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CONTRACT PROVISIONS and PLANS

For Construction of:

ADAMS ROAD, CRP 14-08 AND
BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12

Sealed Bids will be Opened on
June 28, 2016
at
1:45 P.M.
at the Office of the
Board of County Commissioners
Commissioners Hearing Room
P.O. Box 37
35 C Street NW
Ephrata, Washington 98823

NOTICE TO CONTRACTORS

Sealed bids, plainly marked **"BID FOR ADAMS ROAD, CRP 14-08 AND BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12"**, will be received by Grant County at the Office of the Board of County Commissioners located in the County Courthouse, P.O. Box 37, 35 C Street NW – Room 206, Ephrata, WA, 98823, until **1:45 P.M., Tuesday, June 28, 2016** and will then and there be opened and publicly read for the construction of the improvements.

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check, or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. No conditional bid bond will be accepted. Should the successful bidder fail to enter into such contract and furnish a satisfactory performance bond within the time stated in the specifications, the bid proposal deposit shall be forfeited to Grant County.

Maps, plans and specifications may be purchased from the office of the County Engineer, 124 Enterprise St. S.E., Ephrata, WA 98823, upon payment of the amount of $25.00 (non-refundable).

Informational copies of the maps, plans and specifications are on file for inspection at the Grant County Public Works Building, 124 Enterprise St. S.E., Ephrata, WA 98823, and in various plan centers located in Washington.

The Board of County Commissioners of Grant County, Washington, reserves the right to reject any and all bids. The award of this contract, if made, will be to the lowest responsible bidder.

The improvement for which bids will be received follows:

ADAMS ROAD, CRP 14-08 AND BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12
This contract provides for the reconstruction of 1.87 miles of two lane county road in Grant County, WA, and includes roadway excavation, embankment compaction, drainage items, crushed surfacing base course, maintenance rock, hot mix asphalt, bridge replacement, paint striping, seeding and fertilizing, and other work in accordance with the attached Contract Plans, these Contract Provisions and the Standard Specifications.

GRANT COUNTY PUBLIC WORKS

CRP 14-08

ADAMS ROAD

&

CRP 16-12

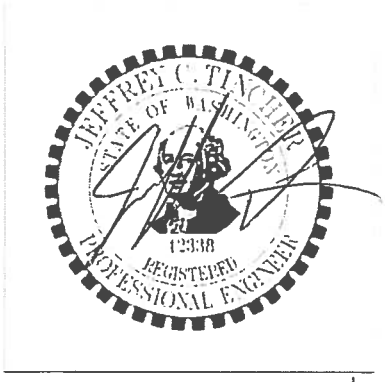
BRIDGE #330, M-NW & BRIDGE #334, 11-NW

NOTICE TO ALL PLANHOLDERS

Grant County Department of Public Works may be contacted to answer questions regarding these bid documents and to show this project to prospective bidders is:
Grant County Department of Public Works

124 Enterprise St. S.E.
Ephrata, WA. 98823
Phone: (509)754-6082 Fax (509)754-6082

As the Engineer in direct responsible charge of developing these contract provisions, I certify these provisions have been developed or incorporated into this project under my direct supervision, or as a result of certified recommendations provided by other licensed professionals.



Jeffrey C. Tincher P.E. 6/9/2016
County Road Engineer Date

BIDDER'S CHECK LIST

The bidder's attention is especially called to the following forms which must be executed in full as required:

(A) PROPOSAL

The unit prices bid must be shown in the spaces provided. Show unit prices in figures only. All extensions of the unit prices must be shown in the spaces provided.

(B) PROPOSAL SIGNATURE SHEET

To be filled in and signed by the bidder.

(C) STATEMENT OF CONTRACTOR QUALIFICATIONS

To be filled in and signed by the bidder.

(D) BID BOND

This form is to be executed by the bidder and his surety company unless the bid is accompanied by cash, certified or cashier's check. The amount of this bond shall be equal to 5% of the total amount bid and may be shown in dollars or on a percentage basis.

The following forms are to be executed after the contract is awarded:

(E) CONTRACT

This agreement is to be executed by the successful bidder, his surety company, and Grant County.

(F) CONTRACT BOND

To be executed by the successful bidder and his surety company.

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INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2016 Standard Specifications for Road, Bridge, and Municipal Construction.

AMENDMENTS TO THE STANDARD SPECIFICATIONS

The following Amendments to the Standard Specifications are made a part of this contract and supersede any conflicting provisions of the Standard Specifications. For informational purposes, the date following each Amendment title indicates the implementation date of the Amendment or the latest date of revision.

Each Amendment contains all current revisions to the applicable section of the Standard Specifications and may include references which do not apply to this particular project.

Section 1-02, Bid Procedures and Conditions
April 4, 2016

1-02.4(1) General

The first sentence of the last paragraph is revised to read:

> Any prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business on the Thursday preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.9 Delivery of Proposal

The last sentence of the third paragraph is revised to read:

> The Contracting Agency will not open or consider any Proposal when the Proposal or Bid deposit is received after the time specified for receipt of Proposals or received in a location other than that specified for receipt of Proposals unless an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received.

The following new paragraph is inserted before the last paragraph:

> If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified in Section 1-02.12 the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.12 Public Opening of Proposals

This section is supplemented with the following new paragraph:

> If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be opened at the time indicated in the call for Bids the time specified for opening of Proposals will be deemed to be extended to the same time of day on the first work day on which the normal work processes of the Contracting Agency resume.

Section 1-06, Control of Material
January 4, 2016

This section is supplemented with the following new section and subsections:

1-06.6 Recycled Materials

The Contractor shall make their best effort to utilize recycled materials in the construction of the project; the use of recycled concrete aggregate as specified in Section 1-06.6(1)A is a requirement of the Contract.

The Contractor shall submit a Recycled Material Utilization Plan as a Type 1 Working Drawing within 30 calendar days after the Contract is executed. The plan shall provide the Contractor's anticipated usage of recycled materials for meeting the requirements of these Specifications. The quantity of recycled materials will be provided in tons and as a percentage of the Plan quantity for each material listed in Section 9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material. When a Contract does not include Work that requires the use of a material that is included in the requirements for using materials the Contractor may state in their plan that no recycled materials are proposed for use.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor's report shall be provided on DOT Form 350-075 Recycled Materials Reporting.

1-06.6(1) Recycling of Aggregate and Concrete Materials

1-06.6(1)A General

The minimum quantity of recycled concrete aggregate shall be 25 percent of the total quantity of aggregate that is incorporated into the Contract for those items listed in Section 9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material that allow the use of recycled concrete aggregate. The percentage of recycled material incorporated into the project for meeting the required percentage will be calculated in tons based on the quantity of recycled concrete used on the entire Contract and not as individual items.

If the Contractor's total cost for Work with recycled concrete aggregate is greater than without the Contractor may choose to not use recycled concrete aggregate. When the Contractor does not meet the minimum requirement of 25 percent recycled concrete aggregate for the Contract due to costs or any other reason the following shall be submitted:

1. A cost estimate for each material listed in Section 9-03.21(1)E that is utilized on the Contract. The cost estimate shall include the following:

    a. The estimated costs for the Work for each material with 25 percent recycled concrete aggregate. The cost estimate shall include for each material a copy of the price quote from the supplier with the lowest total cost for the Work.

    b. The estimated costs for the Work for each material without recycled concrete aggregate.

The Contractor's cost estimates shall be submitted as an attachment to the Recycled Materials Reporting form.

Section 1-07, Legal Relations and Responsibilities to the Public
April 4, 2016

1-07.1 Laws to be Observed

In the second to last sentence of the third paragraph, "WSDOT" is revised to read "Contracting Agency".

1-07.2(2) State Sales Tax: WAC 458-20-170 – Retail Sales Tax

The last three sentences of the first paragraph are deleted and replaced with the following new sentence:

The Contractor (Prime or Subcontractor) shall include sales or use tax on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project, in the unit bid prices.

1-07.9(2) Posting Notices

Items 1 and 2 are revised to read:

1. EEOC - P/E-1 (revised 11/09, supplemented 09/15) – **Equal Employment Opportunity IS THE LAW** published by US Department of Labor. Post for projects with federal-aid funding.

2. FHWA 1022 (revised 05/15) – **NOTICE Federal-Aid Project** published by Federal Highway Administration (FHWA). Post for projects with federal-aid funding.

Items 5, 6 and 7 are revised to read:

5. WHD 1420 (revised 02/13) – **Employee Rights and Responsibilities Under The Family And Medical Leave Act** published by US Department of Labor. Post on all projects.

6. WHD 1462 (revised 01/16) – **Employee Polygraph Protection Act** published by US Department of Labor. Post on all projects.

7. F416-081-909 (revised 09/15) – **Job Safety and Health Law** published by Washington State Department of Labor and Industries. Post on all projects.

Items 9 and 10 are revised to read:

9. F700-074-909 (revised 06/13) – **Your Rights as a Worker in Washington State** by Washington State Department of Labor and Industries (L&I). Post on all projects.

10. EMS 9874 (revised 10/15) – **Unemployment Benefits** published by Washington State Employment Security Department. Post on all projects.

Section 1-08, Prosecution and Progress
January 4, 2016

1-08.1(1) Prompt Payment, Subcontract Completion and Return of Retainage Withheld

In item number 5 of the first paragraph, "WSDOT" is revised to read "Contracting Agency".

Section 1-09, Measurement and Payment
April 4, 2016

1-09.6 Force Account

The second sentence of item number 4 is revised to read:

> A "specialized service" is a work operation that is not typically done by worker classifications as defined by the Washington State Department of Labor and Industries and by the Davis Bacon Act, and therefore bills by invoice for work in road, bridge and municipal construction.

Section 5-04, Hot Mix Asphalt
April 4, 2016

This section (and all subsections) is revised to read:

> This Section 5-04 is written in a style which, unless otherwise indicated, shall be interpreted as direction to the Contractor.
>
> ### 5-04.1 Description
>
> This Work consists of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base, in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these Specifications.
>
> HMA shall be composed of asphalt binder and mineral materials as required, and may include reclaimed asphalt pavement (RAP) or reclaimed asphalt shingles (RAS), mixed in the proportions specified to provide a homogeneous, stable, and workable mix.
>
> ### 5-04.2 Materials
>
> Provide materials as specified in these sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
Warm Mix Asphalt Additive	9-02.5
Aggregates	9-03.8
Reclaimed Asphalt Pavement (RAP)	9-03.8(3)B
Reclaimed Asphalt Shingles (RAS)	9-03.8(3)B
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21
Hot Poured Sealant	9-04.2(1)A
Sand Slurry	9-04.2(1)B

5-04.2(1) How to Get an HMA Mix Design on the QPL

Comply with each of the following:

- Develop the mix design in accordance with WSDOT SOP 732.
- Develop a mix design that complies with Sections 9-03.8(2) and 9-03.8(6).
- Develop a mix design no more than 6 months prior to submitting it for QPL evaluation.
- Submit mix designs to the WSDOT State Materials Laboratory in Tumwater, including WSDOT Form 350-042.
- Include representative samples of the materials that are to be used in the HMA production as part of the mix design submittal. See Section 5-04.2(1)A to determine when to include samples of RAP or RAS.
- Identify the brand, type, and percentage of anti-stripping additive in the mix design submittal.
- Include with the mix design submittal a certification from the asphalt binder supplier that the anti-stripping additive is compatible with the crude source and the formulation of asphalt binder proposed for use in the mix design.
- Do not include warm mix asphalt (WMA) additives when developing a mix design or submitting a mix design for QPL evaluation. The use of warm mix asphalt (WMA) additives is not part of the process for obtaining approval for listing a mix design on the QPL. Refer to Section 5-04.2(2)B.

The Contracting Agency's basis for approving, testing, and evaluating HMA mix designs for approval on the QPL is dependent on the contractual basis for acceptance of the HMA mixture, as shown in Table 1.

Table 1

Basis for Contracting Agency Evaluation of HMA Mix Designs for Approval on the QPL		
Contractual Basis for Acceptance of HMA Mixture (see Section 5-04.3(9))	**Basis for Contracting Agency Approval of Mix Design for Placement on QPL**	**Contracting Agency Materials Testing for Evaluation of the Mix Design**
Statistical Evaluation, or Nonstatistical Evaluation	WSDOT Standard Practice QC-8	The Contracting Agency will test the mix design materials for compliance with Sections 9-03.8(2) and 9-03.8(6).
Visual Evaluation	Review of Form 350-042 for compliance with Sections 9-03.8(2) and 9-03.8(6)	The Contracting Agency may elect to test the mix design materials, or evaluate in accordance with WSDOT Standard Practice QC-8, at its sole discretion.

If the Contracting Agency approves the mix design, it will be listed on the QPL for 12 consecutive months. The Contracting Agency may extend the 12 month listing provided the Contractor submits a certification letter to the Qualified Products Engineer verifying that the aggregate source and job mix formula (JMF) gradation, and asphalt binder crude source and formulation have not changed. The Contractor may submit the certification no sooner than one month prior to expiration of the initial 12 month mix design approval. Within 7 calendar days of receipt of the Contractor's certification, the Contracting Agency will update the QPL. The maximum duration for approval of a mix design and listing on the QPL will be 24 months from the date of initial approval or as approved by the Engineer.

5-04.2(1)A Mix Designs Containing RAP and/or RAS

Mix designs are classified by the RAP and/or RAS content as shown in Table 2.

Table 2

Mix Design Classification Based on RAP/RAS Content	
RAP/RAS Classification	**RAP/RAS Content[1]**
Low RAP/No RAS	0% ≤ RAP% ≤ 20% and RAS% = 0%
High RAP/Any RAS	20% < RAP% ≤ Maximum Allowable RAP[2] and/or 0% < RAS% ≤ Maximum Allowable RAS[2]

[1]Percentages in this table are by total weight of HMA

[2]See Table 4 to determine the limits on the maximum amount RAP and/or RAS.

5-04.2(1)A1 Low RAP/No RAS – Mix Design Submittals for Placement on QPL

For Low RAP/No RAS mix designs, comply with the following additional requirements:

1. Develop the mix design without the inclusion of RAP.
2. The asphalt binder grade shall be the grade indicated in the Bid item name or as otherwise required by the Contract.
3. Do not submit samples of RAP with these mix designs.
4. Testing RAP or RAS stockpiles is not required for obtaining approval for placing these mix designs on the QPL.

5-04.2(1)A2 High RAP/Any RAS - Mix Design Submittals for Placement on QPL

For High RAP/Any RAS mix designs, comply with the following additional requirements:

1. For mix designs with any RAS, test the RAS stockpile (and RAP stockpile if any RAP is in the mix design) in accordance with Table 3.
2. For High RAP mix designs with no RAS, test the RAP stockpile in accordance with Table 3.

3. For mix designs with High RAP/Any RAS, construct a single stockpile for RAP and a single stockpile for RAS and isolate (sequester) these stockpiles from further stockpiling before beginning development of the mix design. Test the RAP and RAS during stockpile construction as required by item 1 and 2 above. Use the test data in developing the mix design, and report the test data to the Contracting Agency on WSDOT Form 350-042 as part of the mix design submittal for approval on the QPL. Account for the reduction in asphalt binder contributed from RAS in accordance with AASHTO PP 78. Do not add to these stockpiles after starting the mix design process.

Table 3

Test Frequency of RAP/RAS During RAP/RAS Stockpile Construction For Approving a High RAP/Any RAS Mix Design for Placement on the QPL		
Test Frequency[1]	Test for	Test Method
• 1/1000 tons of RAP (minimum of 10 per mix design) and • 1/100 tons of RAS (minimum of 10 per mix design)	Asphalt Binder Content and Sieve Analysis of Fine and Coarse Aggregate	FOP for AASHTO T 308 and FOP for WAQTC T 27/T 11

[1]"tons", in this table, refers to tons of the reclaimed material before being incorporated into HMA.

4. Limit the amount of RAP and/or RAS used in a High RAP/Any RAS mix design by the amount of binder contributed by the RAP and/or RAS, in accordance with Table 4.

Table 4

Maximum Amount of RAP and/or RAS in HMA Mixture	
Maximum Amount of Binder Contributed from:	
RAP	RAS
40%[1] minus contribution of binder from RAS	20%[2]

[1] Calculated as the weight of asphalt binder contributed from the RAP as a percentage of the total weight of asphalt binder in the mixture.

[2] Calculated as the weight of asphalt binder contributed from the RAS as a percentage of the total weight of asphalt binder in the mixture.

5. Develop the mix design including RAP, RAS, recycling agent, and new binder.

6. Extract, recover, and test the asphalt residue from the RAP and RAS stockpiles to determine the percent of recycling agent and/or grade of new asphalt binder needed to meet but not exceed the performance grade (PG) of asphalt binder required by the Contract.

a. Perform the asphalt extraction in accordance with AASHTO T 164 or ASTM D 2172 using reagent grade trichloroethylene.

b. Perform the asphalt recovery in accordance with AASHTO R 59 or ASTM D 1856.

c. Test the recovered asphalt residue in accordance with AASHTO R 29 to determine the asphalt binder grade in accordance with Section 9-02.1(4).

d. After determining the recovered asphalt binder grade, determine the percent of recycling agent and/or grade of new asphalt binder in accordance with ASTM D 4887.

e. Test the final blend of recycling agent, binder recovered from the RAP and RAS, and new asphalt binder in accordance with AASHTO R 29. The final blended binder shall meet but not exceed the performance grade of asphalt binder required by the Contract and comply with the requirements of Section 9-02.1(4).

7. Include the following test data with the mix design submittal:

   a. All test data from RAP and RAS stockpile construction.

   b. All data from testing the recovered and blended asphalt binder.

8. Include representative samples of the following with the mix design submittal:

   a. RAP and RAS.

   b. 100 grams of recovered asphalt residue from the RAP and RAS that are to be used in the HMA production.

5-04.2(1)B Commercial HMA - Mix Design Submittal for Placement on QPL

For HMA used in the Bid item Commercial HMA, in addition to the requirements of 5-04.2(1) identify the following in the submittal:

1. Commercial HMA

2. Class of HMA

3. Performance grade of binder

4. Equivalent Single Axle Load (ESAL)

The Contracting Agency may elect to approve Commercial HMA mix designs without evaluation.

5-04.2(1)C Mix Design Resubmittal for QPL Approval

Develop a new mix design and resubmit for approval on the QPL when any of the following changes occur. When these occur, discontinue using the mix design until after it is reapproved on the QPL.

1. Change in the source of crude petroleum used in the asphalt binder.

2. Changes in the asphalt binder refining process.

3. Changes in additives or modifiers in the asphalt binder.

4. Changes in the anti-strip additive, brand, type or quantity.

5. Changes to the source of material for aggregate.

6. Changes to the job mix formula that exceed the amounts as described in item 2 of Section 9-03.8(7), unless otherwise approved by the Engineer.

7. Changes in the percentage of material from a stockpile, when such changes exceed 5% of the total aggregate weight.

    a. Changes to the percentage of material from a stockpile will be calculated based on the total aggregate weight (not including the weight of RAP) for Low RAP/No RAS mix designs.

    b. For High RAP/Any RAS mix designs, changes in the percentage of material from a stockpile will be based on total aggregate weight including the weight of RAP (and/or RAS when included in the mixture).

