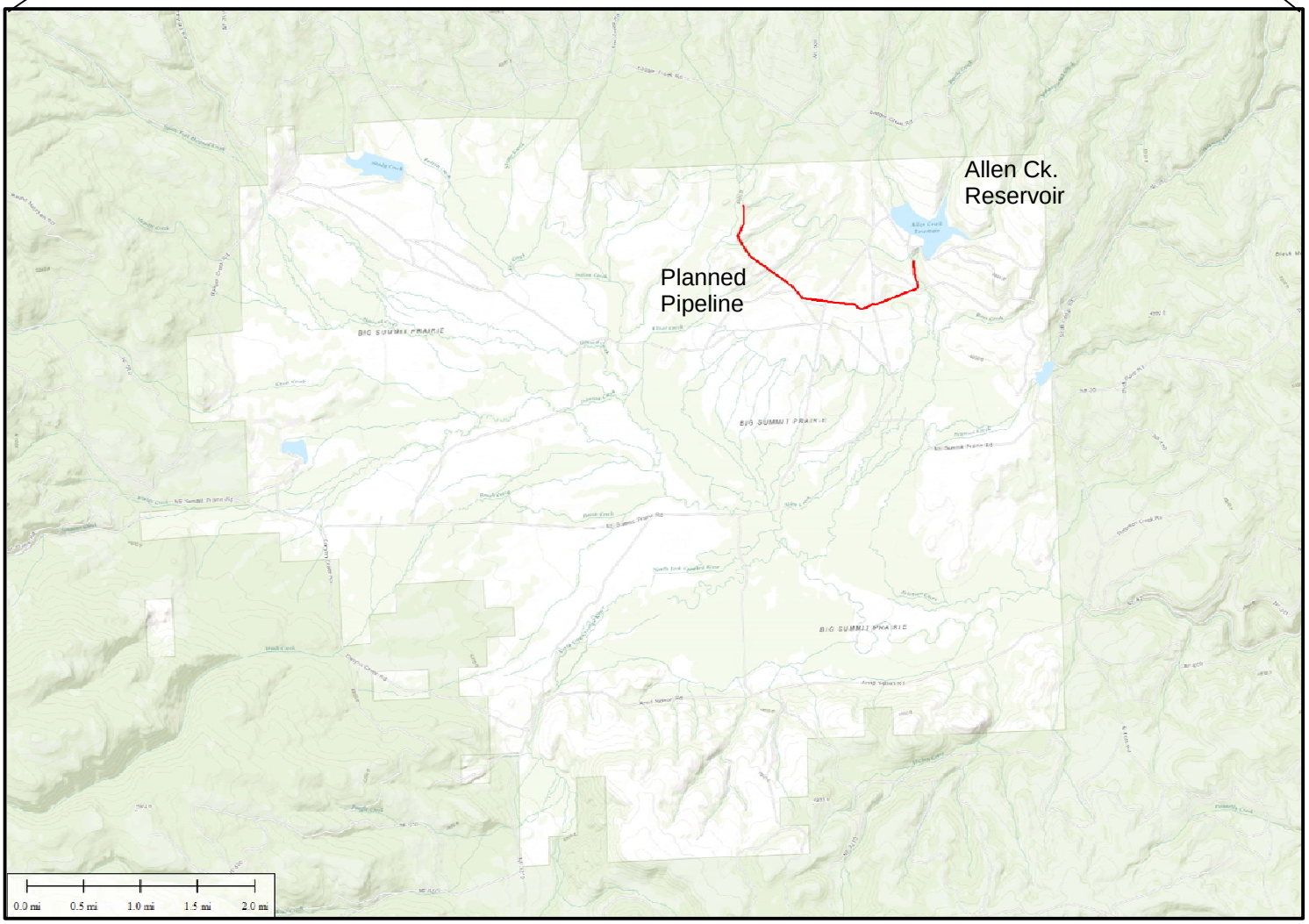
We believe that these two projects and any future projects will work synergistically to allow Waibel Ranches to efficiently manage irrigation water which will allow for increase instream flows on Allen Creek and the North Fork of the Crooked River which will benefit the overall riparian and instream function and condition of the streams on Big Summit Prairie. I steadfastly urge OWRD to award this grant to Waibel Ranches to further our collaborative restoration work that will have lasting impact for decades in this highly valued area of the Crooked River watershed.

Sincerely,

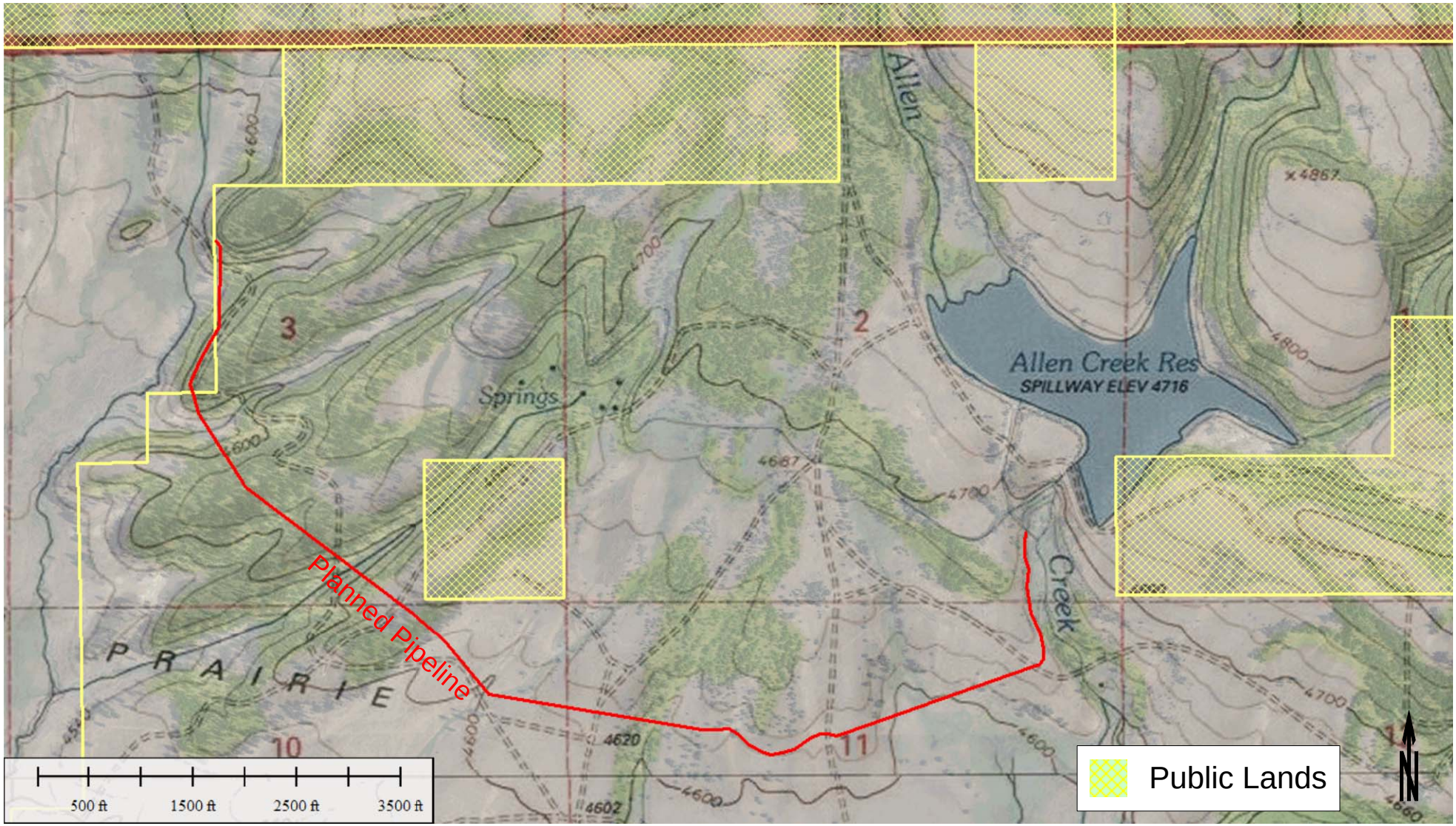
Garry Sanders
Project Manager
Crooked River Watershed Council

Allen Creek Pipeline
Location Map





Allen Creek Pipeline
Layout Map



Gmail by Google

Benn Eilers <benn80@gmail.com>

Affected Tribes for Water Supply Development Account Grants

5 messages

Benn Eilers <benn@rsiengr.com> Mon, Jan 4, 2016 at 5:42 AM
To: karen.m.quigley@state.or.us

Karen -

I am writing to request a list of possible affected Indian Tribes for two Water Supply Development Account grants that we are working on.

The first project is a 2.5 mile long pipeline located in Crook County.
Lat Long: 44.377, -120.184
Township 14S , Range 21E, Sections: 2,3,10,11

The second project is a reservoir expansion project located in Wheeler County.
Lat Long: 44.668, -120.277
Township 10S, Range 20E, Section 25 (SW quarter)

Let me know if you need any further information.
Thank you in advance for your assistance.

Benn Eilers

Engineering Technician
RSI
Redmond, OR
541 678-3969

Quigley Karen M <karen.m.quigley@state.or.us> Mon, Jan 4, 2016 at 7:34 AM
To: Benn Eilers <benn@rsiengr.com>

Good Morning, Ben.
Could you please provide the names of nearest city/town for your projects.
Thanks,
Karen

Sent from my Verizon Wireless 4G LTE DROID
[Quoted text hidden]

Benn Eilers <benn@rsiengr.com> Mon, Jan 4, 2016 at 7:52 AM
To: Quigley Karen M <karen.m.quigley@state.or.us>

Hi Karen -

The closest town to both projects is Mitchell.
The pipeline project is located approximately 15 miles due south of Mitchell (and 35 miles E-NE of Prineville). It is located on Big Summit Prairie, a large private in-holding in the center of a section of Ochoco National Forest.
The reservoir expansion is located approximately 9 miles NW of Mitchell, adjacent to the Painted Hills National Monument.

Thanks
Benn

[Quoted text hidden]

Quigley Karen M <karen.m.quigley@state.or.us> Mon, Jan 4, 2016 at 9:21 AM
To: Benn Eilers <benn@rsiengr.com>

Hello, Benn.
Thanks for the additional info.
There are three Oregon Tribes who may have ancestral ties/or consider this area to be a traditional area of interest. Here is contact info for the respective Tribes' cultural resources directors:
Kathleen Sloan, Confederated Tribes of Warm Springs. Kathleen. Sloan@ctwsbnr.org
Diane Teeman, Burns Paiute Tribe, dlteeman.burns.paiute@gmail.com
Perry Chocktoot, the Klamath Tribes
Perry.Chocktoot @klamthtribes.com
Regards,
[Quoted text hidden]
[Quoted text hidden]

Benn Eilers <benn@rsiengr.com> Mon, Jan 4, 2016 at 10:24 AM
To: Quigley Karen M <karen.m.quigley@state.or.us>

Thank you very much Karen!
[Quoted text hidden]

Gmail by Google

Benn Eilers <benn80@gmail.com>

Upcoming Water Supply Projects

3 messages

Benn Eilers <benn80@gmail.com> Mon, Jan 4, 2016 at 12:15 PM
To: perry.chocktoot@klamathtribes.com

Perry -

I work for an engineering consulting firm (RSI) out of Central Oregon and was given your contact info from Karen Quigley at LCIS. I am in the process of putting together two Water Supply Development Account grants (http://www.oregon.gov/owrd/Pages/Water_Supply_Development_Account.aspx) that may be in areas of interest to the Klamath Tribes.

The first project is a 2.5 mile long pipeline located in Crook County.
Lat Long: 44.377, -120.184
Township 14S , Range 21E, Sections: 2,3,10,11
This project is located approximately 15 miles due south of Mitchell (and 35 miles E-NE of Prineville). It is located on Big Summit Prairie, a large private in-holding in the center of a section of Ochoco National Forest.

The second project is a reservoir expansion project located in Wheeler County.
Lat Long: 44.668, -120.277
Township 10S, Range 20E, Section 25 (SW quarter)
The reservoir expansion is located approximately 9 miles NW of Mitchell, adjacent to the Painted Hills National Monument.

I've attached location maps as PDFs to this email
If you could advise on the likelihood of encountering any culturally significant sites in this area it would be very helpful.

