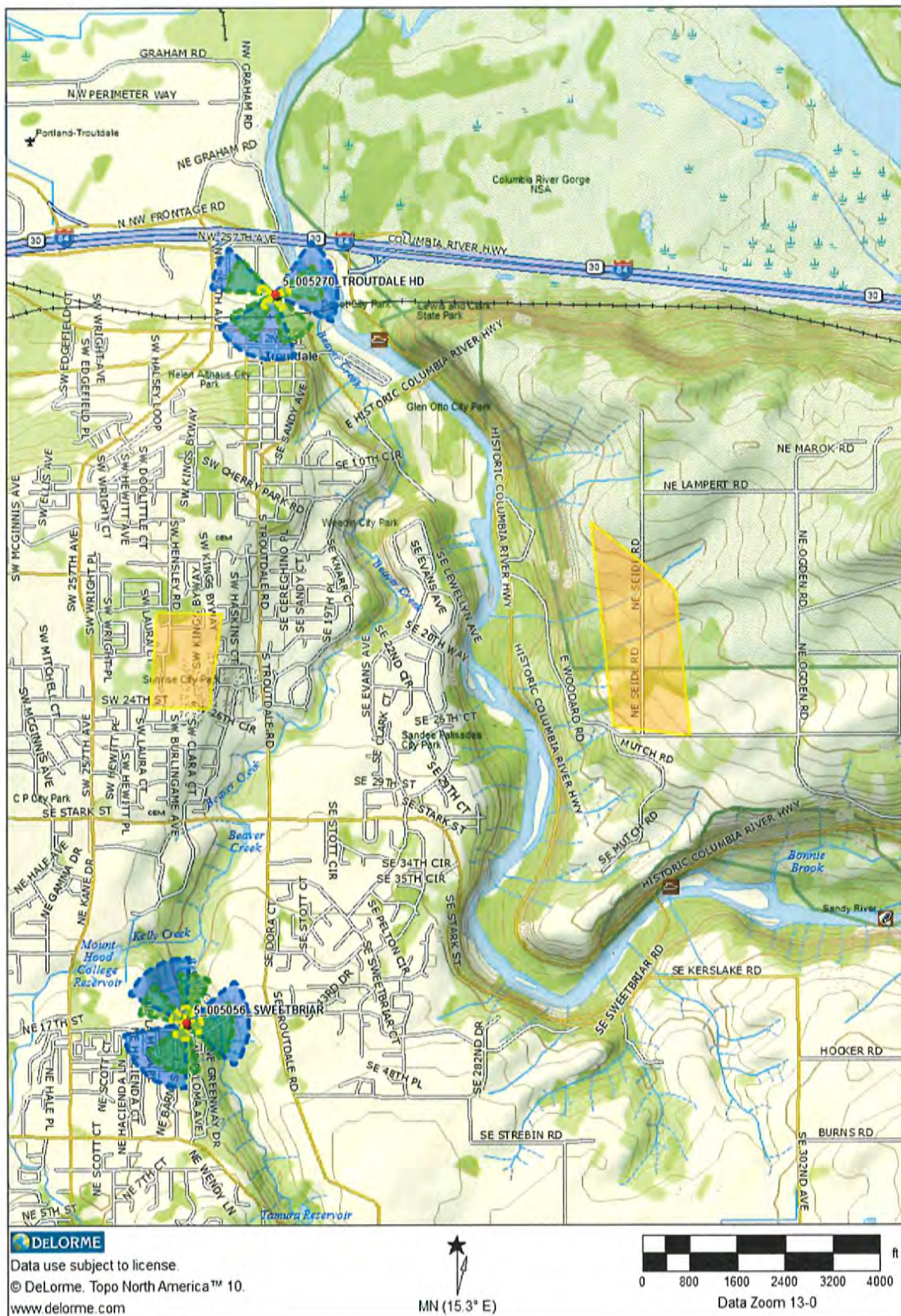


EXHIBIT E SEARCH RING MAP



RF Usage and Facility Justification

POR Stinger

Prepared by Verizon Wireless Jeff Culley

January 28, 2019

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verizon✓

Introduction:

There are two main drivers that prompt the need for a new cell site. One is coverage and the other is capacity.

Coverage is the need to expand wireless service into an area that either has no service or bad service. The request for service often comes from customers or emergency personnel. Expansion of service could mean improving the signal levels in a large apartment complex or new residential community. It could also mean providing new service along a newly built highway.

Capacity is the need for more wireless resources. Cell sites have a limited amount of resources to handle voice calls, data connections, and data volume. When these limits are reached, user experience quickly degrades. This could mean customers may no longer be able to make/receive calls nor be able to browse the internet. It could also mean that webpages will be very slow to download.

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Capacity is the amount of resources a cell site has to handle customer demand. We utilize sophisticated programs that use current usage trends to forecast future capacity needs. Since it takes an average of (1-3) years to complete a cell site project, we have to start the acquisition process several years in advance to ensure the new cell site is in place before the existing cell site hits capacity limits.

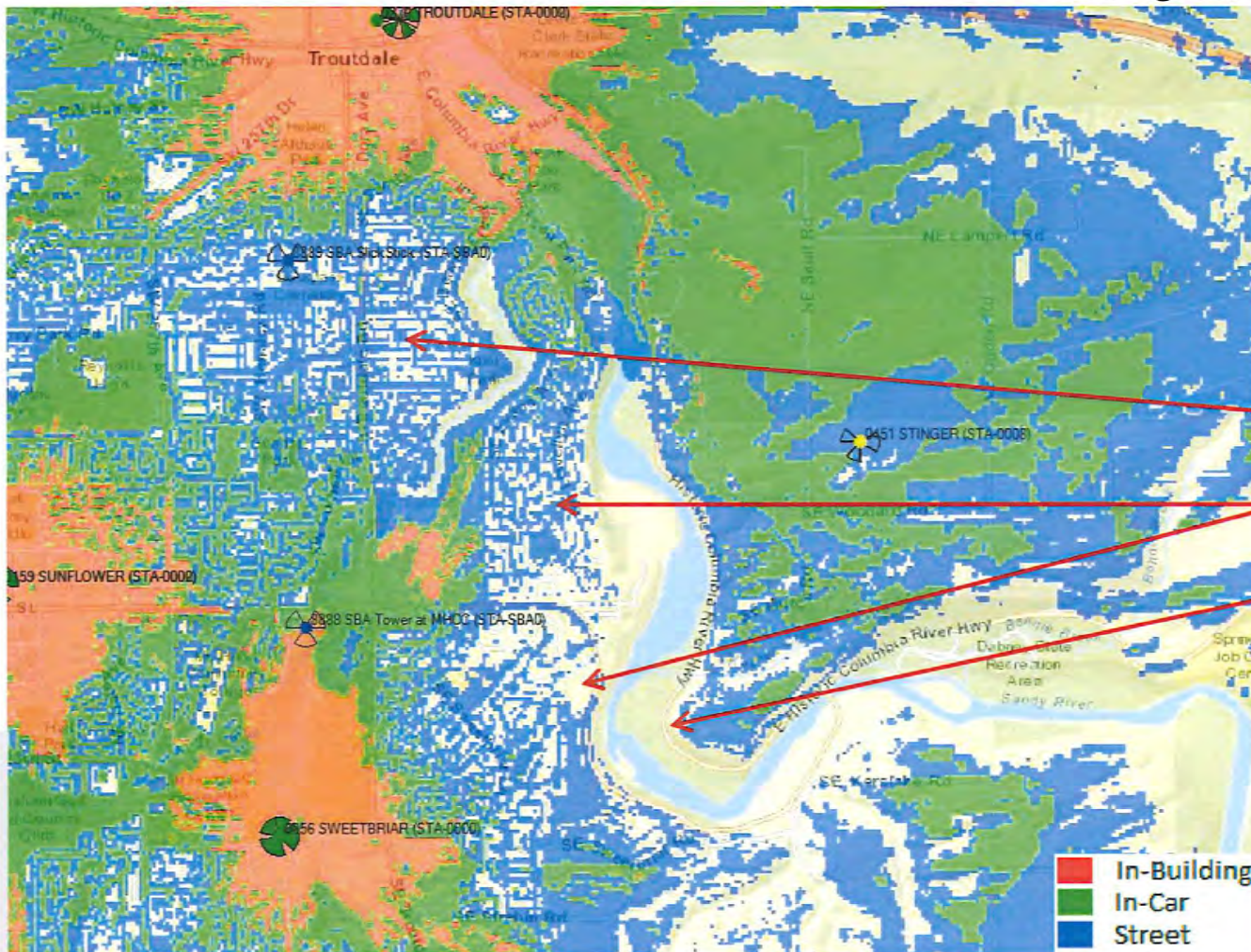
Location, Location, Location. A good capacity cell site needs to be in the center of the user population which ensures even traffic distribution around the cell. A typical cell site is configured in a pie shape, with each slice (aka. sector) holding 33% of the resources. Optimal performance is achieved when traffic is evenly distributed across the 3 sectors.

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Existing coverage.

The proposed Stinger site is a coverage site. Our objective for Stinger is to close a significant gap in coverage, in particular In-Building and In-Car coverage in several key areas.