Prior to making any change in the amount of RAS in an approved mix design, notify the Engineer for determination of whether a new mix design is required, and obtain the Engineer's approval prior to implementing such changes.

5-04.2(2) Mix Design – Obtaining Project Approval

Use only mix designs listed on the Qualified Products List (QPL). Submit WSDOT Form 350-041 to the Engineer to request approval to use a mix design from the QPL. Changes to the job mix formula (JMF) that have been approved on other contracts may be included. The Engineer may reject a request to use a mix design if production of HMA using that mix design on any contract is not in compliance with Section 5-04.3(11)D, E, F, and G for mixture or compaction.

5-04.2(2)A Changes to the Job Mix Formula

The approved mix design obtained from the QPL will be considered the starting job mix formula (JMF) and shall be used as the initial basis for acceptance of HMA mixture, as detailed in Section 5-04.3(9).

During production the Contractor may request to adjust the JMF. Any adjustments to the JMF will require approval of the Engineer and shall be made in accordance with item 2 of Section 9-03.8(7). After approval by the Engineer, such adjusted JMF's shall constitute the basis for acceptance of the HMA mixture.

5-04.2(2)B Using Warm Mix Asphalt Processes

The Contractor may, at the Contractor's discretion, elect to use warm mix asphalt (WMA) processes for producing HMA. WMA processes include organic additives, chemical additives, and foaming. The use of WMA is subject to the following:

- Do not use WMA processes in the production of High RAP/Any RAS mixtures.

- Before using WMA processes, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed WMA process.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

Do not place HMA for wearing course on any Traveled Way beginning October 1st through March 31st of the following year, without written concurrence from the Engineer.

Do not place HMA on any wet surface, or when the average surface temperatures are less than those specified in Table 5, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

Table 5

Minimum Surface Temperature for Paving		
Compacted Thickness (Feet)	**Wearing Course**	**Other Courses**
Less than 0.10	55°F	45°F
0.10 to 0.20	45°F	35°F
More than 0.20	35°F	35°F

5-04.3(2) Paving Under Traffic

These requirements apply when the Roadway being paved is open to traffic.

In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

During paving operations, maintain temporary pavement markings throughout the project. Install temporary pavement markings on the Roadway prior to opening to traffic. Temporary pavement markings shall comply with Section 8-23.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Equip mixing plants as follows.

1. **Use tanks for storage and preparation of asphalt binder which:**

   - Heat the contents by means that do not allow flame to contact the contents or the tank, such as by steam or electricity.
   - Heat and hold contents at the required temperatures.
   - Continuously circulate contents to provide uniform temperature and consistency during the operating period.
   - Provide an asphalt binder sampling valve, in either the storage tank or the supply line to the mixer.

2. **Provide thermometric equipment:**

   - In the asphalt binder feed line near the charging valve at the mixer unit, capable of detecting temperature ranges expected in the HMA and in a location convenient and safe for access by Inspectors.

- At the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates, and situated in full view of the plant operator.

3. **When heating asphalt binder:**

   - Do not exceed the maximum temperature of the asphalt binder recommended by the asphalt binder supplier.

   - Avoid local variations in heating.

   - Provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F.

4. **Provide a mechanical sampler for sampling mineral materials that:**

   - Meets the crushing or screening requirements of Section 1-05.6.

5. **Provide HMA sampling equipment that complies with WSDOT SOP T-168.**

   - Use a mechanical sampling device installed between the discharge of the silo and the truck transport, approved by the Engineer, or

   - Platforms or devices to enable sampling from the truck transport without entering the truck transport for sampling HMA.

6. **Provide for setup and operation of the Contracting Agency's field testing:**

   - As required in Section 3-01.2(2).

7. **Provide screens or a lump breaker:**

   - When using any RAP or any RAS, to eliminate oversize RAP or RAS particles from entering the pug mill or drum mixer.

5-04.3(3)B Hauling Equipment

Provide HMA hauling equipment with tight, clean, smooth metal beds and a cover of canvas or other suitable material of sufficient size to protect the HMA from adverse weather. Securely attach the cover to protect the HMA whenever the weather conditions during the work shift include, or are forecast to include, precipitation or an air temperature less than 45°F.

Prevent HMA from adhering to the hauling equipment. Spray metal beds with an environmentally benign release agent. Drain excess release agent prior to filling hauling equipment with HMA. Do not use petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA. For hopper trucks, operate the conveyer during the process of applying the release agent.

5-04.3(3)C Pavers

Use self-contained, power-propelled pavers provided with an internally heated vibratory screed that is capable of spreading and finishing courses of HMA in lane widths required by the paving section shown in the Plans.

When requested by the Engineer, provide written certification that the paver is equipped with the most current equipment available from the manufacturer for the prevention of segregation of the coarse aggregate particles. The certification shall list the make, model, and year of the paver and any equipment that has been retrofitted to the paver.

Operate the screed in accordance with the manufacturer's recommendations and in a manner to produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. Provide a copy of the manufacturer's recommendations upon request by the Contracting Agency. Extensions to the screed will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. In the Travelled Way do not use extensions without both augers and an internally heated vibratory screed.

Equip the paver with automatic screed controls and sensors for either or both sides of the paver. The controls shall be capable of sensing grade from an outside reference line, sensing the transverse slope of the screed, and providing automatic signals that operate the screed to maintain the desired grade and transverse slope. Construct the sensor so it will operate from a reference line or a mat referencing device. The transverse slope controller shall be capable of maintaining the screed at the desired slope within plus or minus 0.1 percent.

Equip the paver with automatic feeder controls, properly adjusted to maintain a uniform depth of material ahead of the screed.

Manual operation of the screed is permitted in the construction of irregularly shaped and minor areas. These areas include, but are not limited to, gore areas, road approaches, tapers and left-turn channelizations.

When specified in the Contract, provide reference lines for vertical control. Place reference lines on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line is permitted. Automatically control the grade and slope of intermediate lanes by means of reference lines or a mat referencing device and a slope control device. When the finish of the grade prepared for paving is superior to the established tolerances and when, in the opinion of the Engineer, further improvement to the line, grade, cross-section, and smoothness can best be achieved without the use of the reference line, a mat referencing device may be substituted for the reference line. Substitution of the device will be subject to the continued approval of the Engineer. A joint matcher may be used subject to the approval of the Engineer. The reference line may be removed after completion of the first course of HMA when approved by the Engineer. Whenever the Engineer determines that any of these methods are failing to provide the necessary vertical control, the reference lines will be reinstalled by the Contractor.

Furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

If the paving machine in use is not providing the required finish, the Engineer may suspend Work as allowed by Section 1-08.6.

5-04.3(3)D Material Transfer Device or Material Transfer Vehicle

Use a material transfer device (MTD) or material transfer vehicle (MTV) to deliver the HMA from the hauling equipment to the paving machine for any lift in (or partially in) the top 0.30 feet of the pavement section used in traffic lanes. However, an MTD/V is not required for HMA placed in irregularly shaped and minor areas such as tapers and turn lanes, or for HMA mixture that is accepted by Visual Evaluation. At the Contractor's request the Engineer may approve paving without an MTD/V; the Engineer will determine if an equitable adjustment in cost or time is due. If a windrow elevator is used, the Engineer may limit the length of the windrow in urban areas or through intersections.

To be approved for use, an MTV:

1. Shall be a self-propelled vehicle, separate from the hauling vehicle or paver.

2. Shall not connected to the hauling vehicle or paver.

3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.

4. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.

5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

To be approved for use, an MTD:

1. Shall be positively connected to the paver.

2. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.

3. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.

4. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

5-04.3(3)E Rollers

Operate rollers in accordance with the manufacturer's recommendations. When requested by the Engineer, provide a Type 1 Working Drawing of the manufacturer's recommendation for the use of any roller planned for use on the project. Do not use rollers that crush aggregate, produce pickup or washboard, unevenly compact the surface, displace the mix, or produce other undesirable results.

5-04.3(4) Preparation of Existing Paved Surfaces

Before constructing HMA on an existing paved surface, the entire surface of the pavement shall be clean. Entirely remove all fatty asphalt patches, grease drippings,

and other deleterious substances from the existing pavement to the satisfaction of the Engineer. Thoroughly clean all pavements or bituminous surfaces of dust, soil, pavement grindings, and other foreign matter. Thoroughly remove any cleaning or solvent type liquids used to clean equipment spilled on the pavement before paving proceeds. Fill all holes and small depressions with an appropriate class of HMA. Level and thoroughly compact the surface of the patched area.

Apply a uniform coat of asphalt (tack coat) to all paved surfaces on which any course of HMA is to be placed or abutted. Apply tack coat to cover the cleaned existing pavement with a thin film of residual asphalt free of streaks and bare spots. Apply a heavy application of tack coat to all joints. For Roadways open to traffic, limit the application of tack coat to surfaces that will be paved during the same working shift. Equip the spreading equipment with a thermometer to indicate the temperature of the tack coat material.

Do not operate equipment on tacked surfaces until the tack has broken and cured. Repair tack coat damaged by the Contractor's operation, prior to placement of the HMA.

Unless otherwise approved by the Engineer, use CSS-1, CSS-1h, or Performance Graded (PG) asphalt for tack coat. The CSS-1 and CSS-1h emulsified asphalt may be diluted with water at a rate not to exceed one part water to one part emulsified asphalt. Do not allow the tack coat material to exceed the maximum temperature recommended by the asphalt supplier.

When shown in the Plans, prelevel uneven or broken surfaces over which HMA is to be placed by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

5-04.3(4)A Crack Sealing

5-04.3(4)A1 General

When the Proposal includes a pay item for crack sealing, seal all cracks ¼ inch in width and greater.

Cleaning: Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

Sand Slurry: For cracks that are to be filled with sand slurry, thoroughly mix the components and pour the mixture into the cracks until full. Add additional CSS-1 emulsified asphalt to the sand slurry as needed for workability to ensure the mixture will completely fill the crack. Strike off the sand slurry flush with the existing pavement surface and allow the mixture to cure. Top off cracks that were not completely filled with additional sand slurry. Do not place the HMA overlay until the slurry has fully cured.

Hot Poured Sealant: For cracks that are to be filled with hot poured sealant, apply the material in accordance with these requirements and the manufacturer's recommendations. Furnish a Type 1 Working Drawing of the manufacturer's recommendations to the Engineer prior to the start of work, including the manufacturer's recommended heating time and temperatures,

allowable storage time and temperatures after initial heating, allowable reheating criteria, and application temperature range. Confine hot poured sealant material within the crack. Clean any overflow of sealant from the pavement surface. If, in the opinion of the Engineer, the Contractor's method of sealing the cracks with hot poured sealant results in an excessive amount of material on the pavement surface, stop and correct the operation to eliminate the excess material.

5-04.3(4)A2 Crack Sealing Areas Prior to Paving
In areas where HMA will be placed, use sand slurry to fill the cracks.

5-04.3(4)A3 Crack Sealing Areas Not to be Paved
In areas where HMA will not be placed, fill the cracks as follows:

1. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.

2. Cracks greater than 1 inch in width – fill with sand slurry.

5-04.3(4)B Soil Residual Herbicide
Where shown in the Plans, apply one application of an approved soil residual herbicide. Comply with Section 8-02.3(3)B. Complete paving within 48 hours of applying the herbicide.

Use herbicide registered with the Washington State Department of Agriculture for use under pavement. Before use, obtain the Engineer's approval of the herbicide and the proposed rate of application. Include the following information in the request for approval of the material:

1. Brand Name of the Material,

2. Manufacturer,

3. Environmental Protection Agency (EPA) Registration Number,

4. Material Safety Data Sheet, and

5. Proposed Rate of Application.

5-04.3(4)C Pavement Repair
Excavate pavement repair areas and backfill these with HMA in accordance with the details shown in the Plans and as staked. Conduct the excavation operations in a manner that will protect the pavement that is to remain. Repair pavement not designated to be removed that is damaged as a result of the Contractor's operations to the satisfaction of the Engineer at no cost to the Contracting Agency. Excavate only within one lane at a time unless approved otherwise by the Engineer. Do not excavate more area than can be completely backfilled and compacted during the same shift.

Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth of 1.0 feet. The Engineer will make the final determination of the excavation depth required.

The minimum width of any pavement repair area shall be 40 inches unless shown otherwise in the Plans. Before any excavation, sawcut the perimeter of the

pavement area to be removed unless the pavement in the pavement repair area is to be removed by a pavement grinder.

Excavated materials shall be the property of the Contractor and shall be disposed of in a Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

Apply a heavy application of tack coat to all surfaces of existing pavement in the pavement repair area, in accordance with Section 5-04.3(4).

Place the HMA backfill in lifts not to exceed 0.35-foot compacted depth. Thoroughly compact each lift by a mechanical tamper or a roller.

5-04.3(5) Producing/Stockpiling Aggregates, RAP, & RAS

Produce aggregate in compliance with Section 3-01. Comply with Section 3-02 for preparing stockpile sites, stockpiling, and removing from stockpile each of the following: aggregates, RAP, and RAS. Provide sufficient storage space for each size of aggregate, RAP and RAS. Fine aggregate or RAP may be uniformly blended with the RAS as a method of preventing the agglomeration of RAS particles. Remove the aggregates, RAP and RAS from stockpile(s) in a manner that ensures minimal segregation when being moved to the HMA plant for processing into the final mixture. Keep different aggregate sizes separated until they have been delivered to the HMA plant.

5-04.3(5)A Stockpiling RAP or RAS for High RAP/Any RAS Mixes

Do not place any RAP or RAS into a stockpile which has been sequestered for a High RAP/Any RAS mix design. Do not incorporate any RAP or RAS into a High RAP/Any RAS mixture from any source other than the stockpile which was sequestered for approval of that particular High RAP/Any RAS mix design.

RAP that is used in a Low RAP/No RAS mix is not required to come from a sequestered stockpile.

5-04.3(6) Mixing

The asphalt supplier shall introduce anti-stripping additive, in the amount designated on the QPL for the mix design, into the asphalt binder prior to shipment to the asphalt mixing plant.

Anti-strip is not required for temporary work that will be removed prior to Physical Completion.

Use asphalt binder of the grade, and from the supplier, in the approved mix design.

Prior to introducing reclaimed materials into the asphalt plant, remove wire, nails, and other foreign material. Discontinue use of the reclaimed material if the Engineer, in their sole discretion, determines the wire, nails, or other foreign material to be excessive.

Size RAP and RAS prior to entering the mixer to provide uniform and thoroughly mixed HMA. If there is evidence of the RAP or RAS not breaking down during the heating and mixing of the HMA, immediately suspend the use of the RAP or RAS until changes have been approved by the Engineer.

After the required amount of mineral materials, RAP, RAS, new asphalt binder and recycling agent have been introduced into the mixer, mix the HMA until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, RAP and RAS is ensured.

Upon discharge from the mixer, ensure that the temperature of the HMA does not exceed the optimum mixing temperature shown on the approved Mix Design Report by more than 25°F, or as approved by the Engineer. When a WMA additive is included in the manufacture of HMA, do not heat the WMA additive (at any stage of production including in binder storage tanks) to a temperature higher than the maximum recommended by the manufacturer of the WMA additive.

A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, reduce the moisture content.

During the daily operation, HMA may be temporarily held in approved storage facilities. Do not incorporate HMA into the Work that has been held for more than 24 hours after mixing. Provide an easily readable, low bin-level indicator on the storage facility that indicates the amount of material in storage. Waste the HMA in storage when the top level of HMA drops below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift. Dispose of rejected or waste HMA at no expense to the Contracting Agency.

5-04.3(7) Spreading and Finishing

Do not exceed the maximum nominal compacted depth of any layer in any course, as shown in Table 6, unless approved by the Engineer:

Table 6

Maximum Nominal Compacted Depth of Any Layer		
HMA Class	**Wearing Course**	**Other than Wearing Course**
1 inch	0.35 feet	0.35 feet
¾ and ½ inch	0.30 feet	0.35 feet
⅜ inch	0.15 feet	0.15 feet

Use HMA pavers complying with Section 5-04.3(3) to distribute the mix. On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, place the material produced for each JMF with separate spreading and compacting equipment. Do not intermingle HMA produced from more than one JMF. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

Sample aggregate for meeting the requirements of Section 3-04 prior to being incorporated into HMA. (The acceptance data generated for the Section 3-04 acceptance analysis will not be commingled with the acceptance data generated for the Section 5-04.3(9) acceptance analysis.) Aggregate acceptance samples

shall be taken as described in Section 3-04. Aggregate acceptance testing will be performed by the Contracting Agency. Aggregate contributed from RAP and/or RAS will not be evaluated under Section 3-04.

For aggregate that will be used in HMA mixture which will be accepted by either Statistical or Nonstatistical Evaluation, the Contracting Agency's acceptance of the aggregate will be based on:

1. Samples taken prior to mixing with asphalt binder, RAP, or RAS;

2. Testing for the materials properties of fracture, uncompacted void content, and sand equivalent;

3. Evaluation by the Contracting Agency in accordance with Section 3-04, including price adjustments as described therein.

For aggregate that will be used in HMA which will be accepted by Visual Evaluation, evaluation in accordance with items 1, 2, and 3 above is at the discretion of the Engineer.

5-04.3(9) HMA Mixture Acceptance

The Contracting Agency will evaluate HMA mixture for acceptance by one of three methods as determined from the criteria in Table 7.

Table 7

Basis of Acceptance for HMA Mixture			
	Visual Evaluation	**Nonstatistical Evaluation**	**Statistical Evaluation**
Criteria for Selecting the Evaluation Method	• Commercial HMA placed at any location • Any HMA placed in: o sidewalks o road approaches o ditches o slopes o paths o trails o gores o prelevel o temporary pavement[1] o pavement repair • Other nonstructural applications of HMA as approved by the Engineer	• All HMA mixture of the same class and PG binder grade with a Proposal quantity less than 4,000 tons. (Exclude the tonnage of HMA mixture accepted by Visual Evaluation.)	• All HMA mixture other than that accepted by Visual or Nonstatistical Evaluation

[1] Temporary pavement is HMA that will be removed before Physical Completion of the Contract.

5-04.3(9)A Mixture Acceptance – Test Section

This Section applies to HMA mixture accepted by Statistical Evaluation and mixture accepted by Nonstatistical Evaluation. A test section is not allowed for HMA accepted by Visual Evaluation.

The purpose of a test section is to determine, at the beginning of paving, whether or not the Contractor's mix design and production processes will produce HMA meeting the Contract requirements related to mixture.

Use Table 8 to determine when a test section is required, optional, or not allowed, and to determine when test sections may end for an individual mix design. Each mix design will be evaluated independently for the test section requirements.

Construct HMA mixture test sections at the beginning of paving, using at least 600 tons and a maximum of 1,000 tons or as approved by the Engineer. Each test section shall be constructed in one continuous operation. Each test section shall be considered a lot. The mixture in each test section will be evaluated based on the criteria in Table 9 to determine if test sections for that mix design may stop.

If more than one test section is required, each test section shall be separately by the criteria in table 8 and 9.

