WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Columbia County Petitioner, vs. Port of Columbia (rail owner), CWW LLC (railroad operator) Respondents.	DOCKET NO. TR- PETITION TO CONSTRUCT A HIGHWAY-RAIL GRADE CROSSING USDOT CROSSING NO.: TBD

The Petitioner asks the Washington Utilities and Transportation Commission (UTC) to approve construction of a highway-rail grade crossing as described in this petition.

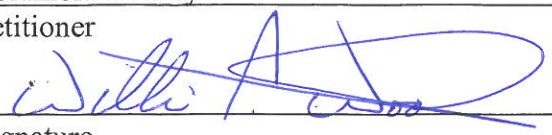
Prior to submitting this petition to the UTC, State Environmental Protection Act (SEPA) requirements must be met. Washington Administrative Code (WAC) 197-11-865 (2) requires:

> **All actions of the utilities and transportation commission under statutes administered as of December 12, 1975, are exempted, except the following:**
>
> **(2) Authorization of the openings or closing of any highway/railroad grade crossing, or the direction of physical connection of the line of one railroad with that of another;**

Please attach sufficient documentation to demonstrate that the SEPA requirement has been fulfilled. For additional information on SEPA requirements contact the Department of Ecology.

Section 1 – Petitioner's Information

Columbia County
Petitioner



Signature

415 North Guernsey Avenue
Street Address

Dayton, Washington 99328
City, State and Zip Code

P.O. Box 5, Dayton, Washington 99328
Mailing Address, if different than the street address

Andrew Woods
Contact Person Name

509-382-2534 | Andrew_Woods@co.columbia.wa.us
Contact Phone Number and E-mail Address

Section 2 – Respondent's Information

Port of Columbia
Respondent #1

1 Port Way
Street Address

Dayton, Washington 99328
City, State and Zip Code

Mailing Address, if different than the street address

Jennie Dickinson
Contact Person Name

509-382-2577 | jennie@portofcolumbia.org
Contact Phone Number and E-mail Address

Section 2 – Respondent's Information (cont.)

CWW LLC
Respondent #2

425 SE 3rd Avenue, Suite #206
Street Address

Portland, Oregon 97214
City, State and Zip Code

Mailing Address, if different than the street address

Paul Didelius
Contact Person Name

971-888-6011 | PD@frontierrail.com
Contact Phone Number and E-mail Address

Section 3 – Proposed Crossing Location

1. Existing highway/roadway Rose Gulch Road

2. Existing railroad CWW LLC

3. GPS location 46° 17' 17.32" N 118° 02' 38.52" W

4. Railroad mile post (nearest tenth) 65.1

5. City Dayton County Columbia

Section 4 – Current Highway Traffic Information

1. Name of roadway/highway Rose Gulch Road

2. Roadway classification Rural Minor Collector

3. Road authority Columbia County

4. Average annual daily traffic (AADT) 175

5. Number of lanes 2

6. Roadway speed 50

7. Is the road part of an established truck route? Yes X No _____

8. If so, trucks are what percent of total daily traffic? 40%

9. Is the road part of an established school bus route? Yes _____ No X

10. If so, how many school buses travel over the crossing each day? 0

11. Describe any changes to the information in 1 through 9, above, expected within ten years:
None

Section 5 – Railroad Information

1. Railroad owner/operator: Port of Columbia / CWW LLC

2. Type of railroad at crossing ■ Common Carrier □ Logging □ Industrial

□ Passenger □ Excursion

3. Type of tracks at crossing ■ Main Line □ Siding or Spur

4. Number of tracks at crossing 1

5. Average daily train traffic, freight 1 Train Monday through Friday

Authorized freight train speed 10 Operated freight train speed 10

6. Average daily train traffic, passenger N/A

Authorized passenger train speed _____ Operated passenger train speed _____

7. Will the proposed crossing eliminate the need for one or more existing crossings?
Yes X No ____

8. If so, state the distance and direction from the proposed crossing.
400 feet east

9. Does the petitioner propose to close any existing crossings?
Yes X No ____

Section 6 – Temporary Crossing

1. Is the crossing proposed to be temporary? Yes ____ No X

2. If so, describe the purpose of the crossing and the estimated time it will be needed

_____

_____

3. Will the petitioner remove the crossing at completion of the activity requiring the temporary crossing? Yes ____ No ____

Approximate date of removal _____

Section 7 – Alternatives to the Proposal

1. Does a safer location for a crossing exist within a reasonable distance of the proposed location?
Yes ____ No X

2. If a safer location exists, explain why the crossing should not be located at that site.

_____

_____

_____

3. Are there any hillsides, embankments, buildings, trees, railroad loading platforms or other barriers in the vicinity which may obstruct a motorist's view of the crossing?
Yes X No ____

4. If a barrier exists, describe:
- ♦ Whether petitioner can relocate the crossing to avoid the obstruction and if not, why not.
- ♦ How the barrier can be removed.
- ♦ How the petitioner or another party can mitigate the hazard caused by the barrier.

There are shrubs near the proposed crossing that will be removed prior to completion of the new crossing.

_____

5. Is it feasible to construct an over-crossing or under-crossing at the proposed location as an alternative to an at-grade crossing?

Yes ____ No X

6. If an over-crossing or under-crossing is not feasible, explain why.

An over- or under-crossing would add considerable cost to the project. Funds are not available for such an undertaking. Also, given the close proximity of U.S. Highway 12 to the railroad, an over- or under-crossing may not even be possible without a major realignment to the highway or railroad.

7. Does the railway line, at any point in the vicinity of the proposed crossing, pass over a fill area or trestle or through a cut where it is feasible to construct an over-crossing or an under-crossing, even though it may be necessary to relocate a portion of the roadway to reach that point?

Yes ____ No X

8. If such a location exists, state:

- ♦ The distance and direction from the proposed crossing.
- ♦ The approximate cost of construction.
- ♦ Any reasons that exist to prevent locating the crossing at this site.

9. Is there an existing public or private crossing in the vicinity of the proposed crossing?

Yes X No ____

10. If a crossing exists, state:
- ♦ The distance and direction from the proposed crossing.
- ♦ Whether it is feasible to divert traffic from the proposed to the existing crossing.

This is a reconstruction of an existing crossing at a new location. The existing crossing is located approximately 400 feet east of the proposed crossing, as shown on the attached preliminary drawings. The basic need for this project is to replace the Vernon Smith Bridge that crosses the Touchet River. A second objective is to realign Road Gulch Road, removing the unnecessary horizontal curves between the new bridge and U.S. Highway 12 and installing a new intersection with U.S. Highway 12.

Section 8 – Sight Distance

1. Complete the following table, describing the sight distance for motorists when approaching the tracks from either direction.

a. Approaching the crossing from south, the current approach provides an unobstructed view as follows: (North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	N/A
Right	200	N/A
Right	100	400 feet
Right	50	400 feet
Right	25	400 feet
Left	300	N/A
Left	200	N/A
Left	100	Over 1 mile
Left	50	Over 1 mile
Left	25	Over 1 mile

b. Approaching the crossing from north, the current approach provides an unobstructed view as follows: (Opposite direction-North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	Over 1 mile
Right	200	350 feet
Right	100	700 feet
Right	50	700 feet
Right	25	Over 1 mile
Left	300	900 feet
Left	200	900 feet
Left	100	900 feet

Left	50	900 feet
Left	25	900 feet

2. Will the new crossing provide a level approach measuring 25 feet from the center of the railway on both approaches to the crossing?

Yes X No ____

3. If not, state in feet the length of level grade from the center of the railway on both approaches to the crossing. _____

4. Will the new crossing provide an approach grade of not more than five percent prior to the level grade?

Yes X No ____

5. If not, state the percentage of grade prior to the level grade and explain why the grade exceeds five percent.

_____

_____

_____

Section 9 – Illustration of Proposed Crossing Configuration

Attach a detailed diagram, drawing, map or other illustration showing the following:

- ♦ The vicinity of the proposed crossing.
- ♦ Layout of the railway and highway 500 feet adjacent to the crossing in all directions.
- ♦ Percent of grade.
- ♦ Obstructions of view as described in Section 7 or identified in Section 8.
- ♦ Traffic control layout showing the location of the existing and proposed signage.

Section 10 – Sidewalks

1. Provide the following information, if applicable:
   a. Provide a description of the type of sidewalks proposed.
   b. Describe who will maintain the sidewalks.
   c. Attach a proposed diagram or design of the crossing including the sidewalks.

No sidewalks are planned.

_____

Section 11 – Proposed Warning Signals or Devices

1. Explain in detail the number and type of automatic signals or other warning devices planned at the proposed crossing, including a cost estimate for each. If requesting preemption, include the type of train detection circuitry, sequencing and advance preemption time.

Passive warning devices will include MUTCD-compliant crossbuck (R15-1) assemblies with yield signs (R1-2), emergency notification system signs (I-13), and retroreflective strips on the sign supports on both approaches to the crossing. An advance warning sign (W10-1) will be posted on Rose Gulch Road, and W10-3 signs will be posted on U.S. Highway 12. Grade crossing pavement markings will be added on both approaches to the crossing.

2. Provide an estimate for maintaining the signals for 12 months. _____

3. Is the petitioner prepared to pay to the respondent railroad company its share of installing the warning devices as provided by law?

Yes ____ No ____

Section 12 – Additional Information

Provide any additional information supporting the proposal, including project-specific information such as the public benefits that would be derived from constructing a new crossing as proposed.

This is a reconstruction of an existing crossing at a new location, and is part of a federally-funded project to replace the Vernon Smith Bridge that crosses the Touchet River. The project will also realign Rose Gulch Road, removing the unnecessary horizontal curves between the new bridge and U.S. Highway 12 and installing a new intersection with U.S. Highway 12. The completed project will enhance public safety and improve access over the Touchet River to U.S. Highway 12. The new bridge will meet current safety standards, realignment of Rose Gulch Road will provide safe route of travel and sight distances. The new railway crossing will be constructed to meet current design and safety standards of the MUTCD and railroad. The reconstructed Rose Gulch Road will be asphalt instead of gravel, and the new crossing surface will also be asphalt. Once the new crossing is constructed, the existing crossing (USDOT 097009F) will be closed and the roadway will be removed.

Section 13 – Waiver of Hearing by Respondent

Waiver of Hearing

The undersigned represents the Respondent in the petition to construct a highway-railroad grade crossing.

USDOT Crossing No.: _____

We have investigated the conditions at the proposed crossing site. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree that a crossing be installed and consent to a decision by the commission without a hearing.

Dated at Dayton, Washington, on the 10th day of April, 2018.

Port of Columbia - Jennie Dickinson
Printed name of Respondent

Jennie Dickinson
Signature of Respondent's Representative

Manager
Title

Port of Columbia
Name of Company

509-382-2577 | jennie@portofcolumbia.org
Phone number and e-mail address

1 Port Way

Dayton, Washington 99328
Mailing address

Waiver of Hearing by Respondent

Waiver of Hearing

The undersigned represents the Respondent in the petition to construct a highway-railroad grade crossing.

USDOT Crossing No.: _____

We have investigated the conditions at the proposed crossing site. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree that a crossing be installed and consent to a decision by the commission without a hearing.

Dated at Walla Walla, Washington, on the 19th day of April, 20 18.

CWW LLC - Paul Didelius
Printed name of Respondent

Signature of Respondent's Representative

Title

CWW LLC
Name of Company

971-888-6011 | PD@frontierrail.com
Phone number and e-mail address

425 SE 3rd Avenue, Suite #206

Portland, Oregon 97214
Mailing address

COLUMBIA COUNTY PUBLIC WORKS

Andrew Woods, P.E. County Engineer / Public Works Director
County Road • Risk Management • GIS • Solid Waste • Fleet Management

DETERMINATION OF NON-SIGNIFICANCE

Description of Proposal:	Replacement of the Vernon Smith Bridge
Proponent:	Columbia County Public Works Department
Location of Proposal:	Where Rose Gulch Road Crosses the Touchet River
Lead Agency:	Columbia County Public Works Department

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

☐ There is no comment period for the DNS

☐ This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on this DNS.

☒ This DNS is issued under WAC 197-11-340(2). The lead agency will not act on this proposal for 14 days from the date below. Comments must be submitted by February 2, 2018.

Responsible Official:	William Andrew Woods, P.E.
Position Title:	Columbia County Engineer/Public Works Director
Address:	415 N. Guernsey Ave. or PO Box 5 Dayton, WA 99328

William A. Woods — Signature

1/18/18 — Date

SEPA ENVIRONMENTAL CHECKLIST

Columbia County Public Works Department
PO Box 5, Dayton, Washington 99328
(509) 382-2534

WAC 197-11-960 Environmental checklist.

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

For nonproject proposals complete this checklist and the supplemental sheet for nonproject actions (Part D). The lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal.

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Vernon Smith Bridge Replacement

2. Name of applicant:

Columbia County Public Works Department
Attn: Andrew Woods, P.E., Public Works Director/County Engineer

3. Address and phone number of applicant and contact person:

Applicant:	**415 N. Guernsey Ave / P.O. Box 5**
	Dayton, Washington 99328
Phone:	**(509) 382-2534**
Email:	**andrew_woods@co.columbia.wa.us**
Contact Person:	**Eric Zitterkopf, Project Manager**
	Anderson Perry & Associates, Inc. (AP)
	214 E. Birch Street
	Walla Walla, Washington 99362
Phone:	**(509) 529-9260**
Email:	**ezitterkopf@andersonperry.com**

4. Date checklist prepared:

January 10, 2018

5. Agency requesting checklist:

Columbia County Public Works Department

6. Proposed timing or schedule (including phasing, if applicable):

The project construction is anticipated to occur between June and November of 2019.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Columbia County has retained AP to complete the engineering and environmental permitting services for the Vernon Smith Bridge Replacement project. The following planning documents and information have been prepared or will be prepared in relation to this proposal:

- **Temporary Erosion and Sediment Control Plan**
- **Critical Area Report (if required)**
- **Geotechnical Report**
- **Cultural Resources Inventory and Historic Properties Inventory**
- **Biological Assessment**
- **Joint Aquatic Resources Permit Application**
- **Hydraulic Project Approval**
- **Stormwater Pollution Prevention Plan (SWPPP)**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

Permit	Approving Agency
County/City Permits	
SEPA Checklist	Columbia County
Critical Area Report	Columbia County
Shoreline Permit	Columbia County
State Permits/Consultation	
Cultural Resources Inventory Concurrence	Department of Archaeology and Historic Preservation (DAHP)
Hydraulic Project Approval	Washington Department of Fish and Wildlife (WDFW)
401 Water Quality Certification	Ecology
Construction Stormwater General Permit	Ecology
Federal Permits/Consultation	
Section 106 Consultation	FHWA
Section 7 ESA Consultation	USACE (U.S. Fish and Wildlife Service and National Marine Fisheries Service)
404 Removal Fill Permit	USACE

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The existing Vernon Smith Bridge at the Rose Gulch Road crossing of the Touchet River will be replaced and the road realigned.

The replacement bridge will be relocated approximately 250 feet upstream of the existing bridge and will be a 135-foot single-span precast concrete girder bridge with a curb-to-curb width of 32 feet that will accommodate two vehicular travel lanes. The bridge superstructure will be supported on cast-in-place concrete abutments founded on spread footing foundations. The low chord of the bridge will be set a minimum of 3 feet above the 100-year flood event.

Approximately 800 linear feet of new approach roadway will be constructed on each end of the bridge to match the new bridge profile and tie into the existing roadway. The existing bridge superstructure and center pier will be removed along with portions of the existing roadway that will be abandoned. See attached preliminary plans.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Vernon Smith Bridge Replacement project is located where Rose Gulch Road crosses the Touchet River, approximately 4 miles southwest of the City of Dayton, in Columbia County, Washington, Township 9 North, Range 38 East, Section 3.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): (Flat), rolling, hilly, steep slopes, mountainous, other.....

The project area is generally flat. The existing bridge and road are surfaced with gravel, and grades are less than 5 percent.

b. What is the steepest slope on the site (approximate percent slope)?

The project area is generally flat. The banks of the Touchet River represent the steepest slopes on site at approximately 100 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The Natural Resources Conservation Service (NRCS) Web Soil Survey maps show soils within the project area to be silt loams and cobbly silt loams. The soils are rated as Prime Farmland and Farmland of Statewide Importance. Potential agricultural land is present in the project area; however, the realignment of the bridge and road is not anticipated to have a significant impact on agricultural lands because the existing bridge and road area will be restored to natural conditions to compensate for the loss of potential agricultural lands.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None known.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

It is anticipated the total fill and excavation for this project will be as follows:

NEW BRIDGE CONSTRUCTION
Temporary Fill: Ecology blocks and sandbags (40 cubic yards [CY]) and gravels (145 CY) in the Touchet River. This material will be placed to isolate the work area from the river.
Permanent Fill: Backfill and riprap (145 CY). Granular fill and riprap will be placed along the south bank toe for armoring the new bridge abutment.