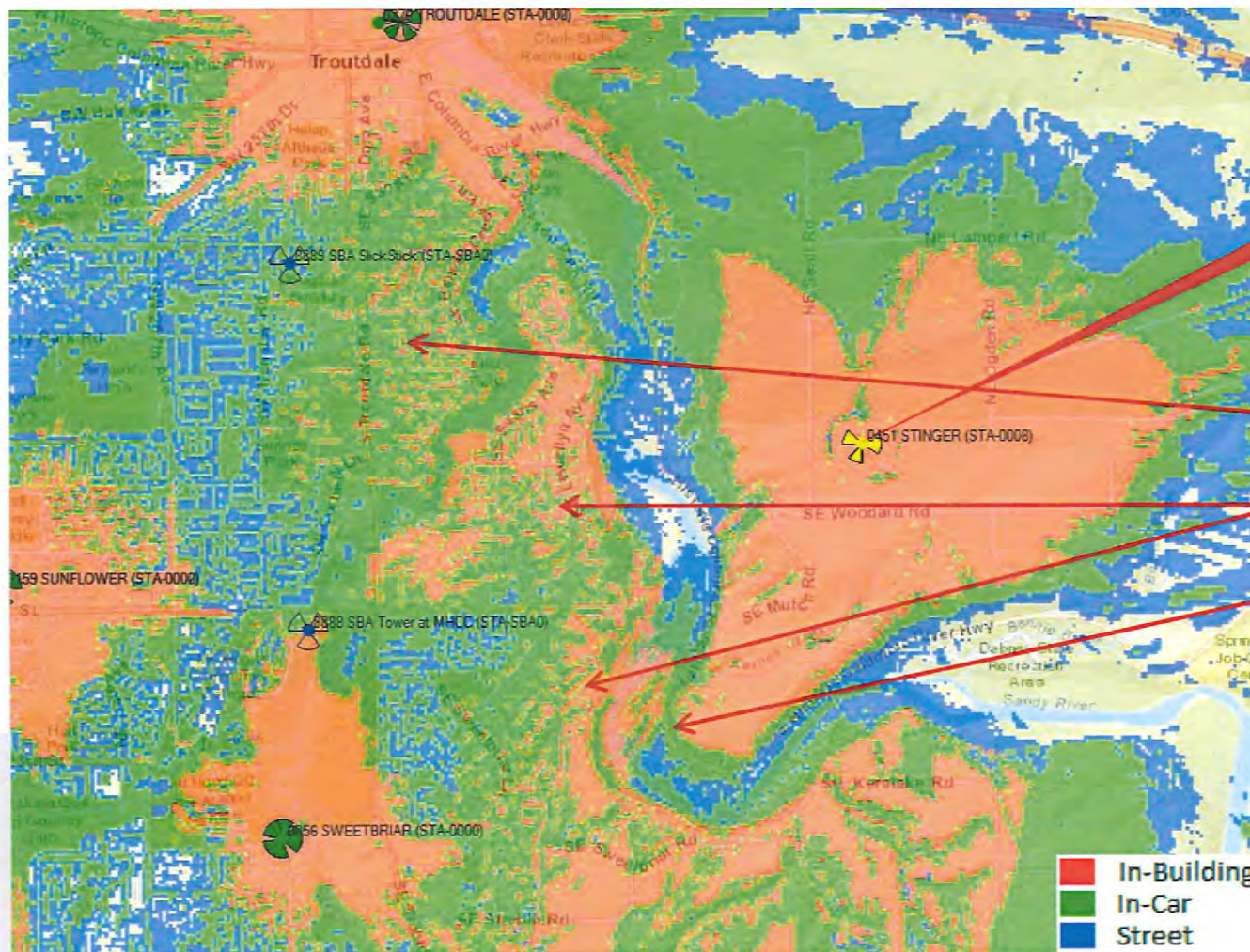
Coverage Objectives:

- Neighborhoods on the
top of the plateau
Neighborhoods near the
Sandy River
Historic Columbia River
Highway

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POR STINGER – Antenna(s) Centerline (C/L): **145'**

The proposed Stinger site at 150' provides the required coverage to resolve most of the gap in coverage areas and is the minimum height necessary to satisfy the objective.



Proposed
Stinger site

Coverage Objectives:

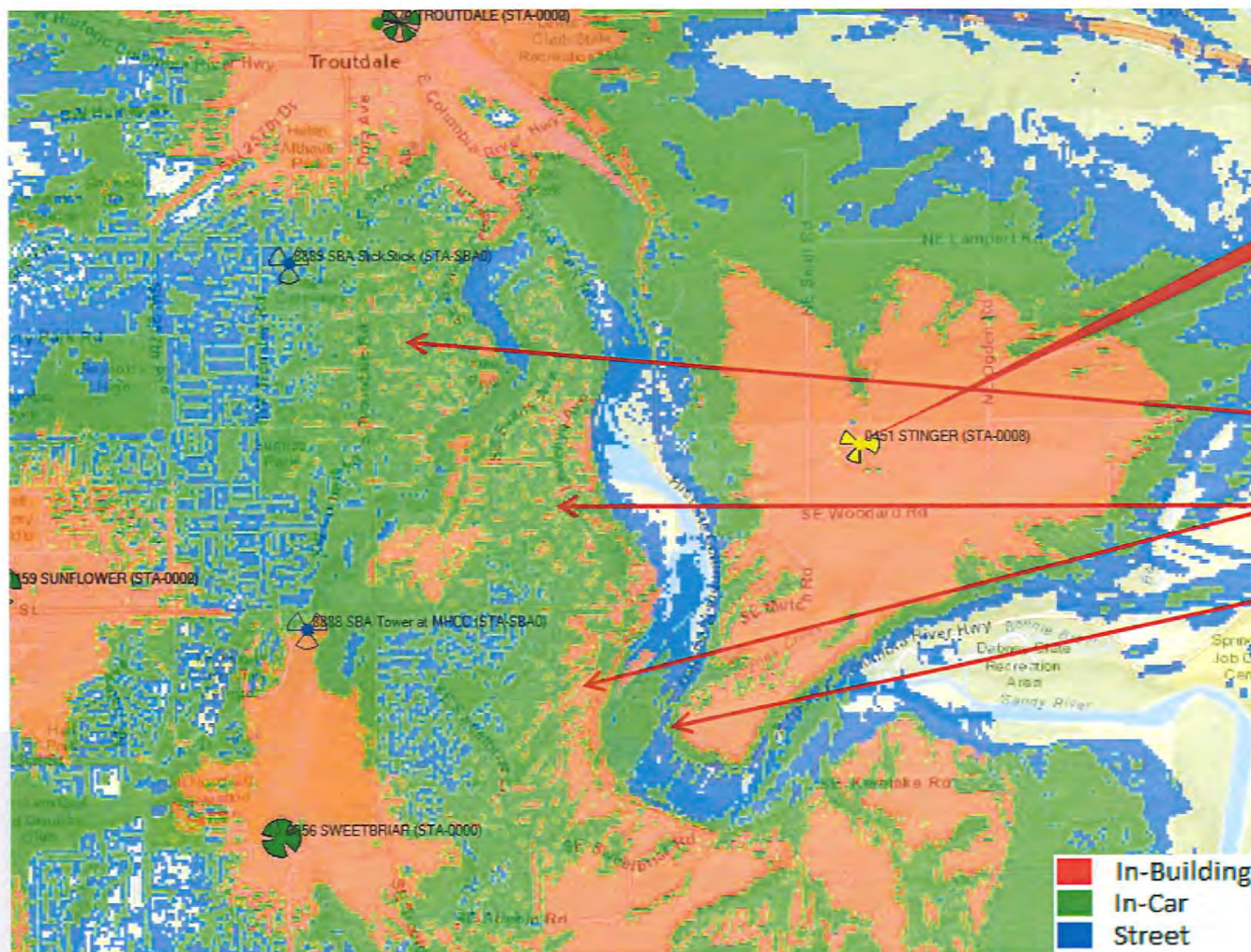
- Neighborhoods on the
top of the plateau
Neighborhoods near the
Sandy River
Historic Columbia River
Highway

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POR STINGER – Antenna(s) Centerline (C/L): **120'**

Proposed
Stinger site

Neighborhoods on the
top of the plateau
Neighborhoods near the
Sandy River
Historic Columbia River
Highway