Table 8

Criteria for Conducting and Evaluating HMA Mix Texture Sections (For HMA Mixture Accepted by Statistical or Nonstatistical Evaluation)		
	High RAP/Any RAS	**Low RAP/No RAS**
Is Mixture Test Section Optional or Mandatory?	Mandatory[1]	At Contractor's Option[3]
Waiting period after paving the test section.	4 calendar days[2]	4 calendar days[2]
What Must Happen to Stop Performing Test Sections?	Meet "Results Required to Stop Performing Test Sections" in Table 9 for High RAP/Any RAS.	Provide samples and respond to WSDOT test results required by Table 9 for Low RAP/No RAS.

[1]If a mix design has produced an acceptable test section on a previous contract (paved in the same calendar year, from the same plant, using the same JMF) the test section may be waived if approved by the Engineer.

[2]This is to provide time needed by the Contracting Agency to complete testing and the Contractor to adjust the mixture in response to those test results. Paving may resume when this is done.

[3]For HMA with Low RAP/No RAS, which is accepted by Nonstatistical Evaluation, a test section is not allowed.

Table 9

Results Required to Stop Performing HMA Mixture Test Sections[1] (For HMA Mixture Accepted by Statistical or Nonstatistical Evaluation)

Test Property	Type of HMA	
	High RAP/Any RAS	Low RAP/No RAS
Gradation	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4[2]	None[4]
Asphalt Binder	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4[2]	None[4]
V_a	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4[2]	None[4]
Hamburg Wheel Track Indirect Tensile Strength	Meet requirements of Section 9-03.8(2).[3]	These tests will not be done as part of Test Section.
Sand Equivalent Uncompacted Void Content Fracture	Meet requirements of Section 9-03.8(2).[3]	None[3]

[1]In addition to the requirements of this table, acceptance of the HMA mixture used in each test section is subject to the acceptance criteria and price adjustments for Statistical Evaluation or Non-statistical Evaluation (see Table 7).

[2]Divide the test section lot into three sublots, approximately equal in size. Take one sample from each sublot, and test each sample for all of the properties in the first column.

[3]Take one sample for each test section lot. Test the sample for all of the properties in the first column.

[4]Divide the test section lot into three sublots, approximately equal in size. Take one sample from each sublot, and test each sample for all of the properties in the first column. There are no criteria for discontinuing test sections for these mixes; however, the contractor must comply with Section 5-04.3(11)F before resuming paving.

5-04.3(9)B Mixture Acceptance – Statistical Evaluation

5-04.3(9)B1 Mixture Statistical Evaluation – Lots and Sublots

HMA mixture which is accepted by Statistical Evaluation will be evaluated by the Contracting Agency dividing that HMA tonnage into mixture lots, and each mixture lot will be evaluated using stratified random sampling by the Contracting Agency sub-dividing each mixture lot into mixture sublots. All mixture in a mixture lot shall be of the same mix design. The mixture sublots will be numbered in the order in which the mixture (of a particular mix design) is paved.

Each mixture lot comprises a maximum of 15 mixture sublots, except:

- The final mixture lot of each mix design on the Contract will comprise a maximum of 25 sublots.
- A mixture lot for a test section, which will consist of the three sublots and corresponding test results used in evaluating the test section for gradation, asphalt binder, and Va.

Each mixture sublot shall be approximately uniform in size with the maximum mixture sublot size as specified in Table 10. The quantity of material represented by the final mixture sublot of the project, for each mix design on the project, may be increased to a maximum of two times the mixture sublot quantity calculated. Should a lot accepted by statistical evaluation contain fewer than three sublots, the HMA will be accepted in accordance with nonstatistical evaluation.

Table 10

Maximum HMA Mixture Sublot Size For HMA Accepted by Statistical Evaluation	
HMA Original Plan Quantity (tons)[1]	**Maximum Sublot Size (tons)[2]**
< 20,000	1,000
20,000 to 30,000	1,500
>30,000	2,000

[1] "Plan quantity" means the plan quantity of all HMA of the same class and binder grade which is accepted by Statistical Evaluation.

[2] The maximum sublot size for each combination of HMA class and binder grade shall be calculated separately.

- For a mixture lot in progress with a mixture CPF less than 0.75, a new mixture lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.

- If, before completing a mixture lot, the Contractor requests a change to the JMF which is approved by the Engineer, the mixture produced in that lot after the approved change will be evaluated on the basis of the changed JMF, and the mixture produced in that lot before the approved change will be evaluated on the basis of the unchanged JMF; however, the mixture before and after the change will be evaluated in the same lot. Acceptance of subsequent mixture lots will be evaluated on the basis of the changed JMF.

5-04.3(9)B2 Mixture Statistical Evaluation – Sampling

Comply with Section 1-06.2(1).

Samples of HMA mixture which is accepted by Statistical Evaluation will be randomly selected from within each sublot, with one sample per sublot. The Engineer will determine the random sample location using WSDOT Test Method T 716. The Contractor shall obtain the sample when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with FOP for WAQTC T 168.

5-04.3(9)B3 Mixture Statistical Evaluation – Acceptance Testing

Comply with Section 1-06.2(1).

The Contracting Agency will test the mixture sample from each sublot (including sublots in a test section) for the properties shown in Table 11.

Table 11

Testing Required for each HMA Mixture Sublot		
Test	**Procedure**	**Performed by**
V_a	WSDOT SOP 731	Engineer
Asphalt Binder Content	FOP for AASHTO T 308	Engineer
Gradation: Percent Passing 1½", 1", ¾", ½", ⅜", No. 4, No. 8, No. 200	FOP for WAQTC T 27/T 11	Engineer

The mixture samples and tests taken for the purpose of determining acceptance of the test section (as described in Section 5-04.3(9)A) shall also be used as the test results for acceptance of the mixture described in 5-04.3(9)B3, 5-04.3(9)B4, 5-04.3(9)B5, and 5-04.3(9)B6.

5-04.3(9)B4 Mixture Statistical Evaluation – Pay Factors

Comply with Section 1-06.2(2).

The Contracting Agency will determine a pay factor (PF_i) for each of the properties in Table 11, for each mixture lot, using the quality level analysis in Section 1-06.2(2)D. For Gradation, a pay factor will be calculated for each of the sieve sizes listed in Table 11 which is equal to or smaller than the maximum allowable aggregate size (100 percent passing sieve) of the HMA mixture. The USL and LSL shall be calculated using the Job Mix Formula Tolerances (for Statistical Evaluation) in Section 9-03.8(7).

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(9)B5 Mixture Statistical Evaluation – Composite Pay Factors (CPF)

Comply with Section 1-06.2(2).

In accordance with Section 1-06.2(2)D4, the Contracting Agency will determine a Composite Pay Factor (CPF) for each mixture lot from the pay factors calculated in Section 5-04.3(9)B4, using the price adjustment factors in Table 12. Unless otherwise specified, the maximum CPF for HMA mixture shall be 1.05.

Table 12

HMA Mixture Price Adjustment Factors	
Constituent	**Factor "f"**
All aggregate passing: 1½", 1", ¾", ½", ⅜" and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (V_a)	20

5-04.3(9)B6 Mixture Statistical Evaluation – Price Adjustments

For each HMA mixture lot, a Job Mix Compliance Price Adjustment will be determined and applied, as follows:

$$JMCPA = [0.60 \times (CPF - 1.00)] \times Q \times UP$$

Where

JMCPA = Job Mix Compliance Price Adjustment for a given lot of mixture ($)
CPF = Composite Pay factor for a given lot of mixture (maximum is 1.05)
Q = Quantity in a given lot of mixture (tons)
UP = Unit price of the HMA in a given lot of mixture ($/ton)

5-04.3(9)B7 Mixture Statistical Evaluation – Retests

The Contractor may request that a mixture sublot be retested. To request a retest, submit a written request to the Contracting Agency within 7 calendar days after the specific test results have been posted to the website or emailed to the Contractor, whichever occurs first. The Contracting Agency will send a split of the original acceptance sample for testing by the Contracting Agency to either the Region Materials Laboratory or the State Materials Laboratory as determined by the Engineer. The Contracting Agency will not test the split of the sample with the same equipment or by the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and V_a, and the results of the retest will be used for the acceptance of the HMA mixture in place of the original mixture sublot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of $250 per sample.

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots, Sublots, Sampling, Test Section, Testing, Retests

For HMA mixture accepted by Nonstatistical Evaluation, comply with the requirements in Table 13:

Table 13

Nonstatistical Evaluation Lots, Sublots, Sampling, Test Section, Testing, Retests		
Comply with the Specifications Below		Comply with the Requirements of the Section for:
Test Section	Section 5-04.3(9)A	Nonstatistical Evaluation
Lots and Sublots	Section 5-04.3(9)B1	Statistical Evaluation
Sampling	Section 5-04.3(9)B2	Statistical Evaluation
Acceptance Tests	Section 5-04.3(9)B3	Statistical Evaluation
Retests	Section 5-04.3(9)B7	Statistical Evaluation

5-04.3(9)C2 Mixture Nonstatistical Evaluation - Acceptance

Each mixture lot of HMA produced under Nonstatistical Evaluation, for which all sublot acceptance test results (required by Table 13) fall within

the Job Mix Formula Tolerances for Nonstatistical Evaluation in Section 9-03.8(7), will be accepted at the unit Contract price with no further evaluation.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Out of Tolerance Procedures

Each mixture lot of HMA produced under Nonstatistical Evaluation, for which any sublot acceptance test result (required by Table 13) falls outside of the Job Mix Formula Tolerances for Nonstatistical Evaluation in Section 9-03.8(7), shall be evaluated in accordance with Section 1-06.2 and Table 14 to determine a Job Mix Compliance Price Adjustment.

Table 14

Nonstatistical Evaluation – Out of Tolerance Procedures	
Comply with the Following[1]	
Pay Factors[2]	Section 5-04.3(9)B4
Composite Pay Factors[3]	Section 5-04.3(9)B5
Price Adjustments	Section 5-04.3(9)B6

[1]When less than three mixture sublots exist, backup samples of the existing mixture sublots shall be tested to provide a minimum of three sets of results for evaluation. If enough backup samples are not available, the Contracting Agency will select core sample locations from the Roadway in accordance with WSDOT Test Method T 716, take cores from the roadway in accordance with WSDOT SOP 734, and test the cores in accordance with WSDOT SOP 737.

[2]The Nonstatistical Evaluation tolerance limits in Section 9-03.8(7) will be used in the calculation of the PF_i.

[3]The maximum CPF shall be 1.00.

5-04.3(9)D Mixture Acceptance – Visual Evaluation

Visual Evaluation of HMA mixture will be by visual inspection by the Engineer or, in the sole discretion of the Engineer, the Engineer may sample and test the mixture.

5-04.3(9)D1 Mixture Visual Evaluation – Lots, Sampling, Testing, Price Adjustments

HMA mixture accepted by Visual Evaluation will not be broken into lots unless the Engineer determines that testing is required. When that occurs, the Engineer will identify the limits of the questionable HMA mixture, and that questionable HMA mixture shall constitute a lot. Then, the Contractor will take samples from the truck, or the Engineer will take core samples from the roadway at a minimum of three random locations from within the lot, selected in accordance with WSDOT Test Method T 716, taken from the roadway in accordance with WSDOT SOP 734, and tested in accordance with WSDOT SOP 737. The Engineer will test one of the samples for all constituents in Section 5-04.3(9)B3. If all constituents from that test fall within the Job Mix Formula Tolerances (for Visual Evaluation) in Section 9-03.8(7), the lot will be accepted at the unit Contract price with no further evaluation.

When one or more constituents fall outside those tolerance limits, the other samples will be tested for all constituents in Section 5-04.3(9)B3,

and a Job Mix Compliance Price Adjustment will be calculated in accordance with Table 15.

Table 15

Visual Evaluation – Out of Tolerance Procedures	
Comply with the Following	
Pay Factors[1]	Section 5-04.3(9)B4
Composite Pay Factors[2]	Section 5-04.3(9)B5
Price Adjustments	Section 5-04.3(9)B6

[1]The Visual Evaluation tolerance limits in Section 9-03.8(7) will be used in the calculation of the PF_i.
[2]The maximum CPF shall be 1.00.

5-04.3(9)E Mixture Acceptance – Notification of Acceptance Test Results

The results of all mixture acceptance testing and the Composite Pay Factor (CPF) of the lot after three sublots have been tested will be available to the Contractor through The Contracting Agency's website.

The Contracting Agency will endeavor to provide written notification (via email to the Contractor's designee) of acceptance test results through its web-based materials testing system Statistical Analysis of Materials (SAM) within 24 hours of the sample being made available to the Contracting Agency. However, the Contractor agrees:

1. Quality control, defined as the system used by the Contractor to monitor, assess, and adjust its production processes to ensure that the final HMA mixture will meet the specified level of quality, is the sole responsibility of the Contractor.

2. The Contractor has no right to rely on any testing performed by the Contracting Agency, nor does the Contractor have any right to rely on timely notification by the Contracting Agency of the Contracting Agency's test results (or statistical analysis thereof), for any part of quality control and/or for making changes or correction to any aspect of the HMA mixture.

3. The Contractor shall make no claim for untimely notification by the Contracting Agency of the Contracting Agency's test results or statistical analysis.

5-04.3(10) HMA Compaction Acceptance

For all HMA, the Contractor shall comply with the General Compaction Requirements in Section 5-04.3(10)A. The Contracting Agency will evaluate all HMA for compaction compliance with one of the following - Statistical Evaluation, Visual Evaluation, or Test Point Evaluation - determined by the criteria in Table 16:

Table 16

Criteria for Determining Method of Evaluation for HMA Compaction[1]		
Statistical Evaluation of HMA Compaction is Required For:	**Visual Evaluation of HMA Compaction is Required For:**	**Test Point Evaluation of HMA Compaction is Required For:**

• Any HMA for which the specified course thickness is greater than 0.10 feet, and the HMA is in: o traffic lanes, including but not limited to: • ramp lanes • truck climbing lanes • weaving lanes • speed change lanes	• "HMA for Preleveling…" • "HMA for Pavement Repair…"	• Any HMA not meeting the criteria for Statistical Evaluation or Visual Evaluation

[1]This table applies to all HMA, and shall be the sole basis for determining the acceptance method for compaction.

The Contracting Agency may, at its sole discretion, evaluate any HMA for compliance with the Cyclic Density requirements of Section 5-04.3(10)B.

5-04.3(10)A HMA Compaction – General Compaction Requirements

Immediately after the HMA has been spread and struck off, and after surface irregularities have been adjusted, thoroughly and uniformly compact the mix. The completed course shall be free from ridges, ruts, humps, depressions, objectionable marks, and irregularities and shall conform to the line, grade, and cross-section shown in the Plans. If necessary, alter the JMF in accordance with Section 9-03.8(7) to achieve desired results.

Compact the mix when it is in the proper condition so that no undue displacement, cracking, or shoving occurs. Compact areas inaccessible to large compaction equipment by mechanical or hand tampers. Remove HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective. Replace the removed material with new HMA, and compact it immediately to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. An exception shall be that pneumatic tired rollers shall be used for compaction of the wearing course beginning October 1st of any year through March 31st of the following year. Coverage with a steel wheel roller may precede pneumatic tired rolling. Unless otherwise approved by the Engineer, operate rollers in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, do not operate a roller in a mode that results in checking or cracking of the mat.

On bridge decks and on the five feet of roadway approach immediately adjacent to the end of bridge/back of pavement seat, operate rollers in static mode only.

5-04.3(10)B HMA Compaction – Cyclic Density

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer's discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow WSDOT SOP 733. A $500 Cyclic

Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

5-04.3(10)C HMA Compaction Acceptance – Statistical Evaluation

HMA compaction which is accepted by Statistical Evaluation will be based on acceptance testing performed by the Contracting Agency, and statistical analysis of those acceptance tests results. This will result in a Compaction Price Adjustment.

5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots

HMA compaction which is accepted by Statistical Evaluation will be evaluated by the Contracting Agency dividing the project into compaction lots, and each compaction lot will be evaluated using stratified random sampling by the Contracting Agency sub-dividing each compaction lot into compaction sublots. All mixture in any individual compaction lot shall be of the same mix design. The compaction sublots will be numbered in the order in which the mixture (of a particular mix design) is paved.

Each compaction lot comprises a maximum of 15 compaction sublots, except for the final compaction lot of each mix design on the Contract, which comprises a maximum of 25 sublots.

Each compaction sublot shall be uniform in size as shown in Table 17, except that the last compaction sublot of each day may be increased to a maximum of two times the compaction sublot quantity calculated. Minor variations in the size of any sublot shall not be cause to invalidate the associated test result.

Table 17

HMA Compaction Sublot Size	
HMA Original Plan Quantity (tons)[1]	Compaction Sublot Size (tons)
<20,000	100
20,000 to 30,000	150
>30,000	200

[1] In determining the plan quantity tonnage, do not include any tons accepted by test point evaluation.

The following will cause one compaction lot to end prematurely and a new compaction lot to begin:

- For a compaction lot in progress with a compaction CPF less than 0.75, a new compaction lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.

5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing

Comply with Section 1-06.2(1).

The location of HMA compaction acceptance tests will be randomly selected by the Contracting Agency from within each sublot, with one test

per sublot. The Contracting Agency will determine the random sample location using WSDOT Test Method T 716.

Use Table 18 to determine compaction acceptance test procedures and to allocate compaction acceptance sampling and testing responsibilities between the Contractor and the Contracting Agency. Roadway cores shall be taken or nuclear density testing shall occur after completion of the finish rolling, prior to opening to traffic, and on the same day that the mix is placed.

Table 18

HMA Compaction Acceptance Testing Procedures and Responsibilities			
	When Contract Includes Bid Item "Roadway Cores"	When Contract Does Not Include Bid Item "Roadway Cores"	
Basis for Test:	Roadway Cores	Roadway Cores[3]	Nuclear Density Gauge[3]
In-Place Density Determined by:	Contractor shall take cores using WSDOT SOP 734[2] --- Contracting Agency will determine core density using FOP for AASHTO T 166	Contracting Agency will take cores[1] using WSDOT SOP 734 --- Contracting Agency will determine core density using FOP for AASHTO T 166	Contracting Agency, using FOP for WAQTC TM 8
Theoretical Maximum Density Determined by:	Contracting Agency, using FOP for AASHTO T 209		
Rolling Average of Theoretical Maximum Densities Determined by:	Contracting Agency, using WSDOT SOP 729		
Percent Compaction in Each Sublot Determined by:	Contracting Agency, using WSDOT SOP 736	Contracting Agency, using WSDOT SOP 736	Contracting Agency, using FOP for WAQTC TM 8

[1]The core diameter shall be 4-inches unless otherwise approved by the Engineer.

[2]The Contractor shall take the core samples in the presence of the Engineer, at locations designated by the Engineer, and deliver the core samples to the Contracting Agency.

[3]The Contracting Agency will determine, in its sole discretion, whether it will take cores or use the nuclear density gauge to determine in-place density. Exclusive reliance on cores for density acceptance is

generally intended for small paving projects and is not intended as a replacement for nuclear gauge density testing on typical projects.

When using the nuclear density gauge for acceptance testing of pavement density, the Engineer will follow WSDOT SOP 730 for correlating the nuclear gauge with HMA cores. When cores are required for the correlation, coring and testing will be by the Contracting Agency. When a core is taken for gauge correlation at the location of a sublot, the relative density of the core will be used for the sublot test result and is exempt from retesting.