Thank you in advance
Benn Eilers

Engineering Technician
RSI
Redmond, OR
541 678-3969

------ Forwarded message ------
From: **Quigley Karen M** <karen.m.quigley@state.or.us>
Date: Mon, Jan 4, 2016 at 9:21 AM
Subject: Re: Affected Tribes for Water Supply Development Account Grants
To: Benn Eilers <benn@rsiengr.com>

Hello, Benn.
Thanks for the additional info.
There are three Oregon Tribes who may have ancestral ties/or consider this area to be a traditional area of interest. Here is contact info for the respective Tribes' cultural resources directors:
Kathleen Sloan, Confederated Tribes of Warm Springs. Kathleen. Sloan@ctwsbnr.org
Diane Teeman, Burns Paiute Tribe, dlteeman.burns.paiute@gmail.com
Perry Chocktoot, the Klamath Tribes
Perry.Chocktoot @klamthtribes.com
Regards,
Karen

Sent from my Verizon Wireless 4G LTE DROID

Benn Eilers <benn@rsiengr.com> wrote:

Hi Karen -

The closest town to both projects is Mitchell.
The pipeline project is located approximately 15 miles due south of Mitchell (and 35 miles E-NE of Prineville). It is located on Big Summit Prairie, a large private in-holding in the center of a section of Ochoco National Forest.
The reservoir expansion is located approximately 9 miles NW of Mitchell, adjacent to the Painted Hills National Monument.

Thanks
Benn

On Mon, Jan 4, 2016 at 7:34 AM, Quigley Karen M <karen.m.quigley@state.or.us> wrote:

> Good Morning, Ben.
> Could you please provide the names of nearest city/town for your projects.
> Thanks,
> Karen
>
> *Sent from my Verizon Wireless 4G LTE DROID*
>
> Benn Eilers <benn@rsiengr.com> wrote:
>
> Karen -
>
> I am writing to request a list of possible affected Indian Tribes for two Water Supply Development Account grants that we are working on.
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> Lat Long: 44.668, -120.277
> Township 10S, Range 20E, Section 25 (SW quarter)
>
> Let me know if you need any further information.
> Thank you in advance for your assistance.
>
> Benn Eilers
>
> Engineering Technician
> RSI
> Redmond, OR
> 541 678-3969

2 attachments

Allen Ck Pipeline Location Map.pdf
3168K

Painted Hills RES Basemap.pdf
723K

Perry Chocktoot <perry.chocktoot@klamathtribes.com> Mon, Jan 4, 2016 at 1:23 PM
To: Benn Eilers <benn80@gmail.com>

I appreciate the notification but these projects are outside our aboriginal territories. We will have to defer to the Warm Springs Nation.

From: Benn Eilers [mailto:benn80@gmail.com]
Sent: Monday, January 04, 2016 12:16 PM
To: Perry Chocktoot
Subject: Upcoming Water Supply Projects

[Quoted text hidden]

Benn Eilers <benn80@gmail.com> Mon, Jan 4, 2016 at 1:27 PM
To: Perry Chocktoot <perry.chocktoot@klamathtribes.com>

Thank you for your quick response. It is greatly appreciated

Benn
[Quoted text hidden]

Gmail by Google

Benn Eilers <benn80@gmail.com>

Upcoming Water Supply Projects and cultural resources

Kathleen Sloan <kathleen.sloan@ctwsbnr.org> Wed, Jan 6, 2016 at 1:13 PM
To: benn@rsiengr.com
Cc: Roberta Kirk <roberta.kirk@ctwsbnr.org>, Quigley Karen M <karen.m.quigley@state.or.us>

Hello Benn,

I received an email fwd from Karen Quigley re: your inquiry into 2 project areas slated for water supply improvements. The first project is a 2.5 mile long pipeline located in Crook County.

> Lat Long: 44.377, -120.184
> Township 14S , Range 21E, Sections: 2,3,10,11
> This project is located approximately 15 miles due south of Mitchell (and 35 miles E-NE of Prineville). It is located on Big Summit Prairie, a large private in-holding in the center of a section of Ochoco National Forest.
>
> The second project is a reservoir expansion project located in Wheeler County.
> Lat Long: 44.668, -120.277
> Township 10S, Range 20E, Section 25 (SW quarter)
> The reservoir expansion is located approximately 9 miles NW of Mitchell, adjacent to the Painted Hills National Monument.

We have completed an initial review of the proposed project areas and our files and both locations are in close proximity to previously recorded sites (pre-contact lithic scatters) and also traditional use areas for the Confederated Tribes of Warm Springs. The area has had little prior field inventory for cultural resources but we consider both locations to have a high probability for cultural and archaeological resources. We would recommend a full field inventory of the project in order to identify and protect any cultural resources that could be impacted by proposed project activities.

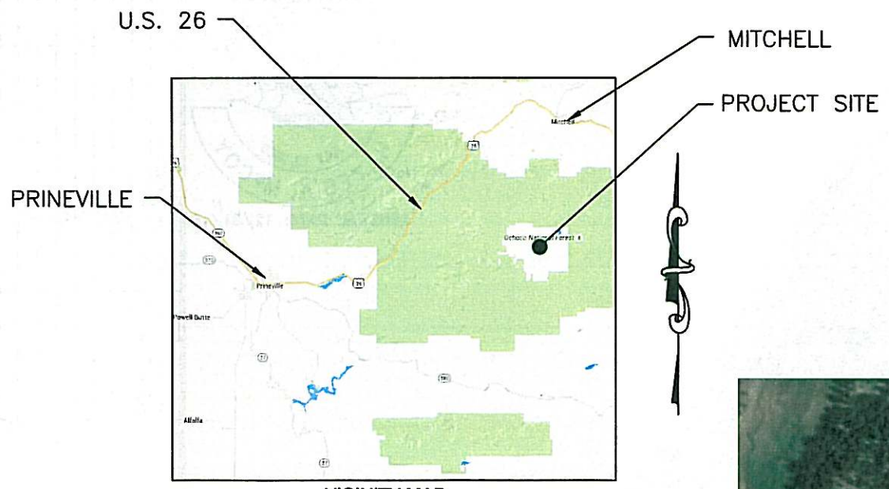
Thank you for contacting us about your project.

Kathleen Sloan, PhD
Manager

Warm Springs Geo Visions
Cultural Resource Department
Confederated Tribes of the Warm Springs Reservation of Oregon

PO Box 460
Warm Springs, Oregon 97761

ph: 541.553.3464
fax: 541-553-3584
kathleen.sloan@ctwsbnr.org



VICINITY MAP
NTS

BIG SUMMIT PRAIRIE PIPELINE

CROOK COUNTY
JANUARY, 2016
T14S, R21E

SCALE: 1" = 1000'

0 500' 1000' 2000'

SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

PROPERTY OWNER

WAIBEL RANCH LLC
8055 SW POWELL BUTTE HIGHWAY
POWELL BUTTE, OR 97753
PH: (541) 480-9428

AGENCY

CROOK COUNTY
300 NE 3RD STREET
PRINEVILLE, OR 97754
PH: (541) 416-3891

CONSULTANT

RESOURCE SPECIALISTS, INC.
CONTACT: GABE WILLIAMS
1180 SW LAKE ROAD SUIT 201
REDMOND, OR 97756
PH: 541-771-6911

SHEET LIST

BSP1.1	COVER SHEET
BSP1.2	STA: 0+00 TO 6+00
BSB1.3	STA: 6+00 TO 18+00
BSP1.4	STA: 18+00 TO 30+00
BSP1.5	STA: 30+00 TO 42+00
BSP1.6	STA: 42+00 TO 54+00
BSP1.7	STA: 54+00 TO 66+00
BSP1.8	STA: 66+00 TO 78+00
BSP1.9	STA: 78+00 TO 86+00
BSP1.10	STA: 86+00 TO 94+00
BSP1.11	STA: 94+00 TO 102+00
BSP1.12	STA: 102+00 TO 109+00
BSP1.13	STA: 109+00 TO 121+00
BSP1.14	STA: 121+00 TO 129+14
BSP1.15	DRAIN/AIRVENT DETAIL
BSP1.16	START CONTROL STRUCTURE DETAIL
BSP1.17	START CONTROL STRUCTURE DETAIL
BSP1.18	END CONTROL STRUCTURE DETAIL

MATERIALS QUANTITY LIST

20" OD CLASS 64 HDPE PIPE	13,000	LF
SADDLE TAP DRAINS	7	E.A.
CLASS 160 DRAIN PIPE	1620	LF
AIRVENTS	6	E.A.

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
30% SUBMITTAL	1/19/16			

ResourceSpecialists INC.
P.O. BOX 25
BEND, OR 97709
(541)771-6911
gabe@rslenger.com

PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: CPF

SHEET TITLE: COVER SHEET

DRAWING: BSP1.1

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SCALE IN FEET

PROFILE

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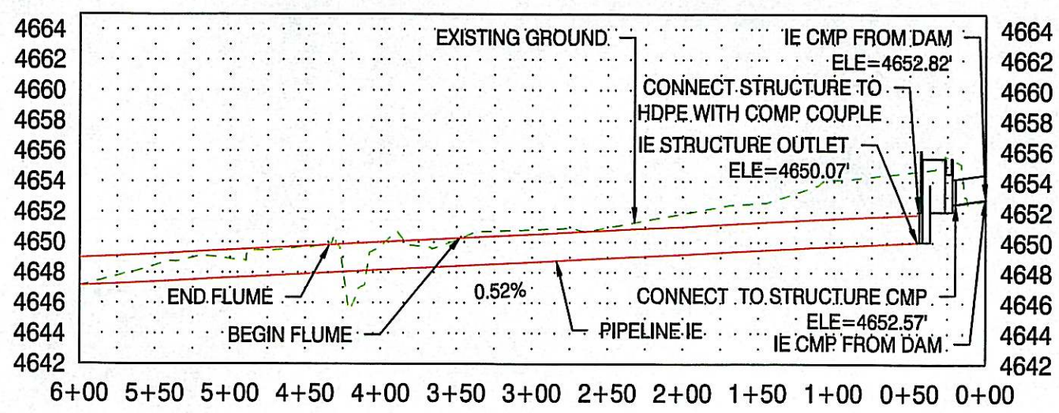

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

ResourceSpecialists INC.
P.O. BOX 25
BEND, OR 97709
(541)771-6911
gabe@rsienger.com

PROJECT: BIG SUMMIT PRAIRIE PIPELINE

PROJECT LOCATION: CROOK COUNTY, OREGON

CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 0+00 TO 6+00

DRAWING: BSP1.2

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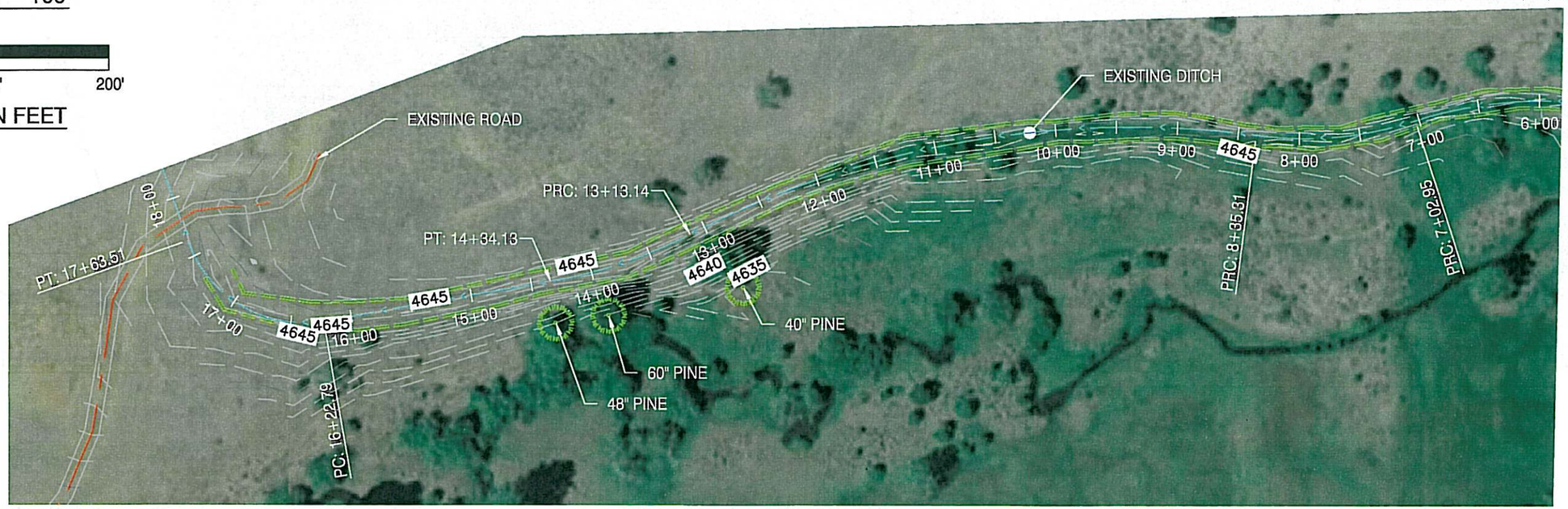
SCALE IN FEET