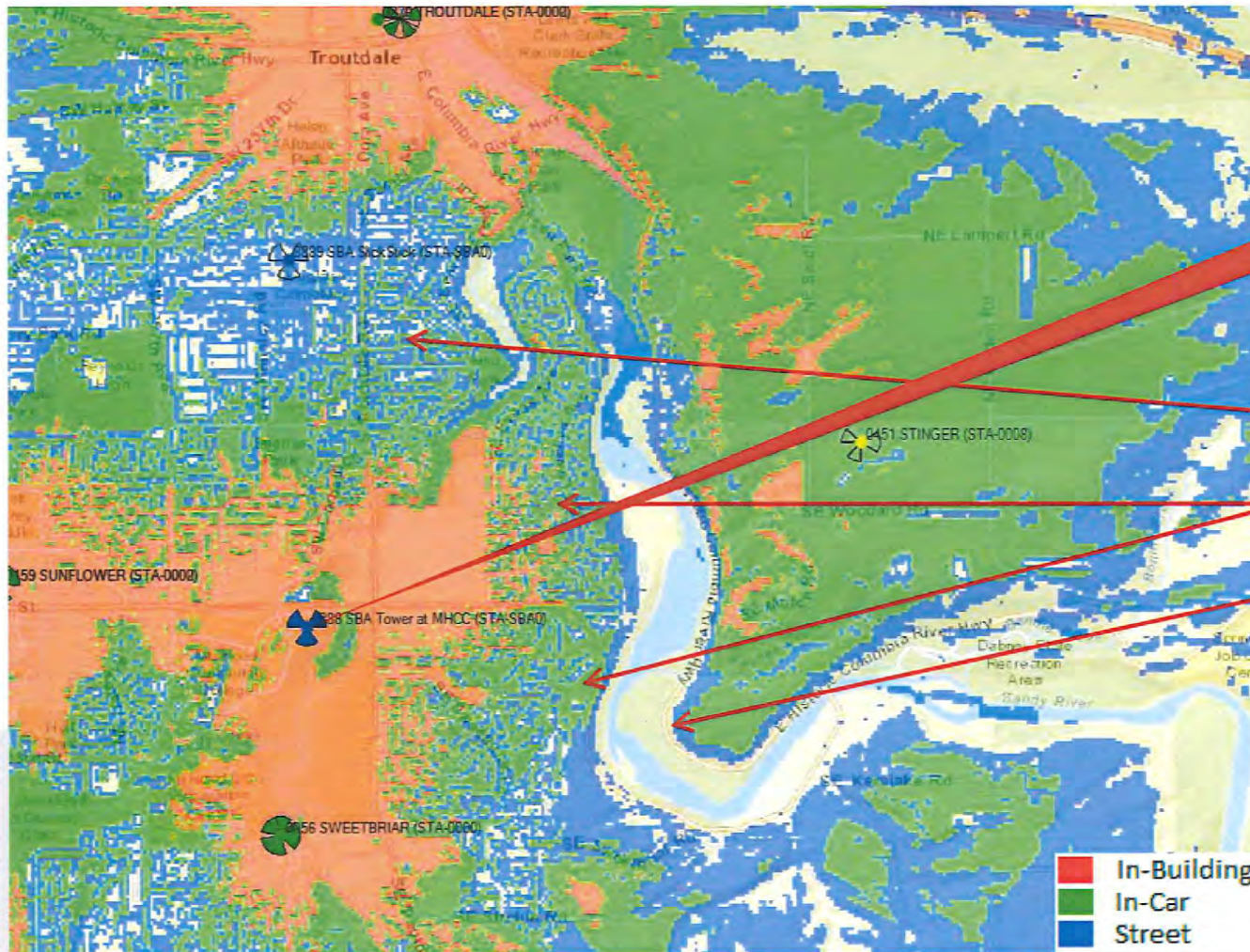


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Existing coverage with existing SBA tower at Mt. Hood Community College

SBA -MHCC— Antenna(s) Centerline (C/L): 110'

The SBA tower at MHCC provides good coverage around the college but leaves most of the other areas of concern unimproved.



SBA tower
at Mt. Hood
Community
College

Coverage Objectives:

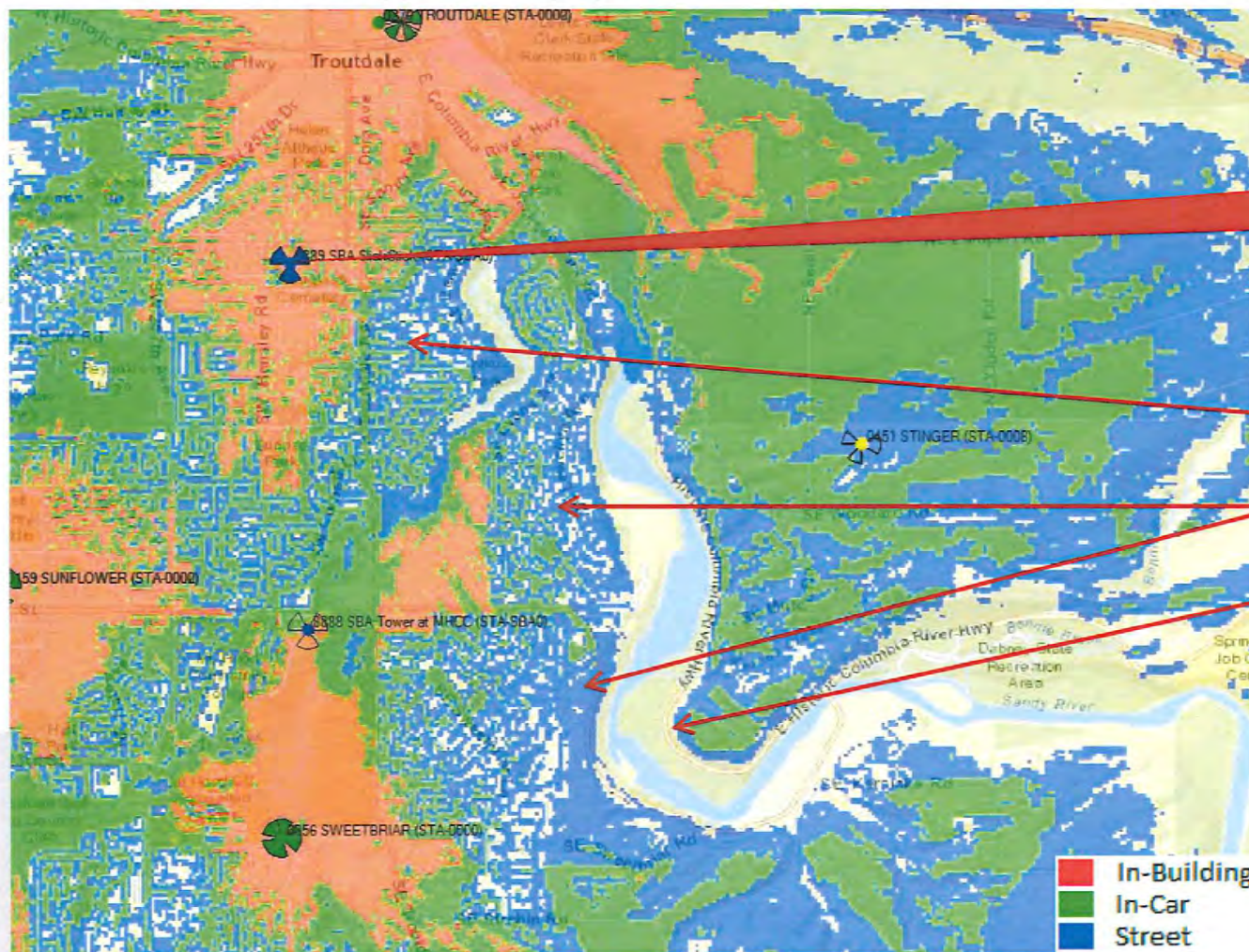
- Neighborhoods on the top of the plateau
- Neighborhoods near the Sandy River
- Historic Columbia River Highway

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Existing coverage with existing SBA tower at Cherry Park Presbyterian Church

SBA -CPPC— Antenna(s) Centerline (C/L): 80'

The SBA tower at Cherry Park Presbyterian Church provides good coverage around the church but leaves most of the other areas of concern unimproved.



SBA tower at
Cherry Park
Presbyterian
Church

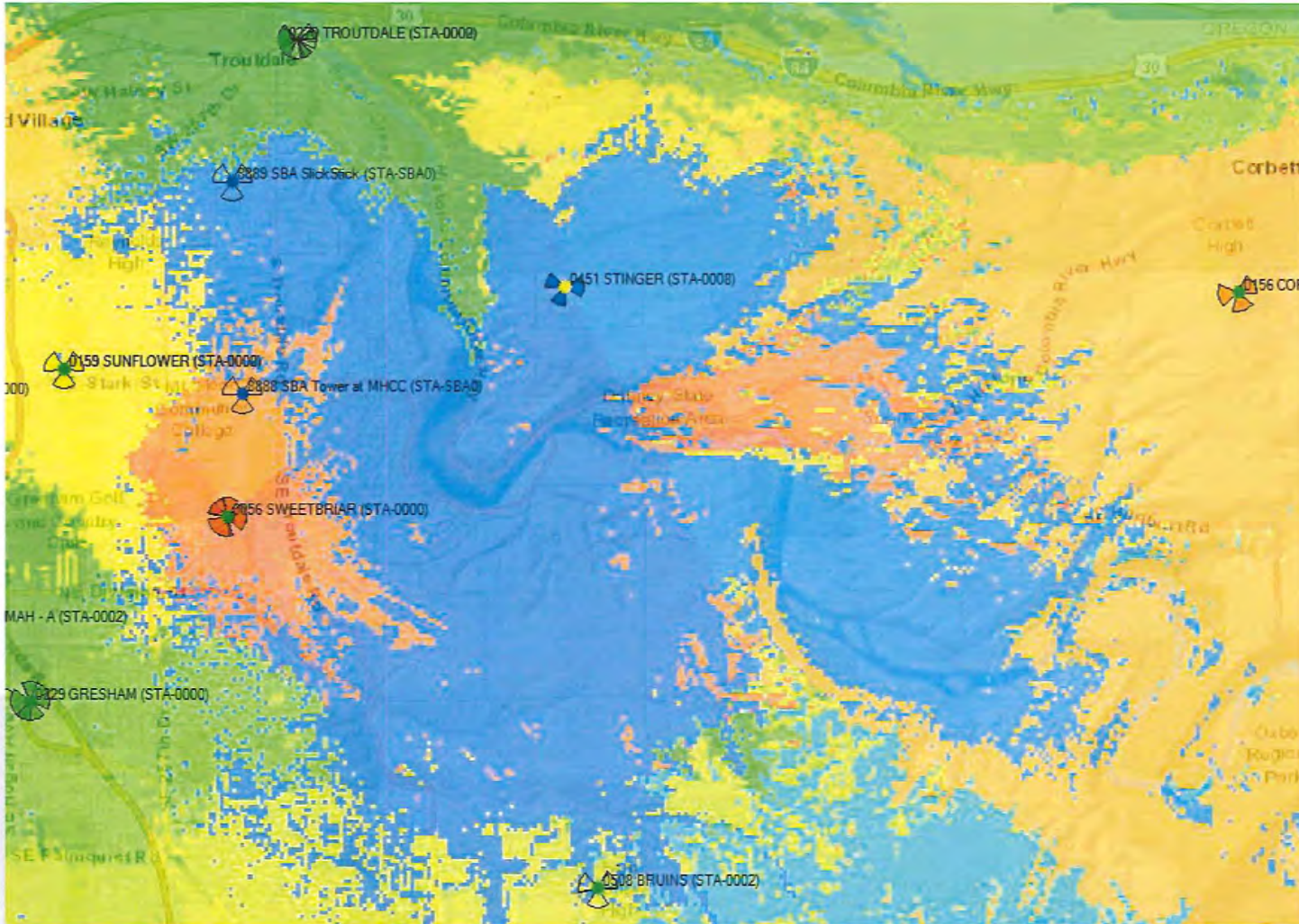
Coverage Objectives:

- Neighborhoods on the top of the plateau
- Neighborhoods near the Sandy River
- Historic Columbia River Highway

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POR STINGER – Antenna(s) Centerline (C/L): **145'**

This is a best server plot showing the most likely serving cell in the area.