5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments

For each HMA compaction lot (that is accepted by Statistical Evaluation) which has less than three compaction sublots, for which all compaction sublots attain a minimum of 91 percent compaction determined in accordance with FOP for WAQTC TM 8 (or WSDOT SOP 736 when provided by the Contract), the HMA will be accepted at the unit Contract price with no further evaluation.

For each HMA compaction lot (that is accepted by Statistical Evaluation) which does not meet the criteria in the preceding paragraph, the compaction lot shall be evaluated in accordance with Section 1-06.2(2) to determine the appropriate Compaction Price Adjustment (CPA). All of the test results obtained from the acceptance samples from a given compaction lot shall be evaluated collectively. Additional testing by either a nuclear density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For the statistical analysis in Section 1-06.2, use the following values:

x = Percent compaction of each sublot
USL = 100
LSL= 91

Each CPA will be determined as follows:

CPA = [0.40 x (CPF – 1.00)] x Q x UP

Where

CPA = Compaction Price Adjustment for the compaction lot ($)
CPF = Composite Pay Factor for the compaction lot (maximum is 1.05)
Q = Quantity in the compaction lot (tons)
UP = Unit price of the HMA in the compaction lot ($/ton)

5-04.3(10)C4 HMA Statistical Compaction – Requests for Retesting

For a compaction sublot that has been tested with a nuclear density gauge that did not meet the minimum of 91 percent of the theoretical maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core, taken at the same location as the nuclear density test, be used for determination of the relative density of the compaction sublot. The relative density of the core will replace the relative density determined by

the nuclear density gauge for the compaction sublot and will be used for calculation of the CPF and acceptance of HMA compaction lot. When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the compaction sublot have been provided or made available to the Contractor. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for retesting. When the CPF for the compaction lot based on the results of the cores is less than 1.00, the Contracting Agency will deduct the cost for the coring from any monies due or that may become due the Contractor under the Contract at the rate of $200 per core and the Contractor shall pay for the cost of the traffic control.

5-04.3(10)D HMA Compaction – Visual Evaluation

Visual Evaluation will be the basis of acceptance for compaction of the Bid items "HMA for Pavement Repair Cl. ___ PG ___"and "HMA for Prelevelling Class___ PG___". This HMA shall be thoroughly compacted to the satisfaction of the Engineer. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller.

5-04.3(10)E HMA Compaction – Test Point Evaluation

When compaction acceptance is by Test Point Evaluation, compact HMA based on a test point evaluation of the compaction train. Perform the test point evaluation in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

5-04.3(10)F HMA Compaction Acceptance – Notification of Acceptance Test Results

The obligations and responsibilities for notifying the Contractor of compaction acceptance test results are the same as for mixture acceptance test results. See Section 5-04.3(9)E.

5-04.3(11) Reject Work

This Section applies to HMA and all requirements related to HMA (except aggregates prior to being incorporated into HMA). For rejection of aggregate prior to its incorporation into HMA refer to Section 3-04.

5-04.3(11)A Reject Work – General

Work that is defective or does not conform to Contract requirements shall be rejected.

5-04.3(11)B Rejection by Contractor

The Contractor may, prior to acceptance sampling and testing, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction)

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests the rejected material to be tested. If the Contractor requests testing, acceptance will be by Statistical Evaluation, and a minimum of three samples will be obtained and tested. When uncompacted material is required for testing but not available, the Engineer will determine random sample locations on the roadway in accordance with WSDOT Test Method T 716, take cores in accordance with WSDOT SOP 734, and test the cores in accordance with WSDOT SOP 737.

If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(11)D Rejection – A Partial Sublot (Mixture or Compaction)

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a mixture or compaction sublot any material that is suspected of being defective in relative density, gradation or asphalt binder content. Such isolated material will not include an original sample location. The Contracting Agency will obtain a minimum of three random samples of the suspect material and perform the testing. When uncompacted material is required for testing but is not available, the Engineer will select random sample locations on the roadway in accordance with WSDOT Test Method T 716, take cores samples in accordance with WSDOT SOP 734, and test the material in accordance with WSDOT SOP 737. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection – An Entire Sublot (Mixture or Compaction)

An entire mixture or compaction sublot that is suspected of being defective may be rejected. When this occurs, a minimum of two additional random samples from this sublot will be obtained. When uncompacted material is required for the additional samples but the material has been compacted, the Contracting Agency will take and test cores from the roadway as described in Section 5-04.3(11)D. The additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress (Mixture or Compaction)

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced when:

1. the Composite Pay Factor (CPF) of a mixture or compaction lot in progress drops below 1.00 and the Contractor is taking no corrective action, or

2. the Pay Factor (PF_i) for any constituent of a mixture or compaction lot in progress drops below 0.95 and the Contractor is taking no corrective action, or

3. either the PF_i for any constituent (or the CPF) of a mixture or compaction lot in progress is less than 0.75.

5-04.3(11)G Rejection – An Entire Lot (Mixture or Compaction)
An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A Transverse Joints
Conduct operations such that placement of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed, but the roller may pass over the unprotected end of the freshly laid HMA only when the placement of the course is discontinued for such a length of time that the HMA will cool below compaction temperature. When the Work is resumed, cut back the previously compacted HMA to produce a slightly beveled edge for the full thickness of the course.

Construct a temporary wedge of HMA on a 50H:1V where a transverse joint as a result of paving or planing is open to traffic. Separate the HMA in the temporary wedge from the permanent HMA upon which it is placed by strips of heavy wrapping paper or other methods approved by the Engineer. Remove the wrapping paper and trim the joint to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

Waste the material that is cut away and place new HMA against the cut. Use rollers or tamping irons to seal the joint.

5-04.3(12)B Longitudinal Joints
Offset the longitudinal joint in any one course from the course immediately below by not more than 6 inches nor less than 2 inches. Locate all longitudinal joints constructed in the wearing course at a lane line or an edge line of the Traveled Way. Construct a notched wedge joint along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size nor more than ½ of the compacted lift thickness, and then taper down on a slope not steeper than 4H:1V. Uniformly compact the sloped portion of the HMA notched wedge joint.

On one-lane ramps a longitudinal joint may be constructed at the center of the traffic lane, subject to approval by the Engineer, if:

1. The ramp must remain open to traffic, or

2. The ramp is closed to traffic and a hot-lap joint is constructed.

   a. Two paving machines shall be used to construct the hot-lap joint.

   b. The pavement within 6 inches of the hot-lap joint will not be excluded from random location selection for compaction testing.

c. Construction equipment other than rollers shall not operate on any uncompacted HMA.

When HMA is placed adjacent to cement concrete pavement, construct longitudinal joints between the HMA and the cement concrete pavement. Saw the joint to the dimensions shown on Standard Plan A-40.10 and fill with joint sealant meeting the requirements of Section 9-04.2.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than ⅛ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than ¼ inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, correct the pavement surface by one of the following methods:

1. Remove material from high places by grinding with an approved grinding machine, or

2. Remove and replace the wearing course of HMA, or

3. By other method approved by the Engineer.

Correct defects until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of $500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When portland cement concrete pavement is to be placed on HMA, the surface tolerance of the HMA shall be such that no surface elevation lies above the Plan grade minus the specified Plan depth of portland cement concrete pavement. Prior to placing the portland cement concrete pavement, bring any such irregularities to the required tolerance by grinding or other means approved by the Engineer.

When utility appurtenances such as manhole covers and valve boxes are located in the Traveled Way, pave the Roadway before the utility appurtenances are adjusted to the finished grade.

5-04.3(14) Planing Bituminous Pavement

Plane in such a manner that the underlying pavement is not torn, broken, or otherwise damaged by the planing operation. Delamination or raveling of the underlying pavement will not be construed as damage due to the Contractor's operations. Pavement outside the limits shown in the Plans or designated by the

Engineer that is damaged by the Contractor's operations shall be repaired to the satisfaction of the Engineer at no additional cost to the Contracting Agency.

For mainline planing operations, use equipment with automatic controls and with sensors for either or both sides of the equipment. The controls shall be capable of sensing the grade from an outside reference line, or a mat-referencing device. The automatic controls shall have a transverse slope controller capable of maintaining the mandrel at the desired transverse slope (expressed as a percentage) within plus or minus 0.1 percent.

Remove all loose debris from the planed surface before opening the planed surface to traffic. The planings and other debris resulting from the planing operation shall become the property of the Contractor and be disposed of in accordance with Section 2-03.3(7)C, or as otherwise allowed by the Contract.

5-04.3(15) Sealing Pavement Surfaces

Apply a fog seal where shown in the Plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches

Construct HMA approaches at the locations shown in the Plans or where staked by the Engineer, in accordance with Section 5-04.

5-04.4 Measurement

HMA Cl. ___ PG ___, HMA for ___ Cl. ___ PG ___, and Commercial HMA will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the HMA. If the Contractor elects to remove and replace HMA as allowed by Section 5-04.3(11), the material removed will not be measured.

Roadway cores will be measured per each for the number of cores taken.

Crack Sealing-LF will be measured by the linear foot along the line of the crack.

Soil residual herbicide will be measured by the mile for the stated width to the nearest 0.01 mile or by the square yard, whichever is designated in the Proposal.

Pavement repair excavation will be measured by the square yard of surface marked prior to excavation.

Asphalt for fog seal will be measured by the ton, as provided in Section 5-02.4.

Longitudinal joint seals between the HMA and cement concrete pavement will be measured by the linear foot along the line and slope of the completed joint seal.

Planing bituminous pavement will be measured by the square yard.

Temporary pavement marking will be measured by the linear foot as provided in Section 8-23.4.

Water will be measured by the M gallon as provided in Section 2-07.4.

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

"HMA Cl. ___ PG ___", per ton.
"HMA for Approach Cl. ___ PG ___", per ton.
"HMA for Preleveling Cl. ___ PG ___", per ton.
"HMA for Pavement Repair Cl. ___ PG ___", per ton.
"Commercial HMA", per ton.
The unit Contract price per ton for "HMA Cl. ___ PG ___", "HMA for Approach Cl. ___ PG ___", "HMA for Preleveling Cl. ___ PG ___", "HMA for Pavement Repair Cl. ___ PG ___", and "Commercial HMA" shall be full compensation for all costs, including anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

"Crack Sealing-FA", by force account.
"Crack Sealing-FA" will be paid for by force account as specified in Section 1-09.6. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total Bid by the Contractor.

"Crack Sealing-LF", per linear foot.
The unit Contract price per linear foot for "Crack Sealing-LF" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)A.

"Soil Residual Herbicide ____ ft. Wide", per mile, or
"Soil Residual Herbicide", per square yard.
The unit Contract price per mile or per square yard for "Soil Residual Herbicide" shall be full payment for all costs incurred to obtain, provide and install herbicide in accordance with Section 5-04.3(4)B.

"Pavement Repair Excavation Incl. Haul", per square yard.
The unit Contract price per square yard for "Pavement Repair Excavation Incl. Haul" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)C with the exception, however, that all costs involved in the placement of HMA shall be included in the unit Contract price per ton for "HMA for Pavement Repair Cl. ___ PG ___", per ton.

"Asphalt for Fog Seal", per ton.
Payment for "Asphalt for Fog Seal" is described in Section 5-02.5.

"Longitudinal Joint Seal", per linear foot.
The unit Contract price per linear foot for "Longitudinal Joint Seal" shall be full payment for all costs incurred to construct the longitudinal joint between HMA and cement concrete pavement, as described in Section 5-04.3(12)B.

"Planing Bituminous Pavement", per square yard.
The unit Contract price per square yard for "Planing Bituminous Pavement" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(14).

"Temporary Pavement Marking", per linear foot.
Payment for "Temporary Pavement Marking" is described in Section 8-23.5.

"Water", per M gallon.

Payment for "Water" is described in Section 2-07.5.

"Job Mix Compliance Price Adjustment", by calculation.
"Job Mix Compliance Price Adjustment" will be calculated and paid for as described in Section 5-04.3(9)B6, 5-04.3(9)C3, and 5-04.3(9)D1.

"Compaction Price Adjustment", by calculation.
"Compaction Price Adjustment" will be calculated and paid for as described in Section 5-04.3(10)C3.

"Roadway Core", per each.
The Contractor's costs for all other Work associated with the coring (e.g., traffic control) shall be incidental and included within the unit Bid price per each and no additional payments will be made.

"Cyclic Density Price Adjustment", by calculation.
"Cyclic Density Price Adjustment" will be calculated and paid for as described in Section 5-04.3(10)B.

Section 6-02, Concrete Structures
April 4, 2016

6-02.3(2)A Contractor Mix Design
The following new sentence is inserted after the first sentence of the third paragraph:

The mix design submittal shall also include test results no older than one year showing that the Aggregates do not contain Deleterious Substances in accordance with Section 9-03.

6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D
The following new sentence is inserted after the second sentence of the last paragraph:

Mix designs using shrinkage reducing admixture shall state the specific quantity required.

The following new sentence is inserted before the last sentence of the last paragraph:

Testing samples of mixes using shrinkage reducing admixture shall use the admixture amount specified in the mix design submittal.

6-02.3(2)B Commercial Concrete
The last sentence of the first paragraph is revised to read:

Commercial concrete does not require mix design or source approvals for cement, aggregate, and other admixtures.

6-02.3(26)D2 Test Block Dimensions
The first sentence is revised to read:

The dimensions of the test block perpendicular to the tendon in each direction shall be the smaller of twice the minimum edge distance or the minimum spacing specified by the special anchorage device manufacturer, with the stipulation that the concrete cover over

any confining reinforcing steel or supplementary skin reinforcement shall be appropriate for the project-specific application and circumstances.

6-02.3(27)A Use of Self-Consolidating Concrete for Precast Units

Item number 2 of the first paragraph is revised to read:

2. Precast reinforced concrete three-sided structures, box culverts and split box culverts in accordance with Section 7-02.3(6).

Section 8-22, Pavement Marking
January 4, 2016

8-22.4 Measurement

The first two sentences of the fourth paragraph are revised to read:

The measurement for "Painted Wide Lane Line", "Plastic Wide Lane Line", "Profiled Plastic Wide Lane Line", "Painted Barrier Center Line", "Plastic Barrier Center Line", "Painted Stop Line", "Plastic Stop Line", "Painted Wide Dotted Entry Line", or "Plastic Wide Dotted Entry Line" will be based on the total length of each painted, plastic or profiled plastic line installed. No deduction will be made for the unmarked area when the marking includes a broken line such as, wide broken lane line, drop lane line, wide dotted lane line or wide dotted entry line.

8-22.5 Payment

The following two new Bid items are inserted after the Bid item "Plastic Crosshatch Marking", per linear foot:

"Painted Wide Dotted Entry Line", per linear foot.

"Plastic Wide Dotted Entry Line", per linear foot.

Section 9-03, Aggregates
April 4, 2016

9-03.1(1) General Requirements

This first paragraph is supplemented with the following:

Reclaimed aggregate may be used if it complies with the specifications for Portland Cement Concrete. Reclaimed aggregate is aggregate that has been recovered from plastic concrete by washing away the cementitious materials.

9-03.1(2) Fine Aggregate for Portland Cement Concrete

This section is revised to read:

Fine aggregate shall consist of natural sand or manufactured sand, or combinations thereof, accepted by the Engineer, having hard, strong, durable particles free from adherent coating. Fine aggregate shall be washed thoroughly to meet the specifications.

9-03.1(2)A Deleterious Substances

This section is revised to read:

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 6 and not exceed the following values:

Material finer than No. 200 Sieve	2.5 percent by weight
Clay lumps and friable particles	3.0 percent by weight
Coal and lignite	0.25 percent by weight
Particles of specific gravity less than 2.00	1.0 percent by weight.

Organic impurities shall be tested in accordance with AASHTO T 21 by the glass color standard procedure and results darker than organic plate no. 3 shall be rejected. A darker color results from AASHTO T 21 may be used provided that when tested for the effect of organic impurities on strength of mortar, the relative strength at 7 days, calculated in accordance with AASHTO T 71, is not less than 95 percent.

9-03.1(4) Coarse Aggregate for Portland Cement Concrete

This section is revised to read:

Coarse aggregate for concrete shall consist of gravel, crushed gravel, crushed stone, or combinations thereof having hard, strong, durable pieces free from adherent coatings. Coarse aggregate shall be washed to meet the specifications.

9-03.1(4)A Deleterious

This section, including title, is revised to read:

9-03.1(4)A Deleterious Substances

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 80 and not exceed the following values:

Material finer than No. 200	1.0[1] percent by weight
Clay lumps and Friable Particles	2.0 percent by weight
Shale	2.0 percent by weight
Wood waste	0.05 percent by weight
Coal and Lignite	0.5 percent by weight
Sum of Clay Lumps, Friable Particles, and Chert (Less Than 2.40 specific gravity SSD)	3.0 percent by weight

[1]If the material finer than the No. 200 sieve is free of clay and shale, this percentage may be increased to 1.5.

9-03.1(4)C Grading

The following new sentence is inserted at the beginning of the last pargraph:

Where coarse aggregate size 467 is used, the aggregate may be furnished in at least two separate sizes.

9-03.1(5) Combined Aggregate Gradation for Portland Cement Concrete

This section is revised to read:

As an alternative to using the fine aggregate sieve grading requirements in Section 9-03.1(2)B, and coarse aggregate sieve grading requirements in Section 9-03.1(4)C, a combined aggregate gradation conforming to the requirements of Section 9-03.1(5)A may be used.

9-03.1(5)A Deleterious Substances

This section is revised to read:

The amount of deleterious substances in the washed aggregates 3/8 inch or larger shall not exceed the values specified in Section 9-03.1(4)A and for aggregates smaller than 3/8 inch they shall not exceed the values specified in Section 9-03.1(2)A.

9-03.1(5)B Grading

The first paragraph is deleted.

9-03.8(7) HMA Tolerances and Adjustments

In the table in item 1, the last column titled "Commercial Evaluation" is revised to read "Visual Evaluation".

9-03.21(1)B Concrete Rubble

This section, including title, is revised to read:

9-03.21(1)B Recycled Concrete Aggregate

Recycled concrete aggregates are coarse aggregates manufactured from hardened concrete mixtures. Recycled concrete aggregate may be used as coarse aggregate or blended with coarse aggregate for Commercial Concrete. Recycled concrete aggregate shall meet all of the requirements for coarse aggregate contained in Section 9-03.1(4) or 9-03.1(5). In addition to the requirements of Section 9-03.1(4) or 9-03.1(5), recycled concrete shall:

1. Contain an aggregated weight of less than 1 percent of adherent fines, vegetable matter, plastics, plaster, paper, gypsum board, metals, fabrics, wood, tile, glass, asphalt (bituminous) materials, brick, porcelain or other deleterious substance(s) not otherwise noted;
2. Be free of harmful components such as chlorides and reactive materials unless mitigation measures are taken to prevent recurrence in the new concrete;
3. Have an absorption of less than 10 percent when tested in accordance with AASHTO T 85.

Recycled concrete aggregate shall be in a saturated condition prior to mixing.

Recycled concrete aggregate shall not be placed below the ordinary high water mark of any water of the State.