NEW ROAD CONSTRUCTION
The new roadway construction will consist of clearing and grubbing existing vegetation along the proposed route, a total of approximately 135,000 square feet (SF). Approximately 35,000 SF of this removal will be riparian vegetation (consisting of shrubby and herbaceous vegetation and a few larger willows, cottonwoods, and alders) in areas that are not existing farmland. Approximately five to seven large trees will be removed for the new roadway and bridge construction. Suitable fill material will be placed to construct the road bed to tie into the new bridge elevation. The new roadway and bridge will be surfaced with asphalt (60,000 SF), while driveway approaches will be surfaced with gravel (6,500 SF).

Approximately 145 CY of clean road fill material sourced from an approved off-site location will be placed in the wetland shown on Figure A during construction of the new roadway.

EXISTING BRIDGE REMOVAL
The existing Vernon Smith Bridge will be demolished and the materials removed from the waterway and project area (70 CY). The refuse materials will be disposed of in an approved upland location.

EXISTING ROADWAY REMOVAL
Where possible, the existing roadway will be removed, although some of the portions will be retained to tie into existing driveways. Approximately 36,000 SF of existing gravel roadway will be removed and graded to match the surrounding landscape, either the adjacent agricultural fields or the riparian area.

All fill material will be obtained from an approved source by the contractor, and excess material will be disposed of at an approved location.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No long-term erosion is anticipated as a result of the project. Some minor, short-term erosion during construction may occur in cleared areas as well as impacts to existing slopes from wind and water; however, the incorporation of erosion control measures will significantly reduce or eliminate the potential for construction-related erosion. The project will follow standard mitigation sequencing by avoiding, reducing, and mitigating for any erosion impacts. Best Management Practices (BMPs) will be used to ensure that the project design requirements are met and that erosion is minimized.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 65,500 SF of new impervious surface will be created as a result of constructing the new bridge and approach roadways. Approximately 36,000 SF of existing impervious surface will be removed when the old bridge and roadways are removed.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, ifany:

BMPs, consistent with the Stormwater Management Manual for Eastern Washington, will be used to minimize the risk of erosion. The County will obtain a Construction Stormwater General Permit from Ecology and will require the contractor to prepare and follow a SWPPP. Once construction is completed within the project area, any disturbed areas would be regraded, resurfaced, and restored using a County-approved seed mixture and mulch to protect the seeds and stabilize the soil. During construction, BMPs will be used to the extent needed to control erosion. These practices may include, but are not limited to, using silt fencing, wattles, and hay bales to slow and/or filter runoff, and sealing the exposed ground surface by rolling with a smooth drum compactor.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction, emissions will be limited to dust from the construction equipment and mobilization of equipment on and off site. Construction equipment, vehicles, and construction workers' personal vehicles will generate minor amounts of short-term, localized carbon monoxide and particulate emissions. If necessary, dust abatement, including watering, will be implemented to control dust.

There will be no permanent impacts to air quality since the project does not include any new emission sources.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of emissions or odor have been identified that would affect the proposed project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The Vernon Smith Bridge crosses the Touchet River, which is a perennial, 55-mile long tributary of the Walla Walla River.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

This project will require work within the Touchet River. The new bridge will be constructed and the existing bridge demolished, which will require placing temporary and permanent fill in the Touchet River. This includes the placement of ecology blocks and sandbags to isolate the work area. The existing bridge center pier will be excavated and disposed of at an approved location. After the removal of the existing bridge is complete, the temporary ecology blocks and sandbags fill will be removed from the Touchet River.

The new bridge abutments will be placed below ordinary high water elevation in the Touchet River. See attached preliminary plans.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

The amount of permanent fill material placed in Wetland 1 (as shown on Figure A) is anticipated to be 145 CY of clean road fill material sourced from an approved off-site location. It will be placed in 990 SF of wetland area during the construction of the new roadway. To compensate for this, a 3,300 SF area of wetland habitat will be created on the site.

The amount of permanent removal from the Touchet River will be 70 CY when the existing Vernon Smith Bridge is demolished and materials are removed from the waterway.

The amount of temporary fill in the Touchet River includes 40 CY of ecology blocks and sandbags, and 145 CY of gravel. The source of this material will be from a location approved by the engineer.

The amount of permanent fill placed in the Touchet River includes 145 CY of backfill and riprap. Granular fill and riprap will be placed along the south bank toe for the new bridge abutment. The materials will be acquired from an engineer-approved source.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

The proposed project will not require any permanent surface water withdrawals or diversions. During construction, surface water from the Touchet River will be temporarily diverted from work areas.

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

The Floodplain Map (Figure B) indicates that the project area lies within a designated 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged into the ground from septic tanks or other sources.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The only permanent runoff from this project would be stormwater runoff from the site's impervious surfaces. Storm drainage measures will be constructed to collect and dispose of runoff from the new impervious surface areas. Catch basins and drainage swales will be utilized to dispose of runoff from the bridge. Runoff from the approach roadway will sheet flow off the roadway and into the gravel shoulders, where it can percolate into the ground. It is anticipated that all stormwater will be handled by infiltration, and no direct release of stormwater into the river will occur.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Waste materials are not expected to enter ground or surface waters. Waste material is not anticipated to be stored within the project area. Release of waste material could potentially occur from accidental fuel leaks or spills during construction.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Drainage patterns may be impacted from removing the existing bridge and roadway, and constructing a new bridge and roadway in a different location. Area wide drainage patterns are anticipated to remain the same.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

Standard BMPs will include temporary sediment and erosion control measures such as berms, wattles, straw bale check dams, straw mulching, and/or plastic coverings.

4. Plants

a. Check the types of vegetation found on the site:

_x_ Deciduous tree: Alder, maple, aspen, other

_x_ Evergreen tree: Fir, cedar, pine, other

_x_ Shrubs

_x_ Grass

___ Pasture

_x_ Crop or grain

___ Orchards, vineyards or other permanent crops

___ Wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, other

___ Water plants: Water lily, eelgrass, milfoil, other

___ Other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Vegetation will be left intact to the maximum extent practicable.

To remove the existing bridge and facilitate access to the center pier work area from the southern riverbank, approximately 800 SF of shrubby and herbaceous riparian vegetation will be cleared but large trees will not. The new roadway construction will consist of clearing and grubbing existing vegetation along the proposed route, a total of approximately 135,000 SF. Approximately 35,000 SF of this removal will be riparian vegetation (consisting of shrubby and herbaceous vegetation and a few larger willows, cottonwoods, and alders) in areas that are not existing farmland. Approximately five to seven large trees will be removed for the new roadway and bridge construction.

c. List threatened and endangered species known to be on or near the site.

No threatened or endangered plant species are known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Following construction, areas of bare soil will be seeded or covered in riprap to prevent erosion and restore the vegetative cover on the site.

e. List all noxious weeds and invasive species known to be on or near the site.

No noxious weeds or invasive species are known to be on or near the site.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: Hawk, heron, eagle, songbirds, other:

Mammals: Deer, bear, elk, beaver, other:

Fish: Bass, salmon, trout, herring, shellfish, other:

b. List any threatened and endangered species known to be on or near the site.

Eight federally-protected species (five salmonids, yellow-billed cuckoo, Spalding's catchfly, and Canada lynx) are known to occur in Columbia County; however, only Middle Columbia River steelhead, Columbia River bull trout, and yellow-billed cuckoo could occupy the action area. The project area is designated critical habitat for steelhead and bull trout, but is not within the proposed critical habitat for yellow-billed cuckoo. Of the three species, only steelhead and bull trout are likely to be adversely affected.

Steelhead are likely to be adversely affected. The project area is not a core spawning or rearing area for steelhead; although, hatchery steelhead do spawn opportunistically in the reach between Waitsburg and Dayton. This area's primary function is as an adult and juvenile migration corridor and juvenile overwintering rearing area.

Bull trout are likely to be adversely affected. According to StreamNet, bull trout may be present in the Touchet River. Adults may use the action area as a pre-spawning migration corridor between January and May and as a post-spawning migration route between September and December, and juveniles may use it year-round for rearing when water temperatures and flows are suitable. The action area is not likely to be used for spawning.

Yellow-billed cuckoo will not be affected. The project area is not suitable habitat for breeding, and because tree coverage is patchy and frequently disturbed, it is not considered prime habitat.

The WDFW Priority Habitats and Species website identifies records of state and federally listed species known to occur in the Touchet River:

- **Steelhead**
- **Bull Trout**
- **Rainbow Trout – Occur and migrate through the project area. Are not a federally listed species. Are not a state listed species of concern.**
- **Spring Chinook – Use the project area as a breeding area. Are not a federally listed species. Are not a state listed species of concern.**
- **Summer Steelhead – Use the project area as a breeding area. Are not a federally listed species. Are not a state listed species of concern.**

- **Northwest White-Tailed Deer – Regular concentrations are found in the project area. Are not a federally listed species. Are not a state listed species of concern.**

Middle Columbia River spring-run Chinook salmon also occur in the Touchet River, but are not federally listed. However, this species is protected under the Magnuson-Stevens Act and the Pacific Salmon Fishery Management Plan and consultation for impacts to Essential Fish Habitat (EFH) is required.

Given the in-water components of this project, aquatic species have the potential to be impacted by the proposed action; therefore, the potential project impacts were analyzed by a Biological Assessment (BA) and mitigation measures have been drafted that will include only working during the in-water work window, isolating the work area, and minimizing turbidity and sedimentation during construction. The BA also analyzed impacts to critical habitats and EFH in addition to impacts to federally listed species.

c. Is the site part of a migration route? If so, explain.

The project lies within the Pacific Flyway for migratory birds. However, the project is not anticipated to have an impact on migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any:

Columbia County will use BMPs to protect against any risk of impacting endangered species or their habitat.

e. List any invasive animal species known to be on or near the site.

None known.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

There are no environmental health hazards that are anticipated to be associated with the completed project.

1) Describe any known or possible contamination at the site from present or past uses.

None known.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Gasoline, oils, and lubricants will be used in motorized vehicles and equipment during the replacement of the bridge. It is not anticipated that any toxic or hazardous chemicals will be stored, used, or produced at the project location.

In the event hazardous or toxic chemicals are used or stored at the site, they would be handled and disposed of in accordance with federal and state solid and hazardous waste regulations (40 Code of Federal Regulations 261 and Washington Administrative Code 173-303).

4) Describe special emergency services that might be required.

None.

5) Proposed measures to reduce or control environmental health hazards, if any:

None.

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None known.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

No additional noise is expected to be associated with the project on a long-term basis. During construction, noise will be generated from vehicles and equipment. This noise will be temporary and will occur within normal hours of operation.

3) Proposed measures to reduce or control noise impacts, if any:

Construction will take place during normal hours of operation. No other measures are proposed to reduce noise impacts.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The current use of the site is as a bridge. Nearby properties are used for agriculture or are unused. This project replaces an existing bridge and roadway approach with a new bridge and roadway in a nearby location. The proposal will reduce the amount of agricultural land in one field (through the construction of the new roadway), but will also add new agricultural land to the same field (through the demolition and restoration of the existing roadway and bridge). This project will not affect current land uses on nearby or adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

According to the NRCS Web Soil Survey maps, soils within the project area are suitable for farmland. A portion of the project area is zoned A-1 Agriculture and is farmed. Approximately 80,000 SF of agricultural land will be converted to the roadway. Approximately 32,000 SF of land will be restored back to agricultural land after the existing road and bridge are demolished.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

c. Describe any structures on the site.

The only existing structure on the site is a bridge.

d. Will any structures be demolished? If so, what?

The existing bridge will be removed.

e. What is the current zoning classification of the site?

The current road area and surrounding north, east, and south areas are zoned A-1 Agricultural. The area west of the proposed new road is adjacent to railroad tracks and is currently zoned HI-1 Heavy Industrial.

f. What is the current comprehensive plan designation of the site?

The existing bridge and roadway is designated as a transportation element of the Columbia County Comprehensive Plan. The area does not include other special designations.

g. If applicable, what is the current shoreline master program designation of the site?

According to Columbia County's Shoreline Master Program, this portion of the Touchet River is designated Rural.

h. Has any part of the site been classified critical area by the city or county? If so, specify.

According to the County's Critical Areas Overlay (CAO) maps, the following critical areas are located in the project area:

- **Fish and Wildlife Habitat Conservation Areas – The project area is a waters of the state (Touchet River) and therefore is located in a Fish and Wildlife Habitat Conservation Area.**
- **Frequently Flooded Areas – The project area is in the 100-year flood zone.**
- **Wetlands – The National Wetlands Inventory (NWI) map showed wetlands within the project area and a wetland delineation was prepared to address this issue.**
- **Resource Lands – A portion of the project area is zoned A-1 Agricultural and characterized as resource lands.**

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project will replace a bridge and obtain all necessary permits from Columbia County.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

The road and bridge will be realigned in a manner that impacts existing agricultural land to the least amount practicable. Additionally, portions of the existing road that are abandoned will be demolished and topsoil placed so these areas can be farmed.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The tallest height of the proposed structure is the bridge, which will be approximately 5 feet above the river bank. The principal exterior building material is concrete.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

The new bridge will be constructed to an aesthetic standard approved by Columbia County and will not result in adverse aesthetic impacts. No mitigation measures are proposed.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The bridge and road will not have lighting. No light or glare impacts are anticipated.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing offsite sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Fishing and hunting.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

The existing bridge is the only structure on site. The bridge will be demolished, as a result of the project. The bridge was constructed in 1963. An online Historic Property Inventory was completed for the existing bridge as part of this project and submitted to DAHP.

The Cultural Resource Inventory conducted for this project by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) resulted in a recommendation that the Vernon Smith Bridge is not eligible for National Register of Historic Places (NRHP) listing. A determination of No Historic Properties Affected was recommended with the stipulation that an Inadvertent Discovery Plan be developed. DAHP issued a letter on October 24, 2017 stating that they concur with the recommendations made in the report and the finding of No Historic Properties Affected.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation. This may include human burials or old cemeteries. Is there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No known landmarks, features, or other evidence of Tribal or historic use or occupation are located within the project area. Additionally, a Cultural Resources Inventory was conducted by CTUIR, and no cultural resources were discovered. Four cultural resource investigations have occurred within 1 mile of the project area; of these, one survey was conducted within the project area. No resources were identified within the project area.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Historic General Land Office Survey Plat maps, Metsker maps, and Sanborn Fire Insurance Maps were consulted prior to fieldwork. Four cultural resource investigations have occurred within 1 mile of the project area; of these, one survey was conducted within the project area.

A field survey (with both surface and subsurface components) and a Cultural Resources Inventory was completed by CTUIR. The survey identified a single cultural resource (Vernon Smith Bridge). This study conducted a reconnaissance-level documentation of the structure and assessed its potential for inclusion to the NRHP. The report resulted in a recommendation that the Vernon Smith Bridge is not eligible for NRHP listing.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

An Inadvertent Discovery Plan will be prepared. In the event of an unanticipated discovery of cultural resources, the property owner, construction contractor, and any subsequent tenant or owner, will be governed by the statutory provisions protecting cultural resources in Chapter 27.53 Revised Code of Washington.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

The Vernon Smith Bridge Replacement project is located where Rose Gulch Road crosses the Touchet River, approximately 4 miles southwest of the City of Dayton, in Columbia County, Washington. The existing bridge site is located approximately 0.22 mile north of the intersection of Rose Gulch Road with U.S. Highway 12. The existing bridge is accessed from Rose Gulch Road. The new bridge will also be accessed by Rose Gulch Road. Proposed access to the existing street system will remain the same as the existing access after the bridge is replaced. During construction a Traffic Control Plan will be utilized to divert traffic from the site.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The site is served by Columbia County Public Transportation, which serves Columbia County on a demand response basis. Transit stops may be requested by individuals.

c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

None.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

This project includes the construction of a new paved public road.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Yes. The proposed project will include an at grade rail crossing over an existing freight rail line.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

None.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public services

a. Would the project result in an increased need for public services (for example: Fire protection, police protection, public transit health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site: Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

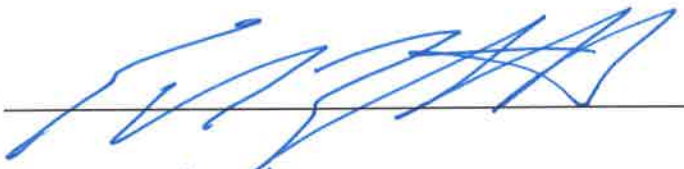
No utilities are currently available at the site.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

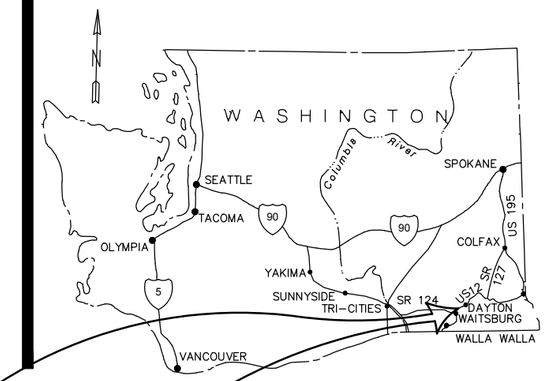
Date Submitted: 11/18/18

PRELIMINARY PLANS

COLUMBIA COUNTY, WA.