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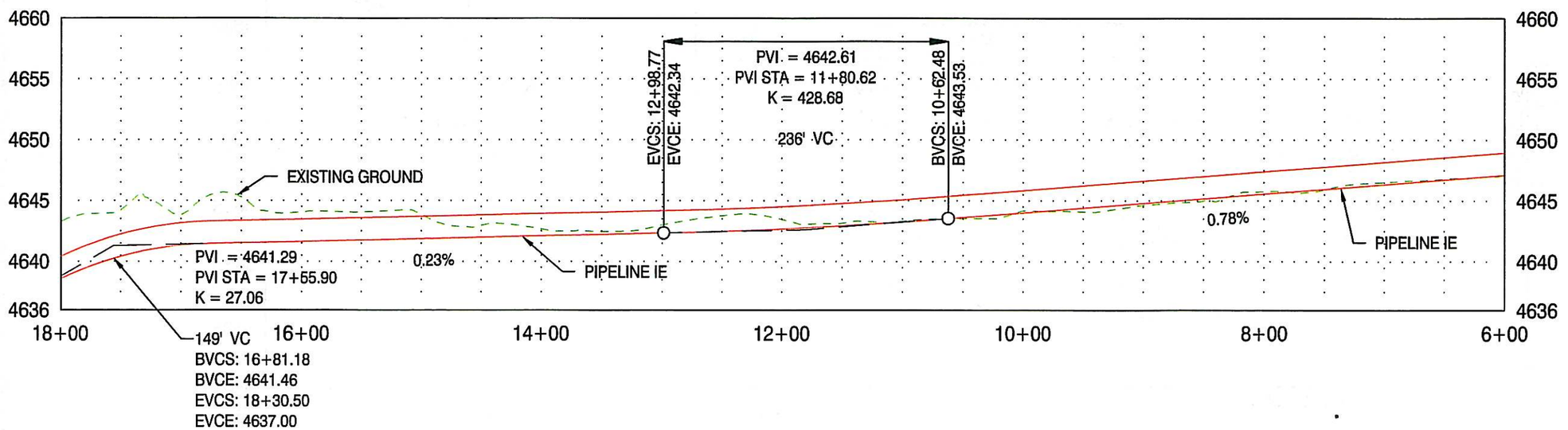

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

ResourceSpecialists INC.
P.O. BOX 25
BEND, OR 97709
(541)771-6911
gabe@rslenger.com

PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 6+00 TO 18+00

DRAWING: BSP1.3

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

No.	REVISION:	DATE:

DRAWING STATUS: EXISTING CONDITIONS DATE: 1/19/16

SCALE: 1" = 100'

0 50' 100' 200'

SCALE IN FEET

PROFILE
HOR: 1"=100'
VER: 1"=10'

ResourceSpecialists INC.
P.O. BOX 25
BEND, OR 97709
(541)771-6911
gabe@rsienger.com

PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 18+00 TO 41 +00

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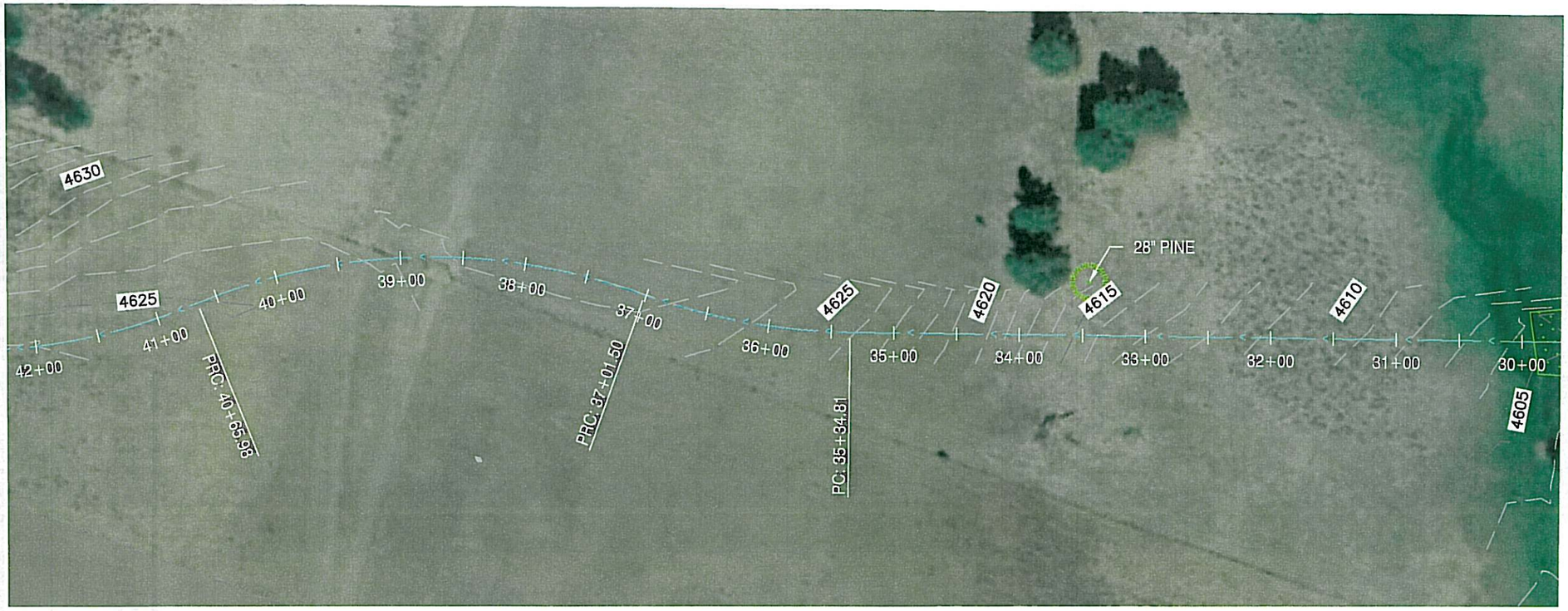

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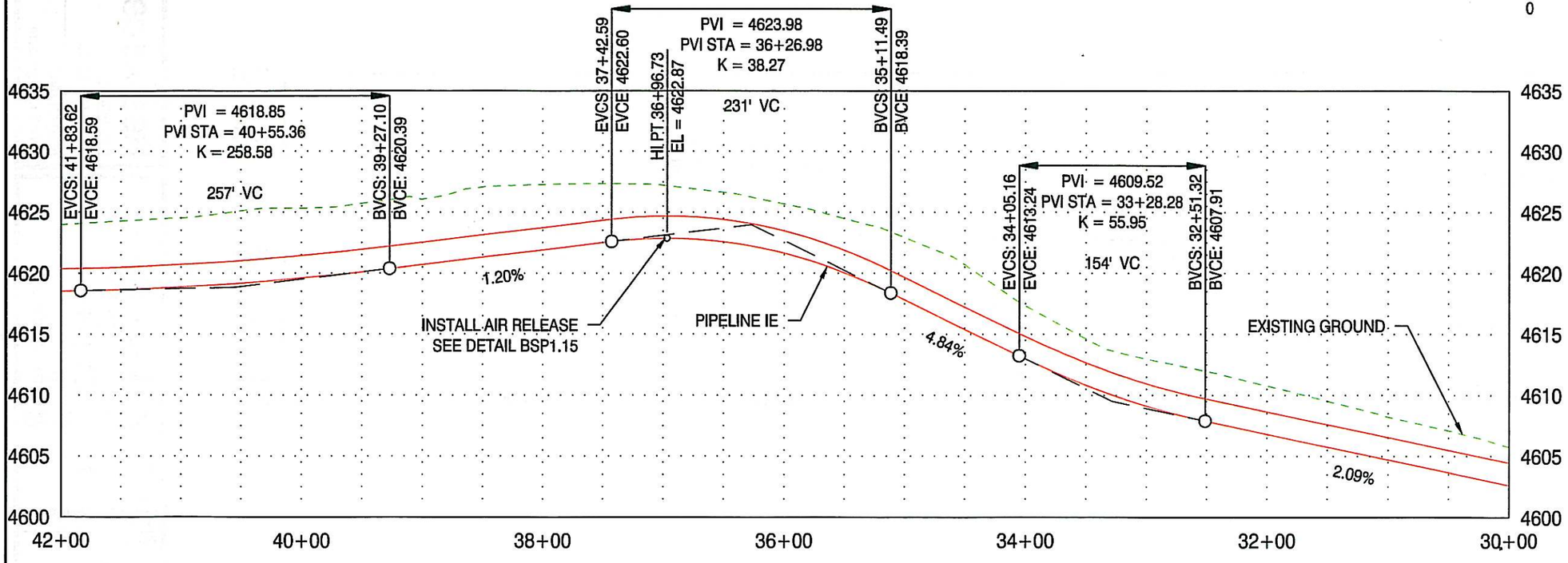
SCALE IN FEET



PROFILE
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VER: 1"=10'

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

ResourceSpecialists INC.
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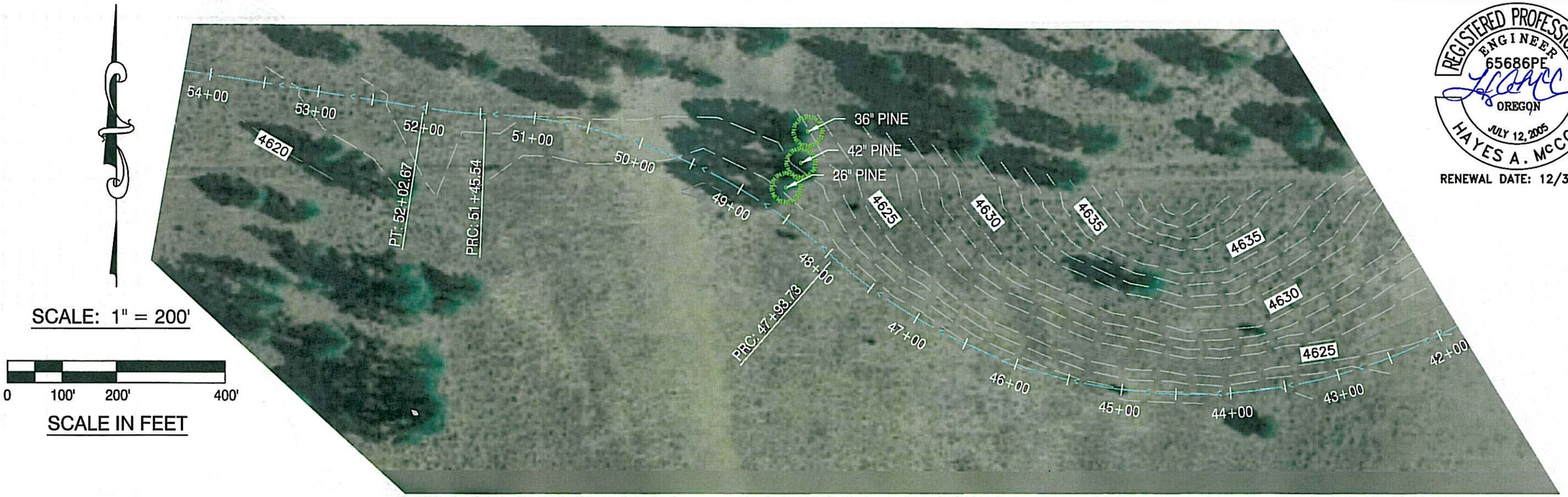
(541)771-6911
gabe@rslenger.com

PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 30+00 TO 42 +00

DRAWING: BSP1.5



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SCALE IN FEET

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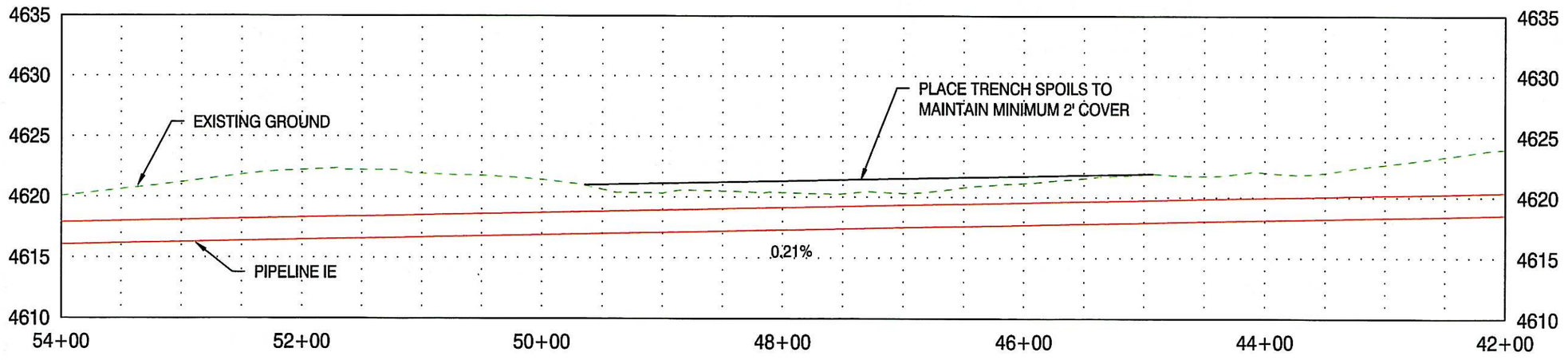
VER: 1"= 10'



REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

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BEND, OR 97709
(541)771-6911
gabe@rsienger.com

PROJECT:
BIG SUMMIT PRAIRIE PIPELINE

PROJECT LOCATION:
CROOK COUNTY, OREGON

CLIENT:
WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE:
PIPELINE STA: 42+00 TO 54+00

DRAWING:

BSP1.6

SCALE: 1" = 100'

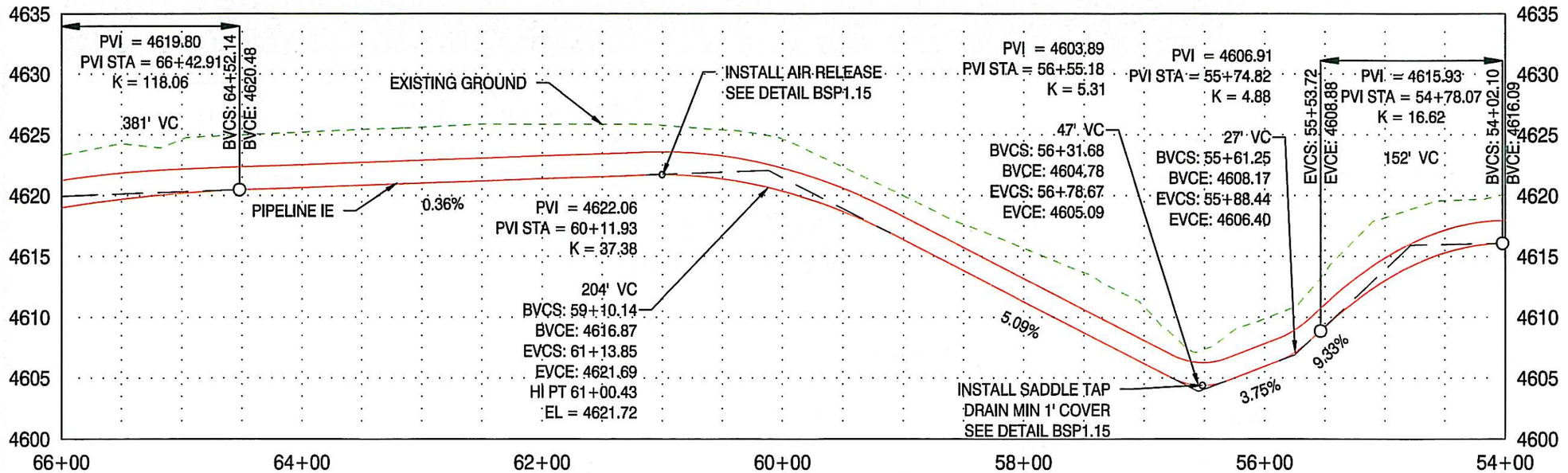
0 50' 100' 200'

SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

PROFILE
HOR: 1"=100'
VER: 1"=10'



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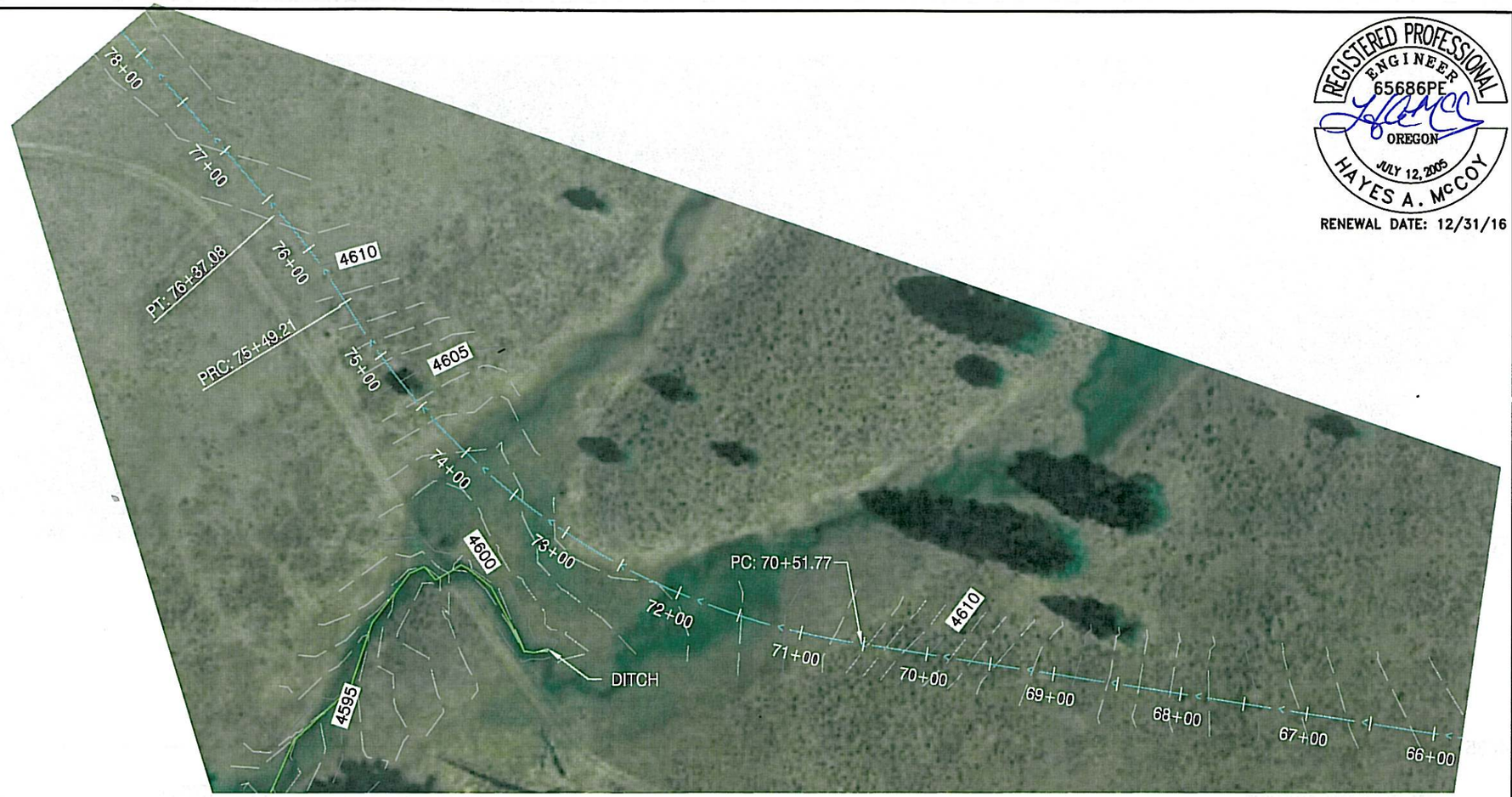
gabe@rsienger.com

PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 54+00 TO 66+00

DRAWING: BSP1.7



SCALE: 1" = 100'

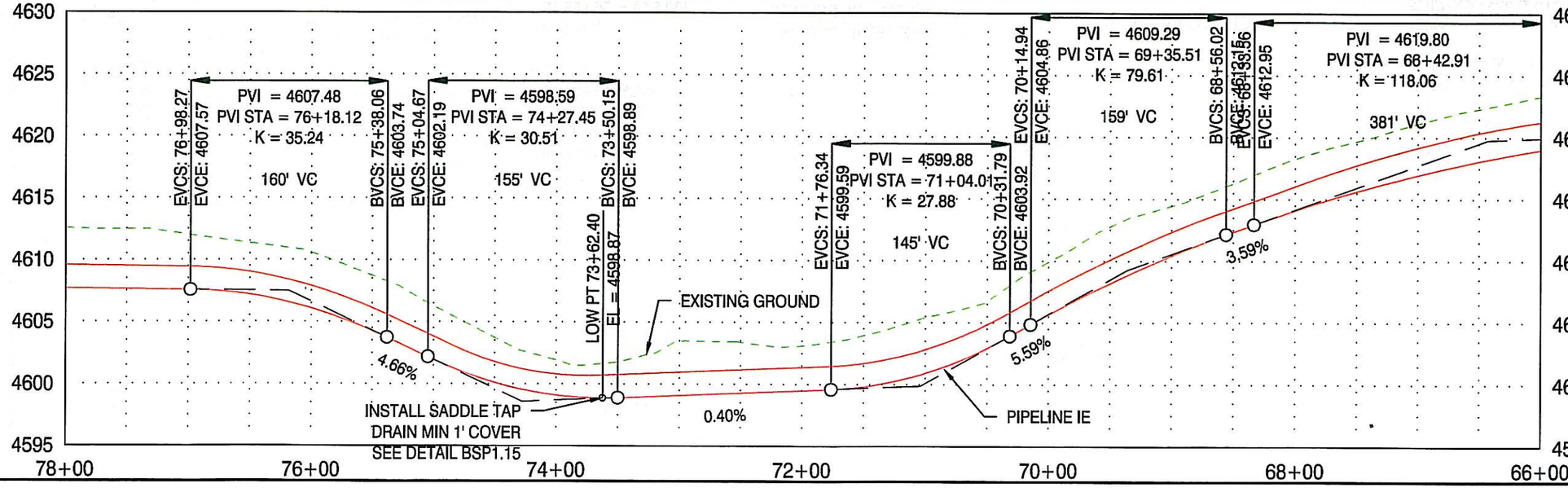
0 50' 100' 200'

SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16	△		
		△		
		△		
		△		
		△		
		△		

PROFILE
HOR: 1"=100'
VER: 1"=10'



Resource Specialists INC.
P.O. BOX 25
BEND, OR 97709
(541)771-6911
gabe@rslenger.com

PROJECT:
BIG SUMMIT PRAIRIE PIPELINE

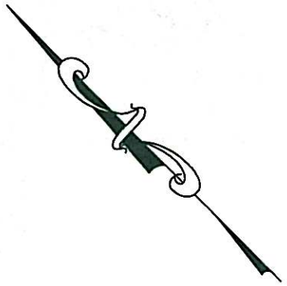
PROJECT LOCATION:
CROOK COUNTY, OREGON

CLIENT:
WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE:
PIPELINE STA: 66+00 TO 78+00