9-03.21(1)D Recycled Steel Furnace Slag

This section title is revised to read:

Steel Furnace Slag

9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material

The following new row is inserted after the second row:

Coarse Aggregate for Commercial Concrete	9-03.1(4)	0	100	0	0

SPECIAL PROVISIONS

The following Special Provisions are made a part of this contract and supersede any conflicting provisions of the 2014 Standard Specifications for Road, Bridge, and Municipal Construction, and the foregoing Amendments to the Standard Specifications.

Several types of Special Provisions are included in this contract; General, Region, Bridges and Structures, and Project Specific. Special Provisions types are differentiated as follows:

(date)	General Special Provision
(******)	Notes a revision to a General Special Provision and also notes a Project Specific Special Provision.
(Regions[1] date)	Region Special Provision
(BSP date)	Bridges and Structures Special Provision

General Special Provisions are similar to Standard Specifications in that they typically apply to many projects, usually in more than one Region. Usually, the only difference from one project to another is the inclusion of variable project data, inserted as a "fill-in".

Region Special Provisions are commonly applicable within the designated Region. Region designations are as follows:

Regions[1]	
ER	Eastern Region
NCR	North Central Region
NWR	Northwest Region
OR	Olympic Region
SCR	South Central Region
SWR	Southwest Region
WSF	Washington State Ferries Division

Bridges and Structures Special Provisions are similar to Standard Specifications in that they typically apply to many projects, usually in more than one Region. Usually, the only difference from one project to another is the inclusion of variable project data, inserted as a "fill-in".

Project Specific Special Provisions normally appear only in the contract for which they were developed.

DIVISION 1 GENERAL REQUIREMENTS

DESCRIPTION OF WORK

(******)

This contract provides for the reconstruction of 1.87 miles of two lane county road in Grant County, WA, and includes roadway excavation, embankment compaction, drainage items, crushed surfacing base course, maintenance rock, hot mix asphalt, bridge replacement, paint striping, seeding and fertilizing, and other work in accordance

with the attached Contract Plans, these Contract Provisions and the Standard Specifications.

DEFINITIONS AND TERMS

1-01.3 Definitions

(January 4, 2016 APWA GSP)

Delete the heading **Completion Dates** and the three paragraphs that follow it, and replace them with the following:

Dates

Bid Opening Date
The date on which the Contracting Agency publicly opens and reads the Bids.

Award Date
The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

Contract Execution Date
The date the Contracting Agency officially binds the Agency to the Contract.

Notice to Proceed Date
The date stated in the Notice to Proceed on which the Contract time begins.

Substantial Completion Date
The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

Physical Completion Date
The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

Completion Date
The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

Final Acceptance Date
The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications, Amendments, or WSDOT General Special Provisions, to the terms "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

All references to the terms "State" or "state" shall be revised to read "Contracting Agency" unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

All references to "State Materials Laboratory" shall be revised to read "Contracting Agency designated location".

All references to "final contract voucher certification" shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

Additive
A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

Alternate
One of two or more units of work or groups of bid items, identified separately in the Bid Proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

Business Day
A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

Contract Bond
The definition in the Standard Specifications for "Contract Bond" applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

Contract Documents
See definition for "Contract".

Contract Time
The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

Notice of Award
The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency's acceptance of the Bid Proposal.

Notice to Proceed
The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the Work and establishing the date on which the Contract time begins.

Traffic
Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic

BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder

(******)
Bidders must meet the minimum qualifications of RCW 39.04.350(1), as amended:

Before award of a public works contract, a bidder must meet the following responsibility criteria to be considered a responsible bidder and qualified to be awarded a public works project. The bidder must:

(a) At the time of bid submittal, have a certificate of registration in compliance with chapter 18.27 RCW;
(b) Have a current state unified business identifier number;
(c) If applicable, have industrial insurance coverage for the bidder's employees working in Washington as required in Title 51 RCW; an employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW; and
(d) Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).
(e) Bidders shall be qualified by experience, financing, equipment, and organization to do the work called for in the Contract Documents. The Contracting Agency reserves the right to take whatever action it deems necessary to ascertain the ability of the bidder to perform the work satisfactorily. The Contracting Agency's actions may include a pre-qualification procedure prior to the bidder being furnished a proposal form on any contract, or a pre-award survey of the bidder's qualifications prior to award.

1-02.2 Plans and Specifications

(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed can be found in the Call for Bids (Advertisement for Bids) for the work.

After award of the contract, plans and specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	4	Furnished automatically upon award.
Contract Provisions	4	Furnished automatically upon award.

Large plans (e.g., 22" x 34")	0	Furnished only upon request.

Additional plans and Contract Provisions may be obtained by the Contractor from the source stated in the Call for Bids, at the Contractor's own expense.

1-02.5 Proposal Forms

(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder's name, address, telephone number, and signature; the bidder's D/M/WBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the Proposal Form unless otherwise specified.

1-02.6 Preparation of Proposal

(June 27, 2011 APWA GSP)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last paragraph, and replace it with the following:

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any D/M/WBE requirements are to be satisfied through such an agreement.
A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any D/W/MBE requirements are to be satisfied through such an agreement.

(August 2, 2004)

The fifth and sixth paragraphs of Section 1-02.6 are deleted.

1-02.7 Bid Deposit

(March 8, 2013 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:

1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;
5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1-02.9 Delivery of Proposal

(August 15, 2012 APWA GSP, Option A)

Delete this section and replace it with the following:

Each proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

If the project has FHWA funding and requires DBE Written Confirmation Documents or Good Faith Effort Documentation, then to be considered responsive, the Bidder shall submit with their Bid Proposal, written Confirmation Documentation from each DBE firm listed on the Bidder's completed DBE Utilization Certification, form 272-056A EF, as required by Section 1-02.6.

The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids.

Public Opening Of Proposals

Section 1-02.12 is supplemented with the following:

(******)

Date Of Opening Bids

Sealed bids are to be received at the following location prior to the time specified:

The Office of the Board of County Commissioners, Grant County Courthouse, Room 206, 35 C St. NW, P.O. Box 37, Ephrata, WA 98823

The Clock of Record for this project is the Time Stamp Clock in the office of the Board of County Commissioners.

The bid opening date for this project is **June 28, 2016**. Bids received will be publicly opened and read after **1:45 P.M.** Pacific Time on this date.

1-02.13 Irregular Proposals

(March 13, 2012 APWA GSP)

Revise item 1 to read:

1. A proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified <u>when so required</u>;
   b. The authorized proposal form furnished by the Contracting Agency is not used or is altered;
   c. The completed proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
   d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
   e. A price per unit cannot be determined from the Bid Proposal;
   f. The Proposal form is not properly executed;
   g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
   h. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
   i. The Bidder fails to submit written confirmation from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidders DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
   j The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
   k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
   l. <u>More than one proposal is submitted for the same project from a Bidder under the same or different names.</u>

AWARD AND EXECUTION OF CONTRACT

1-03.3 Execution of Contract

(October 1, 2005 APWA GSP)

Revise this section to read:

<u>Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.</u>

Within **10 (ten) calendar days** after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within ten calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 5 (five) additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
   a. Is registered with the Washington State Insurance Commissioner, and
   b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
   a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
   b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

SCOPE OF THE WORK

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

(March 13, 2012 APWA GSP)

Revise the second paragraph to read:

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

1. Addenda,
2. Proposal Form,
3. Special Provisions (Including Appendices),
4. Contract Plans,
5. Amendments to the Standard Specifications,
6. Standard Specifications,
7. Contracting Agency's Standard Plans or Details (if any), and
8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

CONTROL OF WORK

1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this section with the following:

If the Contractor fails to remedy defective or unauthorized work within the time specified in a written notice from the Engineer, or fails to perform any part of the work required by the Contract Documents, the Engineer may correct and remedy such work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized work corrected immediately, have the rejected work removed and replaced, or have work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor's unauthorized work.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency's rights provided by this Section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the work as required.

1-05.11 Final Inspection

Delete this section and replace it with the following:

1-05.11 Final Inspections and Operational Testing

(October 1, 2005 APWA GSP)

1-05.11(1) Substantial Completion Date

When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefor.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the work physically complete and ready for final inspection.

1-05.11(2) Final Inspection and Physical Completion Date

When the Contractor considers the work physically complete and ready for final inspection, the Contractor by written notice, shall request the Engineer to schedule a final inspection. The Engineer will set a date for final inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which the final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.
The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the work was considered physically complete. That date shall constitute the Physical Completion Date of the contract, but shall not imply acceptance of the work or that all the obligations of the Contractor under the contract have been fulfilled.

1-05.11(3) Operational Testing

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but prior to the physical completion date. Whenever items of work are listed in the Contract Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

Operational and test periods, when required by the Engineer, shall not affect a manufacturer's guaranties or warranties furnished under the terms of the contract.

Superintendents, Labor and Equipment of Contractor

Revise the seventh paragraph of Section 1-05.13 to read:

(******)
Whenever the Contracting Agency evaluates the Contractor's qualifications pursuant to Section 1-02.1 and 1-02.14, it will take these performance reports into account.

Cooperation With Other Contractors

Section 1-05.14 is supplemented with the following:

(March 13, 1995)
Other Contracts Or Other Work
It is anticipated that the following work adjacent to or within the limits of this project will be performed by others during the course of this project and will require coordination of the work:

1. Utility relocations and/or normal maintenance work by telephone and power companies.
2. Normal maintenance work by Grant County Road crews.
3. Normal maintenance work by QCBID.

1-05.15 Method of Serving Notices

(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be directed to the Project Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be in paper format, hand delivered or sent via mail delivery service to the Project Engineer's office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

Add the following new section:

1-05.16 Water and Power

(October 1, 2005 APWA GSP)

The Contractor shall make necessary arrangements, and shall bear the costs for power and water necessary for the performance of the work, unless the contract includes power and water as a pay item.

1-05.17 Oral Agreements

(October 1, 2005 AWPA GSP)

No oral agreement or conversation with any officer, agent, or employee of the Contracting Agency, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the contract. Such oral agreement or conversation shall be considered as unofficial information and in no way binding upon the Contracting Agency, unless subsequently put in writing and signed by the Contracting Agency.

LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to be Observed

(October 1, 2005 APWA GSP)

Supplement this section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

1-07.2 State Taxes

Delete this section, including its sub-sections, in its entirety and replace it with the following:

1-07.2 State Sales Tax

(June 27, 2011 APWA GSP)

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

The Contracting Agency will pay the retained percentage (or release the Contract Bond if a FHWA-funded Project) only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax — Rule 171

WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such

sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(3) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.7 Load Limits

Section 1-07.7 is supplemented with the following:

(March 13, 1995)
Whenever the Contractor obtains materials from a source other than that provided by the Contracting Agency, or provides a source for materials not designated to come from a source provided by the State and the location of the source necessitates hauling on other than State Highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

1-07.9 Wages

General
Section 1-07.9(1) is supplemented with the following:

The State rates incorporated in this contract are applicable to all construction activities associated with this contract.

1-07.13 Contractor's Responsibility for Work

Repair of Damage

Section 1-07.13(4) is revised to read:

(August 6, 2001)

The Contractor shall promptly repair all damage to either temporary or permanent work as directed by the Engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2), or 1-07.13(3), payment will be made in accordance with Section 1-04.4. Payment will be limited to repair of damaged work only. No payment will be made for delay or disruption of work.

1-07.16 Protection and Restoration of Property

Section 1-07.16 is supplemented with the following:

(******)

Notification

The Contractor shall distribute a special notice to each project resident before beginning work. Project resident means any person, company, or public agency having a driveway inside the project limits, within one mile of the project limits, or having a driveway or access on a dead-end road within the project limits. The special notice shall contain the following information and statements:

- Date of the notice.
- Project name, termini, and a description of the major phases of the work.
- Name of Contractor, Contractor's representative and 24 hour phone number.
- Scheduled project start and completion dates.
- Available detour routes.
- One-way traffic will be maintained during each working day.
- Two-way traffic will be restored at the end of each working day.
- All plants, trees, shrubs, gardens, sprinklers or structures within the limits of construction will be removed. Residents are to be advised to remove such property before work begins.
- Driveways will be restored to useable conditions at the end of each working day, without exception.
- Mail service interruptions or relocations. Statement that the Contractor will remove, temporarily relocate, and eventually reinstall mail receptacles. Statement that mailboxes, posts, etc., damaged by the Contractor will be replaced and installed at no charge to the resident.
- Possible problems with power, telephone, potable water, sewer, irrigation supply relocations and/or interruptions, if any.
- Temporary fencing requirements for livestock, if any.
- Residents are responsible for driveway culvert maintenance.
- Request to irrigators to eliminate water on the roadway and in the borrow ditches per Grant County Ordinance.

The Contractor must notify all affected Grant County agencies of the date and anticipated length of all road closures, including school districts, fire districts, Multi-Agency Communications Center (509) 762-1901, Sheriff's Dept. (509) 754-2011, Emergency Management (509) 762-1462, and U.S. Postal Service offices.

The Contractor must place a "Notice of Road Construction" in the legal newspaper of Grant County (Columbia Basin Herald). All notices must be provided a minimum of three (3) working days prior to beginning work. The County will not allow any work to be performed until the required notices are made by the Contractor.

(******)

Payment

The lump sum contract price for "Notification" shall be full compensation for all labor, equipment, materials, and tools necessary to perform the work outlined in this supplemental section.

1-07.17 Utilities And Similar Facilities

Section 1-07.17 is supplemented with the following:

(******)

Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

Public and private utilities, or their Contractors, will furnish all work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the work for this project.

The Contractor shall call the Utility Location Request Center (One Call Center), for field location, not less than two nor more than ten business days before the scheduled date for commencement of excavation which may affect underground utility facilities, unless otherwise agreed upon by the parties involved. A business day is defined as any day other than Saturday, Sunday, or a legal local, State, or Federal holiday. The telephone number for the One Call Center for this project is 1-800-424-5555. If no one-number locator service is available, notice shall be provided individually to those owners known to or suspected of having underground facilities within the area of proposed excavation.

The Contractor is alerted to the existence of Chapter 19.122 RCW, a law relating to underground utilities. Any cost to the Contractor incurred as a result of this law shall be at the Contractor's expense.

No excavation shall begin until all known facilities, in the vicinity of the excavation area, have been located and marked.

The Contractor can go to the following web site to find any changes to the Washington dig law that took effect in 2013.
http://www.utc.wa.gov/publicSafety/pipelineSafety/Pages/CallBeforeYouDig-DigLaw.aspx

The Contractor shall attend a mandatory utility preconstruction meeting with the Engineer, all affected Subcontractors, and all utility owners and their Contractors prior to beginning onsite work.

The following addresses and telephone numbers of utility companies and other agencies known or suspected of having facilities within the project limits are supplied for the Contractor's convenience:

- Grant County PUD, Jaime Esparza
  30 C Street SW,
  Ephrata, WA 98823, (509) 754-5088 Ext. 2156
  jesparz@gcpud.org

- Frontier Communication, Shon McIntyre
  320 East Penny Road
  Wenatchee, WA 98801, (509) 662-9262
  Shon.McIntyre@ftr.com
  Alternate Contact: Dave Holland, Construction Supervisor
  (509) 679-7958
- CenturyLink, Curt Austin
  P.O. Box 550, Connell, WA. 99326, (509) 235-3375
  Curtis.J.Austin@centurylink.com
- Quincy Columbia Basin Irrigation District, John Mele, P.E.
  (509) 787-3591, Ext. 236
  Jmele@qcbid.org

1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

1-07.18 Insurance

(January 4, 2016 APWA GSP)

1-07.18(1) General Requirements

A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.

B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.

C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.

E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency

G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

1-07.18(2) Additional Insured

All insurance policies, with the exception of Workers Compensation, and of Professional Liability and Builder's Risk (if required by this Contract) shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

- the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those maintained by the Contractor.

For Commercial General Liability insurance coverage, the required additional insured endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

1-07.18(3) Subcontractors

The Contractor shall cause each Subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by Subcontractors.

The Contractor shall ensure that all Subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency evidence of insurance and copies of the additional insured endorsements of each Subcontractor of every tier as required in 1-07.18(4) Verification of Coverage.

1-07.18(4) Verification of Coverage

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Verification of coverage shall include:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
3. Any other amendatory endorsements to show the coverage required herein.
4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor. In the event an additional insured incurs a liability subject to any policy's deductibles or self-insured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

The Commercial General Liability insurance shall be endorsed to provide a per project general aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's completed operations for at least three years following Substantial Completion of the Work.

Such policy must provide the following minimum limits:

$1,000,000 Each Occurrence

$2,000,000 General Aggregate
$2,000,000 Products & Completed Operations Aggregate
$1,000,000 Personal & Advertising Injury each offence
$1,000,000 Stop Gap / Employers' Liability each accident

1-07.18(5)B Automobile Liability

Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

Such policy must provide the following minimum limit:

$1,000,000 Combined single limit each accident

1-07.18(5)C Workers' Compensation

The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

Section 1-07.18 is supplemented with the following:

1-07.23 Public Convenience and Safety

Construction Under Traffic

Section 1-07.23(1) is supplemented with the following:

(January 2, 2012)
Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Regulatory Posted Speed	Distance from Traveled Way (Feet)
35 mph or less	10 *
40 mph	15
45 to 55 mph	20
60 mph or greater	30

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

(******)

Payment

No additional compensation will be paid to the Contractor for any cost or expense incurred as a result of the requirements of this provision and all costs shall be considered incidental to and included in other applicable contract items.

PROSECUTION AND PROGRESS

Add the following new section:

1-08.0 Preliminary Matters

(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference

(October 10, 2008 APWA GSP)

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. To discuss such other related items as may be pertinent to the work.

The Contractor shall prepare and submit at the preconstruction conference the following:

1. A breakdown of all lump sum items;
2. A preliminary schedule of working drawing submittals; and
3. A list of material sources for approval if applicable.

Add the following new section:

1-08.0(2) Hours of Work

(******)

Except in the case of emergency or unless otherwise approved by the Contracting Agency, the normal straight time working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. of a working day with a maximum 1-hour lunch break and a 5-day work week. The normal straight time 8-hour working period for the Contract shall be established at the preconstruction conference or prior to the Contractor commencing the work.

Written permission from the Engineer is required, if a Contractor desires to perform work on holidays, Saturdays, or Sundays; before 7:00 a.m. or after 6:00 p.m. on any day; or longer than an 8-hour period on any day. The Contractor shall apply in writing to the Engineer for such permission, no later than noon on the working day prior to the day for which the Contractor is requesting permission to work.

Permission to work between the hours of 10:00 p.m. and 7:00 a.m. during weekdays and between the hours of 10:00 p.m. and 9:00 a.m. on weekends or holidays may also be subject to noise control requirements. Approval to continue work during these hours may be revoked at any time the Contractor exceeds the Contracting Agency's noise control regulations or complaints are received from the public or adjoining property owners regarding the noise from the Contractor's operations. The Contractor shall have no claim for damages or delays should such permission be revoked for these reasons.

Permission to work Saturdays, Sundays, holidays, or other than the agreed upon normal straight time working hours Monday through Friday may be given subject to certain other conditions set forth by the Contracting Agency or Engineer. These conditions may include but are not limited to:

- The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees when in the opinion of the Engineer, such work necessitates their presence.
- On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times.
- Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
- Considering multiple work shifts as multiple working days with respect to contract time, even though the multiple shifts occur in a single 24-hour period.