VERNON SMITH BRIDGE REPLACEMENT

PWP 13-10
FEDERAL AID NO. BROS-07RG(001)



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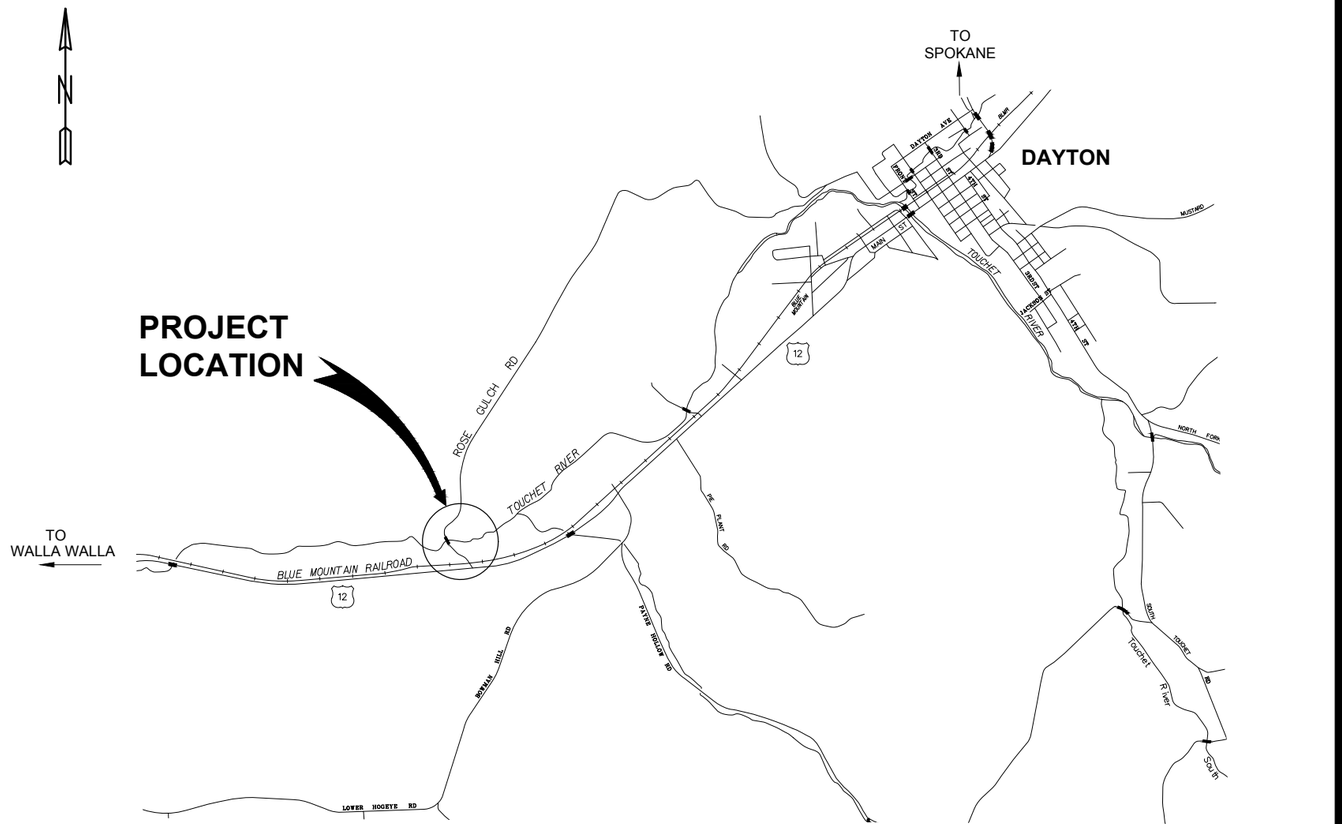


VICINITY MAP

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

BOARD OF COLUMBIA COUNTY COMMISSIONERS

MICHAEL A. TALBOTT, CHAIRMAN
NORM J. PASSMORE
MERLE D. JACKSON

COUNTY OFFICIALS

ANDREW WOODS, P.E.
DIRECTOR / COUNTY ENGINEER

anderson perry & associates, inc.
engineering · surveying · natural resources
214 E. Birch – Walla Walla, WA 99362 Ph: (509)529-9260 Fax: (509)529-8102

SHEET
G-001
1 OF 30

GENERAL CONSTRUCTION NOTES

1. THESE PLANS SPECIFICATIONS AND REFERENCED DOCUMENTS SHALL BE USED TO CONSTRUCT THE IMPROVEMENTS SHOWN. REFERENCED DOCUMENTS INCLUDE THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (2018 EDITION), WSDOT STANDARD PLANS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

2. ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE SHOWN WITH AS MUCH ACCURACY AS POSSIBLE, BASED ON AVAILABLE INFORMATION. SOME DISCREPANCIES AND OMISSIONS IN LOCATION, TYPE, AND SIZE SHOULD BE EXPECTED TO OCCUR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES IN AND AROUND THE WORK AREAS BOTH PRIVATE AND PUBLIC. ANY DISCREPANCIES BETWEEN THE DESIGN SHEETS AND EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER.

3. ANY OBSTRUCTIONS ENCOUNTERED THAT MAY NOT BE SHOWN ON THE PLANS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. ITEMS VISIBLE IN THE FIELD ARE THE CONTRACTOR'S RESPONSIBILITY, EVEN IF NOT SHOWN ON THE PLANS.

4. SAW CUT ALL EXISTING ASPHALT AND CONCRETE WHERE JOINTS WITH NEW CONSTRUCTION WILL BE REQUIRED.

5. VEGETATION TO REMAIN THAT OVERHANGS THE ROADWAY OR SIDEWALK SHALL BE TRIMMED TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 14 FEET.

6. THE CONTRACTOR SHALL MAKE ANY NECESSARY PROVISIONS FOR PROVIDING ACCESS FOR RESIDENTS, GARBAGE COLLECTION, AND MAIL DELIVERY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH SANITATION AND MAIL DELIVERY SERVICES FOR SUITABLE ACCOMMODATIONS.

7. HYDROSEED ALL SOIL AREAS DISTURBED FROM CONSTRUCTION OPERATIONS AS DIRECTED BY THE ENGINEER.

8. THE CONTRACTOR SHALL KEEP THE WORK AREA CLEAN, PREVENT TRACKING OF SOIL AND DEBRIS ONTO THE STATE HIGHWAY AND SHALL MAINTAIN DUST CONTROL AT ALL TIMES.

SUMMARY OF QUANTITIES

DATUM STATEMENT

HORIZONTAL DATUM:
XX
VERTICAL DATUM:
NGVD XX

REVISION	BY	DATE

1 0 1 2 3
SCALE IN FEET

DESIGNED BY	E. ZITTERKOPF
DRAWN BY	-
REVIEWED BY	-

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60G-002SOQ.DWG

PRELIMINARY

FEDERAL AID PROJECT NO: BROS-07RG(001)

anderson perry & associates, inc.
engineering - surveying - natural resources

COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

GENERAL NOTES & SUMMARY OF QUANTITIES

SHEET
G-002
2 OF 30

LEGEND

WATER

	EXISTING	PROPOSED
IRRIGATION	IRR	IRR
WATER LINE	30"W	30"W
VALVES (GATE/BUTTERFLY/CHECK)		
BURIED TELEMETRY	TL	TL
FITTINGS (BEND/TEE/CAP)		
COUPLING		
REDUCER		
WATER METER		
FIRE HYDRANT		
THRUST BLOCK		
FLANGE		
AIR RELIEF		
BLOWOFF		

STORM DRAIN

CULVERT/STORM DRAIN	SD	
STORM DRAIN CATCH BASIN		
MANHOLE		

MISC. UTILITIES

BURIED POWER	UP	UP
OVERHEAD POWER	OHP	OHP
BURIED TELEPHONE	UT	UT
OVERHEAD TELEPHONE	OHT	OHT
FIBER OPTIC	FO	FO
BURIED TV	TV	TV
OVERHEAD TV	OTV	OTV
GAS	G	G
UTILITY POLE		
UTILITY POLE ANCHOR		
PAD TRANSFORMER		
POWER VAULT	P	P
TELEPHONE RISER/VAULT	T	T
STREET LIGHT		

SURVEY

	EXISTING	PROPOSED
ANGLE POINT		
BENCHMARK		
BLOCK CORNER		
IRON PIPE		
MONUMENT (IN CASE)		
MONUMENT (SURFACE)		
SOIL BORING/TEST PIT	746.2	746.2
SPOT ELEVATION		
CENTERLINE		
RIGHT-OF-WAY		
PROPERTY LINE		
EASEMENT LINE		
SECTION LINE		

SURFACE FEATURES

INDEX CONTOUR	740	740
INTERMEDIATE CONTOUR		
DITCH CENTERLINE		DITCH
RETAINING WALL		
EDGE ASPHALT/CONCRETE		
EDGE GRAVEL		
FENCE LINE/GATE		
SILT FENCE		
DAYLIGHT/CATCH POINT		
TREE, CONIFER		
TREE, DECIDUOUS		
TREE/BRUSH LINE		
RIPRAP OR SPALLS		
SIGN		
MAILBOX		
BUILDING		
ADDRESS POST		

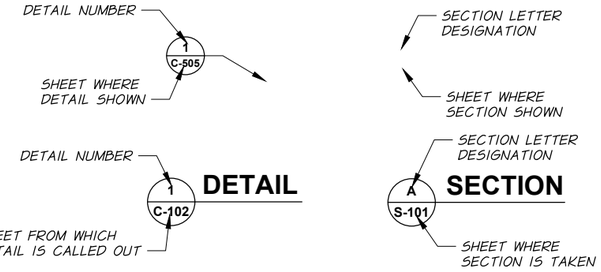
SURFACE FEATURES

	EXISTING	PROPOSED
ASPHALT HATCH		
GRAVEL HATCH		
CONCRETE HATCH		
GRASS/SOD HATCH		

TRAFFIC CONTROL

TYPICAL TRAFFIC CONTROL ARROWS		
TYPICAL TRAFFIC CONTROL SYMBOLS	STOP	STOP
TYPICAL TRAFFIC DIVIDER LINES		
FOG LINE		

SECTION AND DETAIL DESIGNATIONS



REVISION	BY	DATE

SCALE IN FEET: 1 0 1 2 3

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

JOB NUMBER 228–57
DATE NOVEMBER 29 2017
ACAD FILE: 228–57–60G–003LEG.DWG

PRELIMINARY

FEDERAL AID PROJECT NO: BROS-07RG(001)

anderson perry & associates, inc.
engineering - surveying - natural resources

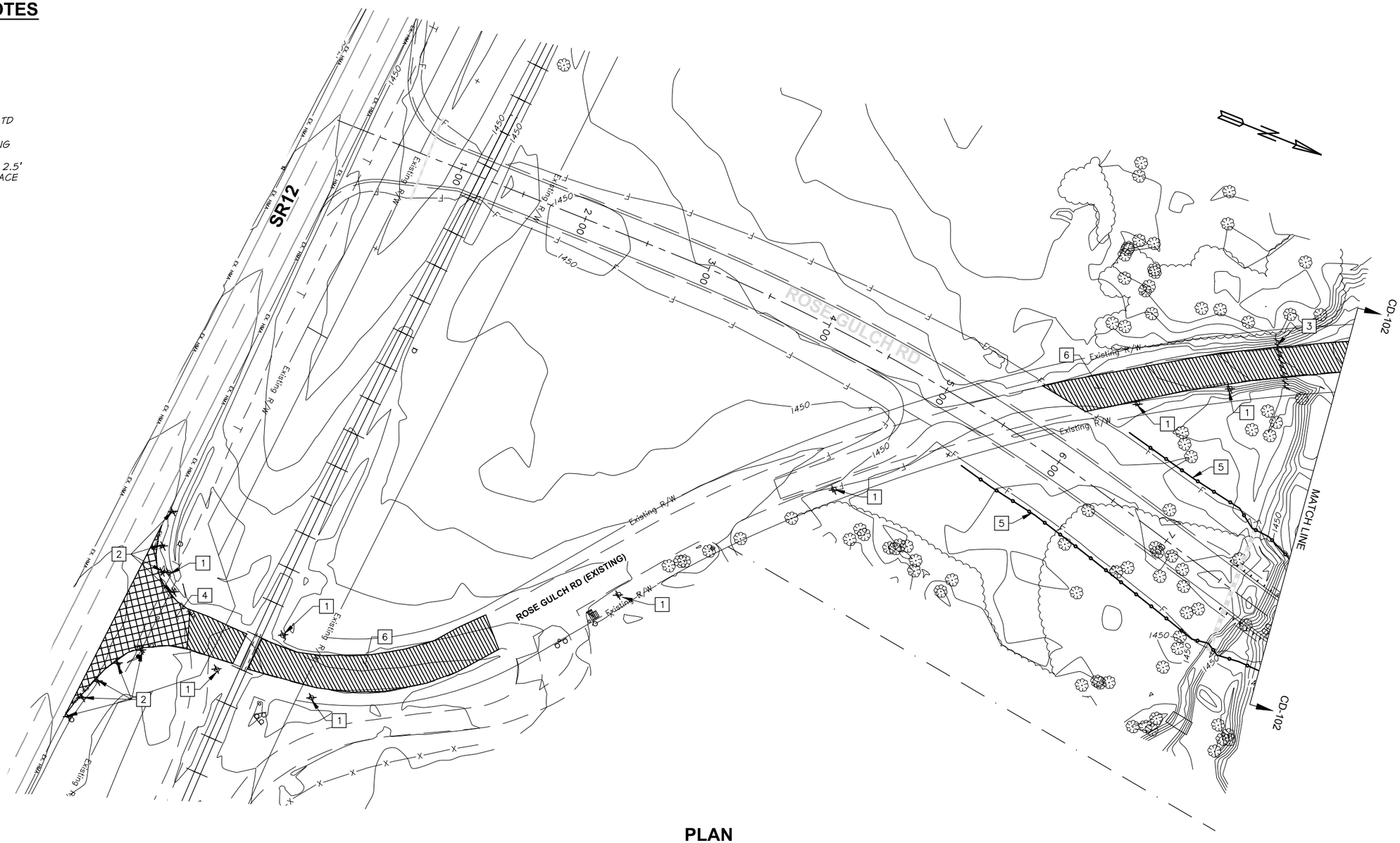
COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

GENERAL LEGEND

SHEET
G-003
3 OF 30

SITE PREPARATION NOTES

1. REMOVE SIGN AND POST
2. REMOVE DELINEATOR
3. REMOVE CULVERT
4. REMOVE HMA
5. INSTALL SILT FENCE, SEE WSDOT STD PLAN I-30.15-02.
6. REMOVE AND REPLACE THE EXISTING ROADBED. EXCAVATE EXISTING ROADBED TO A MINIMUM DEPTH OF 2.5' BELOW EXISTING GRADE AND REPLACE REMOVED MATERIAL WITH 2.5' OF TOPSOIL.
7. REMOVE FENCE
8. INSTALL 6-MAN BOULDER



PLAN

REVISION	BY	DATE	
DESIGNED BY E. ZITTERKOPF			
DRAWN BY –			
REVIEWED BY –			

40 0 40 80 120
SCALE IN FEET

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60CD-101XX.DWG

PRELIMINARY

FEDERAL AID PROJECT NO: BROS-07RG(001)