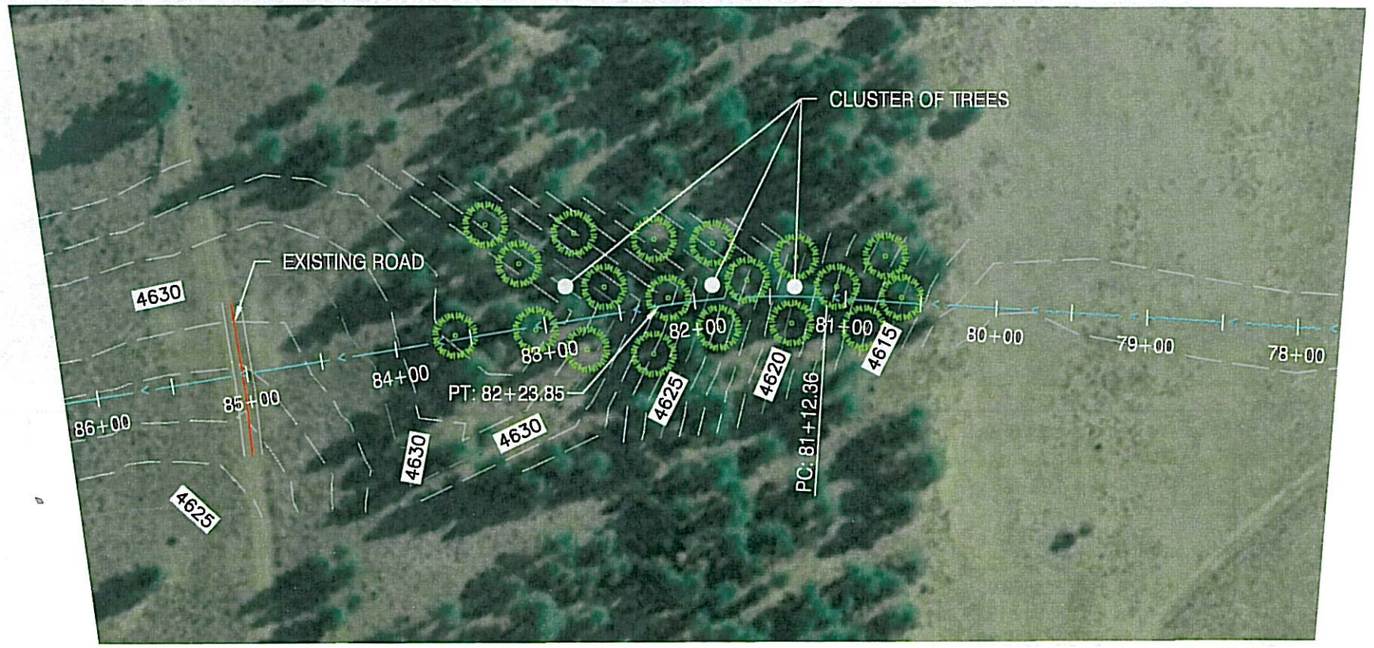
DRAWING:
BSP1.8



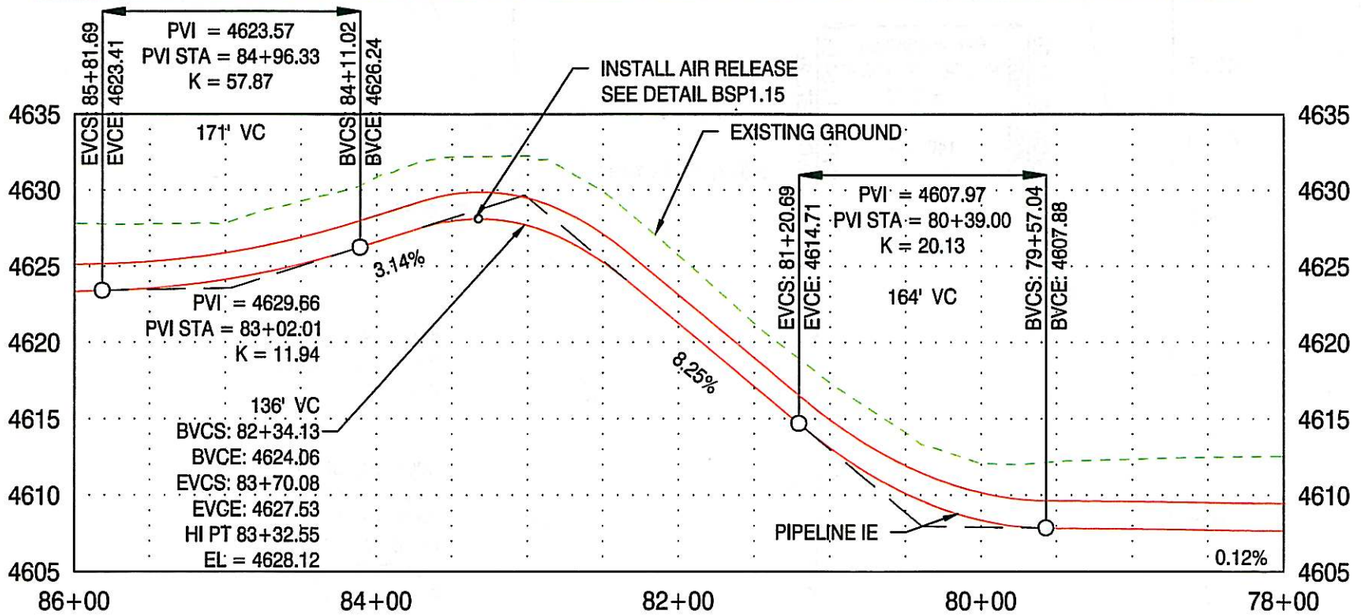
SCALE: 1" = 100'

0 50' 100' 200'

SCALE IN FEET



PROFILE
HOR: 1"=100'
VER: 1"=10'



REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

No.	REVISION:	DATE:

DRAWING STATUS: EXISTING CONDITIONS
DATE: 1/19/16

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PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

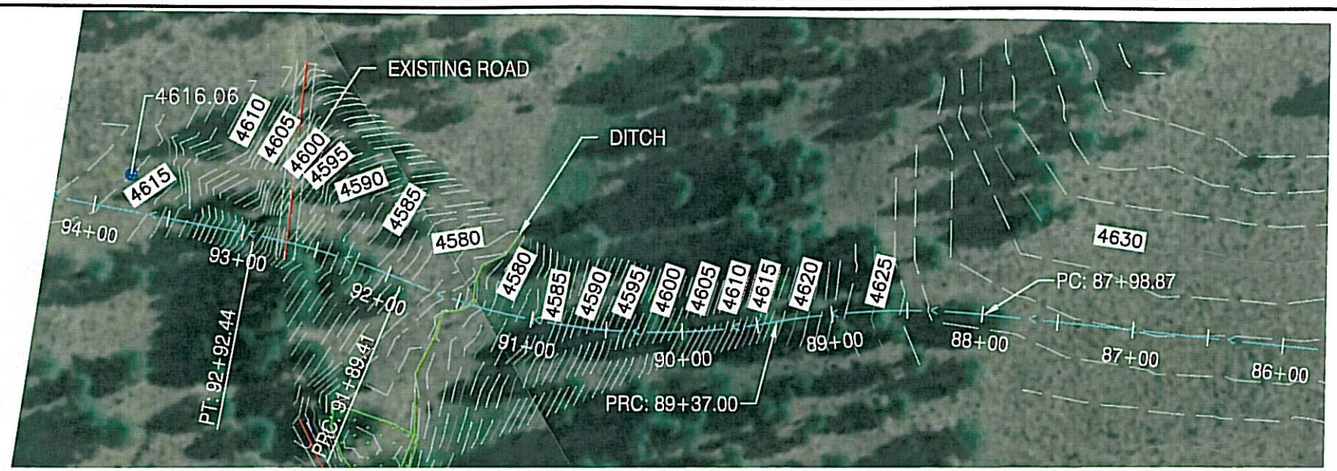
SHEET TITLE: PIPELINE STA: 78+00 TO 86+00

DRAWING: BSP1.9

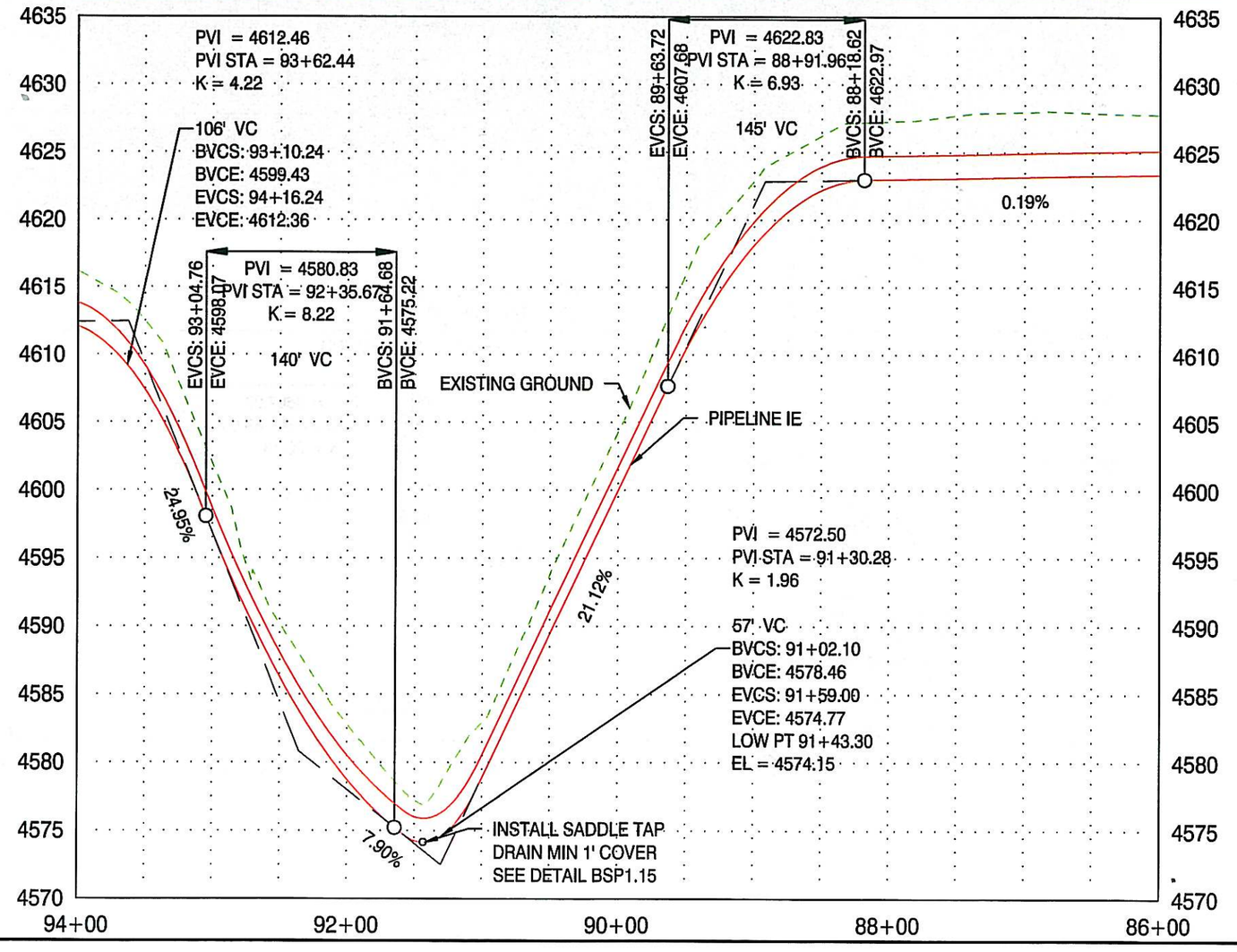
SCALE: 1" = 100'

0 50' 100' 200'

SCALE IN FEET



PROFILE
HOR: 1"=100'
VER: 1"=10'



REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

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PROJECT:
BIG SUMMIT PRAIRIE PIPELINE

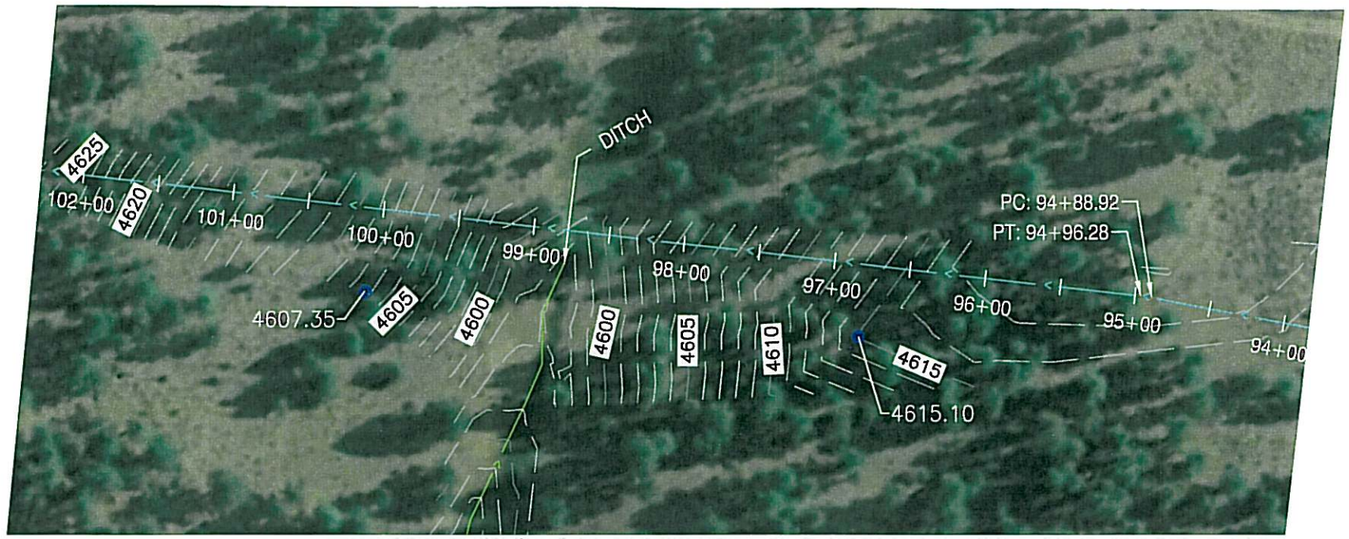
PROJECT LOCATION:
CROOK COUNTY, OREGON

CLIENT:
WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE:
PIPELINE STA: 86+00 TO 94+00