1-08.1 Subcontracting

Section 1-08.1 is supplemented with the following:

(October 12, 1998)
Prior to any subcontractor or agent beginning work, the Contractor shall submit to the Engineer a certification (WSDOT Form 420-004) that a written agreement between the Contractor and the subcontractor or between the subcontractor and any lower tier subcontractor has been executed. This certification shall also guarantee that these

subcontract agreements include all the documents required by the Special Provision Federal Agency Inspection.

A subcontractor or lower tier subcontractor will not be permitted to perform any work under the contract until the following documents have been completed and submitted to the Engineer:

1. Request to Sublet Work (Form 421-012), and
2. Contractor and Subcontractor or Lower Tier Subcontractor Certification for Federal-aid Projects (Form 420-004).

The Contractor's records pertaining to the requirements of this Special Provision shall be open to inspection or audit by representatives of the Contracting Agency during the life of the contract and for a period of not less than three years after the date of acceptance of the contract. The Contractor shall retain these records for that period. The Contractor shall also guarantee that these records of all subcontractors and lower tier subcontractors shall be available and open to similar inspection or audit for the same time period.

(July 23, 2015 APWA GSP)

Delete the eighth paragraph and replace it with the following:

On all projects funded with federal assistance the Contractor shall submit "Quarterly Report of Amounts Credited as DBE Participation" (form 422-102 EF) on a quarterly basis, in which DBE Work is accomplished, for every quarter in which the Contract is active or upon completion of the project, as appropriate. The quarterly reports are due on the 20th of April, July, October, and January for the four respective quarters.

Subcontract Completion and Return of Retainage Withheld

Section 1-08.1(1) is revised to read:

(August 4, 2014)
The following procedures shall apply to all subcontracts entered into as a part of this Contract:

Requirements

1. The Prime Contractor or Subcontractor shall make payment to the Subcontractor not later than ten days after receipt of payment from the Contracting Agency for work satisfactorily completed by the Subcontractor, to the extent of each Subcontractor's interest therein.

2. Prompt and full payment of retainage from the Prime Contractor to the Subcontractor shall be made within 30 days after Subcontractor's Work is satisfactorily completed.

3. For purposes of this Section, a Subcontractor's work is satisfactorily completed when all task and requirements of the Subcontract have been accomplished and including any required documentation and material testing.

4. Failure by a Prime Contractor or Subcontractor to comply with these requirements may result in one or more of the following:

   a. Withholding of payments until the Prime Contractor or Subcontractor complies

b. Failure to comply shall be reflected in the Prime Contractor's Performance Evaluation

c. Cancellation, Termination, or Suspension of the Contract, in whole or in part

d. Other sanctions as provided by the subcontract or by law under applicable prompt pay statutes.

Conditions
This clause does not create a contractual relationship between the Contracting Agency and any Subcontractor as stated in Section 1-08.1. Also, it is not intended to bestow upon any Subcontractor, the status of a third-party beneficiary to the Contract between the Contracting Agency and the Contractor.

Payment
The Contractor will be solely responsible for any additional costs involved in paying retainage to the Subcontractors. Those costs shall be incidental to the respective Bid Items.

1-08.4 Prosecution Of Work

The first sentence of Section 1-08.4 is revised to read:

(******)
The Contractor shall begin work on **July 11, 2016**, unless otherwise approved by the Engineer.

1-08.5 Time For Completion

The third paragraph of Section 1-08.5 is revised to read:

(******)
Contract time shall begin on the first working day. The first working day shall be July 11, 2016, unless otherwise approved by the Engineer.

Section 1-08.5 is supplemented with the following:

(March 13, 1995)
This project shall be physically completed within **60 working days**.

1-08.9 Liquidated Damages

(August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine that the work is Substantially Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, the formula for liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as

promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.

Measurement and Payment

Payments

Section 1-09.9 is supplemented with the following:

(March 13, 1995)
The quantity of the following items to be paid for on this project shall be the quantity shown in the Proposal, unless changes are made in accordance with Section 1-04.4 which affect this quantity. The quantity shown in the Proposal will be adjusted by the amount of the change and will be paid for as specified in Section 1-04.4.

*** "Roadway Excavation Incl. Haul", "Embankment Compaction" ***

The quantities in the Proposal are listed only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities before submitting a bid. No adjustments other than for approved changes will be made in the quantity even though the actual quantities required may deviate from those listed.

The unit contract price for these items shall be full pay to construct and complete this portion of the work.

1-09.13 Claims Resolution

1-09.13(3) Claims $250,000 or Less

(October 1, 2005 APWA GSP)

Delete this Section and replace it with the following:

The Contractor and the Contracting Agency mutually agree that those claims that total $250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Administration of Arbitration

(October 1, 2005 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters are located. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the contract as a basis for decisions.

TEMPORARY TRAFFIC CONTROL

General

Section 1-10.1 is supplemented with the following:

(April 1, 2013)
The Contracting Agency will provide the following labor, equipment and/or materials resources to the Contractor for use on the project.

*** Class A Traffic Signs as outlined in the included Construction Sign Plan and Sign Table ***

The Contractor shall notify the Engineer when each resource is to be utilized and shall provide a minimum of *** 5 (five) *** working days advance notice to allow any necessary arrangements to be made.

1-10.2 Traffic Control Management

General

Section 1-10.2(1) is supplemented with the following:

(December 1, 2008)
Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust
27055 Ohio Ave.
Kingston, WA 98346
(360) 297-3035

Evergreen Safety Council
401 Pontius Ave. N.
Seattle, WA 98109
1-800-521-0778 or (206) 382-4090

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022
Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701

1-10.2(2) Traffic Control Plans

Section 1-10.2(2) is supplemented with the following:

(******)
The County has provided the Traffic Sign Plan for this project and said plan(s) are included in these specifications and is made part of this contract.

The work contemplated in this contract will require the Contractor to take special precautions in implementing safe traffic control procedures in accordance with the MUTCD. The Contractor's attention is directed to WAC 296-155-305 as it relates to signing, signaling and flaggers. All questions concerning new standards should be directed to the Wash. State Dept. of Labor and Industries.

The Contractor will not be permitted to close Adams Road, 11-NW or Martin Road, to local traffic within the project limits, other than when work on the Bridge replacement items of this contract are taking place. **The contractor shall provide a detailed traffic sign plan for each bridge closure.** One-way traffic must be kept open during working hours and two-way traffic must be restored at the end of each working day for local traffic. Access to County road intersections, local farms and residences shall be kept open at all times.

1-10.3 Traffic Control Labor, Procedures and Devices

1-10.3(3) Traffic Control Devices

Construction Signs

Section 1-10.3(3)A is supplemented with the following:

(******)
The required signs will be available to the Contractor at the Grant County Sign Shop, 124 Enterprise St. SE, Ephrata, WA, (509) 754-6082, on normal work days. The Contractor shall make arrangements with the Engineer at least five working days prior to picking up the signs. The Contractor shall sign an itemized receipt at the time of acquisition.

Signs shall be taken down and returned to Grant County Sign Shop by the Contractor when their need has ceased as determined by the Engineer. Due to County Force BST placement on this project, the signs will likely stay up until after those operations have ceased. The value of signs furnished by the Contracting Agency to the Contractor is fixed at $10.00 per square foot. The value of such signs which are damaged or not returned as provided in Sections 1-10.1 and 1-10.3(3)A will be deducted from payment due or to become due the Contractor.

Wood Sign Posts
Use the charts below to determine post size for Class A construction signs.

One Post Installation

Post Size	Min. Sign Sq. Ft.	Max Sign Sq. Ft.
4x4	-	16.0
4x6	17.0	20.0
6x6	21.0	25.0
6x8	26.0	31.0

Two Post Installation
(For signs 5 feet or greater in width)

Post Size	Min. Sign Sq. Ft.	Max Sign Sq. Ft.

4x4	-	16.0
4x6	17.0	36.0
6x6	37.0	46.0
6x8	47.0	75.0 *

* The Engineer will determine the post size for signs greater than 75 square feet.

Barricades

Section 1-10.3(3)D is supplemented with the following:

(******)
The barricades, provided by the contractor, shall be Type III and constructed in accordance with the details shown in the MUTCD and the Standard Plans. The barricade width shall be eight (8) feet.

As may be indicated in the Signing Plan, Traffic Control Plans, or the Contract Provisions, the Contractor may be required to install signs, warning lights, or both, on barricades.

1-10.4 Measurement

Section 1-10.4 is supplemented with the following:

(******)
No unit of measurement will be made for any of the items contained in the Traffic Control Plan or Section 1-10 of the Standard Specifications.

1-10.5 Payment

Section 1-10.5(1) is supplemented with the following:

(******)
No additional compensation will be paid to the Contractor for any cost or expense incurred as a result of the requirements of this provision and all costs shall be considered incidental to and included in other applicable contract items.

DIVISION 2 EARTHWORK

CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description

Section 2-01.1 is supplemented with the following:

(March 13,1995)
Clearing and grubbing on this project shall be performed within the following limits:

Station 10+75 to 109+00

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.3 Construction Requirements

Section 2-02.3 is supplemented with the following:

Removal of Bridges, Box Culverts, and Other Drainage Structures

Section 2-02.3(2) is supplemented with the following:

(******)

The Contractor shall remove the following portions of existing Bridge #330 – M-NW Road NW located in Section 36, T21N, R24E WM, Bridge #331 – Adams Road NW located in Section 2, T20N, R24E WM, Bridge #332 – Martin Road NW located in Section 36, T21N, R24E WM, and Bridge #334 11 - NW located in Section 2, T20N, R24E WM, as shown on the plans.

Full Superstructure (Girders and Deck)
Top portion of existing concrete abutments as shown in the Plans (Bridge #332)

Removal of Pavement, Sidewalks, and Curbs

Section 2-02.3(3) is supplemented with the following:

(******)

Rotomilling Bituminous Pavement

The Contractor shall rotomill all existing bituminous pavements. The Contractor shall provide equipment capable of producing planings 2 inches in diameter or smaller. All sections planed on any given day shall be uniformly spread, watered, and re-compacted to a non-yielding surface over the existing subgrade by the end of the work day and re-graded, if necessary, to the staked line and grade before placement of crushed surfacing materials.

The equipment used to rotomill existing bituminous pavements shall be capable of rotomilling a minimum of 72" in a single pass, capable of working at a mixing depth of at least 6" without producing skips and work at a traveling speed of 1 mph or more.

2-02.5 Payment

Section 2-02.5 is supplemented with the following:

"Rotomilling Bituminous Pavement", per square yard.

(June 26, 2000)

Use of Explosives

Explosives shall not be used in the demolition,

(******)

Requirements for Closing Bridge to Traffic Prior to Beginning Removal

The Contractor shall not close the existing bridge to traffic and shall not begin bridge removal operations until the following conditions are met:

1. The Contractor has received the Engineer's approval of the bridge demolition plan.
2. The Contractor has sufficient material on hand to complete bridge removal and bridge construction operations in the least possible time.
3. The Contractor shall furnish a report on the status of material delivery to the Engineer. The report shall specify the materials already available at the site, the materials yet to arrive at the site, and the scheduled delivery dates of the materials yet to arrive at the site.
4. The Engineer has received the list of residents notified about the project and road closure.
5. The Contractor has received the Engineer's approval to proceed.

Payment

Section 2-02.5 is supplemented with the following:

(******)
"Removal of Existing Bridge #330 M-NW Road", lump sum.
"Removal of Existing Bridge #331 Adams Road", lump sum.
"Removal of Existing Bridge #332 Martin Road", lump sum.
"Removal of Existing Bridge #334 11-NW", lump sum.

ROADWAY EXCAVATION AND EMBANKMENT

Construction Requirements

Disposal Of Surplus Material

Section 2-03.3(7)A is supplemented with the following:
(******)
No waste site has been provided by the County for the disposal of excess rock and soil.

2-03.5 Payment

Section 2-03.5 is supplemented with the following:

(******)
All costs for sawcutting existing roadway shall be included in the unit price, "Roadway Excavation Incl. Haul".

STRUCTURE EXCAVATION

Construction Requirements

Shoring And Cofferdams

Section 2-09.3(3)D is supplemented with the following:

(******)

The Contractor shall protect the canal from damage due to the Contractor's operations. Damage to the canal or other USBR facilities, due to the Contractor's operations, will be repaired by the Contractor at the Contractor's expense.

The Contractor shall take measures to prevent material from spilling into the USBR canal during all activities and construction of Adams Road.

CONSTRUCTION GEOSYNTHETIC

2-12.2 Materials

Section 2-12.2 is supplemented with the following:

(******)

Section Product shall be TenCate Mirafi ® HP570 Woven Polypropylene Geotextile or NTPEP approved equal product.

2-12.3 Construction requirements

Section 2-12.3 is supplemented with the following

(******)

The Contractor shall excavate to the limits shown on the plans at each Bridge approach as shown in the plans. Woven Geotextile fabric shall be placed in sections between each surfacing layer and be approved by the Engineer prior to placement of the next layer. Overlaps shall be 2' minimum for all joints.

2-12.4 Measurement

Section 2-12.4 is supplemented with the following

(******)

Construction Geotextile for Separation will be measured by the square yard for the perimeter of ground surface actually covered.

DIVISION 3 PRODUCTION FROM QUARRY AND PIT SITES AND STOCKPILING

PRODUCTION FROM QUARRY AND PIT SITES

State Furnished Material Sources

Section 3-01.3 is supplemented with the following:

(******)

The following source(s) of stockpiled materials are made available to the Contractor at the unit prices shown under the section entitled Stockpiling Aggregates:

Stockpile Site *** #580 – Monument Hill *** source for *** crushed surfacing base course, gravel backfill for walls, and gravel for pipe zone bedding *** is located in Section 28, Township 21 North, Range 24 East W.M.

STOCKPILING AGGREGATES

General Requirements

Removing Aggregates From Stockpiles

Section 3-02.2(7) is supplemented with the following:

(******)
Crushed Surfacing Base Course, Maintenance Rock, Gravel Backfill For Walls, and Gravel Backfill for Pipe Zone Bedding for use on this project are existing in stockpile at the location and for the unit prices listed below and in the amounts shown in the Plans.

Location	Material	Price
Index #580	Crushed Surfacing Base Course	$4.42/Ton
Monument Hill Pit	Gravel Backfill for PZB	$5.83/C.Y.
Sec. 28 T21N, R24E WM	Gravel Backfill for Walls	$5.83/C.Y.

The Contractor may not obtain material from other sources. The source provided is the only site to be used for crushed surfacing on this project.

The contractor shall provide a structure/shack for the person weighing the crushed aggregate at the County provided pit sites. The structure/shack shall be equipped with an AC unit, or a unit approved by the engineer capable of provide cool air circulation through the structure.

Payment

Section 3-02.5 is supplemented with the following:

(******)
The unit contract price shall be full payment for the purchase, loading, hauling, placing and compacting of materials provided in stockpile.

The County shall deduct the costs of aggregates from monthly progress estimates in accordance with the rates specified above and based on the quantity of materials allowed by the Engineer on the monthly progress payments and final estimate.

SITE RECLAMATION

Contracting-Agency Provided Sites

Section 3-03.2(1) is supplemented with the following:

(March 13, 1995)
Site reclamation will be performed by the Contracting Agency on all sites furnished by the Contracting Agency.

DIVISION 4 BASES

BALLAST AND CRUSHED SURFACING

Section 4-04 is supplemented with the following:

Construction Requirements

Equipment

The first sentence of Section 4-04.3(1) is revised to read:

(******)
All equipment necessary for the satisfactory performance of this construction shall be on the project and approved by the Engineer prior to beginning work. The Contractor shall demonstrate that equipment of sufficient size, number, and reliability has been provided to meet the project schedule submitted by the Contractor, if requested by the Engineer.

Placing and Spreading

The third paragraph of Section 4-04.3(4) is supplemented with the following:

(******)
The Contractor shall fill each hauling vehicle with the same quantity of crushed aggregate. This is necessary in order to provide consistent spreads within the limits of the specific section determined by the Engineer.

The Contractor shall place the material in such a way as to minimize the impact of the hauling vehicles. Hauling over any of the surfacing materials prior to processing shall not be permitted.

Miscellaneous Requirement

The second sentence of the first paragraph of Section 4-04.3(7) is revised to read:

(******)
Each course of surfacing material shall be placed in its entirety before placing the succeeding course unless otherwise authorized by the Engineer. The Contractor shall repair any segregated areas by reprocessing the effected section of each course before placing any additional material.

DIVISION 5 SURFACE TREATMENTS AND PAVEMENTS

5-04.3(7)A2 Statistical or Nonstatistical Evaluation

Section 5-04.3(7)A2 is supplemented with the following:

(******)
Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Be submitted to the Project Engineer on WSDOT Form 350-042
- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2) and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with WSDOT Test Method T 718 or based on historic anti-strip and aggregate source compatibility from WSDOT lab testing. Anti-strip evaluation of HMA mix designs utilized that include RAP will be completed without the inclusion of the RAP.

At or prior to the preconstruction meeting, the contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The proposed mix design indicated on a WSDOT mix design/anti-strip report that is within one year of the approval date

- If the proposed mix design has not been referenced and previously verified by WSDOT State Materials Lab on a previous project, the Contractor shall also submit samples to the WSDOT State Materials Lab for WSDOT verification testing in accordance with WSDOT Standard Specifications.

The mix design will be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO Material Reference Laboratory (AMRL) program.

At the discretion of the Engineer, agencies may accept mix designs verified beyond the one year verification period with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

A minimum of three (3) working days prior to the first day of paving, up to six (6) Ignition Furnace Calibration Samples shall be obtained to calibrate the Ignition Furnaces used for acceptance testing of the HMA. Calibration samples shall be provided by the Contractor when directed by the Engineer. Calibration samples shall be prepared in accordance with WSDOT SOP 728.

5-04.3(8)A1 General
(January 16, 2014 APWA GSP)

Delete this section and replace it with the following:
Acceptance of HMA shall be as defined under nonstatistical or commercial evaluation.

Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the contract documents.

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Project Engineer and must be made in accordance with Section 9-03.8(7).

Commercial evaluation may be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. Commercial HMA can be accepted by a contractor certificate of compliance letter stating the material meets the HMA requirements defined in the contract

5-04.5(1)B Price Adjustments for Quality of HMA Compaction
(January 16, 2014 APWA GSP)

Delete this section and replace it with the following:

The maximum CPF of a compaction lot is 1.00.

For each compaction lot of HMA when the CPF is less than 1.00, a Nonconforming Compaction Factor (NCCF) will be determined. THE NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of the NCCF, the quantity of HMA in the lot in tons and the unit contract price per ton of the mix.

Division 6 - Structures

GENERAL REQUIREMENTS FOR STRUCTURES

Utilities Supported by or Attached to Bridges

Section 6-01.10 is supplemented with the following:

(******)
Relocation of existing utilities outside of the bridge structure shall be the responsibility of the utility company. The Contractor shall notify the utility company at least two (2) weeks in advance of beginning any work.

The Contractor shall cooperate fully with the utility company in order to expedite all relocations and new installations.