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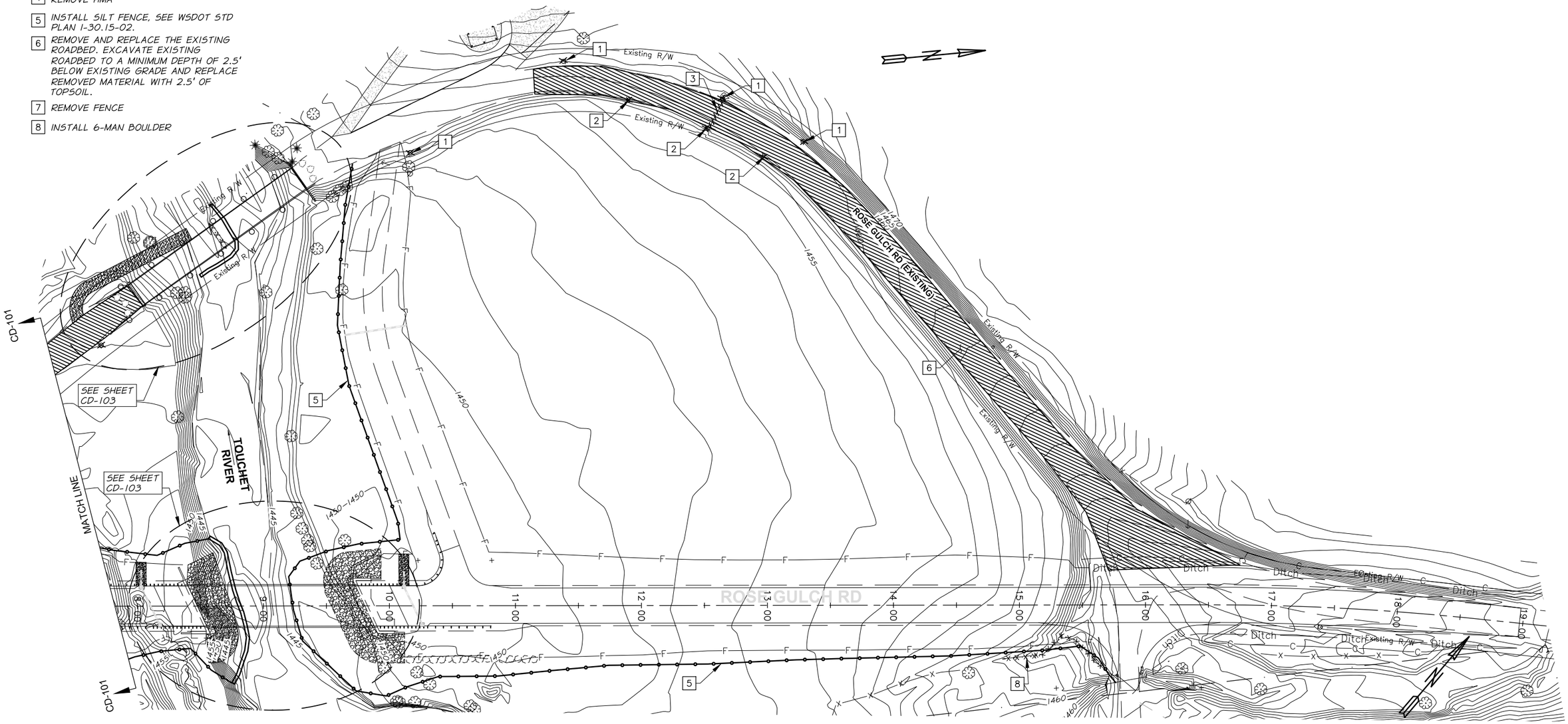
COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

SITE PREPARATION PLAN

SHEET
CD-101
5 OF 30

SITE PREPARATION NOTES

1. REMOVE SIGN AND POST
2. REMOVE DELINEATOR
3. REMOVE CULVERT
4. REMOVE HMA
5. INSTALL SILT FENCE, SEE WSDOT STD PLAN I-30.15-02.
6. REMOVE AND REPLACE THE EXISTING ROADBED. EXCAVATE EXISTING ROADBED TO A MINIMUM DEPTH OF 2.5' BELOW EXISTING GRADE AND REPLACE REMOVED MATERIAL WITH 2.5' OF TOPSOIL.
7. REMOVE FENCE
8. INSTALL 6-MAN BOULDER



PLAN

REVISION	BY	DATE	
DESIGNED BY E. ZITTERKOPF			
DRAWN BY –			
REVIEWED BY –			

40 0 40 80 120
SCALE IN FEET

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60CD-102XX.DWG

PRELIMINARY

FEDERAL AID PROJECT NO: BROS-07RG(001)

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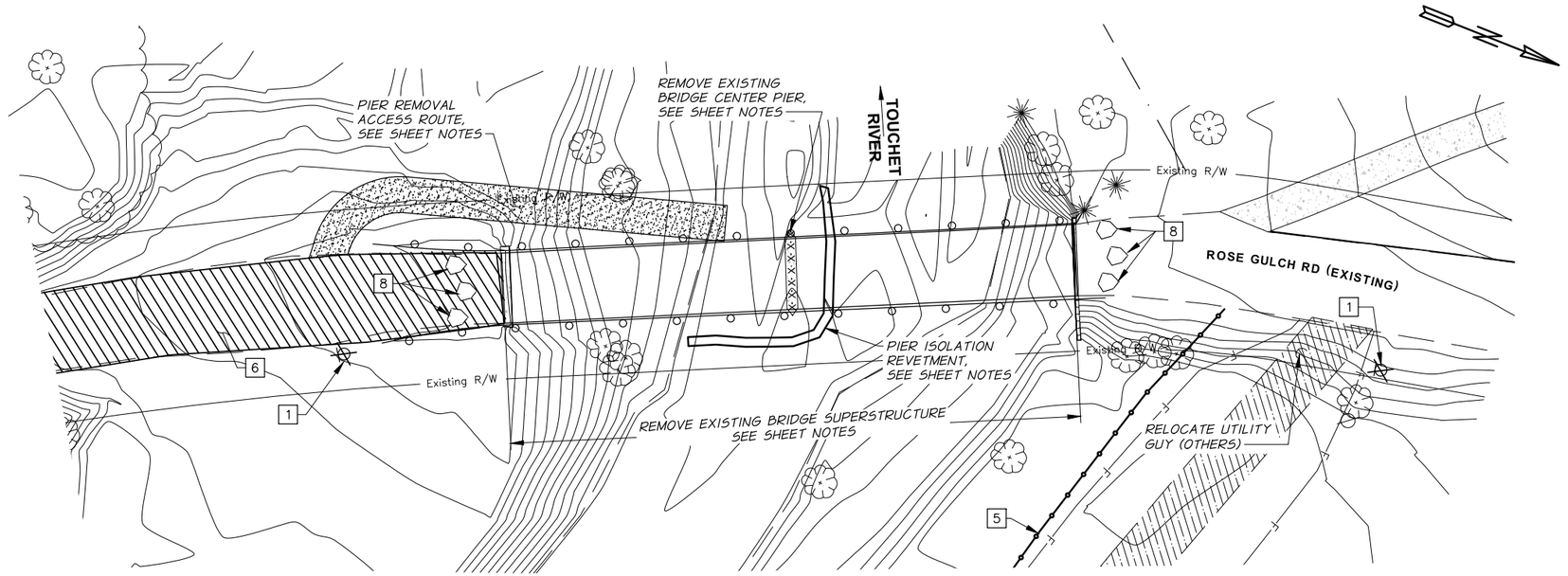
COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

SITE PREPARATION PLAN

SHEET
CD-102
6 OF 30

SITE PREPARATION NOTES

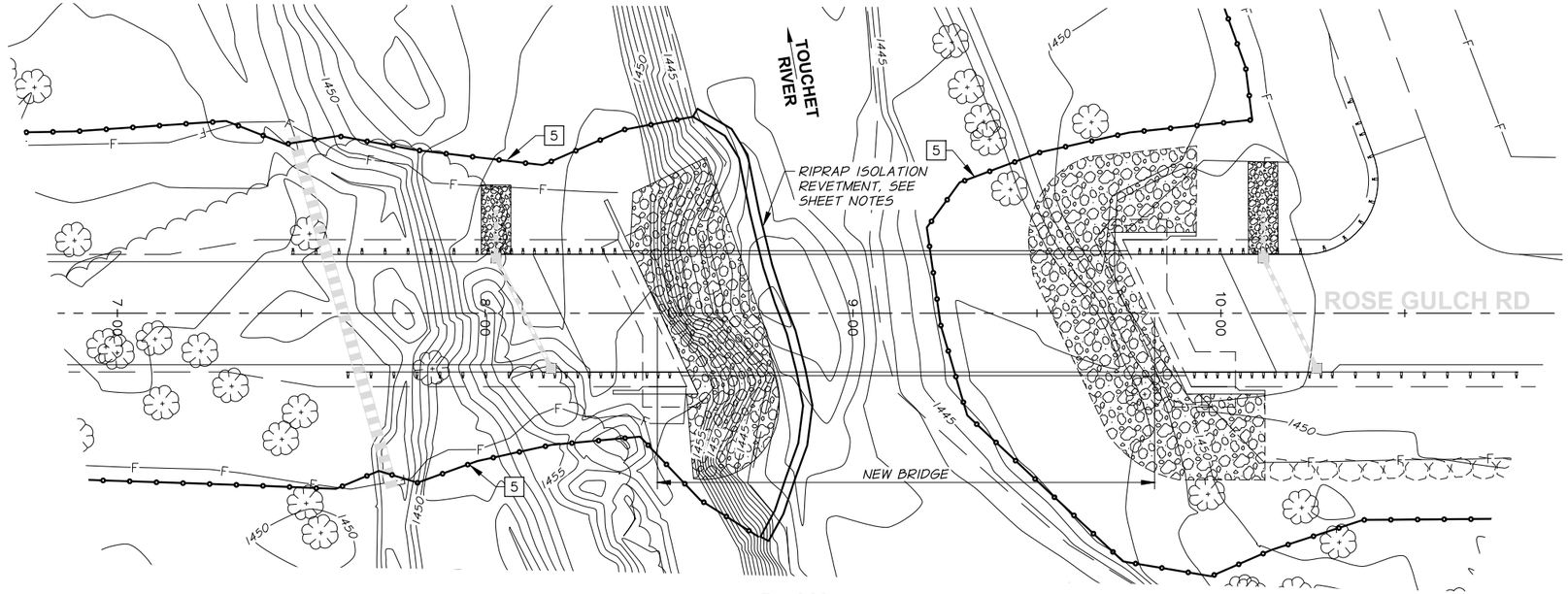
1. REMOVE SIGN AND POST
2. REMOVE DELINEATOR
3. REMOVE CULVERT
4. REMOVE HMA
5. INSTALL SILT FENCE, SEE WSDOT STD PLAN I-30.15-02.
6. REMOVE AND REPLACE THE EXISTING ROADBED. EXCAVATE EXISTING ROADBED TO A MINIMUM DEPTH OF 2.5' BELOW EXISTING GRADE AND REPLACE REMOVED MATERIAL WITH 2.5' OF TOPSOIL.
7. REMOVE FENCE
8. INSTALL 6-MAN BOULDER



PLAN

SHEET NOTES

1. THE EXISTING BRIDGE SHALL REMAIN IN SERVICE UNTIL THE NEW BRIDGE IS OPEN FOR TRAFFIC.
2. THE EXISTING BRIDGE SUPERSTRUCTURE SHALL BE COMPLETELY REMOVED INCLUDING ALL APPROACH GUARDRAIL AND ASSOCIATED APPURTENANCES.
3. THE EXISTING BRIDGE ABUTMENTS SHALL REMAIN IN PLACE. THE CENTER PIER SHALL BE ENTIRELY REMOVED.
4. ACCESS TO THE CENTER PIER OF THE EXISTING BRIDGE SHALL BE ALONG THE ROUTE SHOWN.
5. TEMPORARY REVETMENTS FOR INSTALLATION OF RIPRAP, AND REMOVAL OF THE EXISTING BRIDGE CENTER PIER SHALL BE INSTALLED AND REMOVED WITHIN THE TIME FRAME SPECIFIED IN THE HPA.
6. REVETMENTS SHALL CONSIST OF PRECAST ECOLOGY BLOCKS, SAND/GRAVEL BAGS, AND VISQUEEN OR AN APPROVED EQUIVALENT SYSTEM. THE REVETMENTS SHALL BE CONSTRUCTED WITH A MINIMUM OF 2'-0" OF FREEBOARD ABOVE THE WATER SURFACE AT THE TIME OF INSTALL.
7. THE CONTRACTOR SHALL DEWATER AS NECESSARY THE AREA BEHIND THE TEMPORARY REVETMENTS. INSTALLATION AND REMOVAL OF REVETMENTS SHALL OCCUR IN CONJUNCTION WITH FISH REMOVAL (BY OTHERS).



PLAN

REVISION	BY	DATE

20 0 20 40 60
SCALE IN FEET

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60CD-103XX.DWG

PRELIMINARY

FEDERAL AID PROJECT NO: BROS-07RG(001)

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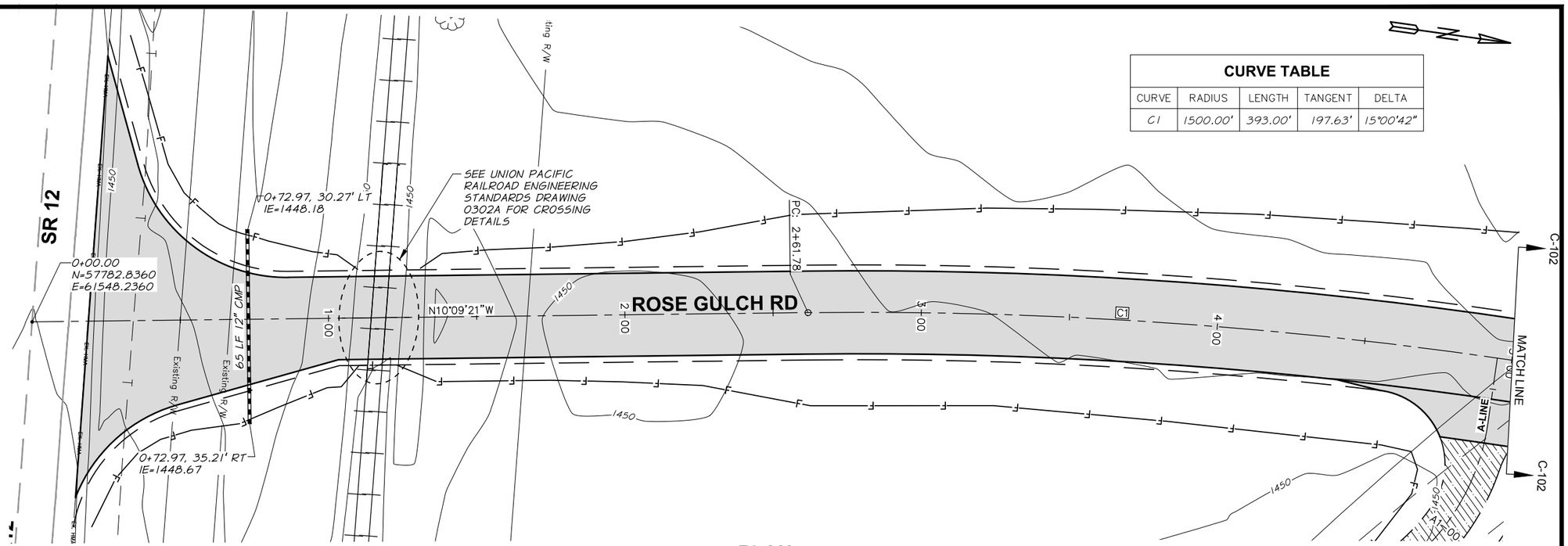
engineering · surveying · natural resources

COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

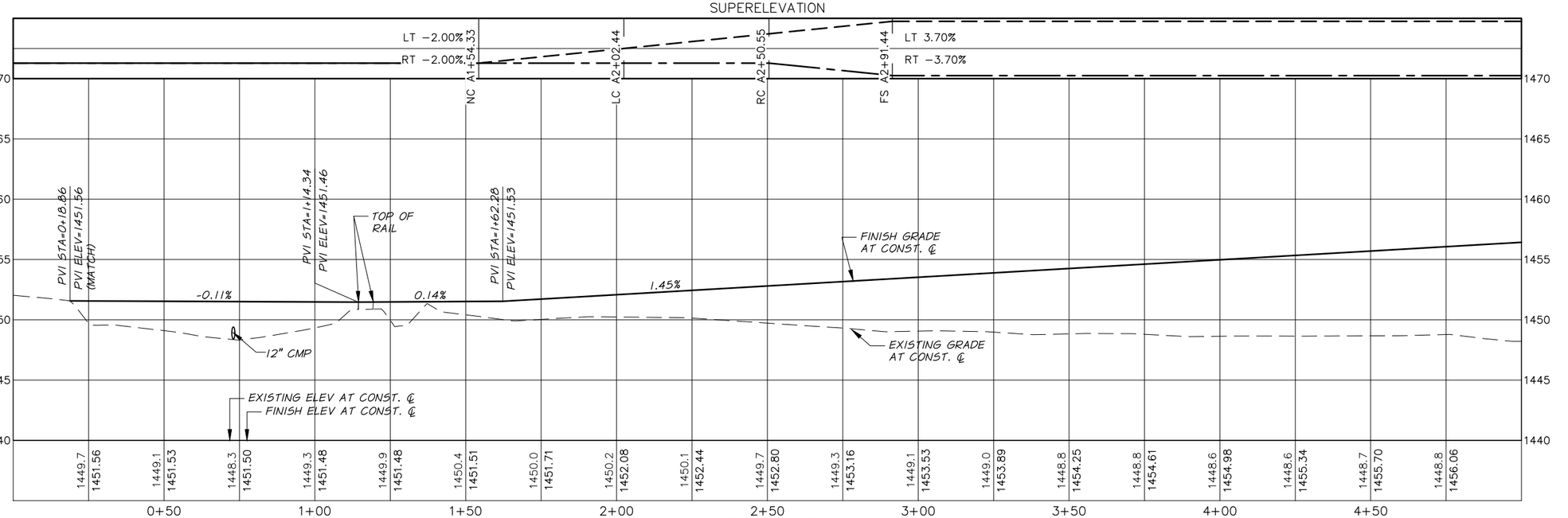
SITE PREPARATION PLAN

SHEET
CD-103
7 OF 30

CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	1500.00'	393.00'	197.63'	15°00'42"



PLAN



PROFILE

SHEET NOTES

1. BEVEL ENDS OF CULVERTS 30 INCHES IN DIAMETER OR LESS. SEE WSDOT STD PLAN B-70.20-00.

REVISION	BY	DATE

HORIZONTAL SCALE IN FEET: 20 0 20 40 60
VERTICAL SCALE IN FEET: 5 0 5 10 15

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60C-101XX.DWG

PRELIMINARY

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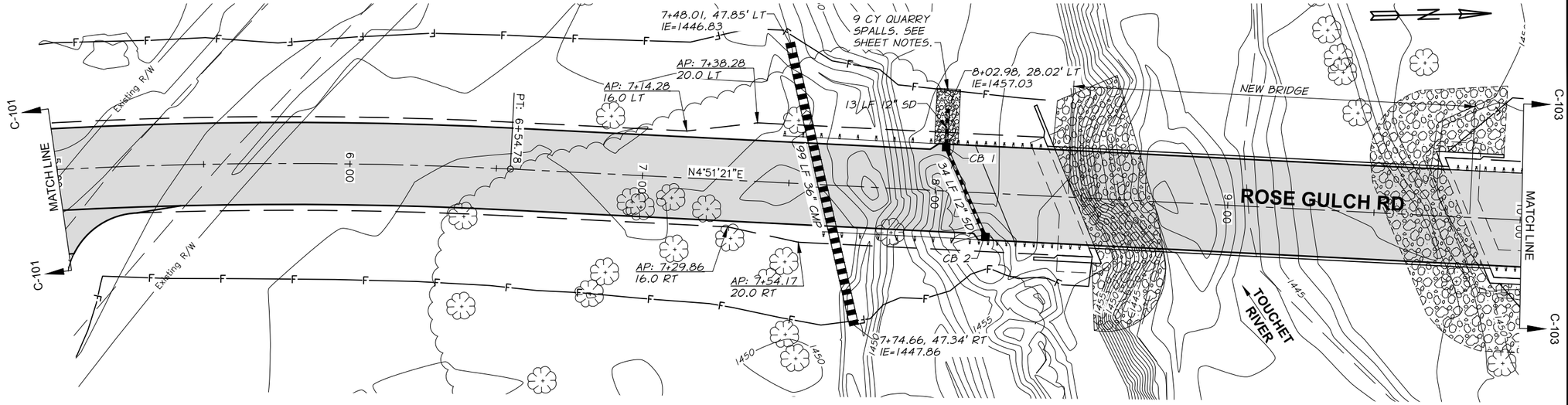
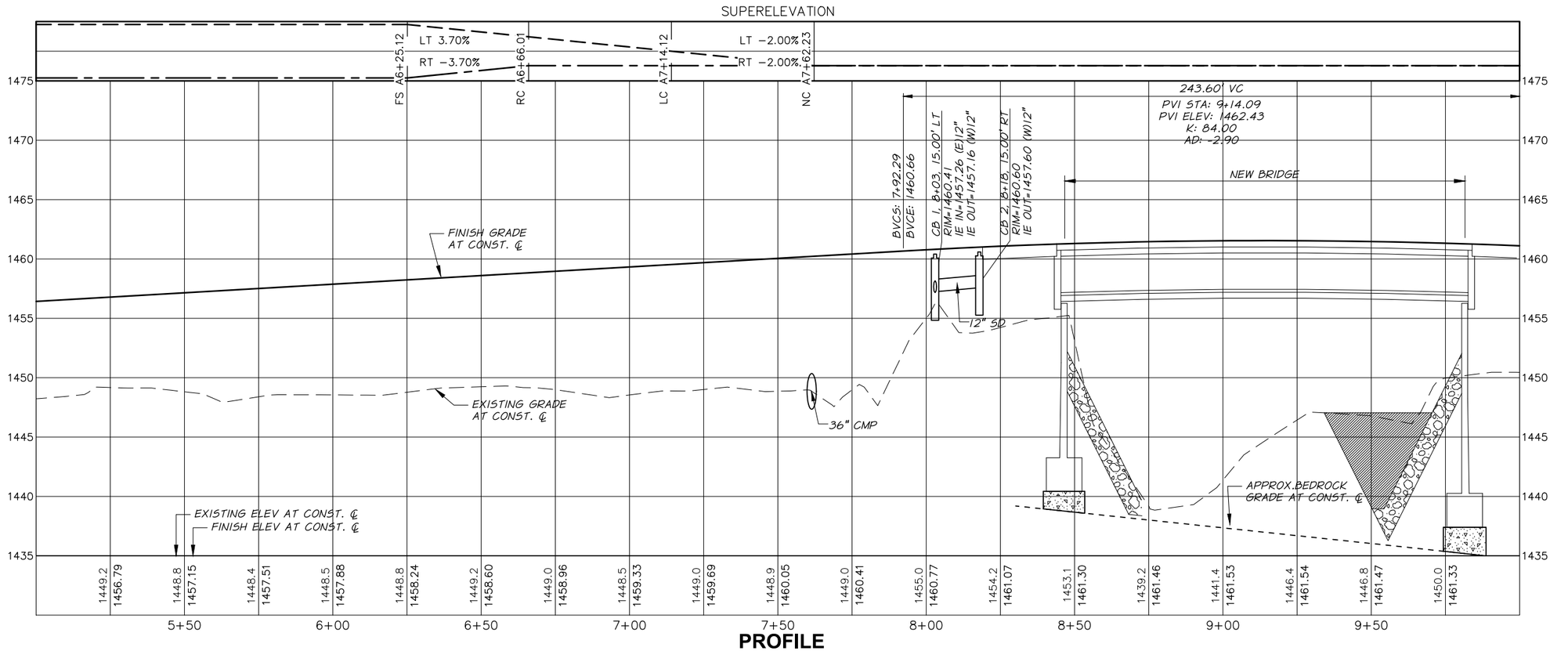
VERNON SMITH BRIDGE REPLACEMENT

PLAN AND PROFILE

SHEET
C-101
8 OF 30



PLAN



PROFILE

SHEET NOTES

1. PLACE QUARRY SPALLS AT 1.5 THICK OVER GEOTEXTILE FOR SEPARATION. CENTER SPALL MAT ON PIPE OUTLET AND EXTEND FROM TOP TO BOTTOM OF SLOPE.

REVISION	BY	DATE

20 0 20 40 60
HORIZONTAL SCALE IN FEET
5 0 5 10 15
VERTICAL SCALE IN FEET

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60C-102XX.DWG

PRELIMINARY

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PLAN AND PROFILE

SHEET
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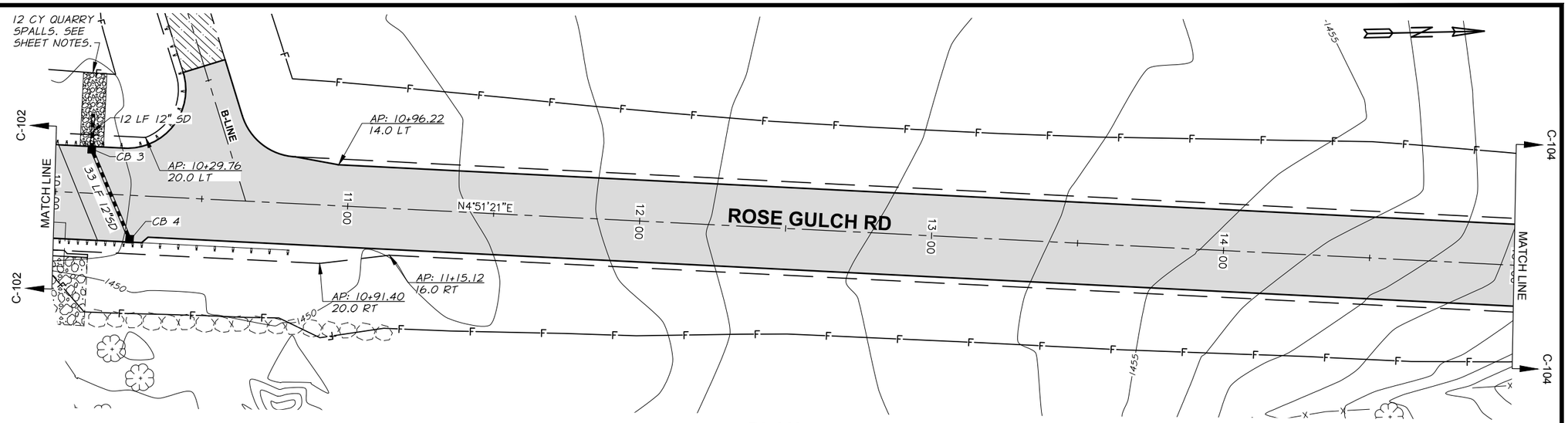
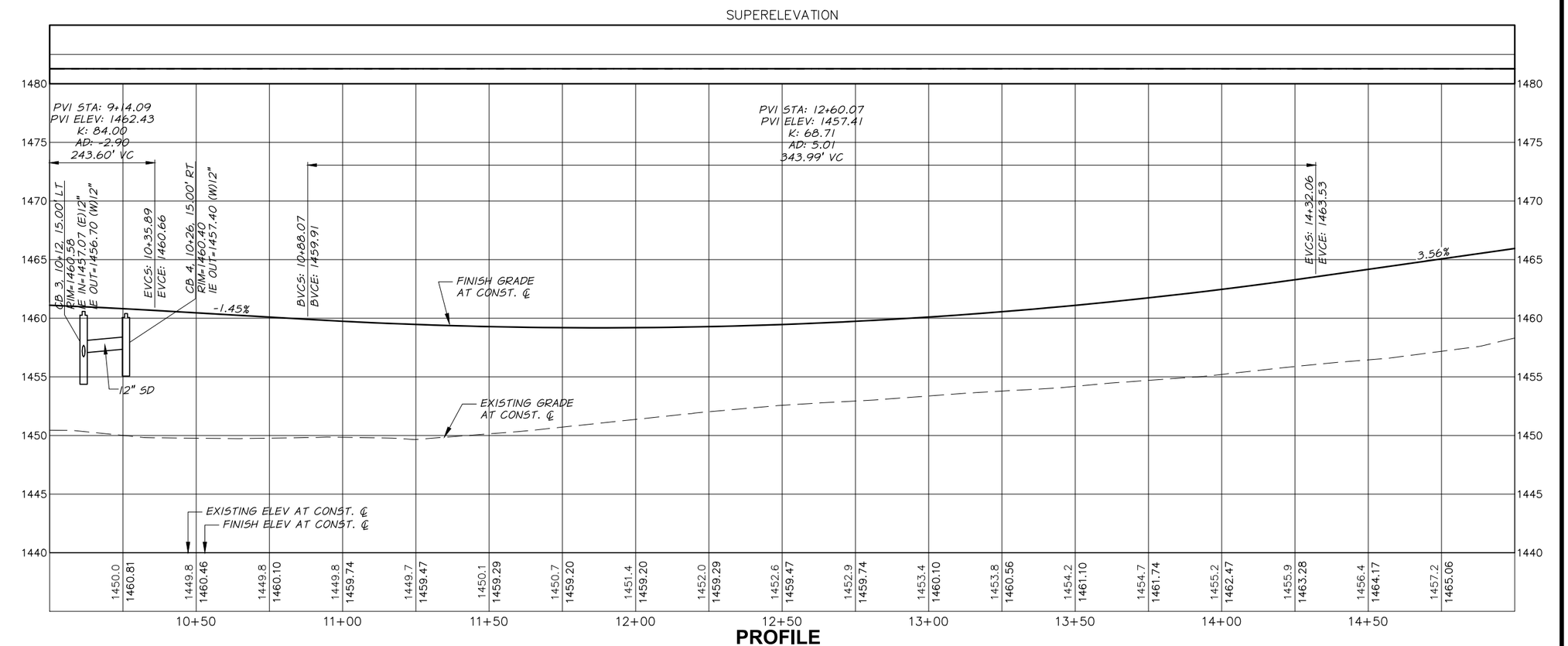


PLAN



PROFILE

SHEET NOTES

1. PLACE QUARRY SPALLS AT 1.5 THICK OVER GEOTEXTILE FOR SEPARATION. CENTER SPALL MAT ON PIPE OUTLET AND EXTEND FROM TOP TO BOTTOM OF SLOPE.