DRAWING:
BSP1.10

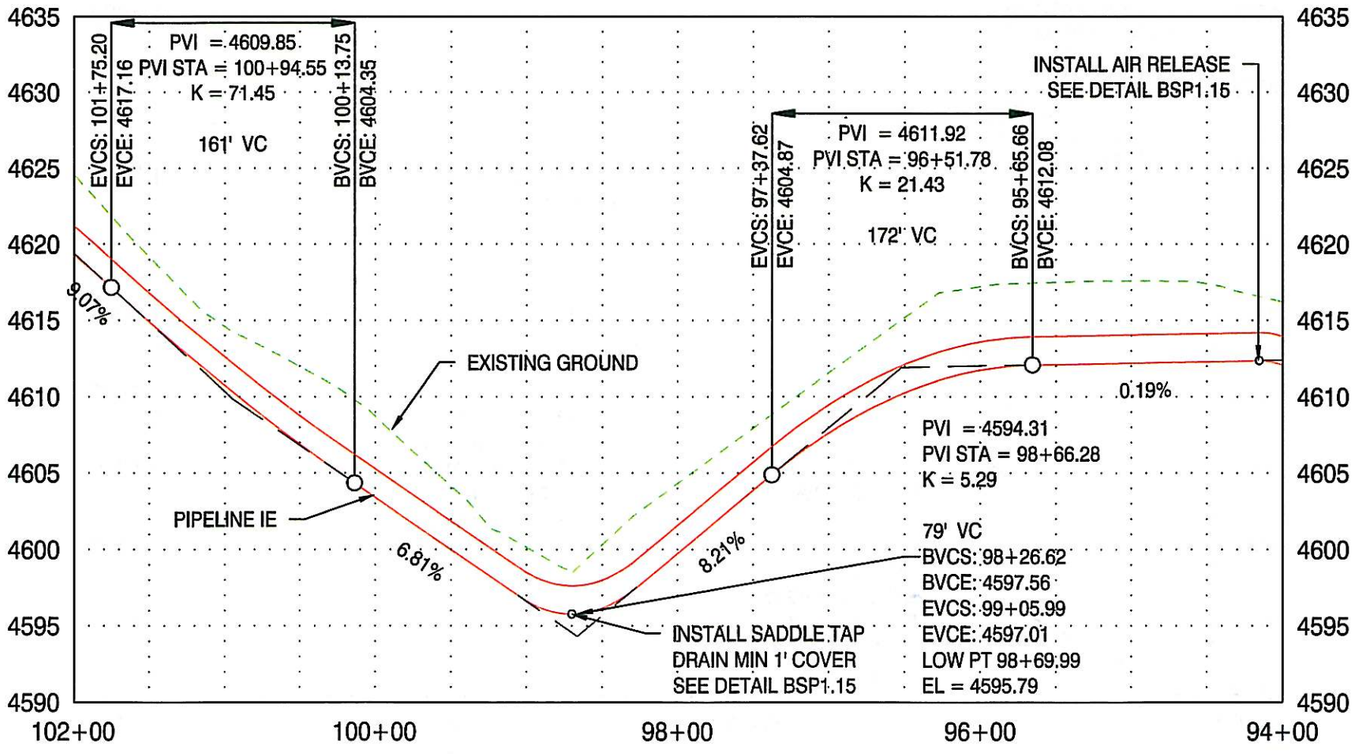


SCALE: 1" = 100'

0 50' 100' 200'

SCALE IN FEET

PROFILE
HOR: 1"=100'
VER: 1"=10'



REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

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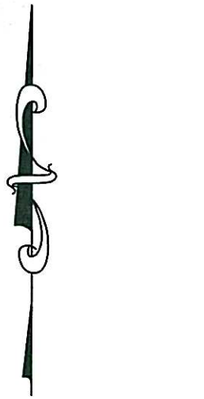
PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 94+00 TO 102+00

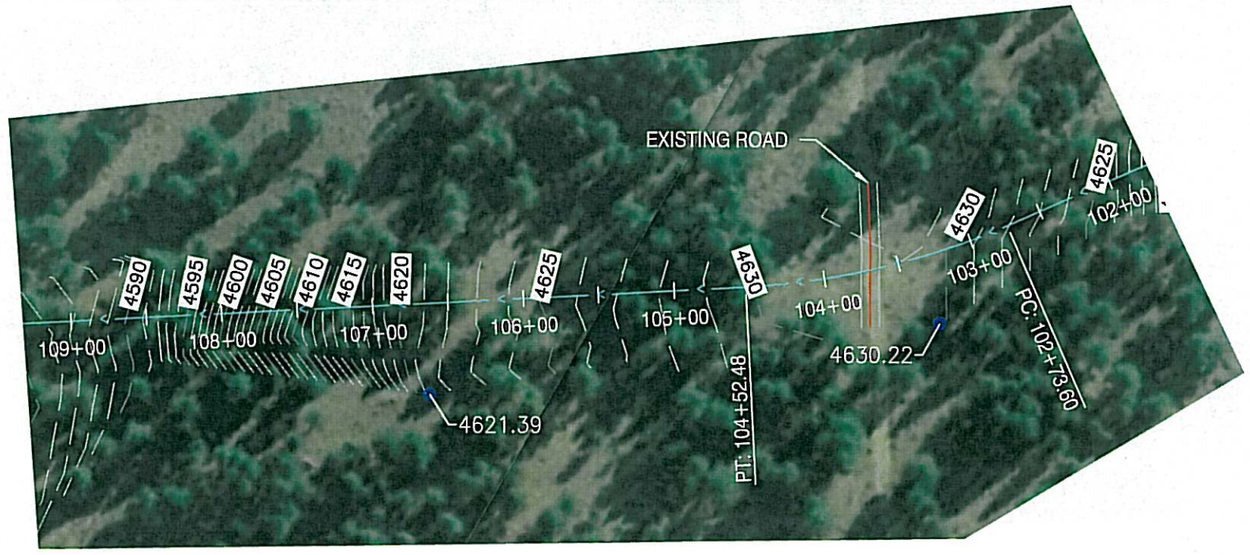
DRAWING: BSP1.11

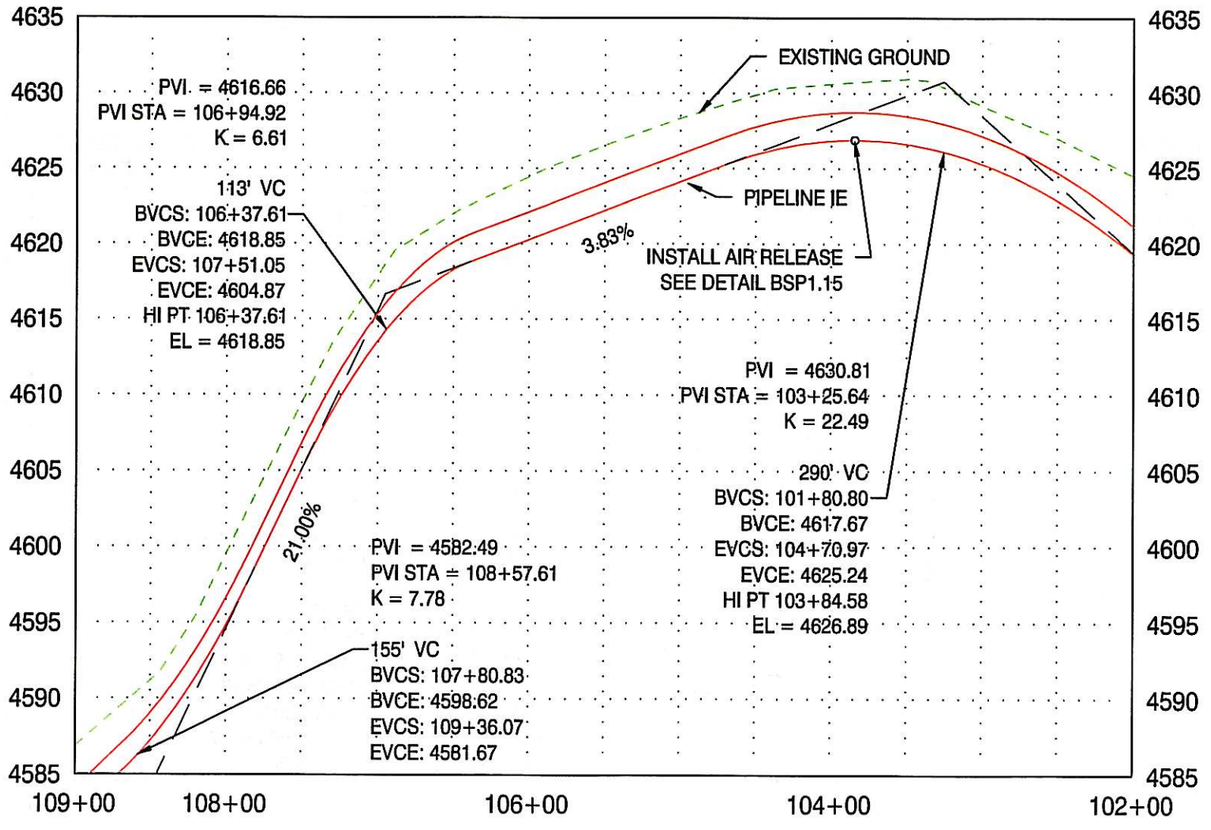


SCALE: 1" = 100'

0 50' 100' 200'

SCALE IN FEET





PROFILE
HOR: 1"=100'
VER: 1"=10'

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

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PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 102+00 TO 109+00

DRAWING: BSP1.12

SCALE: 1" = 100'

0 50' 100' 200'

SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16	△		
		△		
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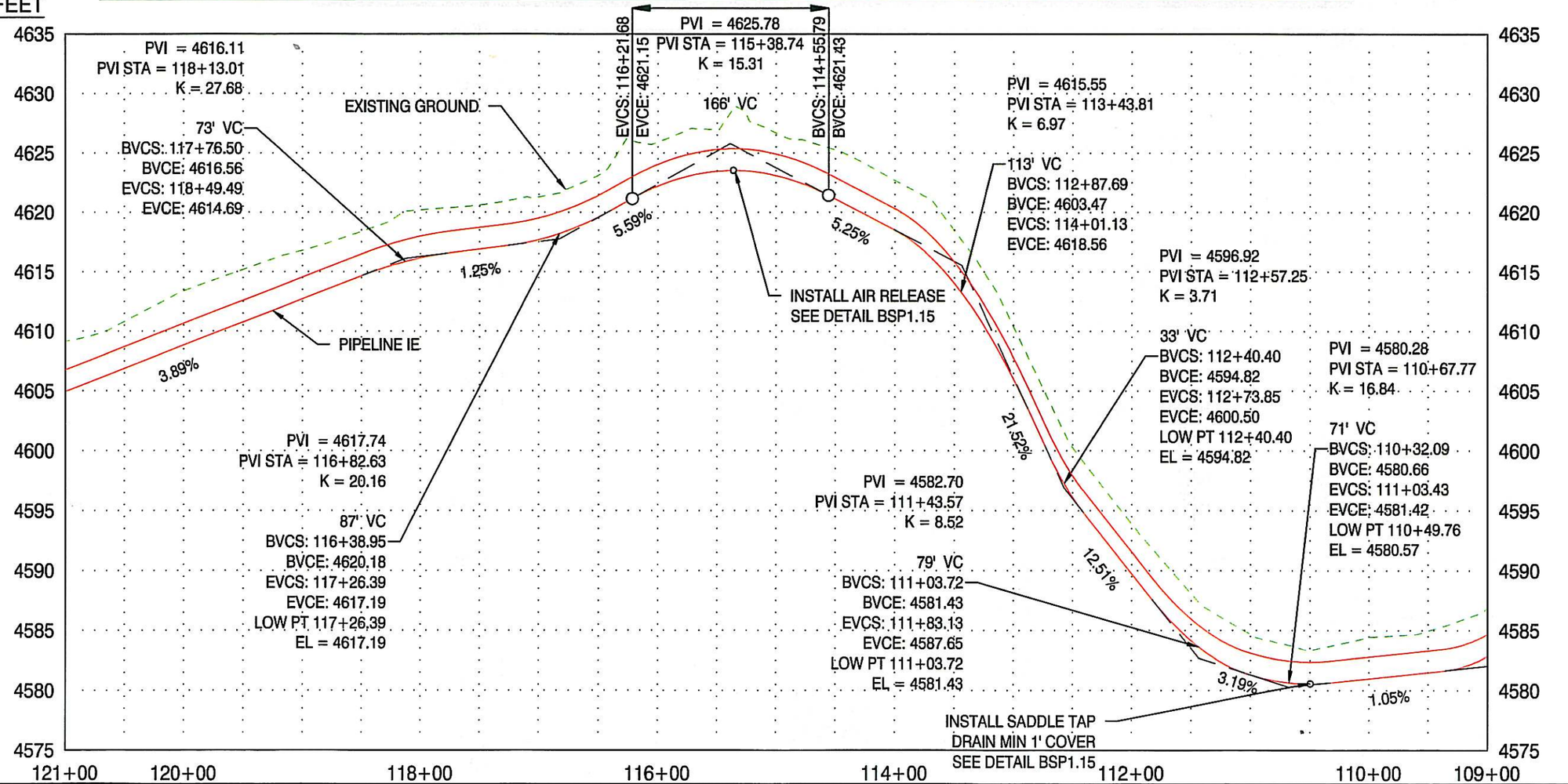
		△		