Concrete Structures

Description

Section 6-02.1 is supplemented with the following:

This work consists of the construction of Bridge #330, of Bridge #331, of Bridge #332, and of Bridge #334 .

Construction Requirements

Finishing Concrete Surfaces

Section 6-02.3(14) is supplemented with the following:

(******)
Nonshrink Grout

The Contractor shall furnish and place the nonshrink grout specified herein at the following locations shown in the plans.

The grout shall be prepackaged nonshrink grout, mixed, placed and cured as recommended by the manufacturer.

The nonshrink grout shall meet the following requirements:

REQUIREMENT	TEST METHOD	VALUES
Early Volume Change	ASTM C 827	0% Shrinkage, 2.5% Expansion
Hardened Volume Change	CRD C 621	0% Shrinkage, 2.5% Expansion
Setting Time at Ambient Conditions	AASHTO T 131	30 minutes minimum
	AASHTO T 154	45 minutes minimum
Min Compressive Strength	AASHTO T 106	6,000 psi @ 3 days

The grout shall be a workable mix with flowability suitable for the intended application.

The Contractor shall submit a request for approval of material sources for the prepackaged nonshrink grout to the Engineer for approval along with test data from an independent testing laboratory confirming that the proposed grout will meet the specified nonshrink requirements. A sample of the prepackaged grout of the production lot to be used shall be submitted to the Engineer for approval. The Contractor shall receive approval from the Engineer before using the grout.

Before placing grout the concrete on which it is to be placed shall be thoroughly cleaned, roughened, and wetted with water to ensure proper bonding. The grout shall be kept continuously wet with water until a strength of 3,000 psi is attained

Section 6-02.3(28) is supplemented with the following:

Precast Abutments (******)

Manufacturing Plant Quality Control Program

The manufacturing plant of precast abutments shall be certified by one of the organizations specified in Section 6-02.3(28) and shall be approved by WSDOT as a Certified Precast Concrete Fabricator prior to the start of production.

Design Criteria

The abutments as shown in the plans are intended to be precast as a way to accelerate the construction schedule. The abutments were designed in accordance with the current AASHTO LRFD Bridge Design Specifications. The bearing resistance for Strength and Service limits states are provided in the Geotechnical Report.

As shown in the details, the abutments are currently designed as a unit. The Contractor may choose to design abutment sections with field connections or splices. Any splice system shall provide moment and shear resistance equal to the section as shown or as a minimum double the controlling design load at the splice (whichever is least). Under no circumstances shall the design be less than the controlling design load. All steel components that will be exposed or buried shall be plated or galvanized to prevent corrosion.

The minimum strength of concrete shall be 4,000 psi and shall conform to the Standard Specifications. The Contractor's Engineer shall submit calculations verifying the strength of abutment splices along with calculations for stresses and stability for handling, shipping, and erection. The design calculations shall be stamped and signed by a Professional Engineer in accordance with Section 6-01.9.

Shop Drawings

Before casting the abutments, the Contractor shall submit Type 2E Working drawings. They shall show complete details of the methods, materials, and equipment the Contractor proposes to use in the Work including:

1. Abutment shape and dimensions.
2. Lifting, bracing, and erection inserts.
3. Handling, erection and backfill procedure.
4. Reinforcing, joint, and connection details.

Finishing

The Contractor shall finish all exposed surfaces of the abutments with a Class 2 finish.

The Contractor shall mark the following information, using waterproof paint, on the back side of each abutment piece:

Job Number
Fabrication Date
Manufacturer's Name and Trademark
Abutment number and part (A, B, etc)

Handling and Storage

Precast abutments shall not be removed from forms until the concrete reaches a minimum compressive strength of 70 percent of the final design strength specified in the shop drawings. Precast abutments shall not be shipped until the concrete has reached the specified design strength.

Any damage from stripping or improper handling or shipping is the Contractor's responsibility.

Erection

The Contractor shall excavate material for the precast abutments in the locations as shown on the plans. The depth of excavation shall be determined by the footing elevations and type of subgrade encountered. The Contractor should review the geotechnical recommendations report prepared for this project. The Contractor shall take extra precaution not to damage concrete canal linings or existing abutments that are to remain in place.

If hard caliche is found present at the foundation subgrade elevation, the footings shall bear on a 6-inch-thick crushed rock leveling pad. If hard caliche is not present at the foundation subgrade elevation, the leveling pad shall consist of a 2-foot-thick crushed rock. The crushed rock shall consist of compacted crushed surfacing base course (CSBC), per Section 9-03.9(3).

The Contractor shall lift all members as designated in the shop drawings. Temporary shoring or bracing shall be used, if necessary.

Measurement

Section 6-02.4 is supplemented with the following:

(August 2, 2010)
Summary of Quantities for Adams Road Bridge Structures

Bridge #330 M-NW Road contains the following approximate quantities of materials and work:

PRESTRESSED CONCRETE VOIDED SLAB GIRDERS	301.5	L.F.
PRECAST CONCRETE ABUTMENTS	2	EA.
T631 BRIDGE RAILING	78.125	L.F.
BEARING PADS ¾" x 5" x 4'-0"	18	EA.
WELD TIES	64	EA.
KEYWAY GROUTING	268	L.F.
CONNECTION DOWELS	18	EA.
BUTYL RUBBER STRIP	78.25	L.F.

GIRDER STOP PADS	4	EA.

Bridge #331 Adams Road contains the following approximate quantities of materials and work:

PRESTRESSED CONCRETE VOIDED SLAB GIRDERS	275.25	L.F.
PRECAST CONCRETE ABUTMENTS	2	EA.
T631 BRIDGE RAILING	65.625	L.F.
BEARING PADS ¾" x 5" x 4'-0"	18	EA.
WELD TIES	64	EA.
KEYWAY GROUTING	244.67	L.F.
CONNECTION DOWELS	18	EA.
BUTYL RUBBER STRIP	78.25	L.F.
GIRDER STOP PADS	4	EA.

Bridge #332 Martin Road contains the following approximate quantities of materials and work:

PRESTRESSED CONCRETE VOIDED SLAB GIRDERS	356	L.F.
PRECAST CONCRETE ABUTMENTS	2	EA.
T631 BRIDGE RAILING	93.75	L.F.
BEARING PADS ¾" x 5" x 4'-0"	16	EA.
WELD TIES	77	EA.
KEYWAY GROUTING	311.5	L.F.
CONNECTION DOWELS	16	EA.
BUTYL RUBBER STRIP	70.25	L.F.
GIRDER STOP PADS	4	EA.

Bridge #334 Road 11-NW contains the following approximate quantities of materials and work:

PRESTRESSED CONCRETE VOIDED SLAB GIRDERS	242	L.F.
PRECAST CONCRETE ABUTMENTS	2	EA.
T631 BRIDGE RAILING	62.5	L.F.
BEARING PADS ¾" x 5" x 4'-0"	16	EA.
WELD TIES	56	EA.
KEYWAY GROUTING	211.75	L.F.
CONNECTION DOWELS	16	EA.
BUTYL RUBBER STRIP	70.25	L.F.
GIRDER STOP PADS	4	EA.

The quantities are listed only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities before submitting a bid. No adjustments other than for approved changes will be made in the lump sum contract price for "Bridge 330 M-NW Road", "Bridge 331 Adams Road", "Bridge 332 Martin Road", and "Bridge 334 Road 11 NW" even though the actual quantities required may deviate from those listed.

Payment

The third bid item under Section 6-02.5 is supplemented with the following:

(June 26, 2000)
All costs in connection with the bridge structure, including prestressed girders, connections, and precast concrete abutments shall be included in the lump sum contract price for ***"Bridge 330 M-NW Road", "Bridge 331 Adams Road", "Bridge 332 Martin Road", and "Bridge 334 Road 11 NW"***.

Section 6-02.5 is supplemented with the following:

(June 26, 2000)
Bridge and Structures Minor Items
For the purpose of payment, such bridge and structures items as nosing angle, lifting loops, concrete inserts, grout, etc. for which there is no pay item included in the proposal, are considered as bridge and structures minor items. All costs in connection with furnishing and installing these bridge and structures minor items as shown and noted in the Plans and as outlined in these specifications and in the Standard Specifications shall be included in the lump sum contract price for ***"Bridge 330 M-NW Road", "Bridge 331 Adams Road", "Bridge 332 Martin Road", and "Bridge 334 Road 11 NW"***.

BRIDGE RAILINGS

Payment

Section 6-06.5 is supplemented with the following:

(March 6, 2000)
All costs in connection with constructing Thrie Beam Bridge Railing shall be included in the lump sum contract price for each bridge.

DIVISION 8 MISCELLANEOUS CONSTRUCTION

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.3 Construction Requirements

Mulching

Section 8-01.3(2)D is supplemented with the following:

(******)
A 50%/50% mix of Wood cellulose fiber suitable for use with a hydroseeder and Hydro-Straw with Tackifier (Hydrostraw Guar Plus or approved equal) shall be applied at a rate of 2,000 pounds per acre. 50/50 mix shall be sufficiently mixed in the truck prior to application.

8-22 PAVEMENT MARKING

8-22.3 Construction Requirements

Preliminary Spotting
The first sentence of Section 8-22.3(1) is replaced with the following:

(******)
The Contractor shall use established control points to assist in the preliminary spotting of the lines to be marked. Where control points are unavailable the Contractor shall establish such control as necessary to provide accurate preliminary spotting for pavement marking. The Engineer shall provide control points for no-pass zones.

Marking Application
Section 8-22.3(3) is supplemented with the following:

(******)
This contract contains new striping work and will require two applications of paint on a thoroughly swept pavement surface. 10 mils on the first pass and 15 mils on the second pass in the opposite direction. Glass beads for retro-reflective applications shall be applied at the rate of 7 pounds per gallon of paint.

The Contractor shall use a three gun paint spray system for all striping on this contract.

Measurement
Section 8-22.4 is supplemented with the following:

(******)
The following are the approximate linear foot lengths of pavement markings required on this project:

Painted Skip Centerline – 7,927 L.F.
Painted Skip/No Pass – 1,582 L.F.
Painted Edge Line 12' Lane – 19,600 L.F.

DIVISION 9 MATERIALS

9-14 EROSION CONTROL AND ROADSIDE PLANTING

9-14.2 Seed

Section 9-14.2 is supplemented with the following:

(******)

The following Roadside seed mix is approved for application on this project.

Kind and variety of Seed in mixture	% By Weight	Minimum % Pure Seed	Minimum % Germination
Special Eastern Washington Roadside Mix Containing*:			
Bluegrass, Sherman Big	10	9.5	70
Wheatgrass, Crested, Nordan	70	68.5	85
Wheatgrass, Thickspike, Critana	10	9.5	85
Sandburg	5	4.5	
Sheep Fescue	5	4.5	
Weed Seed		2.0 (max)	
Inert and other crop		3.5 (max)	
Total		100.0	

*Special Eastern Washington Roadside Mix shall be applied at the rate of twenty-one (21) pounds per acre on all areas to be seeded.

9-14.3 Fertilizer

Section 9-14.3 is supplemented with the following:

(******)

The Contractor shall use 16-16-16 slow release fertilizer, and it shall be applied at the rate of 125 pounds per acre.

(August 4, 2014)
Standard Plans

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 15-048, effective August 3, 2015 is made a part of this contract.

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PROPOSAL

To: Board of County Commissioners
Grant County, Washington

Date:_____, 2016

This certifies that the undersigned has examined the location of **ADAMS ROAD, CRP 14-08 AND BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12, in Grant County, Washington,** and that the plans, specifications and contract governing the work embraced in the improvement and the method by which payment will be made for said work is understood. The undersigned hereby proposes to undertake and complete the work embraced in this improvement, or as much thereof as can be completed with the money available in accordance with said plans, specifications and contract and at the following schedule of rates and prices.
ADAMS ROAD, CRP 14-08 AND

Note: Unit prices for all items, all extensions, and total amount must be shown. Please type or use ink. Please initial all changes.

Item No.	Plan Quantity	Item Description	Price per Unit* Dollars . Cents	Total Amount Dollars . Cents
PREPARATION				
1	1 Lump Sum	Mobilization	At ////////./////. Per Lump Sum	.
2	1 Lump Sum	Notification	At ////////./////. Per Lump Sum	.
3	1 Lump Sum	Clearing and Grubbing	At ////////./////. Per Lump Sum	.
4	1 Lump Sum	Removal of Existing Bridge #330 M-NW Road	At ////////./////. Per Lump Sum	.
5	1 Lump Sum	Removal of Existing Bridge #331 Adams Road	At ////////./////. Per Lump Sum	.
6	1 Lump Sum	Removal of Existing Bridge #332 Martin Road	At ////////./////. Per Lump Sum	.
7	1 Lump Sum	Removal of Existing Bridge #334 11-NW	At ////////./////. Per Lump Sum	.

Item No.	Plan Quantity	Item Description	Price per Unit* Dollars . Cents	Total Amount Dollars . Cents
GRADING				
8	25,000 Sq. Yd.	Rotomilling Bituminous Pavement	At . Per Square Yard	.
9	3,064 C.Y.	Roadway Excavation	At . Per Cubic Yard	.
10	1,610 C.Y.	Embankment Compaction	At . Per Cubic Yard	.
11	640 Sq. Yd.	Construction Geotextile For Separation	At . Per Square Yard	.
DRAINAGE				
12	170 L.F.	Plain Steel Culvert Pipe 0.064" Th. – 12" Diameter	At . Per Linear Foot	.
13	145 L.F.	Plain Steel Culvert Pipe 0.064" Th. – 18" Diameter	At . Per Linear Foot	.
SURFACING				
14	11,100 Ton	Crushed Surfacing Base Course From Stockpile Pit #580	At . Per Ton	.
HOT MIX ASPHALT				
15	5,000 Ton	Commercial HMA Class 1/2" Incl. PG64-28 Paving Asphalt	At . Per Ton	.
STRUCTURE				
16	1 Lump Sum	Bridge #330, M-NW Road	At ////////./////. Per Lump Sum	.
17	1 Lump Sum	Bridge #331, Adams Road	At ////////./////. Per Lump Sum	.

Item No.	Plan Quantity	Item Description	Price per Unit* Dollars . Cents	Total Amount Dollars . Cents
18	1 Lump Sum	Bridge #332, Martin Road	At ////////./////. Per Lump Sum	.
19	1 Lump Sum	Bridge #334, 11-NW	At ////////./////. Per Lump Sum	.
TRAFFIC				
20	302 Lin. Ft.	Beam Guardrail Type 31	At . Per Linear Foot	.
21	6 Each	Beam Guardrail Anchor Type 10	At . Per Each	.
22	5 Each	Beam Guardrail Flared Terminal, 25'-0'	At . Per Each	.
23	3 Each	Beam Guardrail Flared Terminal, 50'-0"	At . Per Each	.
24	29,109 Lin. Ft.	Paint Line	At . Per Linear Foot	.
OTHER ITEMS				
25	591 C.Y.	Structure Excavation Class "A" Including Haul	At . Per Cubic Yard	.
26	16 C.Y.	Gravel Backfill For Pipe Zone Bedding	At . Per Cubic Yard	.
27	74 C.Y.	Gravel Backfill For Walls	At . Per Cubic Yard	.
28	1 Lump Sum	Spill Prevention, Control, and Countermeasure (SPCC) Plan	At ////////./////. Per Lump Sum	.

Item No.	Plan Quantity	Item Description	Price per Unit* Dollars . Cents	Total Amount Dollars . Cents
29	1 Each	Monument	At . Per Each	.
30	1 Lump Sum	Trimming and Cleanup	At ////////./////. Per Lump Sum	.
31	4.0 Acre	Seeding, Fertilizing and Mulching, With Roadside Mix	At ////////./////. Acre	.
32	-$2.00 Est.	Minor Change	At ////////./////. Est.	-$2.00

PROJECT Total	.

Failure to return this Declaration as part of the bid proposal package will make the bid nonresponsive and ineligible for award.

NON-COLLUSION DECLARATION

I, by signing the proposal, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association, or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.

2. **That by signing the signature page of this proposal, I am deemed to have signed and have agreed to the provisions of this declaration.**

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Revised 6/14

From DOT Form 272-036I EF
07/2011

Proposal – Signature Page

The bidder is hereby advised that by signature of this proposal he/she is deemed to have acknowledged all requirements and signed all certificates contained herein.

A proposal guaranty in an amount of five percent (5%) of the total bid, based upon the approximate estimate of quantities at the above prices and in the form as indicated below, is attached hereto:

Cash	☐	In the Amount of _____
Cashier's Check	☐	_____ Dollars
Certified Check	☐	($_____) Payable to the Grant County Treasurer
Proposal Bond	☐	In the Amount of 5% of the Bid

Receipt is hereby acknowledged of addendum(s) No.(s) ____, ____ & ____.

Signature of Authorized Official(s)

Proposal Must Be Signed →

_____

_____

Please Print Name of Authorized Official

Firm Name _____

Address _____

_____

_____

State of Washington Contractor's License No. _____

Federal ID No. _____

Note:

(1) This proposal form is not transferable and any alteration entered hereon without prior permission from the County Engineer will be cause for considering the proposal irregular and subsequent rejection of bid.

(2) Please refer to section 1-02.6 of the standard specifications, re:"Preparation of Proposal" or "Article 4" of the instructions to bidders for building construction jobs.

(3) Should it be necessary to modify this proposal either in writing or by electronic means, please make reference to the following proposal number in your communication: _____

Revised 8/95

Statement of Contractor Qualifications

To: Board of County Commissioners
Grant County, Washington

Date: _____, 2016

RE: **ADAMS ROAD, CRP 14-08 AND BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12**

I hereby maintain that I am a responsible bidder as contemplated by the policies of the State of Washington and Chapter 36.77 of the Revised Code of Washington.

1. My permanent business name and address is _____ which I have maintained for ____ years. My phone is (____)_____ Fax (____)_____
2. I have adequate plant equipment to expeditiously and properly perform the work contemplated for Grant County, Washington. **Description of work:** This contract provides for the reconstruction of 1.87 miles of two lane county road in Grant County, WA, and includes roadway excavation, embankment compaction, drainage items, crushed surfacing base course, maintenance rock, hot mix asphalt, bridge replacement, paint striping, seeding and fertilizing, and other work in accordance with the attached Contract Plans, these Contract Provisions and the Standard Specifications. (Please list equipment to be used on this project. Attach list if necessary.)
   _____
   _____
3. I have adequate funds to promptly meet obligations incident to this work. (Provide bank, contact & phone.) a) _____
   b) _____ c) _____
4. I have adequate experience in this class of work and I am thoroughly familiar with the specifications used in this project. I have constructed the following similar improvements: (Provide project name, contact & phone.)
   a) _____
   b) _____
5. I have submitted and maintain annually a "Standard Questionnaire and Financial Statement" to the Washington State Department of Transportation (WSDOT): Yes ☐ No ☐ Region: _____
   WSDOT has determined: a) I am prequalified to _____ _____ in the amount of _____.__
   b) I have failed to be prequalified for the following reasons: ___ _____.