REVISION	BY	DATE

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

HORIZONTAL SCALE IN FEET: 20 0 20 40 60
VERTICAL SCALE IN FEET: 5 0 5 10 15

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60C-103XX.DWG

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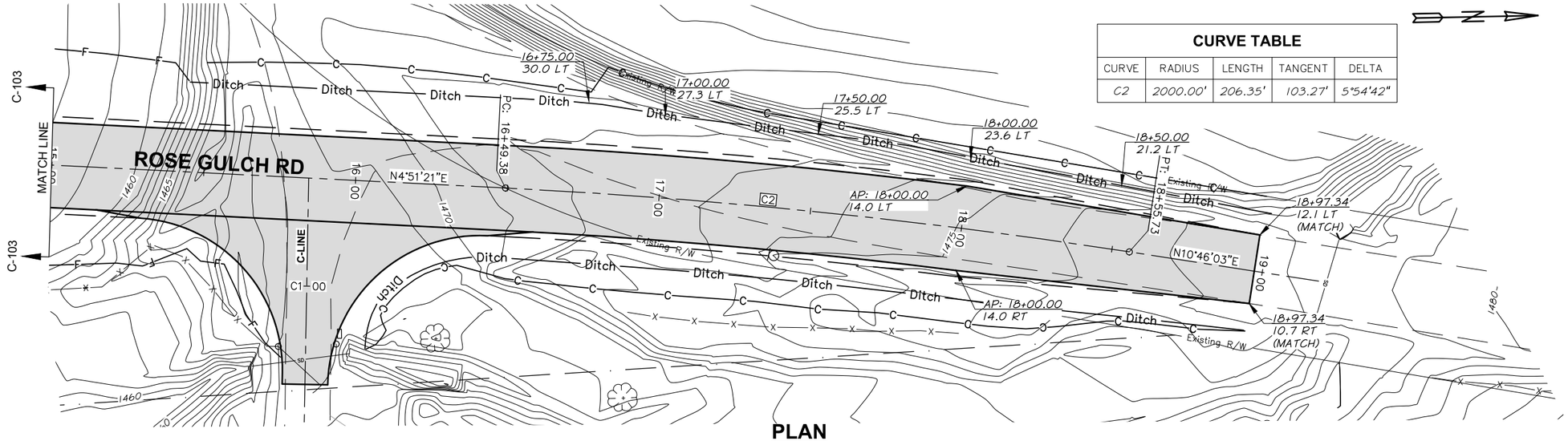
VERNON SMITH BRIDGE REPLACEMENT

PLAN AND PROFILE

SHEET
C-103
10 OF 30

CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C2	2000.00'	206.35'	103.27'	5°54'42"



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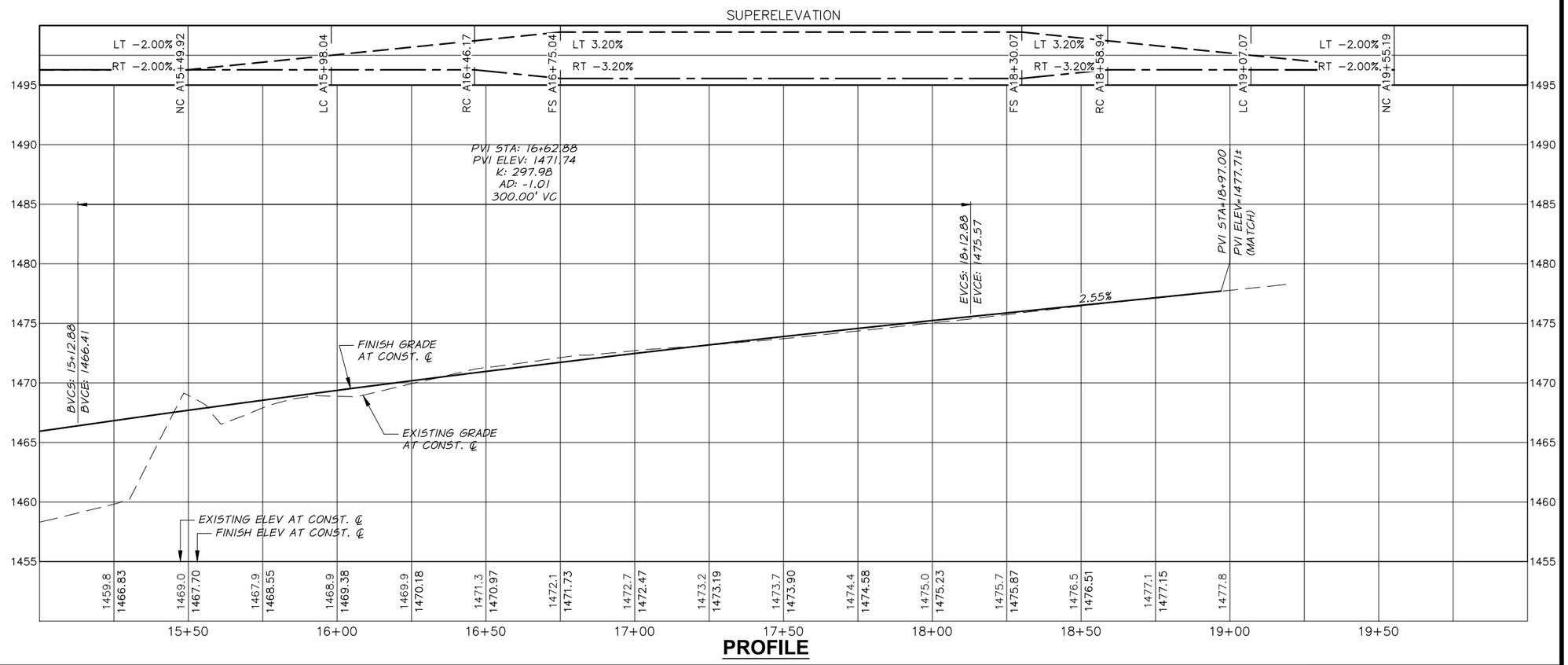

PROFILE

REVISION	BY	DATE

20 0 20 40 60
HORIZONTAL SCALE IN FEET
5 0 5 10 15
VERTICAL SCALE IN FEET

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

JOB NUMBER 228–57 DATE NOVEMBER 29 2017
ACAD FILE: 228–57–60C–104XX.DWG

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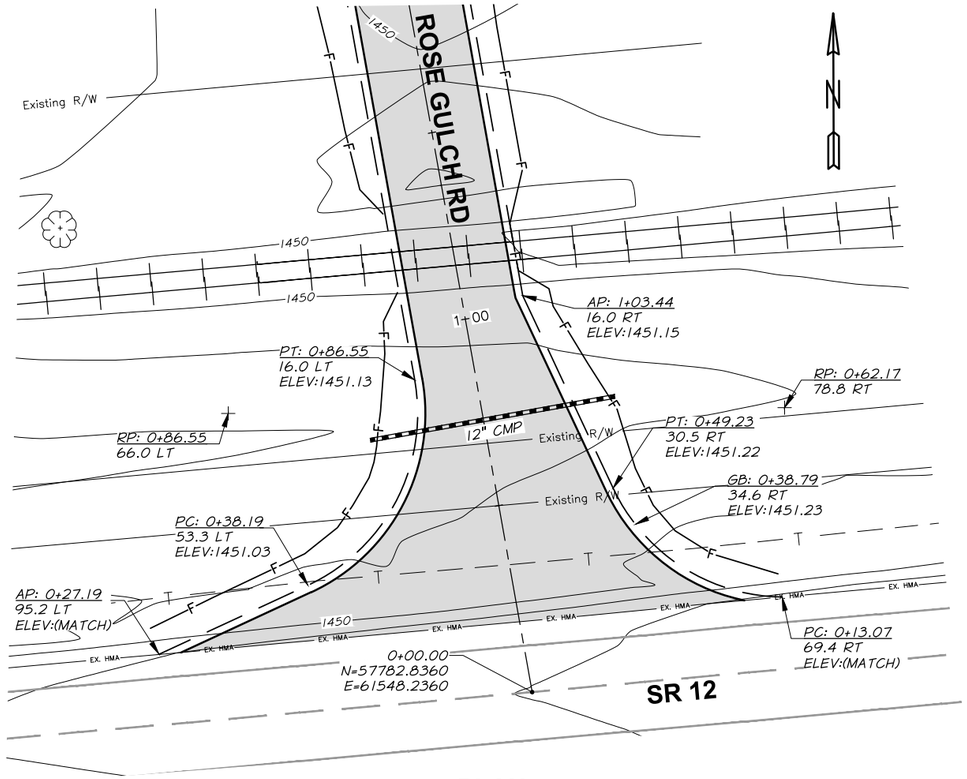
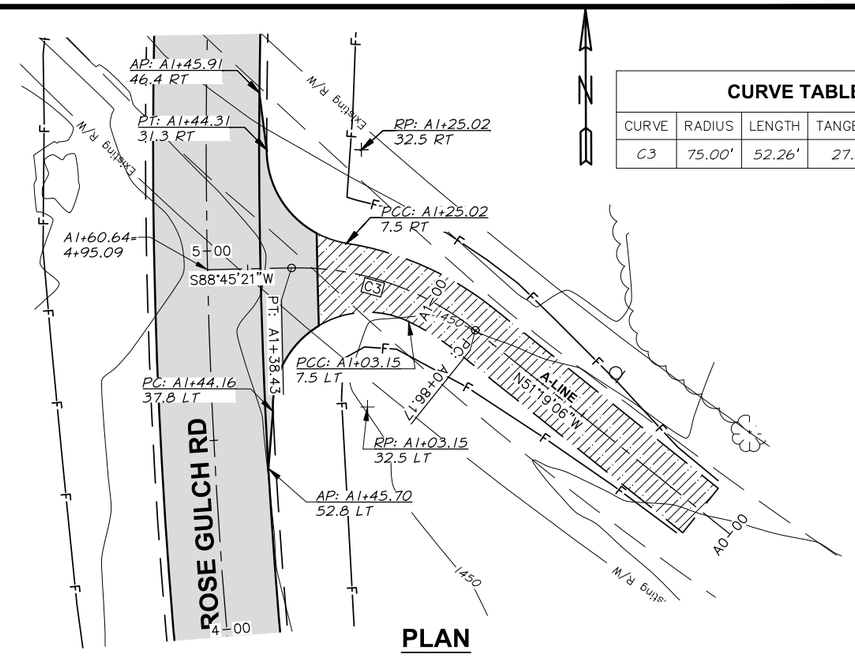
VERNON SMITH BRIDGE REPLACEMENT

PLAN AND PROFILE

SHEET
C-104
11 OF 30

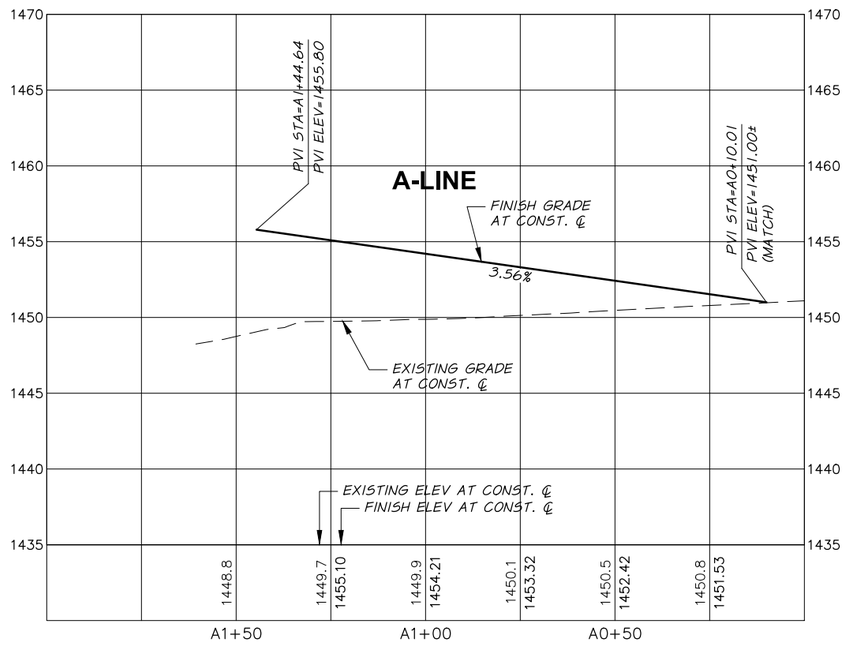


PLAN



CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C3	75.00'	52.26'	27.24'	39°55'33"

PLAN



PROFILE

REVISION	BY	DATE	
DESIGNED BY E. ZITTERKOPF			
DRAWN BY –			
REVIEWED BY –			

20 0 20 40 60
HORIZONTAL SCALE IN FEET
5 0 5 10 15
VERTICAL SCALE IN FEET

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60C-105XX.DWG

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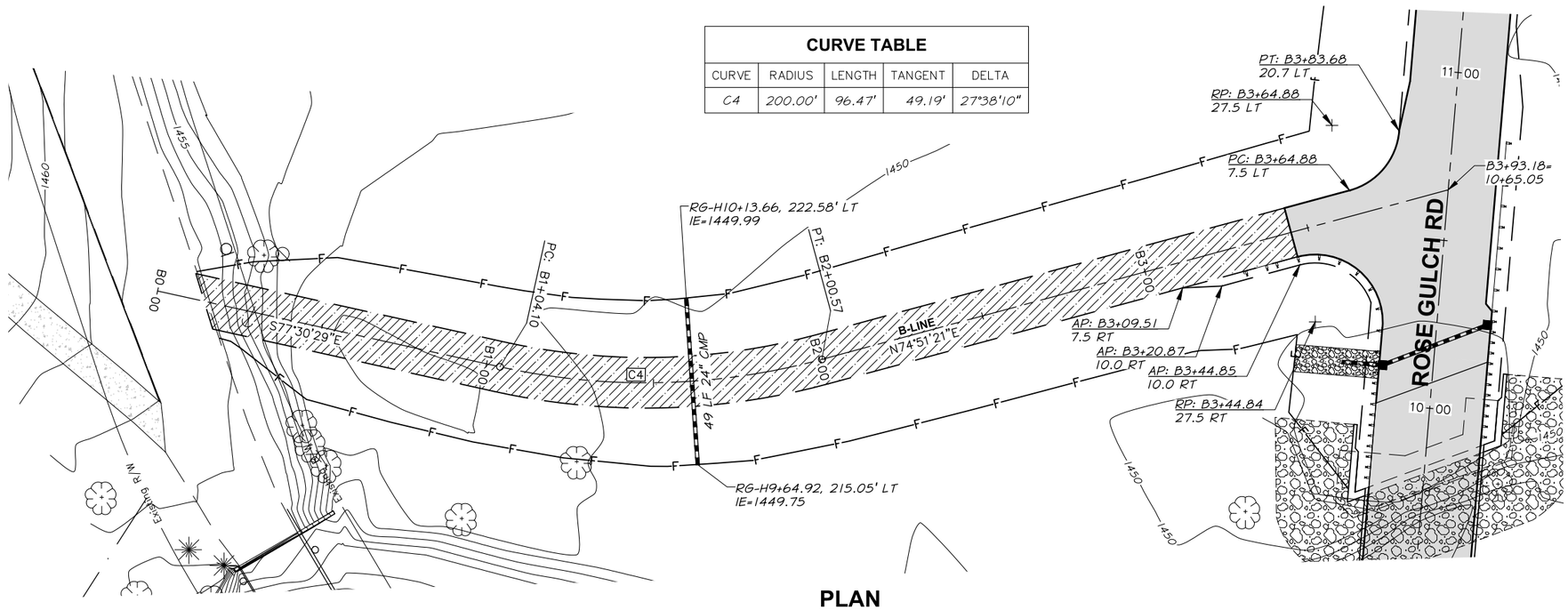
VERNON SMITH BRIDGE REPLACEMENT

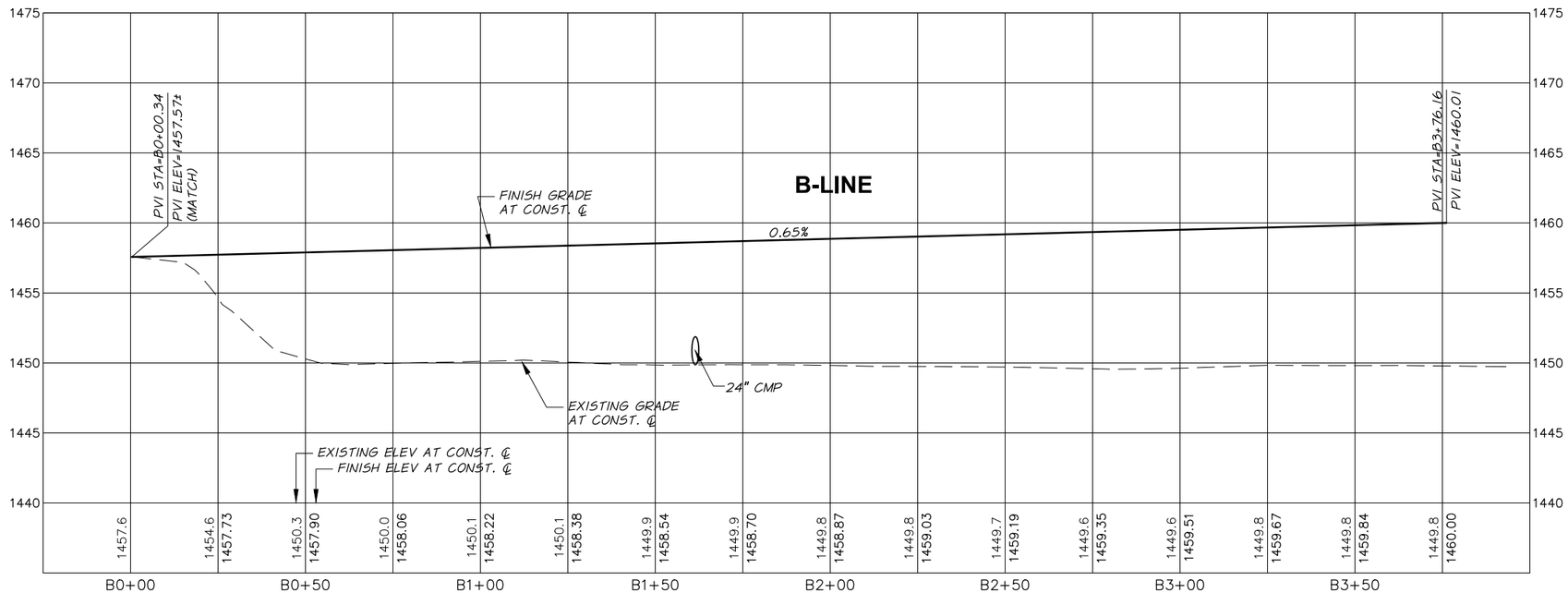
PLAN AND PROFILE

SHEET
C-105
12 OF 30

CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C4	200.00'	96.47'	49.19'	27°38'10"



PLAN



PROFILE

REVISION	BY	DATE

HORIZONTAL SCALE IN FEET: 20 0 20 40 60

VERTICAL SCALE IN FEET: 5 0 5 10 15

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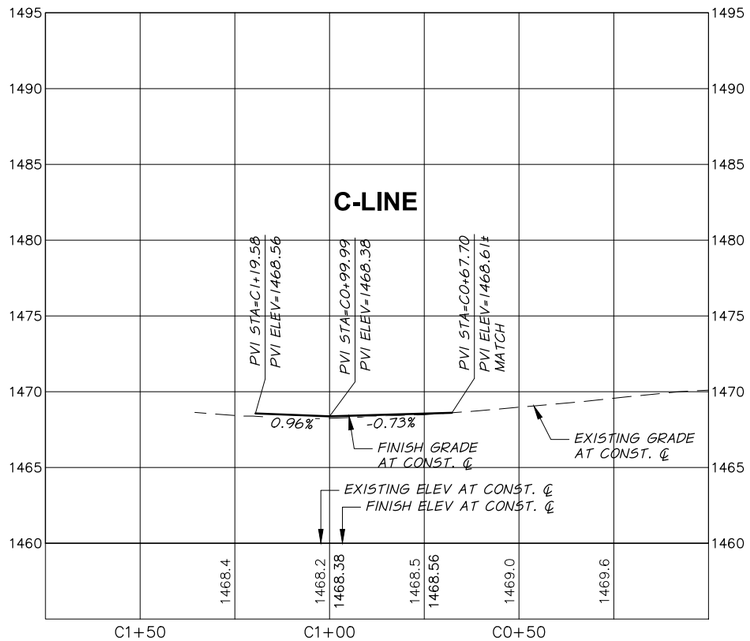
PLAN AND PROFILE

SHEET
C-106
13 OF 30

PLAN



PROFILE

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REVIEWED BY –			COPYRIGHT 2018 BY ANDERSON PERRY & ASSOC., INC.