Blue represents the predicted coverage from our proposed site STINGER

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Need Case for: Stinger

Summary: We have several areas in the Troutdale area with a significant gap in in-building and in-car coverage. The POR SPRINGER site will resolve most of these areas with a 150' tower.

Detail below:

- POR STINGER at 120' doesn't provide sufficient coverage because of the height of the surrounding trees and the angles needed to reach some of the gaps in coverage.
- Neither of the SBA towers cover very much of the gap in coverage we would still need to build a site if either of these were selected.

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POR STINGER

EXHIBIT H UTILITY REPORT

29421 E WOODARD RD
TROUTDALE, OR 97060-8317
E911 ADDRESS: 29421 E WOODARD RD
TROUTDALE, OR 97060-8317



R&W
ENGINEERING, INC.
9815 SW Allen Blvd., Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3326
Fax: (503) 726-3326
E-mail: rwh@rweeng.com
Project No.: 1382.025.001
Contact: VANESSA FUGATE

COORDINATES

LATITUDE: 45.525419° N
LONGITUDE: -122.359431° W

SITE ACCESS INFORMATION

ACCESS TO THE PROPERTY IS PROVIDED VIA AN EXISTING GRAVEL DRIVEWAY, LAST 207' TO TOWER AREA IS DIRT. A TRUCK/DRILL RIG CAN ACCESS WITH ADVANCE COORDINATION WITH OWNER.

DRIVING DIRECTIONS

FROM NE 122ND AVE, HEAD NORTH ON NE 122ND TOWARD NE MARINE DR; TURN RIGHT ON MARINE DR - GO 0.6 MILE; TURN LEFT ONTO SE WOODARD RD. GO 0.8 MILE, TURN RIGHT ONTO DRIVEWAY AT 29421 EAST WOODARD RD, DRIVE PAST HOUSE TO RIGHT SIDE IN WOODS PAST GATE.

SITE NOTES

- SARZAR DATED 08/26/16 RECEIVED 11/15/16.
- ZDS DATED 02/17/17 RECEIVED 02/27/17.
- LEASE EXHIBIT DATED 01/18/17 RECEIVED 02/27/17.

EASEMENTS:

POWER:

- PGE WILL REQUIRE AN EASEMENT IF ONE IS NOT IS NOT ALREADY IN PLACE BY VIRTUE OF LEASE OR NON-EXCLUSIVE EASEMENT. SITE AGO TO PROVIDE PGE WITH THE LEASE EXHIBIT OR NON-EXCLUSIVE EASEMENT FOR REVIEW.

TELCO:

- TELCO WILL REQUIRE AN EASEMENT IF ONE IS NOT ALREADY IN PLACE BY VIRTUE OF LEASE OR NON-EXCLUSIVE EASEMENT.

PROJECT CONTACTS

APPLICANT
VERIZON WIRELESS
5430 NE 122ND AVE
PORTLAND, OR 97230

PROJECT CONSULTANT
RAW ENGINEERING, INC.
9815 SW ALLEN BLVD, STE 107
BEAVERTON, OR 97005
VANESSA FUGATE
PH: 503.726.3326
VFUGATE@RWEING.COM

REAL ESTATE CONSULTANT
BLACKROCK CONSULTING, LLC
1100 MELODY LN, STE 139
ROSEVILLE, CA 95678
KONRAD HYLE
PH: 503.522.0634
KONRAD@BLK-ROCK.COM

CONSTRUCTION MANAGER
VERIZON WIRELESS
JASON FALLAU
CELL: 541.981.3542
JASON.FALLAU@VERIZONWIRELESS.COM

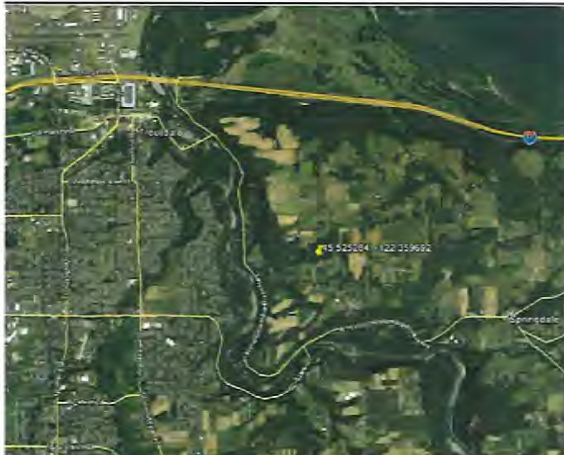
LAND OWNER
CLIFF HEGSTAD
PH: 503.481.8927
CLIFF1931@AOL.COM

STRUCTURE OWNER
N/A

POWER PROVIDER
PORTLAND GENERAL ELECTRIC (PGE) - W/O #W2221580
3700 SE 17TH AVE
PORTLAND, OR 97202
CONTACT: SYDNEY COX
PH: 503.963.6871
SYDNEY.COM@PG&N.COM

FIBER/TELCO PROVIDER
GENERIC FIBER
FRONTIER TERRITORY

PROJECT VICINITY MAP



SITE AREA MAP



DRAWING INDEX

SHEET	DESCRIPTION
T-1.0	TITLE SHEET
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A-4.0	PHOTOS
A-5.0	504-PGE VAULT SPEC
A-6.0	PGE PADMOUNT SPEC
A-7.0	644-3-PGE VAULT SPEC
A-8.0	PGE DESIGN
PG. 10	POWER EMAIL

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO VERIZON WIRELESS SERVICES IS STRICTLY PROHIBITED.

R&W PROJECT NO.: 1382.025.001

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2	03/24/17	VAF	POWER DESIGN

SUBMITTAL

NO.	DATE	BY:	DESCRIPTION
1	04/04/17	VAF	GENERIC FIBER

SITE NAME

POR STINGER

SITE ADDRESS

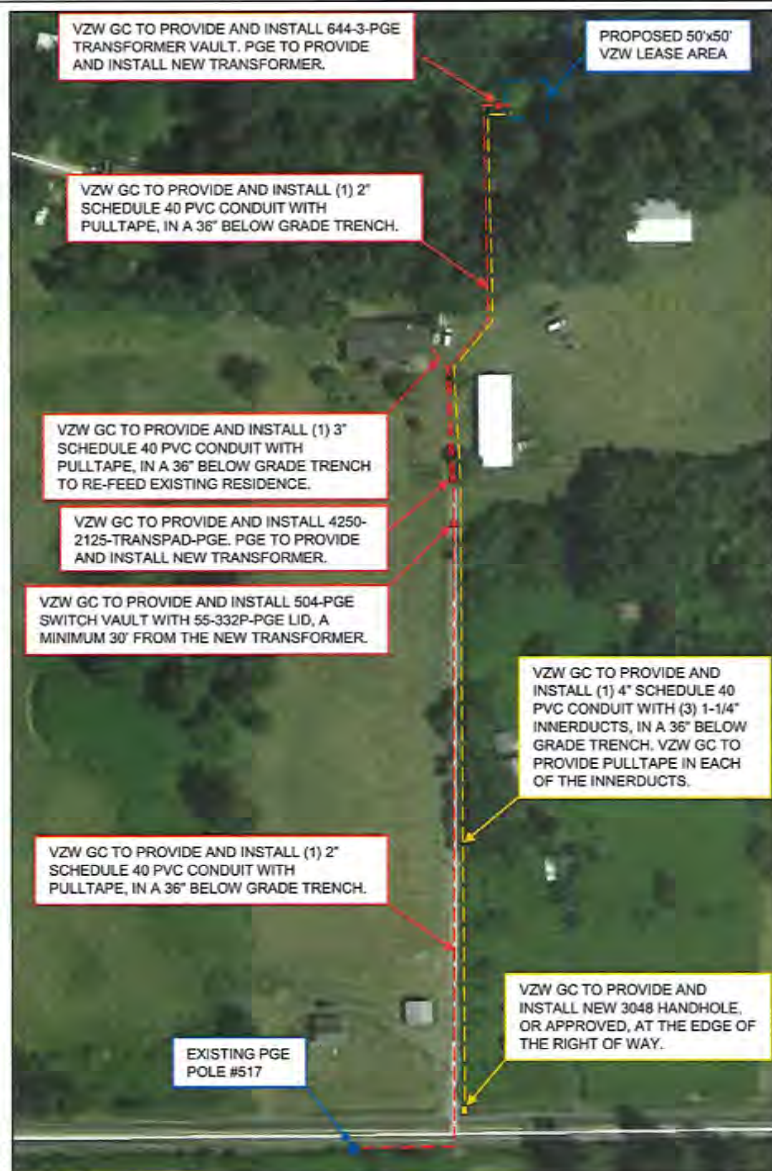
29421 E WOODARD RD
TROUTDALE, OR 97060-8317

SHEET TITLE

TITLE
SHEET

SHEET NO.