PROFILE
HOR: 1"=100'
VER: 1"=10'

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PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: AMS

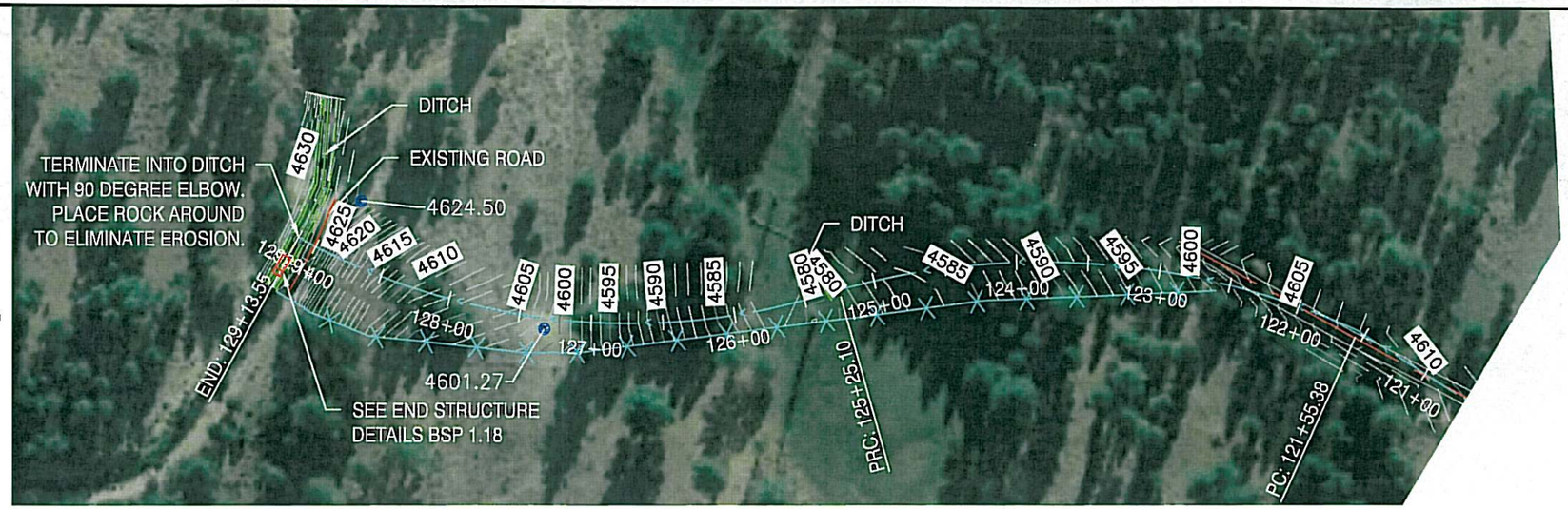
SHEET TITLE: PIPELINE STA: 109+00 TO 121+00

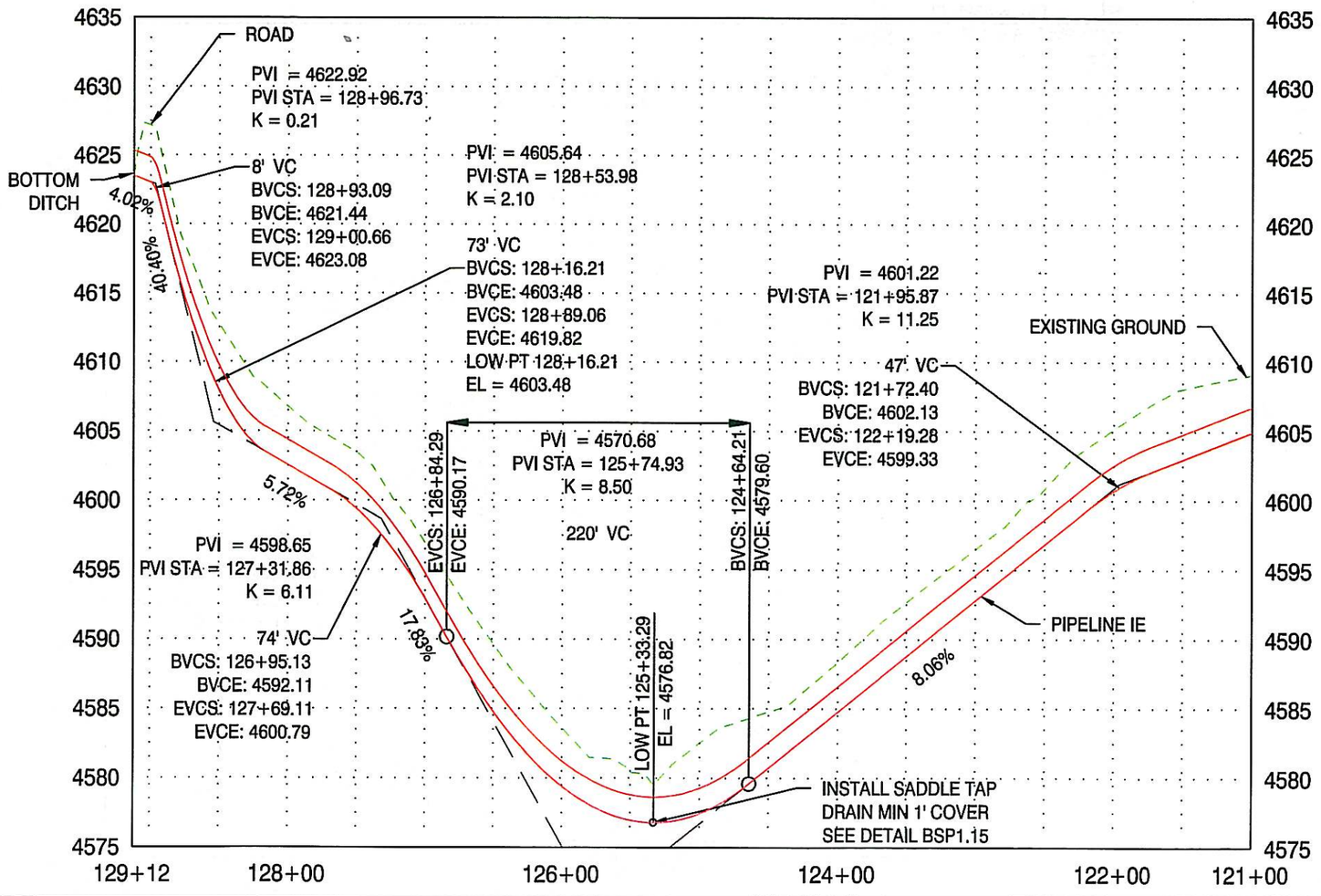
DRAWING: BSP1.13

SCALE: 1" = 100'

0 50' 100' 200'

SCALE IN FEET





PROFILE
HOR: 1"=100'
VER: 1"=10'

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

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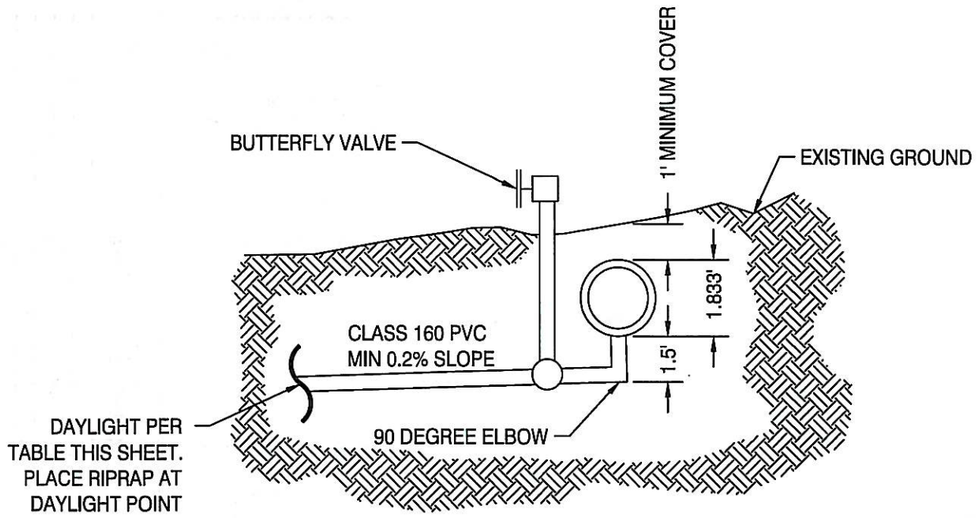
PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

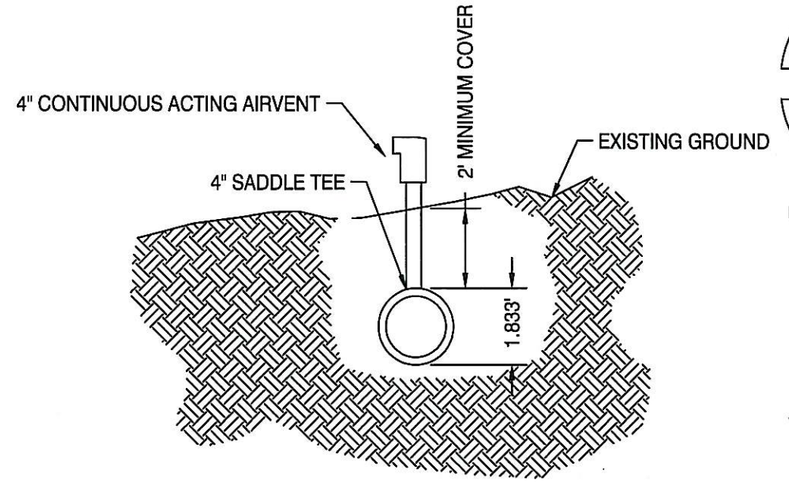
DRAWN BY: AMS

SHEET TITLE: PIPELINE STA: 121+00 TO 129+14

DRAWING: BSP1.14



SADDLE TAP DRAIN DETAIL
TYP.



AIRVENT DETAIL
TYP.

TABLE 1: DRAIN DETAIL		
STATION	LENGTH (FEET)	SLOPE
29+08.57	200	0.20%
56+78.7	225	0.20%
73+62.40	175	0.20%
91+43.3	240	0.20%
98+69.99	200	0.20%
110+49.76	230	0.20%
125+33.29	350	0.20%

TABLE 2: AIRVENT LOCATIONS
STATION
36+96.73
64+00.26
83+32.68
94+15.46
103+84.73
115+36.13

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OREGON
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HAYES A. McCOY
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EXISTING CONDITIONS	1/19/18			

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gabe@rslenger.com

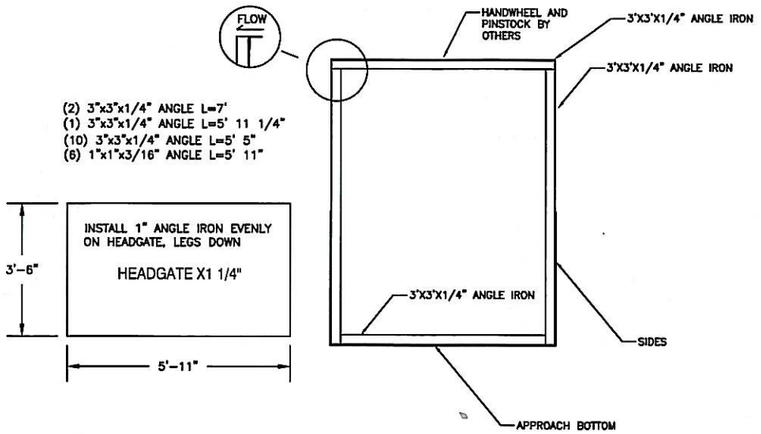
PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