20 0 20 40 60
HORIZONTAL SCALE IN FEET
5 0 5 10 15
VERTICAL SCALE IN FEET

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VERNON SMITH BRIDGE REPLACEMENT

PLAN AND PROFILE

SHEET
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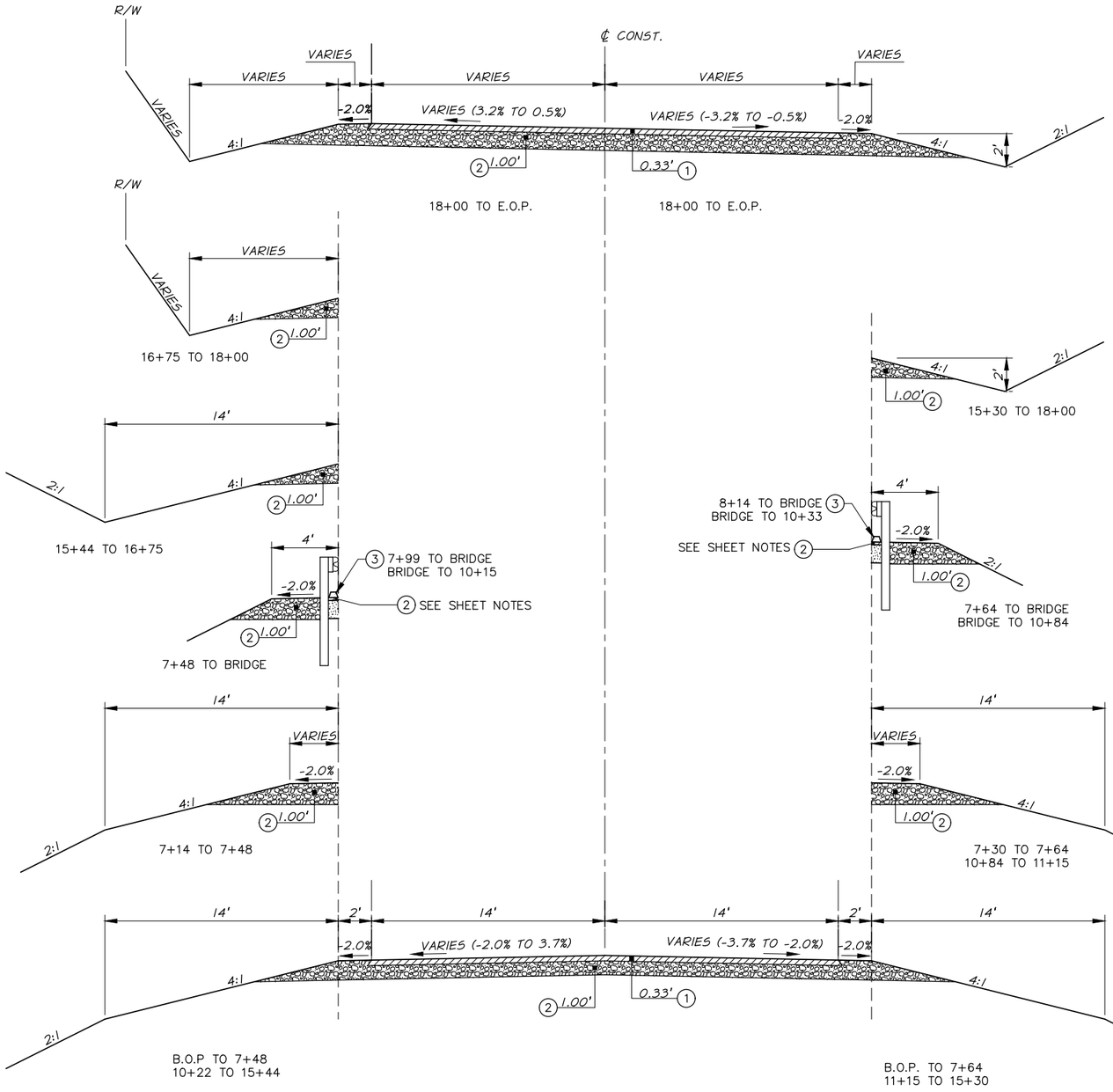
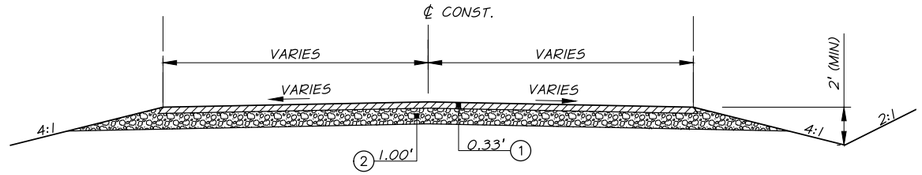


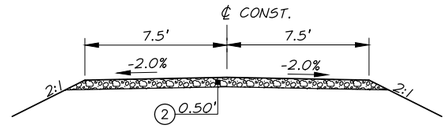
TYPICAL ROAD SECTION - ROSE GULCH

NTS



TYPICAL ROAD SECTION - C-LINE

NTS



TYPICAL ROAD SECTION - A&B-LINES

NTS

LEGEND

1. HMA CL. 1/2-INCH PG 64-28
2. CRUSHED SURFACING BASE COURSE
3. EXTRUDED CURB

SHEET NOTES

1. SEE PLAN SHEETS FOR TRANSITION AREAS AND SUPERELEVATION.
2. HMA TO EXTEND TO FACE OF GUARDRAIL POSTS WHERE EXTRUDED CURB IS REQUIRED.

REVISION	BY	DATE

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60C-301SEC.DWG

PRELIMINARY

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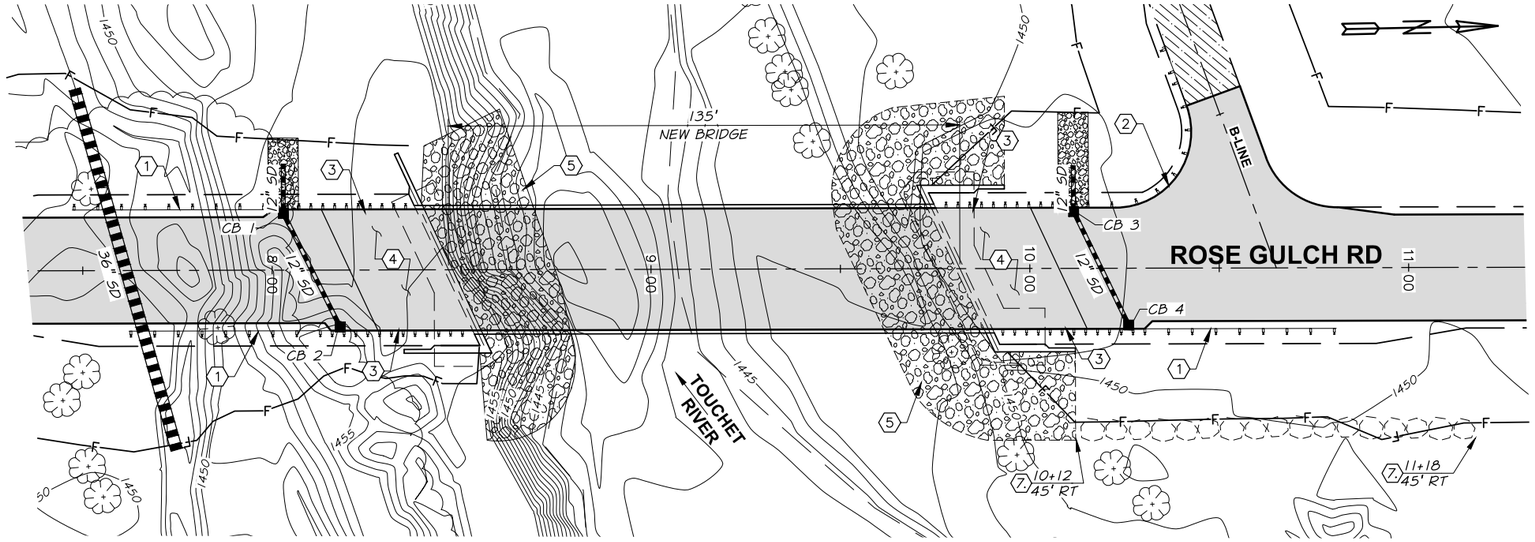
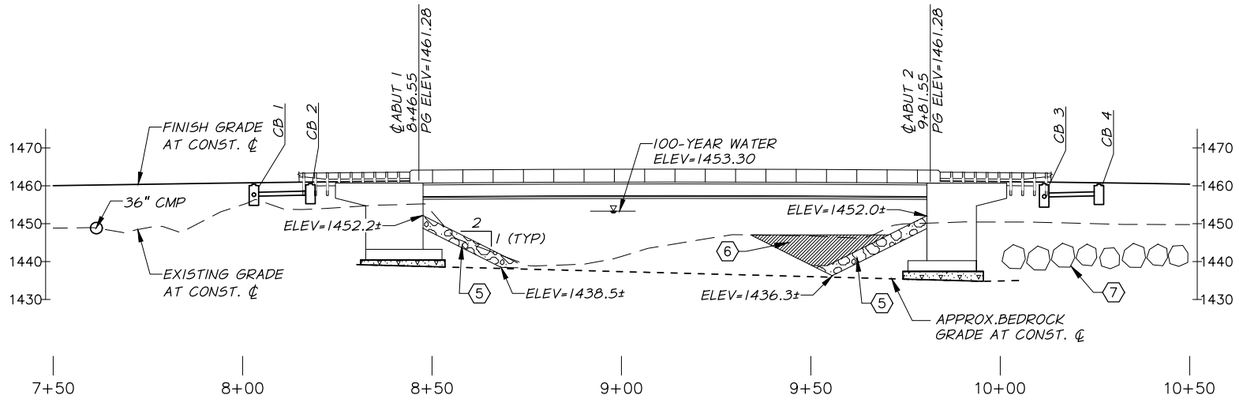
COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

TYPICAL ROAD SECTIONS

SHEET
C-301
15 OF 30



PLAN



ELEVATION

BRIDGE GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: ALL MATERIAL AND WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE "2018 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, EXCEPT AS NOTED IN THESE PLANS, SPECIAL PROVISIONS, AND AMENDMENTS.

DESIGN SPECIFICATIONS: THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS FOR LOAD AND RESISTANCE FACTOR DESIGN IN THE "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS", 6TH EDITION, WITH 2013 INTERIM REVISIONS.

MATERIAL:
CONCRETE (SEAL): CLASS 4000W
CONCRETE (CAST-IN-PLACE): CLASS 4000
CONCRETE (PRECAST GIRDERS): SEE GIRDER DETAILS
REINFORCING STEEL: ASTM A706, GRADE 60
PRESTRESSING STEEL: SEE GIRDER DETAILS

FINISHING:
ALL EXPOSED CAST-IN-PLACE SURFACES ABOVE THE FINISHED GRADE NOT FINISHED WITH FORM LINERS TO RECEIVE A CLASS 1 FINISH. OF THE GIRDERS, ONLY THE EXTERIOR FACE OF THE EXTERIOR GIRDERS SHALL RECEIVE A CLASS 1 FINISH. ALL EXPOSED EDGES OF CAST-IN-PLACE CONCRETE SHALL BE CHAMFERED WITH A 1" (DIAGONAL LENGTH) CHAMFER. ALL EXPOSED CAST-IN-PLACE CONCRETE SURFACES TO RECEIVE A PIGMENTED SEALER.

OTHER:
UNLESS OTHERWISE SHOWN ON THE PLANS, CONCRETE COVER FROM THE FACE OF CONCRETE TO REINFORCING BARS SHALL BE 2" (3" FOR CONCRETE CAST AGAINST SOIL).

UNLESS OTHERWISE SHOWN, THE MINIMUM REINFORCING BAR SPLICE LENGTH SHALL BE 2'-0".

ABBREVIATIONS:

PG - PROFILE GRADE	ABUT - ABUTMENT	BK - BACK
EF - EACH FACE	TYP - TYPICAL	BOT - BOTTOM
NF - NEAR FACE	OC - ON CENTER	
FF - FAR FACE	ES - EQUALLY SPACED	
CLR - CLEAR	BRG - BEARING	

DESIGN LIVE LOAD: HL93

CONSTRUCTION NOTES

1. BEAM GUARDRAIL (TYPE 31) TRANSITION SECTION TYPE 21 AND BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL STEEL POSTS, SEE WSDOT STD PLANS C-22.40-06 AND C-25.20-06.
2. BEAM GUARDRAIL (TYPE 31) TRANSITION SECTION TYPE 21, BEAM GUARDRAIL TYPE 31 (STRONG POST, R=32.5'), AND BEAM GUARDRAIL ANCHOR TYPE 10. USE STEEL POSTS ON ALL. SEE WSDOT STD PLANS C-20.42-05, C-23.60-04 AND C-25.20-06.
3. TYPE 5 EXTRUDED CURB, SEE WSDOT STD PLANS B-95.40-00 AND F-10.42-00.
4. APPROACH SLAB, CONSTRUCT PARALLEL TO ABUTMENT. SEE WSDOT STD PLAN A-40.50-02.
5. HEAVY LOOSE RIPRAP 3' THICK OVER GEOTEXTILE FOR SEPARATION.
6. REPLACE MATERIAL AFTER INSTALLING RIPRAP.
7. 6-MAN ROCKS (BURIED). INSTALL AT ELEVATION 1440±. SEE PLAN FOR LIMITS.