T-1.0



CONSTRUCTION NOTES

GENERAL REQUIREMENTS

- THIS UCR IS NOT A CONSTRUCTION, OR BID DOCUMENT.
- VZW GC TO REQUEST LOCATES BE PERFORMED PRIOR TO ANY EXCAVATION.
- A RIGHT OF WAY PERMIT WILL BE REQUIRED FOR ALL WORK DONE IN THE RIGHT OF WAY. PGE WILL OBTAIN THE PERMIT, VZW WILL NEED TO USE A PGE APPROVED CONTRACTOR FOR WORK DONE IN THE RIGHT OF WAY.
- MAINTAIN PROPER CLEARANCES FROM ALL EXISTING AND NEW PIPING, DRAINAGE AND CONDUITS ON THE PROPERTY.
- ALL SWEEPS TO HAVE A MINIMUM 36" RADIUS. FIBERGLASS SWEEPS MAY BE REQUIRED. VERIFY WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- PGE MAY REQUIRE THAT VZW GC INSTALL BOLLARDS AROUND TRANSFORMERS. VERIFY WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- PGE WILL REQUIRE 24 HOUR ACCESS TO THEIR FACILITIES.
- PGE WILL REQUIRE A MINIMUM 60 DAYS NOTICE PRIOR TO CONSTRUCTION.

POWER

THERE IS AN EXISTING OVERHEAD POWER LINE THAT CURRENTLY FEEDS THE PROPERTY. PGE WILL BE CONVERTING THE EXISTING OVERHEAD SERVICE TO UNDERGROUND WHICH WILL CAUSE AN OUTAGE. VZW GC TO COORDINATE OUTAGE WITH PGE REPRESENTATIVE AND OWNER REPRESENTATIVE.

- VZW GC TO SWEEP (1) 2" SCHEDULE 40 PVC CONDUIT WITH PULLTAPE, UP AT THE BASE OF EXISTING PGE POLE #517. COORDINATE EXACT SWEEP LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO PLACE CONDUIT IN A 36" BELOW GRADE TRENCH AND EXTEND EAST APPROXIMATELY 90' BEFORE MAKING 90° TURN NORTH. COORDINATE EXACT ROUTING WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO BORE CONDUIT 36" BELOW GRADE UNDER E WOODARD RD APPROXIMATELY 50' TO THE BEGINNING OF THE EXISTING DRIVEWAY.
- AT THE BEGINNING OF THE DRIVEWAY, VZW GC TO EXTEND CONDUIT IN A 36" BELOW GRADE TRENCH TO THE LOCATION OF THE NEW SWITCH VAULT.
- VZW GC TO PROVIDE AND INSTALL 504-PGE SWITCH VAULT WITH 55-332P-PGE LID, PER PGE SPECIFICATIONS. COORDINATE EXACT LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO STUB (1) 2" SCHEDULE 40 PVC CONDUIT WITH PULLTAPE, INTO THE NEW SWITCH VAULT. COORDINATE EXACT STUB LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO PLACE CONDUIT IN A 36" BELOW GRADE TRENCH AND EXTEND TO THE LOCATION OF THE NEW TRANSFORMER.
- VZW GC TO PROVIDE AND INSTALL 4250-2125-TRANSPAD-PGE, PER PGE SPECIFICATIONS. A MINIMUM 30' FROM NEW SWITCH VAULT. PGE TO PROVIDE AND INSTALL NEW TRANSFORMER. COORDINATE EXACT LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO SWEEP UP (1) 3" SCHEDULE 40 PVC CONDUIT WITH PULLTAPE, INTO THE NEW TRANSFORMER. COORDINATE EXACT SWEEP LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO PLACE CONDUIT IN A 36" BELOW GRADE AND EXTEND TO THE LOCATION OF THE EXISTING METER IN ORDER TO RE-FEED THE EXISTING RESIDENCE. NOTE: LOCATION OF THE METER MUST BE APPROVED BY PGE SERVICE INSPECTOR.
- VZW GC TO ALSO SWEEP UP (1) 2" SCHEDULE 40 PVC CONDUIT WITH PULLTAPE, INTO THE NEW TRANSFORMER. COORDINATE EXACT SWEEP LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO PLACE THE 2" CONDUIT IN A 36" BELOW GRADE TRENCH AND EXTEND TO THE LOCATION OF A NEW TRANSFORMER OUTSIDE THE VZW LEASE AREA. COORDINATE EXACT ROUTING WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO PROVIDE AND INSTALL NEW 644-3-PGE VAULT, PER PGE SPECIFICATIONS, JUST OUTSIDE THE FENCED LEASE AREA. PGE TO PROVIDE AND INSTALL NEW TRANSFORMER. COORDINATE EXACT LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO STUB (1) 3" SCHEDULE 40 PVC CONDUIT WITH PULLTAPE, INTO THE NEW TRANSFORMER VAULT. COORDINATE EXACT STUB LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO PLACE CONDUIT IN A 36" BELOW GRADE TRENCH AND EXTEND TO NEW H-FRAME WITH METERBASE. COORDINATE EXACT ROUTING WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- VZW GC TO PROVIDE AND INSTALL NEW H-FRAME WITH 200A, 120/240V, 1-PHASE METERBASE WITH 200A MAIN DISCONNECT, PER PGE SPECIFICATIONS, INSIDE THE FENCED LEASE AREA. COORDINATE EXACT LOCATION WITH PGE REPRESENTATIVE PRIOR TO INSTALLATION.
- PGE WILL REQUIRE ALL INSPECTIONS BE COMPLETED PRIOR TO ENERGIZING THE SERVICE.

GENERIC FIBER

- VZW GC TO PROVIDE AND INSTALL NEW 3048 HANDHOLE, OR APPROVED, AT THE EDGE OF THE RIGHT OF WAY ON E WOODARD RD. COORDINATE EXACT LOCATION WITH THE VZW FCM PRIOR TO INSTALLATION.
- VZW GC TO STUB (1) 4" SCHEDULE 40 PVC CONDUIT WITH (3) 1-1/4" INNERDUCTS, EACH WITH PULLTAPE, INTO THE NEW HANDHOLE.
- VZW GC TO PLACE CONDUITS IN A 36" BELOW GRADE TRENCH AND EXTEND TO THE NEW FIBER DEMARC INSIDE THE VZW LEASE AREA. COORDINATE EXACT ROUTING WITH VZW FCM PRIOR TO INSTALLATION.
- VZW GC TO PROVIDE AND INSTALL DUDLIK ENCLOSURE, OR APPROVED, ON THE NEWLY INSTALLED H-FRAME. COORDINATE EXACT LOCATION AND SPECIFICATIONS WITH VZW FCM PRIOR TO PURCHASE AND INSTALLATION.
- VZW GC TO PROVIDE AND INSTALL -48V DC POWER, 19" RACK AND #6 COPPER GROUND IN THE ENCLOSURE FOR FUTURE FIBER.



R&W
ENGINEERING, INC.
Serving the Northwest Region
9515 S.W. Allen Blvd., Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3305
Fax: (503) 726-3308
E-mail: charlie@rweg.com
Project No.: 1382.025.001
Contact: VANESSA FUGATE

DRAWING INDEX

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T-1.0	OVERALL SITE PLAN
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A-3.0	PHOTOS
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A-6.0	PGE PADMOUNT SPEC.
A-7.0	644-3-PGE VAULT SPEC.
A-8.0	PGE DESIGN
P.G. 10	POWER EMAIL

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2	03/24/17	VAF	POWER DESIGN

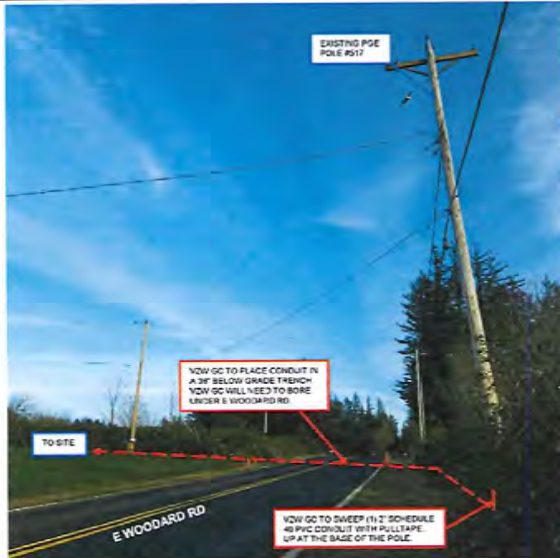
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NO.	DATE	BY	DESCRIPTION
1	04/04/17	VAF	GENERIC FIBER

SITE NAME
POR STINGER

SITE ADDRESS
29421 E WOODARD RD
TROUTDALE, OR 97060-8317

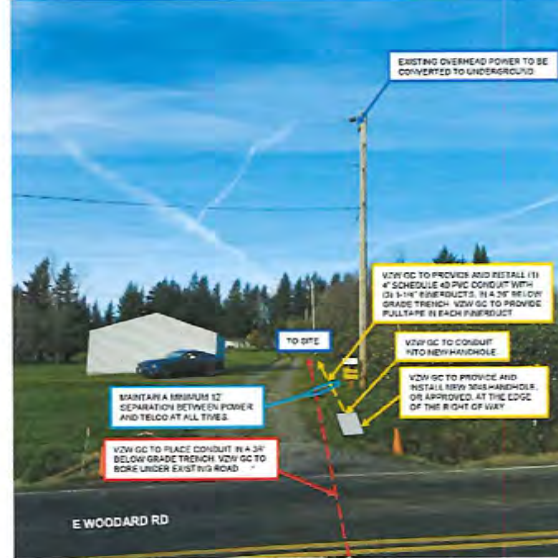
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OVERALL
SITE PLAN