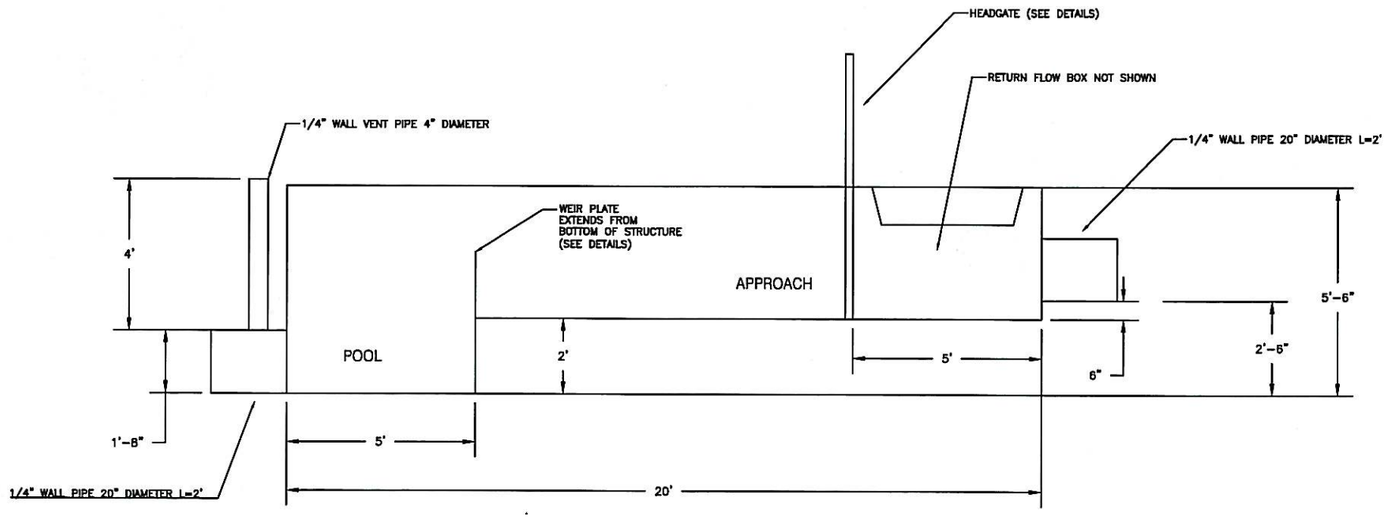
DRAWN BY: CPF

SHEET TITLE: DRAIN/AIRVENT DETAIL

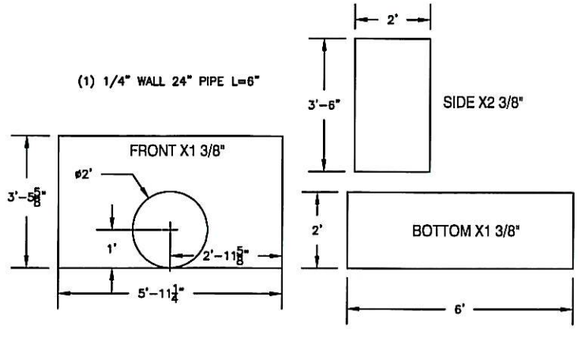
DRAWING: BSP1.15

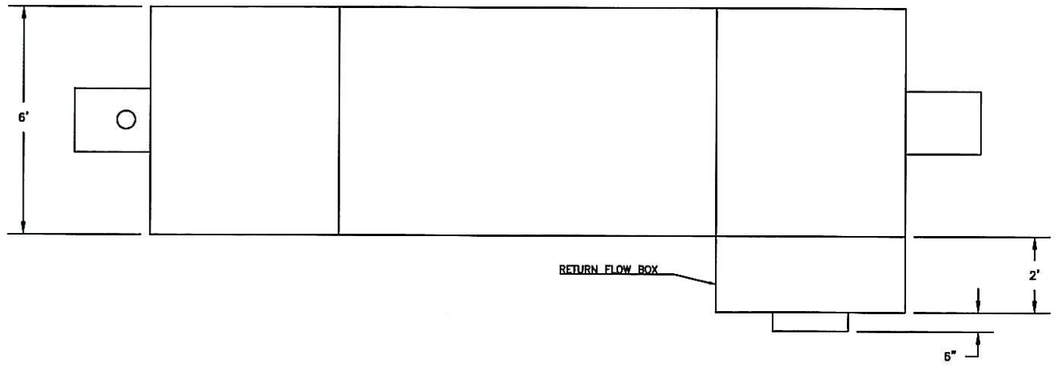
HEADGATE





RETURN FLOW BOX





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HAYES A. McCOY
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PROJECT:
BIG SUMMIT PRAIRIE PIPELINE

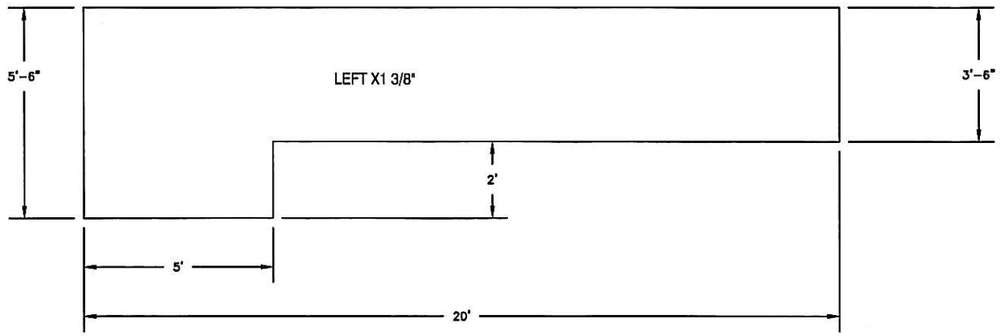
PROJECT LOCATION:
CROOK COUNTY, OREGON

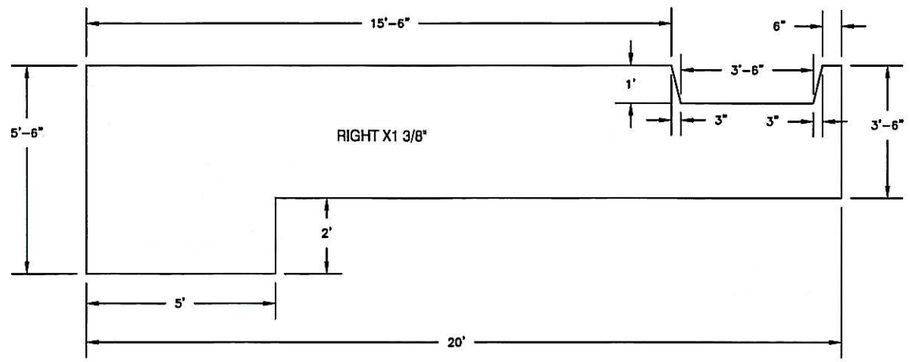
CLIENT:
WAIBEL RANCH LLC

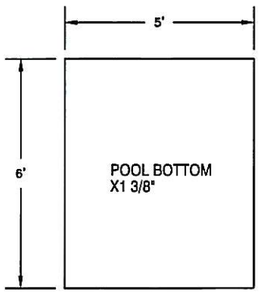
DRAWN BY: CPF

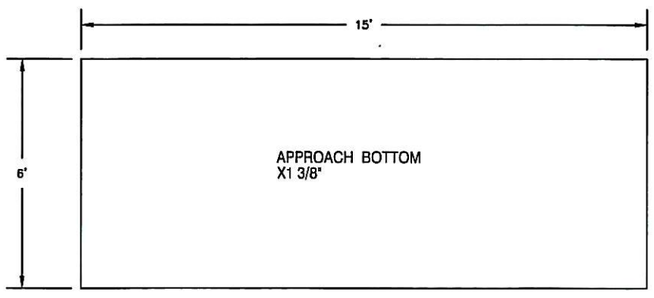
SHEET TITLE:
START CONTROL STRUCTURE

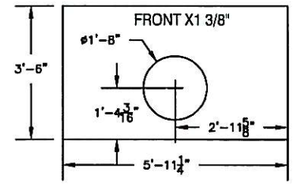
DRAWING:
BSP1.16

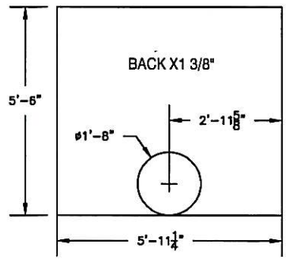


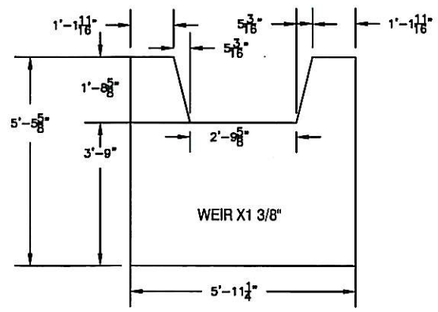












(2) 1/4" WALL 20" PIPE L=2'
(1) 1/4" WALL 4" PIPE L=4'

(1) 1/4" WALL 24" PIPE L=6"
(2) 1/4" WALL 20" ANGLE L=2'
(8) 3"x3"x1/4" ANGLE L=6'
(8) 3"x3"x1/4" ANGLE L=5' 11 1/4"
(10) 3"x3"x1/4" ANGLE L=3' 6"
(4) 3"x3"x1/4" ANGLE L=5' 6"
INSTALL ANGLE IRON BRACES EVENLY ON BOTTOM, TOP, AND SIDES

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

DRAWING STATUS:	DATE:	No.	REVISION:	DATE:
EXISTING CONDITIONS	1/19/16			

Resource Specialists INC.
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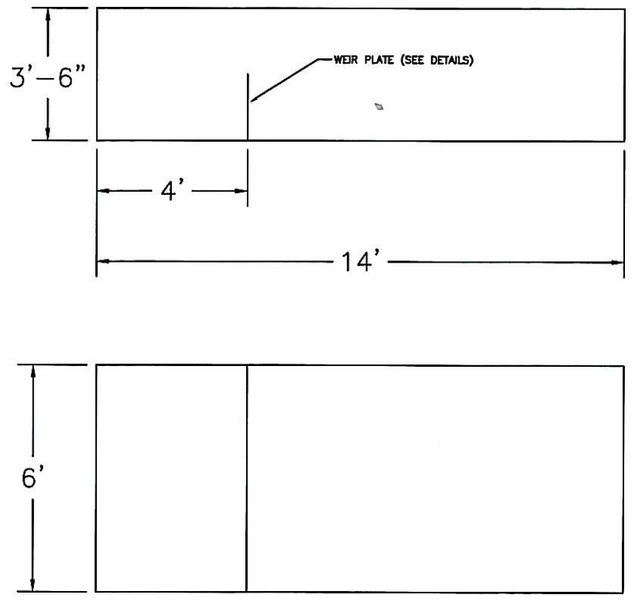
gabe@rsienger.com

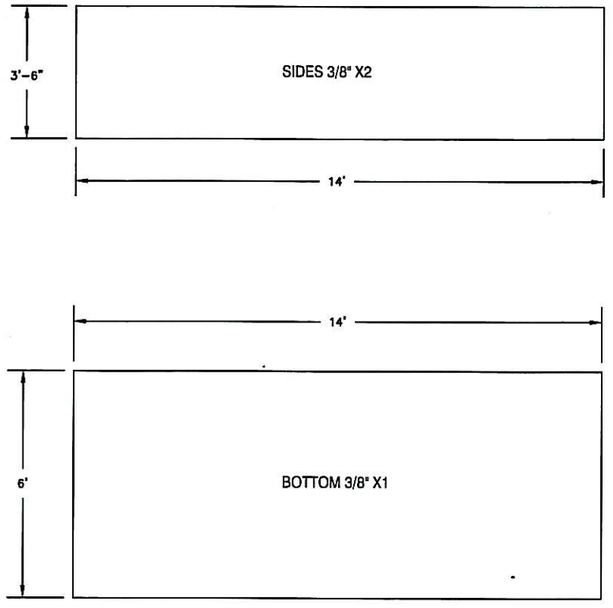
PROJECT:
BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION:
CROOK COUNTY, OREGON
CLIENT:
WAIBEL RANCH LLC

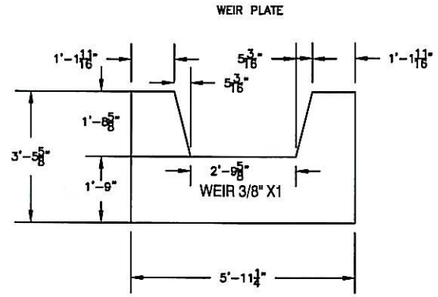
DRAWN BY: CPF

SHEET TITLE:
START CONTROL STRUCTURE

DRAWING:
BSP1.17







(5) 3"x3"x1/4" ANGLE L=6'
(5) 3"x3"x1/4" ANGLE L=5' 11 1/4"
(10) 3"x3"x1/4" ANGLE L=3' 6"

INSTALL ANGLE IRON BRACES EVENLY ON BOTTOM, TOP, AND SIDES

REGISTERED PROFESSIONAL ENGINEER
65686PE
OREGON
JULY 12, 2005
HAYES A. McCOY
RENEWAL DATE: 12/31/16

No.	REVISION:	DATE:
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DRAWING STATUS: EXISTING CONDITIONS DATE: 1/19/16

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gabe@rsienger.com

PROJECT: BIG SUMMIT PRAIRIE PIPELINE
PROJECT LOCATION: CROOK COUNTY, OREGON
CLIENT: WAIBEL RANCH LLC

DRAWN BY: CPF

SHEET TITLE: END CONTROL STRUCTURE

DRAWING: BSP1.18