REVISION	BY	DATE

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

HORIZONTAL SCALE IN FEET: 20 0 20 40 60
VERTICAL SCALE IN FEET: 20 0 20 40 60

JOB NUMBER 228-57 DATE NOVEMBER 29 2017
ACAD FILE: 228-57-60S-101XX.DWG

PRELIMINARY

FEDERAL AID PROJECT NO: BROS-07RG(001)

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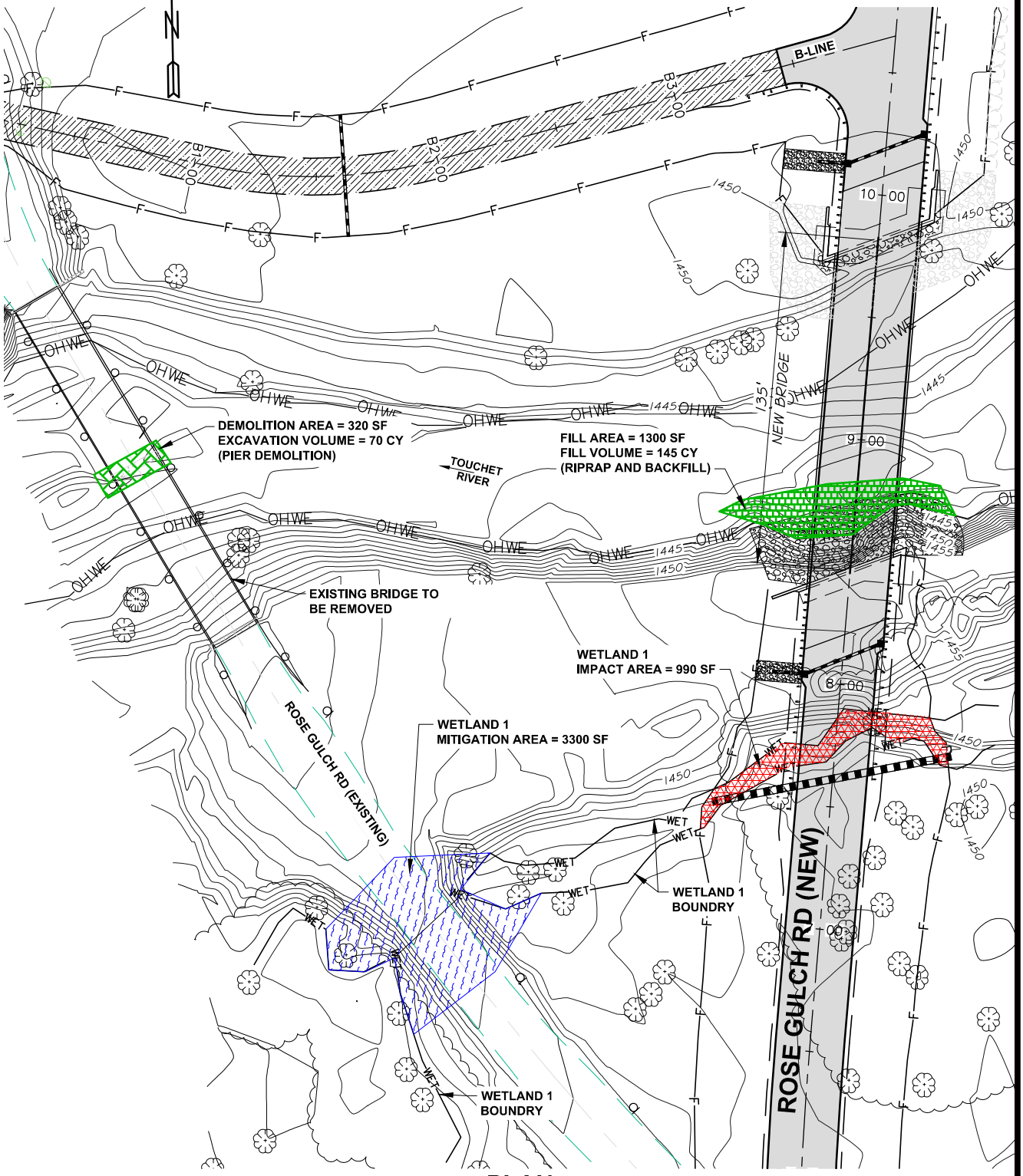
COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

BRIDGE LAYOUT

SHEET
S-101
18 OF 30

FIGURES



PLAN

30 0 30 60 90
SCALE IN FEET

anderson perry & associates, inc.

COLUMBIA COUNTY, WASHINGTON
VERNON SMITH BRIDGE REPLACEMENT

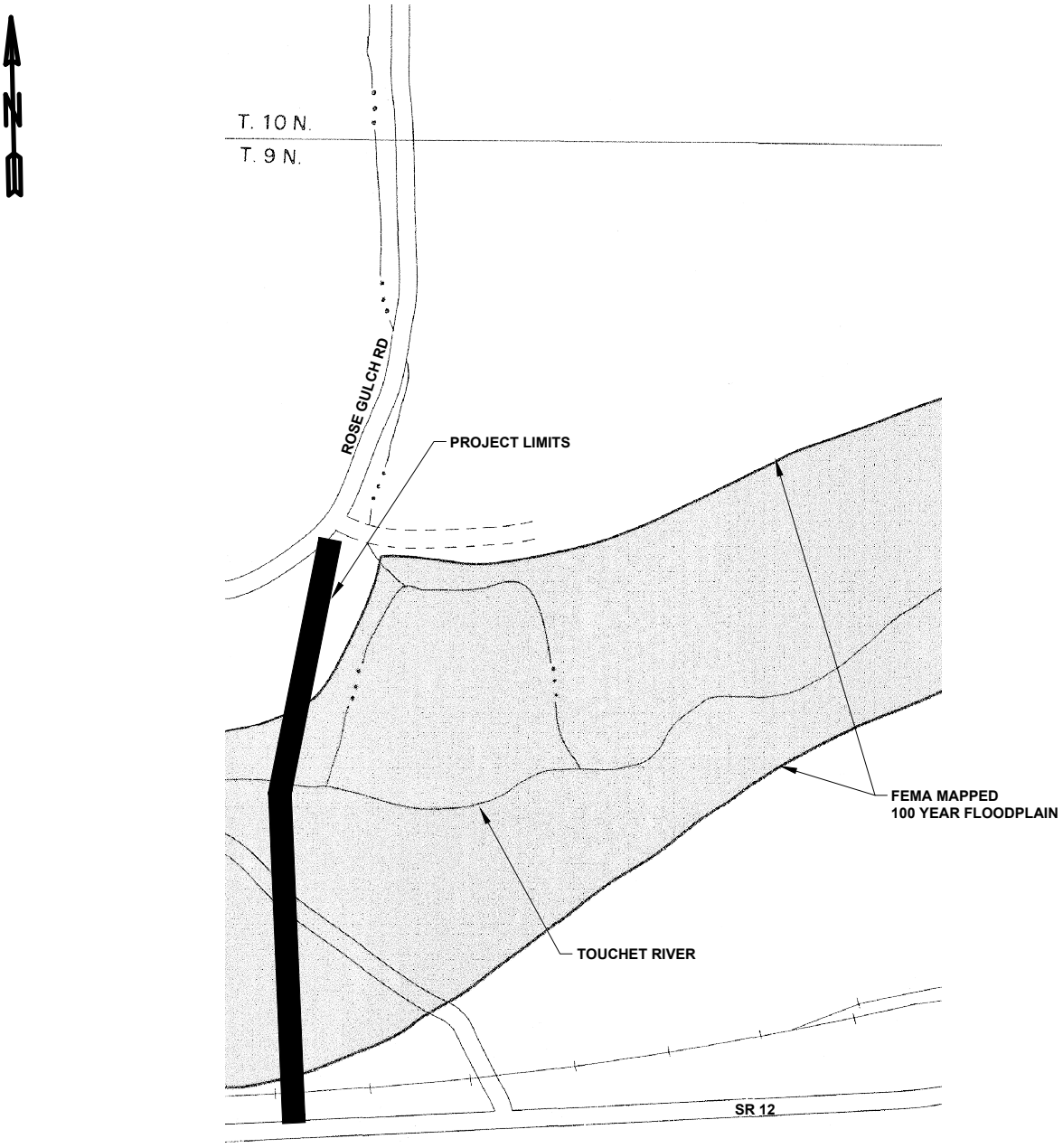
WETLAND AND WATERWAY FILL AND EXCAVATION

FIGURE

A

JANUARY 09 2018

228-57-60C-PERMIT1.DWG



PLAN
NTS

anderson perry & associates, inc.

COLUMBIA COUNTY, WASHINGTON
VERNON SMITH BRIDGE REPLACEMENT

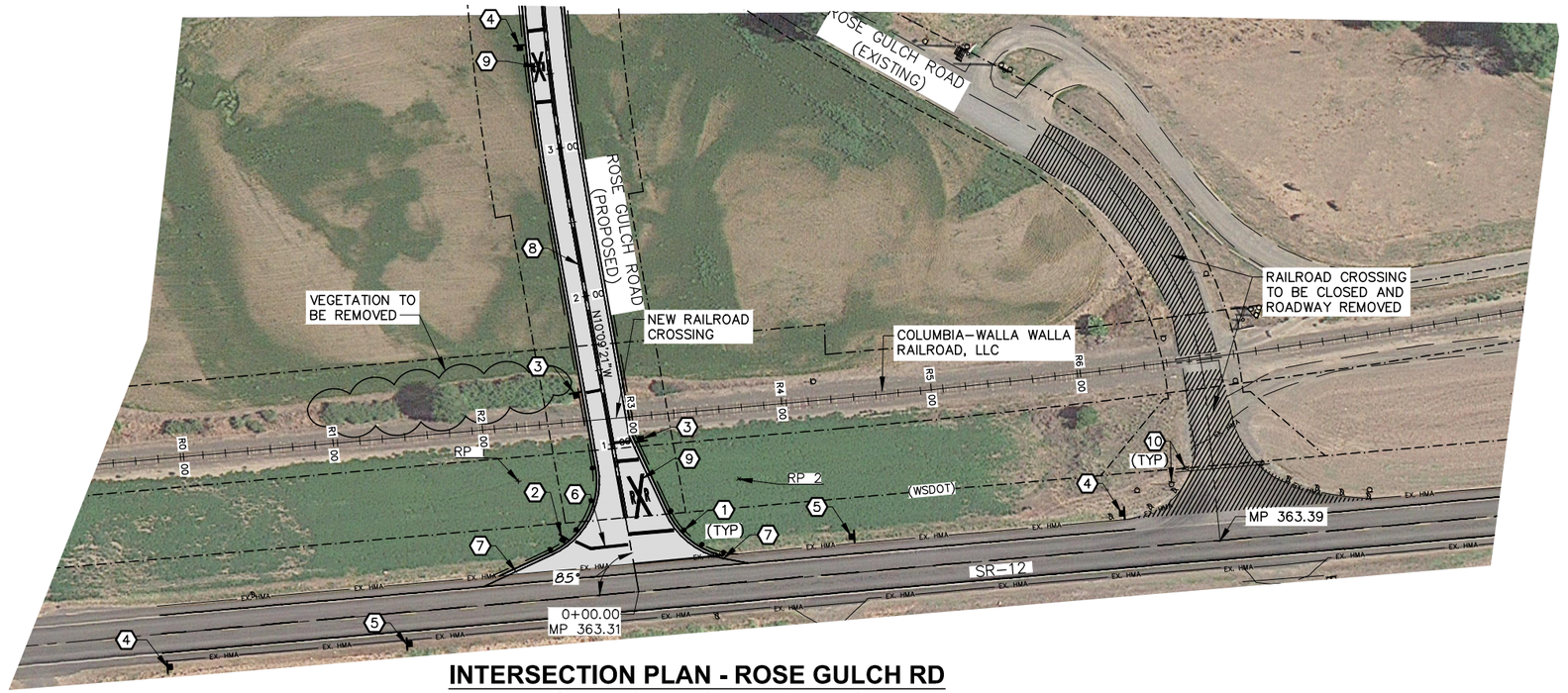
FLOODPLAIN MAP

FIGURE

B

JANUARY 09 2018

228-57-60G-FLOODFIG.DWG



INTERSECTION PLAN - ROSE GULCH RD

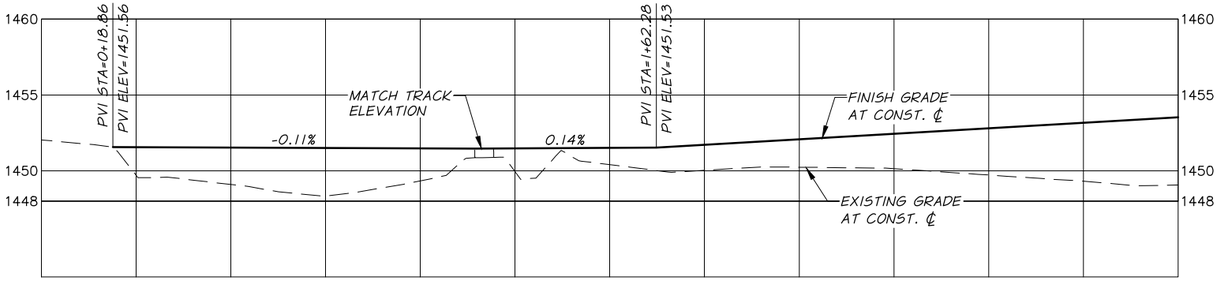
50 0 50 100 150
SCALE IN FEET

NOTES:

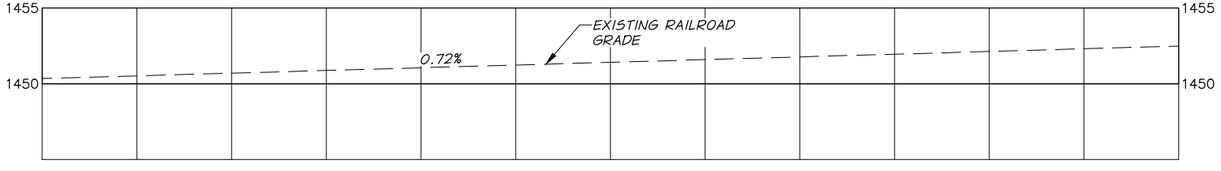
1. GUIDE POSTS PER WSDOT STD PLAN M-40.30-01.
2. MUTCD R1-1 SIGN (STOP)
3. MUTCD R15-1, R1-2 & I-3 SIGNS (RR CROSSBUCK, YIELD, EMERGENCY NOTIFICATION)
4. MUTCD W10-1 SIGN (RR CROSSING ADVANCE)
5. MUTCD W10-3 SIGN (PARALLEL RR CROSSING)
6. PLASTIC STOP BAR PER WSDOT STD PLAN M-24.60-04
7. PAINTED WHITE EDGE LINE PER WSDOT STD PLAN M-20.10-02
8. PAINTED DOUBLE YELLOW STRIPE PER WSDOT STD PLAN M-20.10-02
9. PAINTED RAILROAD CROSSING PER WSDOT STD PLAN M-11.10-02
10. REMOVE EXISTING SIGN AND GUIDE POSTS

RADIUS TABLE

RP	STA	OFFSET	LENGTH	RADIUS
RP 1	0+86.55	66.00' LT	65.7'	50.0'
RP 2	0+62.12	78.76' RT	46.3'	50.0'



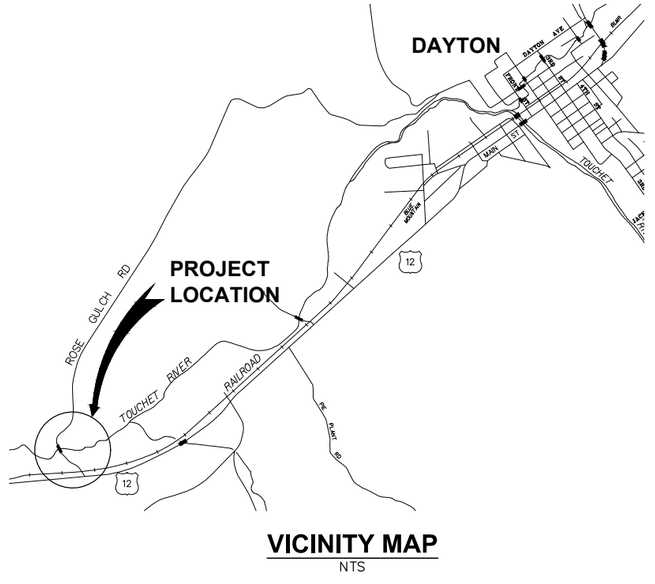
PROFILE - ROSE GULCH RD



PROFILE - RAILROAD

LEGEND

- RAILROAD TRACK
- RIGHT OF WAY
- EDGE OF GRAVEL
- EXISTING EDGE OF HMA
- EDGE OF ASPHALT
- EXISTING DELINEATOR
- PROPOSED DELINEATOR
- EXISTING SIGN
- PROPSED SIGN



VICINITY MAP

NTS

REVISION	BY	DATE

20 0 20 40 60
HORIZONTAL SCALE IN FEET
5 0 5 10 15
VERTICAL SCALE IN FEET

DESIGNED BY E. ZITTERKOPF
DRAWN BY –
REVIEWED BY –

JOB NUMBER 228-57 DATE APRIL 09 2018
ACAD FILE: 228-57-60C-R01XX.DWG

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NOT FOR CONSTRUCTION

FEDERAL AID PROJECT NO: BROS-07RG(001)

anderson perry & associates, inc.
engineering - surveying - natural resources

COLUMBIA COUNTY
VERNON SMITH BRIDGE REPLACEMENT

RAILROAD INTERSECTION PLAN

SHEET 1
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