SHEET NO.
A-1.0



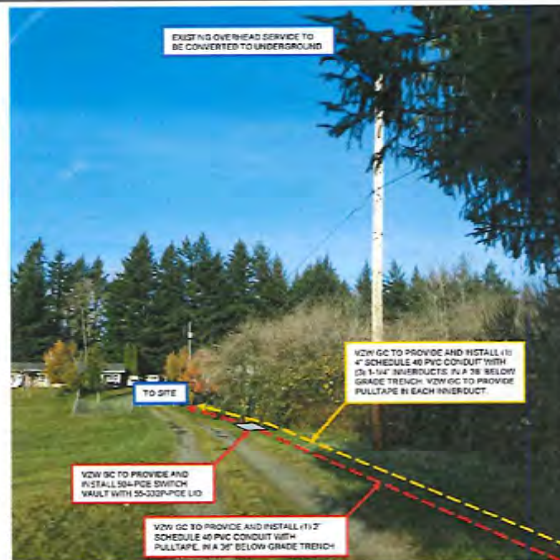
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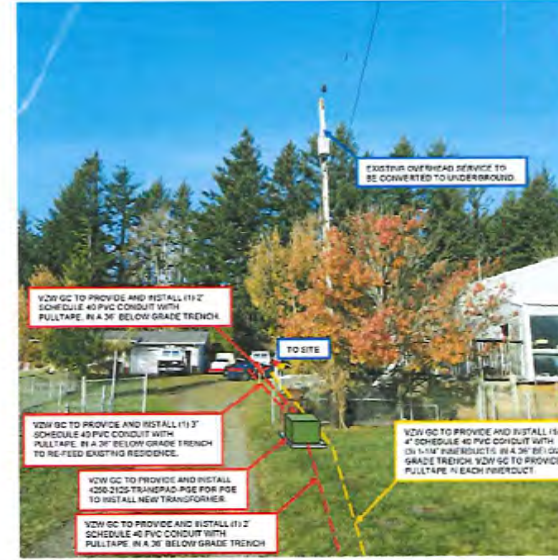
2 POWER/FIBER PHOTO 1

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SCALE: NTS



3 POWER/FIBER PHOTO 2

SCALE: NTS
SCALE: NTS



4 POWER/FIBER PHOTO 3

SCALE: NTS
SCALE: NTS



R&W
ENGINEERING, INC.
3615 SUN ALLEN BLVD., Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3325
Fax: (503) 726-3326
E-mail: blum@rweg.com
Project No.: 1382.025.001
Contact: VANESSA FUSATE

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A-7.0	544-3-PGE VAULT SPEC
A-8.0	PGE DESIGN
PG. 10	POWER EMAIL

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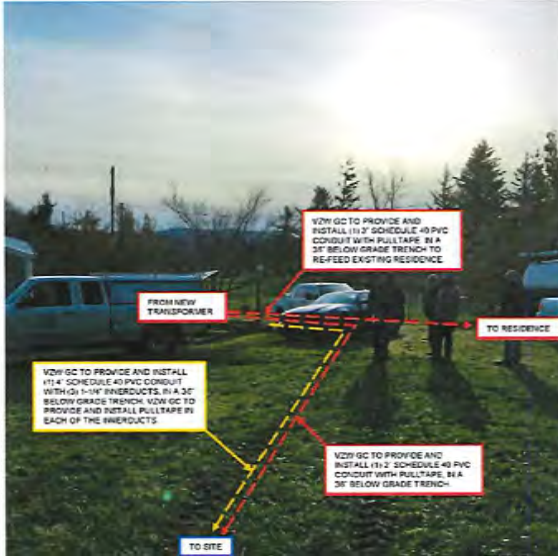
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POR STINGER

SITE ADDRESS
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TROUTDALE, OR 97060-8317

SHEET TITLE
PHOTOS

SHEET NO.
A-2.0



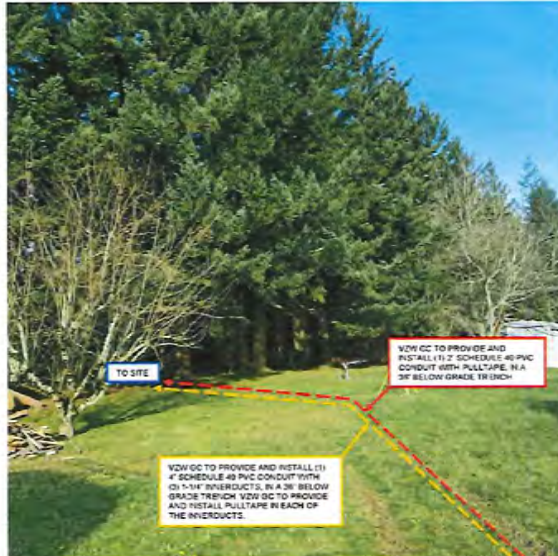
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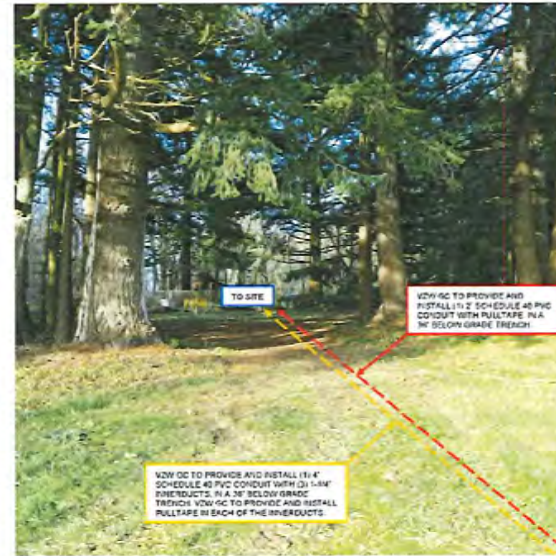
6 POWER PHOTO 2

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SCALE: NTS



7 POWER/FIBER PHOTO 5

SCALE: NTS
SCALE: NTS



8 POWER/FIBER PHOTO 6

SCALE: NTS
SCALE: NTS



R&W
ENGINEERING, INC.
3075 S.W. Allen Blvd., Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3325
Fax: (503) 726-3326
E-mail: info@rweg.com
Project No.: 1382.025.001
Contact: VANESSA FLUGATE

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POR STINGER

SITE ADDRESS
23421 E WOODWARD RD
TROUTDALE, OR 97060-8317

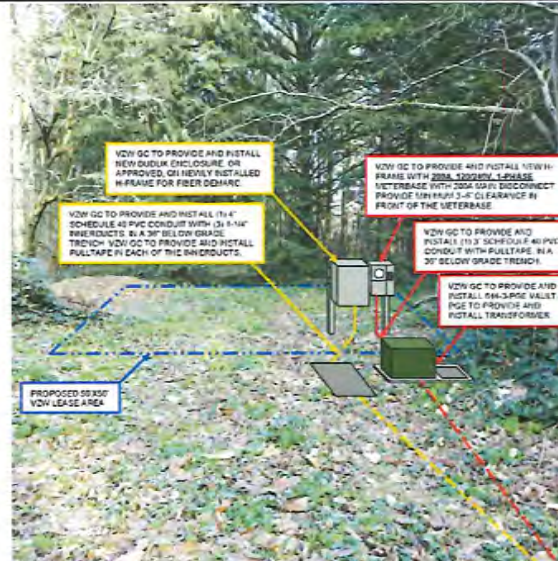
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PHOTOS

SHEET NO.
A-3.0



9 POWER/FIBER PHOTO 7

SCALE: NTS
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10 POWER/FIBER PHOTO 8

SCALE: NTS
SCALE: NTS



3615 S.W. 40th Blvd., Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3325
Fax: (503) 726-3326
E-mail: info@rwweng.com
Project No.: 1382.025.001
Contact: VANESSA PUGATE

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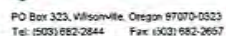
SHEET NO.

A-4.0

Single Phase Switch Vault
Single Phase Padmount Transformer Vault - 25 & 50 kVA
Three Phase Mini-Pak Transformer Vault



PGE L26100 1-5-12



504-PGE

File Name: 020UEE504FGE1

Issue Date: Revised 8-15-12

oldcastlepodcast.com/wilsonville

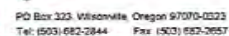
504-PGE
56 x 56 x 48

35.0

PLAN VIEW

Score: $\frac{1}{T} = \frac{1}{T-1}$

PGE L26100 1-5-12



PO Box 323, Wilsonville, Oregon 97070-0323
Tel: (503) 682-2844 Fax: (503) 682-2657

504-PGE

File Name: 020UEE504PGE2

Issue Date: Revised 8-15-12

oldcastleprecast.com/wilsonville

504-PGE
56 x 56 x 48

35.1

SCALE: NTS

SCALE: NTS



9015 S.W. 48th Blvd., Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3325
Fax: (503) 726-3328
E-mail: rharris@jnweng.com
Project No.: 1302.025.001
Contact: VANESSA FLUGATE

<u>SHEET</u>	<u>DESCRIPTION</u>
T-1.0	TITLE SHEET
A-1.0	OVERALL SITE PLAN
A-2.0	PHOTOS
A-3.0	PHOTOS
A-4.0	PHOTOS
A-5.0	504-PGE VAULT SPEC
A-6.0	PGE PADMOUNT SPEC
A-7.0	644-3-PGE VAULT SPEC
A-8.0	PGE DESIGN
PG. 10	POWER EMAIL

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R&W PROJECT NO.: 1382.025.001

WALK DATES

NO.	DATE	BY:	DESCRIPTION
1	12/07/16	VAF	LOCKDOWN
2	03/24/17	VAF	POWER DESIG

SUBMITTAL

NO.	DATE	BY:	DESCRIPTION
1	04/04/17	VAF	GENERIC FIB

SITE NAME

POR STINGER

SITE ADDRESS

29421 E. WOODARD RD
TROUTDALE, OR 97060-8317

SHEET TITLE

PHOTOS

SHEET NO.

A-5.0



R&W
ENGINEERING, INC.
3015 S.W. Allen Blvd., Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3325
Fax: (503) 726-3326
E-mail: info@rww.com
Project No.: 1382-025.001
Contact: VANESSA PUGLIE

DRAWING INDEX

SHEET	DESCRIPTION
T-1.0	TITLE SHEET
A-1.0	OVERALL SITE PLAN
A-2.0	PHOTOS
A-3.0	PHOTOS
A-4.0	PHOTOS
A-5.0	SDA-PGE VAULT SPEC
A-6.0	PGE PADMOUNT SPEC
A-7.0	844-3-PGE VAULT SPEC
A-8.0	PGE DESIGN
PG. 10	POWER EMAIL

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RAW PROJECT NO.: 1382-025.001

WALK DATES

NO.	DATE	BY	DESCRIPTION
1	12/07/16	VAF	LOCKDOWN
2	03/28/17	VAF	POWER DESIGN

SUBMITTAL

NO.	DATE	BY	DESCRIPTION
1	04/04/17	VAF	GENERIC FIBER

SITE NAME

POR STINGER

SITE ADDRESS

29421 E WOODARD RD
TROUTDALE, OR 97060-8317

SHEET TITLE

PHOTOS

SHEET NO.

A-6.0

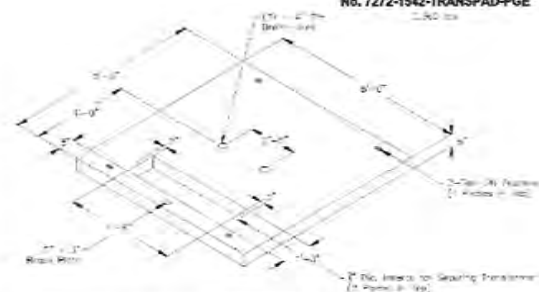
PADMOUNTS-PGE



TRANSFORMER PADMOUNT - SINGLE PHASE
25 - 75 kVA
No. 4250-2125-TRANSPAD-PGE
NTS



TRANSFORMER PADMOUNT - THREE PHASE
75 - 300 kVA
No. 7272-1542-TRANSPAD-PGE
NTS



TRANSFORMER PADMOUNT - THREE PHASE
500 - 1500 kVA
No. 9696-1554-TRANSPAD-PGE
NTS

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

PGE L28185 4-14-08



PO Box 323, Wilsonville, Oregon 97070-0323
Tel: (503) 662-2844 Fax: (503) 662-2857

PADMNTS.-PGE

File Name: 020UEPADSPGE

Issue Date: 2011

oldcastleprecast.com/wilsonville

PADMOUNTS-PGE

45.0

1

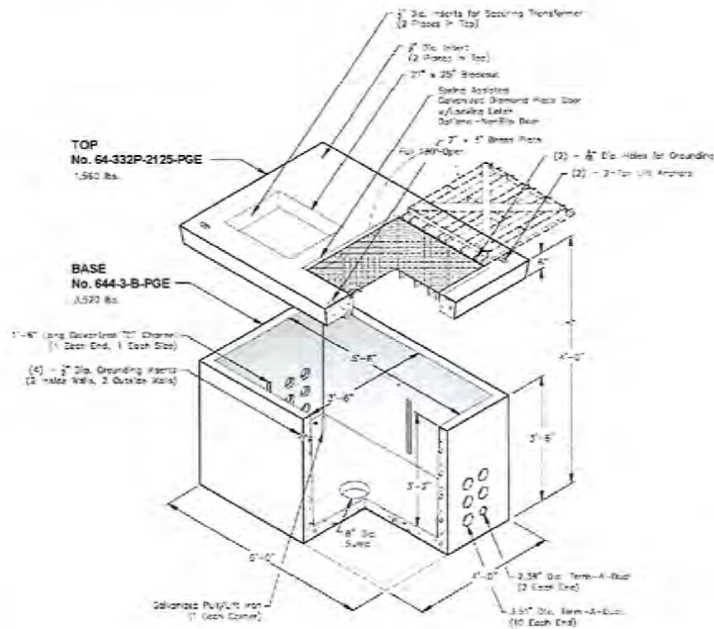
PGE PADMOUNT

SCALE: NTS

SCALE: NTS

644-3-PGE

Single Phase Padmount Transformer Vault w/Access - All Sizes
(Subdivision Design - Low Profile)



Scale: 3/8" = 1'-0"

PGE L28100 1-5-12



PO Box 323, Wilsonville, Oregon 97070-0323
Tel: (503) 682-2844 Fax: (503) 682-2657

644-3-PGE

File Name: G20UE644PGE31

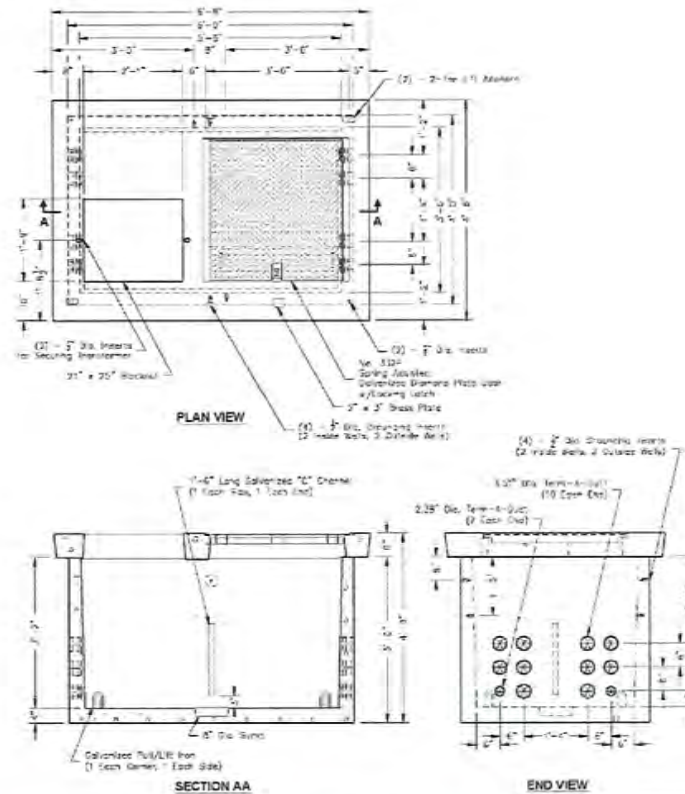
Issue Date: Revised 8-15-12

oldcastleprecast.com/wilsonville

644-3-PGE
48 x 72 x 48

37.0

644-3-PGE



Scale: 1/2" = 1'-0"

PGE L28100 1-5-12



PO Box 323, Wilsonville, Oregon 97070-0323
Tel: (503) 682-2844 Fax: (503) 682-2657

644-3-PGE

File Name: G20UE644PGE32

Issue Date: Revised 8-15-12

oldcastleprecast.com/wilsonville

644-3-PGE
48 x 72 x 48

37.1



5512 SW Alder Blvd., Suite 101
Beaverton, Oregon 97005
Phone: (503) 726-3325
Fax: (503) 726-3325
Email: Newman@rwe.com
Project No: 1382.025.001
Contact: VANESSA FUGITE

DRAWING INDEX

SHEET	DESCRIPTION
T-1.0	TITLE SHEET
A-1.0	OVERALL SITE PLAN
A-2.0	PHOTOS
A-3.0	PHOTOS
A-4.0	PHOTOS
A-5.0	504-PGE VAULT SPEC
A-6.0	PGE PADMOUNT SPEC
A-7.0	644-3-PGE VAULT SPEC
A-8.0	PGE DESIGN
PG. 10	POWER EMAIL

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R&W PROJECT NO.: 1382.025.001

WALK DATES

NO.	DATE	BY	DESCRIPTION
1	12/07/16	VAF	LOCKDOWN
2	03/24/17	VAF	POWER DESIGN

SUBMITTAL

NO.	DATE	BY	DESCRIPTION
1	04/04/17	VAF	GENERIC FIBER

SITE NAME

POR STINGER

SITE ADDRESS

28421 E WOODWARD RD
TROUTDALE, OR 97060-8317

SHEET TITLE

PHOTOS

SHEET NO.

A-7.0

SCALE: NTS

SCALE: NTS

Vanessa Fugate

From: Sydney Cox <Sydney.Cox@pgn.com>
Sent: Friday, March 24, 2017 1:22 PM
To: Vanessa Fugate
Cc: Jason Fallau; Heidi Speer; Sydney Cox
Subject: RE: POR Stinger Generic Fiber UCR - FOR REVIEW
Attachments: M2221580.pdf; 504 Vault.pdf; 644-3-PGE Vault.pdf

Good afternoon Vanessa. Please see the attached PGE Preliminary Electrical Design for the overhead to underground conversion and the new service to the cell site. The existing customer meter will need to be replaced with a meter that will accept an underground feed. Once I have received the okay to proceed, I will finalize the design and make the necessary changes to the exact locations of conduits into the micro-pad and vaults. Please let me know if you have any questions.

Thank you,

Sydney Cox
Service & Design Project Manager
Portland General Electric
1705 NE. Burnside St.
Gresham, OR. 97030
| 📞 503.669-5226 | ✉ sydney.cox@pgn.com

From: Vanessa Fugate [mailto:vfugate@rweng.com]
Sent: Tuesday, March 21, 2017 6:35 PM
To: Sydney Cox
Cc: Jason Fallau; Heidi Speer
Subject: RE: POR Stinger Generic Fiber UCR - FOR REVIEW

Please take care when opening links, attachments or responding to this email as it originated outside of PGE.

Good Evening Sydney,

Per your request, attached is the revised UCR. Please review and let me know if any further changes are required.

Jason, please review and let me know if anything needs changed for Verizon.

Thanks!

Vanessa Fugate
R&W Engineering, Inc.
9615 SW Allen Blvd, Suite 107
Beaverton, OR 97005

(503) 726-3325 (direct)
(503) 747-8016 (mobile)
(503) 292-6000 (mainline)

(503) 726-3326 (fax)

Visit our NEW website: www.rweng.com

Please consider the environment before printing this email

From: Sydney Cox [<mailto:Sydney.Cox@pgn.com>]
Sent: Thursday, March 16, 2017 8:46 AM
To: Vanessa Fugate <vfugate@rweng.com>
Cc: Sydney Cox <Sydney.Cox@pgn.com>
Subject: RE: POR Stinger Generic Fiber UCR - FOR REVIEW

Good morning Vanessa. Attached is the specs for the 504 Vault. This will now be a switching vault instead of a transformer vault. The lid that will need to be purchased is 55-332P-PGE. The location of this switch vault needs to be a minimum of 30 feet away from all transformers for safety purposes. You can either call for a 4x4 gravel pad base for a mini pad transformer to feed the existing house or choose to install a 4250-2125-Transpad-PGE that will accommodate a larger pad mount transformer if one is ever needed. The transformer needs to be a minimum of 8-feet away from a combustible structure and within 15-feet of a drivable surface. Please let me know if you have any questions.

Thank you,

Sydney Cox
Service & Design Project Manager
Portland General Electric
1705 NE. Burnside St.
Gresham, OR. 97030
|  503.669-5226 |  sydney.cox@pgn.com

From: Vanessa Fugate [<mailto:vfugate@rweng.com>]
Sent: Monday, March 06, 2017 2:20 PM
To: Sydney Cox; Jason Fallau
Cc: Shawn VanGiesen; Roy Lorete; Greg Robertson
Subject: POR Stinger Generic Fiber UCR - FOR REVIEW

Please take care when opening links, attachments or responding to this email as it originated outside of PGE.

Good Afternoon,

Attached is the UCR for VZW POR Stinger. Please review and let me know if any changes are required.

Thank you,
Vanessa Fugate
R&W Engineering, Inc.
9615 SW Allen Blvd, Suite 107
Beaverton, OR 97005

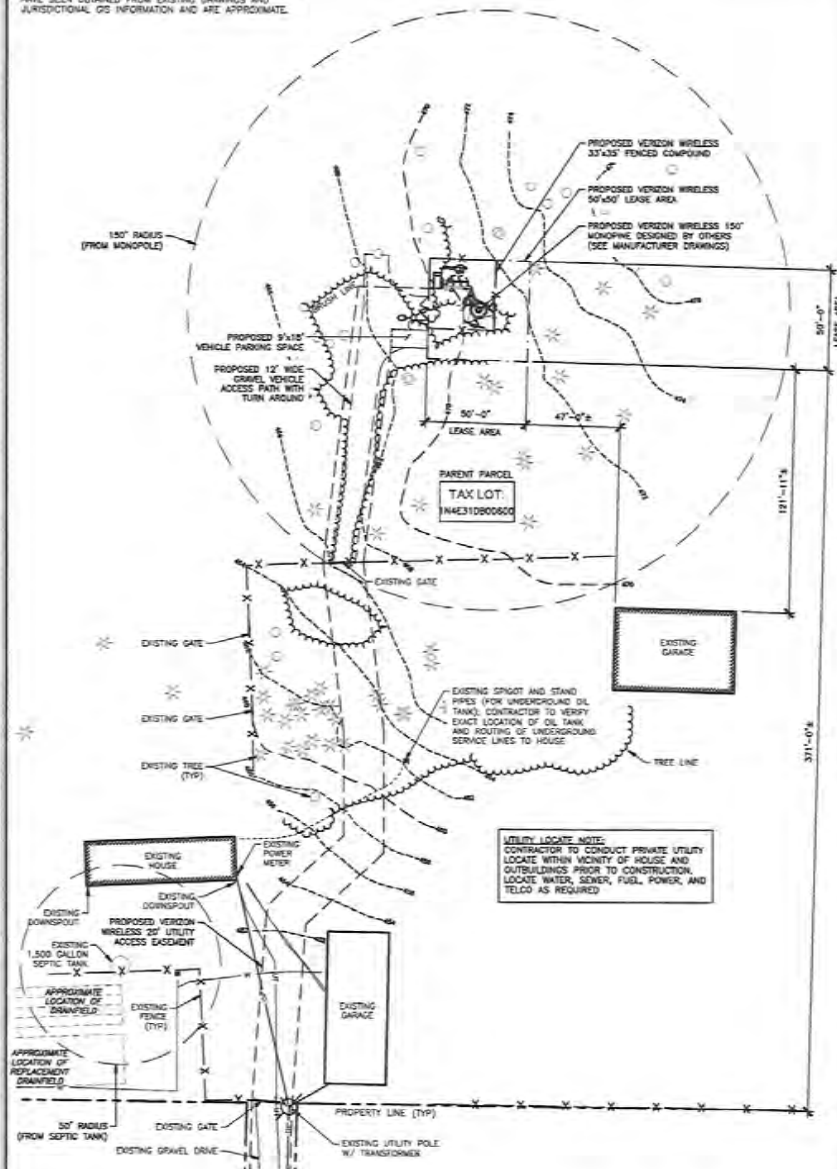
(503) 726-3325 (direct)
(503) 747-8016 (mobile)
(503) 292-6000 (mainline)

(503) 726-3326 (fax)

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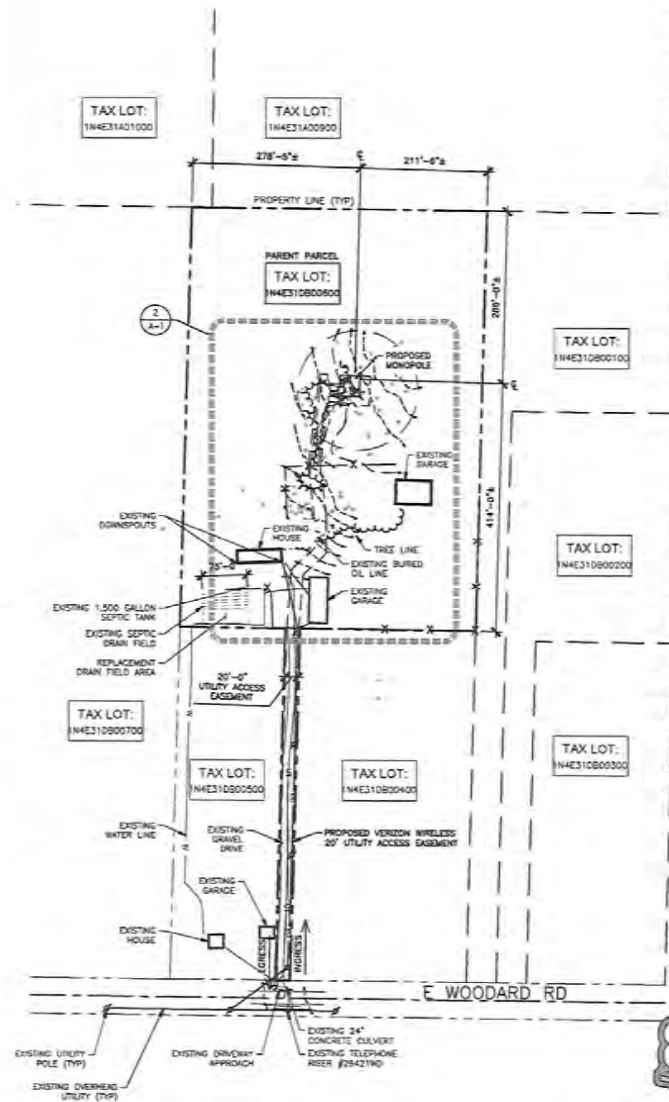
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NOTE:
THIS IS NOT A SURVEY. ALL INFORMATION AND TRUE NORTH
HAVE BEEN OBTAINED FROM EXISTING DRAWINGS AND
JURISDICTIONAL OS INFORMATION AND ARE APPROXIMATE.



24"=0' SCALE: 1" = 30'-0"
11"=17" SCALE: 1" = 60'-0"

ENLARGED SITE PLAN 2



24"=0' SCALE: 1" = 30'-0"
11"=17" SCALE: 1" = 60'-0"

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

SITE PLAN 1

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EXP 12/31/19

ZONING		
5	11/15/19	ADD MONOPINE & LANDSCAPE
4	05/24/19	ADD L-810 LIGHTING
3	02/27/19	ISSUED FOR REVIEW
2	05/26/18	ISSUED FOR REVIEW
1	10/12/17	ISSUED FOR REVIEW
0	02/17/17	ISSUED FOR PERMIT
4	12/19/16	ISSUED FOR REVIEW

No. Date Revision

Client:



Implementation Team:



A/E Team:
MORRISON HERSFIELD
200 STEWART ST. SUITE 200
SEATTLE, WA 98101
Tel: 206.268.1370
www.morrisonhershfield.com

Project Info:
POR STINGER
29421 E WOODARD RD
TROUTDALE, OR 97060

Drawing Title:

SITE PLAN

Project Number: 190001800	Start Date: 12/13/16
Draftsman: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No.	Sheet No.
5	A-1