   The Contracting Agency may determine a prospective Bidder who is not prequalified to perform certain types of work within the financial and experience constraints determined by WSDOT to be not responsible and refuse to award a contract.
   The Board of County Commissioners shall proceed to award the contract to the lowest and best bidder but may reject any or all bids if in its opinion good cause exists therefor. (RCW 36.77.040)

I hereby certify that the above statements are true and accurate.
Very truly yours,
By: _____
(Print Name) _____
Company Name: _____
Address: _____
City, State, Zip: _____
Washington State Contractor's License No.: _____
Revised 4/02

Bid Bond

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto Grant County, Washington, as Obligee, in the penal sum of _____ Dollars ($_____) for the payment of which the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of the obligation is such that if the Obligee shall make any award to the Principal for **ADAMS ROAD, CRP 14-08 AND, BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12,** located in Grant County, Washington, according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for the faithful performance thereof, with the Surety or Sureties approved by the Obligee; or if the principal shall, in case of failure so to do, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS ____ DAY OF _____ , 2016

Principal _____

Surety _____

Attorney-in-Fact _____

CONTRACT

THIS AGREEMENT, between the Board of County Commissioners of Grant County, State of Washington, acting under and by virtue of Chapter 36.77 of the Revised Code of Washington, as amended, hereinafter called the County, and _____, for itself, its heirs, executors, administrators, successors and assigns, hereinafter called the Contractor.

WITNESSETH:

That in consideration of the payments, covenants, and agreements, hereinafter mentioned, and attached and made a part of this agreement, to be made and performed by the parties hereto, and the parties hereto covenant and agree as follows:

DESCRIPTION OF WORK:

1. The Contractor shall do all work and furnish all tools, materials, and equipment necessary to improve and complete **ADAMS ROAD, CRP 14-08 AND BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12,** located in Grant County, Washington, as proposed in a bid opened **1:45 P.M., Tuesday, June 28, 2016** in accordance with and as described in the herein attached plans and standard specifications, and in full compliance with the terms, conditions, and stipulations herein set forth and attached, now referred to any by such reference incorporated herein and made part hereof as fully for all purposes as if here set forth at length, and shall perform any alterations in or additions to the work covered by this contract and every part thereof and any force account work may be ordered as provided in this contract and every part thereof.

2. The Contractor shall provide and be at the expense of all materials, labor, carriage, tools, implements and conveniences and things of every description that may be requisite for the transfer of materials and for constructing and completing the work provided for in this contract and every part thereof.

3. The County hereby promises and agrees with the Contractor to employ, and does employ the Contractor to provide the materials and to do and cause to be done the above described work and to complete and finish the same according to the attached plans and specifications and the terms and conditions herein contained, and hereby contracts to pay for the same according to the attached specifications and the schedule of unit or itemized prices hereto attached, at the time and in the manner and upon the conditions provided for in this contract and every part thereof. The County further agrees to employ the Contractor to perform any alterations in or additions to the work covered by this contract and every part thereof and any force account work that may be ordered and pay for same under the terms of this contract and the attached plans and specifications.

4. The Contractor for himself, and for his heirs, executors, administrators and assigns, and successors and assigns, does hereby agree to the full performance of all the covenants herein contained upon the part of the Contractor.

5. It is further provided that no liability shall attach to the County by reason of entering into this contract, except as expressly provided herein.

IN WITNESS WHEREOF, the said Contractor has executed this instrument, and the said Board of County Commissioners of Grant County has caused this instrument to be executed by and in the name of said Board by its Members, duly attested by its Clerk, the day and year below written, and the seal of said Board to be hereunto affixed on said date.

____day of _____, 2016

_____
Signature

_____
Print Name

_____
Firm Name

_____
Address

_____
City State Zip

(____)_____
Phone

ATTEST:

_____
Clerk of the Board

APPROVED AS TO FORM:

____day of _____,2016

_____
Deputy Prosecuting Attorney

BOARD OF COUNTY COMMISSIONERS
OF GRANT COUNTY, WASHINGTON

this ____ day of _____, 2016

_____
Chair

_____
Member

_____
Member

CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, _____, as principal, and _____, a corporation organized and existing under the laws of the State of _____, as surety corporation, and qualified under the laws of the State of Washington to become surety upon bonds of contractors with municipal corporations, as surety, are jointly and severally held and firmly bound to Grant County, Washington, in the penal sum of

_____

($_____) for the payment of which sum on demand we bind ourselves and our successors, heirs, administrators or personal representatives, as the case may be.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of Grant County, Washington.

Dated at _____, Washington, this ____ day of _____, 2016.

The conditions of the above obligation are such that:

WHEREAS, on **June 28, 2016**, the Board of County Commissioners of said Grant County has let or is about to let to the Principal, a certain contract, the said contract providing for the improvement of **ADAMS ROAD, CRP 14-08 AND BRIDGE #330, M-NW & BRIDGE #334, 11-NW, CRP 16-12,** located in Grant County, Washington, (which contract is referred to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said Principal has accepted, or is about to accept, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth;

NOW, THEREFORE, if the said Principal shall faithfully perform all of the provisions of said contract in the manner and within the time therein set forth or within such extensions of time as may be granted under said contract, and shall pay all laborers, mechanics, subcontractors and material men, and all persons who shall supply said Principal or subcontractors with provisions and supplies for the carrying on of said work, and shall hold said Grant County harmless from any loss or damage occasioned to any person or property by reason of any carelessness or negligence on the part of said Principal, or any subcontractor in the performance of said work and shall indemnify and hold Grant County harmless from any damage or expense by reason of failure of performance as specified in said contract or from defects appearing or developing in the material or workmanship provided or performed under said contract, and until the same is accepted, then and in that event this obligation shall be void but otherwise it shall be and remain in full force and effect.

Countersigned:

_____ _____

Licensed Agent/Surety Co. Principal

_____ _____

Attorney-in-Fact, Surety

_____

Approved as to Form:

(_____)_____

Firm, Street Address (No P.O. Box), Phone of Local Office of Agent _____, 2016

_____

Deputy Prosecuting Attorney

TITLE VI – Contractor Requirements

During the performance of this contract, the contractor/consultant, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations

The contractor shall comply with the Regulations relative to non-discrimination in federally assisted programs of United States Department of Transportation (USDOT), Title 49, Code of Federal Regulations, part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination

The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of sub-contractors, including procurement of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. Solicitations for Sub-contracts, Including Procurement of Materials and Equipment

In all solicitations either by competitive bidding or negotiations made by the contractor for work to be performed under a sub-contract, including procurement of materials or leases of equipment, each potential sub-contractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, sex, or national origin.

4. Information and Reports

The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the contracting agency or the appropriate federal agency to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to WSDOT or the USDOT as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Non-compliance

In the event of the contractor's non-compliance with the non-discrimination provisions of this contract, the contracting agency shall impose such contract sanctions as it or the USDOT may determine to be appropriate, including, but not limited to:

- Withholding of payments to the contractor under the contract until the contractor complies, and/or;
- Cancellation, termination, or suspension of the contract, in whole or in part

6. Incorporation of Provisions

The contractor shall include the provisions of paragraphs (1) through (5) in every sub-contract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any sub-contractor or procurement as the contracting agency or USDOT may direct as a means of enforcing such provisions including sanctions for non-compliance.

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a sub-contractor or supplier as a result of such direction, the contractor may request WSDOT enter into such litigation to protect the interests of the state and, in addition, the contractor may request the USDOT enter into such litigation to protect the interests of the United States.

State of Washington
Department of Labor & Industries

Prevailing Wage Section - Telephone 360-902-5335
PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 6/7/2016

County	Trade	Job Classification	Wage	Holiday	Overtime	Note
Grant	Carpenters	Carpenters	$40.76	5A	1B	8N
Grant	Flaggers	Journey Level	$33.91	7B	1M	
Grant	Ironworkers	Journeyman	$56.20	7N	1O	
Grant	Laborers	Air And Hydraulic Track Drill	$36.55	7B	1M	
Grant	Laborers	Asphalt Raker	$36.55	7B	1M	
Grant	Laborers	Asphalt Roller, Walking	$36.28	7B	1M	
Grant	Laborers	Brick Pavers	$36.01	7B	1M	
Grant	Laborers	Brush Hog Feeder	$36.01	7B	1M	
Grant	Laborers	Brush Machine	$36.55	7B	1M	
Grant	Laborers	Caisson Worker, Free Air	$36.55	7B	1M	
Grant	Laborers	Carpenter Tender	$36.01	7B	1M	
Grant	Laborers	Cement Finisher Tender	$36.28	7B	1M	
Grant	Laborers	Cement Handler	$36.01	7B	1M	
Grant	Laborers	Chain Saw Operator & Faller	$36.55	7B	1M	
Grant	Laborers	Clean-up Laborer	$36.01	7B	1M	
Grant	Laborers	Compaction Equipment	$36.28	7B	1M	
Grant	Laborers	Concrete Crewman	$36.01	7B	1M	
Grant	Laborers	Concrete Saw, Walking	$36.28	7B	1M	
Grant	Laborers	Concrete Signalman	$36.01	7B	1M	
Grant	Laborers	Concrete Stack	$36.55	7B	1M	
Grant	Laborers	Confined Space Attendant	$36.01	7B	1M	
Grant	Laborers	Crusher Feeder	$36.01	7B	1M	
Grant	Laborers	Demolition	$36.01	7B	1M	
Grant	Laborers	Demolition Torch	$36.28	7B	1M	
Grant	Laborers	Dope Pot Fireman, Non-mechanical	$36.28	7B	1M	
Grant	Laborers	Driller Helper (when Required To Move & Position Machine)	$36.28	7B	1M	
Grant	Laborers	Drills With Dual Masts	$36.83	7B	1M	
Grant	Laborers	Dry Stack Walls	$36.01	7B	1M	
Grant	Laborers	Dumpman	$36.01	7B	1M	

Grant	Laborers	Erosion Control Laborer	$36.01	7B	1M
Grant	Laborers	Final Detail Cleanup (i.e., Dusting, Vacuuming, Window Cleaning; Not Construction Debris Cleanup)	$33.91	7B	1M
Grant	Laborers	Firewatch	$36.01	7B	1M
Grant	Laborers	Form Cleaning Machine Feeder, Stacker	$36.01	7B	1M
Grant	Laborers	Form Setter, Paving	$36.28	7B	1M
Grant	Laborers	General Laborer	$36.01	7B	1M
Grant	Laborers	Grade Checker	$38.54	7B	1M
Grant	Laborers	Grout Machine Header Tender	$36.01	7B	1M
Grant	Laborers	Guard Rail	$36.01	7B	1M
Grant	Laborers	Gunite	$36.55	7B	1M
Grant	Laborers	Hazardous Waste Worker (level A)	$36.83	7B	1M
Grant	Laborers	Hazardous Waste Worker (level B)	$36.55	7B	1M
Grant	Laborers	Hazardous Waste Worker (level C)	$36.28	7B	1M
Grant	Laborers	Hazardous Waste Worker (level D)	$36.01	7B	1M
Grant	Laborers	Hdpe Or Similar Liner Installer	$36.01	7B	1M
Grant	Laborers	High Scaler	$36.55	7B	1M
Grant	Laborers	Jackhammer Operator Miner, Class "b"	$36.28	7B	1M
Grant	Laborers	Laser Beam Operator	$36.55	7B	1M
Grant	Laborers	Miner, Class "a"	$36.01	7B	1M
Grant	Laborers	Miner, Class "c"	$36.55	7B	1M
Grant	Laborers	Miner, Class "d"	$36.83	7B	1M
Grant	Laborers	Monitor Operator, Air Track Or Similar Mounting	$36.55	7B	1M
Grant	Laborers	Mortar Mixer	$36.55	7B	1M
Grant	Laborers	Nipper	$36.01	7B	1M
Grant	Laborers	Nozzleman	$36.55	7B	1M
Grant	Laborers	Nozzleman, Water (to Include Fire Hose), Air Or Steam	$36.28	7B	1M
Grant	Laborers	Pavement Breaker, 90 Lbs. & Over	$36.55	7B	1M
Grant	Laborers	Pavement Breaker, Under 90 Lbs.	$36.28	7B	1M
Grant	Laborers	Pipelayer	$36.55	7B	1M
Grant	Laborers	Pipelayer, Corrugated Metal Culvert And Multi-plate	$36.28	7B	1M
Grant	Laborers	Pipewrapper	$36.55	7B	1M
Grant	Laborers	Plasterer Tenders	$36.55	7B	1M
Grant	Laborers	Pot Tender	$36.28	7B	1M
Grant	Laborers	Powderman	$38.20	7B	1M
Grant	Laborers	Powderman Helper	$36.28	7B	1M
Grant	Laborers	Power Buggy Operator	$36.28	7B	1M
Grant	Laborers	Power Tool Operator, Gas, Electric, Pneumatic	$36.28	7B	1M
Grant	Laborers	Railroad Equipment, Power Driven, Except Dual Mobile	$36.28	7B	1M

Grant	Laborers	Railroad Power Spiker Or Puller, Dual Mobile	$36.28	7B	1M	
Grant	Laborers	Remote Equipment Operator	$36.83	7B	1M	
Grant	Laborers	Remote Equipment Operator (i.e. Compaction And Demolition)	$36.28	7B	1M	
Grant	Laborers	Rigger/signal Person	$36.28	7B	1M	
Grant	Laborers	Riprap Person	$36.01	7B	1M	
Grant	Laborers	Rodder & Spreader	$36.28	7B	1M	
Grant	Laborers	Sandblast Tailhoseman	$36.01	7B	1M	
Grant	Laborers	Scaffold Erector, Wood Or Steel	$36.01	7B	1M	
Grant	Laborers	Stake Jumper	$36.01	7B	1M	
Grant	Laborers	Structural Mover	$36.01	7B	1M	
Grant	Laborers	Tailhoseman (water Nozzle)	$36.01	7B	1M	
Grant	Laborers	Timber Bucker & Faller (by Hand)	$36.01	7B	1M	
Grant	Laborers	Track Laborer (rr)	$36.01	7B	1M	
Grant	Laborers	Traffic Control Laborer	$33.91	7B	1M	8T
Grant	Laborers	Traffic Control Supervisor	$34.91	7B	1M	8S
Grant	Laborers	Trencher, Shawnee	$36.28	7B	1M	
Grant	Laborers	Trenchless Technology Technician	$36.55	7B	1M	
Grant	Laborers	Truck Loader	$36.01	7B	1M	
Grant	Laborers	Tugger Operator	$36.28	7B	1M	
Grant	Laborers	Vibrators, All	$36.55	7B	1M	
Grant	Laborers	Wagon Drills	$36.28	7B	1M	
Grant	Laborers	Water Pipe Liner	$36.28	7B	1M	
Grant	Laborers	Welder, Electric, Manual Or Automatic (hdpe Or Similar Pipe And Liner)	$36.83	7B	1M	
Grant	Laborers	Well-point Person	$36.01	7B	1M	
Grant	Laborers	Wheelbarrow, Power Driven	$36.28	7B	1M	
Grant	Power Equipment Operators	A-frame Truck (2 Or More Drums)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	A-frame Truck (single Drum)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Asphalt Plant Operator	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Assistant Plant Operator, Fireman Or Pugmixer (asphalt)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Assistant Refrigeration Plant & Chiller Operator (over 1000 Ton)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Assistant Refrigeration Plant (under 1000 Ton)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Automatic Subgrader (ditches & Trimmers)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Backfillers (cleveland & Similar)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Backhoe & Hoe Ram (under 3/4 Yd.)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Backhoe (45,000 Gw & Under)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Backhoe (45,000 Gw To 110,000 Gw)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Backhoe (over 110,000 Gw)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Backhoes & Hoe Ram (3 Yds & Over)	$41.51	7B	1M	8D

Grant	Power Equipment Operators	Backhoes & Hoe Ram (3/4 Yd. To 3 Yd.)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Bagley Or Stationary Scraper	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Batch & Wet Mix Operator (multiple Units, 2 & Incl. 4)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Batch Plant & Wet Mix Operator, Single Unit (concrete)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Batch Plant (over 4 Units)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Belt Finishing Machine	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Belt Loader (kocal Or Similar)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Belt-crete Conveyors With Power Pack Or Similar	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Bending Machine	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Bit Grinders	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Blade (finish & Bluetop), Automatic, Cmi, Abc, Finish Athey & Huber & Similar When Used As Automatic	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Blade Operator (motor Patrol & Attachments)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Blower Operator (cement)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Boat Operator	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Bob Cat (skid Steer)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Bolt Threading Machine	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Boom Cats (side)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Boring Machine (earth)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Boring Machine (Rock Under 8 inch Bit - Quarry Master, Joy Or Similar)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Bump Cutter (wayne, Saginau Or Similar)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Cableway Controller (dispatcher)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Cableway Operators	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Canal Lining Machine (concrete)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Carrydeck & Boom Truck (under 25 Tons)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Cement Hog	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Chipper (without Crane) Cleaning & Doping Machine (pipeline)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Clamshell, Dragline	$42.61	7B	1M	8D
Grant	Power Equipment Operators	Compactor (self-propelled With Blade)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Compressor (2000 Cfm Or Over, 2 Or More, Gas Diesel Or Electric Power)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Compressors (under 2000 Cfm, Gas, Diesel Or Electric Power)	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Concrete Cleaning / Decontamination Machine Operator	$41.51	7B	1M	8D

Grant	Power Equipment Operators	Concrete Pump Boon Truck	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Concrete Pumps (squeeze-crete, Flow-crete, Whitman & Similar)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Concrete Saw (multiple Cut)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Concrete Slip Form Paver	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Conveyor Aggregate Delivery Systems (c.a.d.)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Crane Oiler- Driver (cdl Required) & Cable Tender, Mucking Machine	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Cranes (25 Tons & Under), All Attachments Incl. Clamshell, Dragline	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Cranes (25 Tons To And Including 45 Tons), All Attachments Incl. Clamshell, Dragline	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Cranes (45 Tons To 85 Tons), All Attachments Incl. Clamshell And Dragline	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Cranes (85 Tons & Over) And All Climbing, Overhead, Rail & Tower. All Attachments Incl.	$42.61	7B	1M	8D
Grant	Power Equipment Operators	Crusher Feeder	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Crusher, Grizzle & Screening Plant Operator	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Curb Extruder (asphalt Or Concrete)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Deck Engineer	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Deck Hand	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Derricks & Stifflegs (65 Tons & Over)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Derricks & Stifflegs (under 65 Tons)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Distributor Leverman	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Ditch Witch Or Similar	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Dope Pots (power Agitated	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Dozer / Tractor (up To D-6 Or Equivalent) And Traxcavator	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Dozer / Tractors (d-6 & Equivalent & Over)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Dozer, 834 R/t & Similar	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Drill Doctor	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Driller Licensed	$42.61	7B	1M	8D
Grant	Power Equipment Operators	Drillers Helper	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Drilling Equipment (8 inch Bit & Over - Robbins, Reverse Circulation & Similar)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Drills (churn, Core, Calyx Or Diamond)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Elevating Belt (holland Type)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Elevating Belt-type Loader (euclid, Barber Green & Similar)	$40.64	7B	1M	8D

Grant	Power Equipment Operators	Elevating Grader-type Loader (dumor, Adams Or Similar)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Elevator Hoisting Materials	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Equipment Serviceman, Greaser & Oiler	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Fireman & Heater Tender	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Fork Lift Or Lumber Stacker, Hydra-life & Similar	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Generator Plant Engineers (diesel Or Electric)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Gin Trucks (pipeline)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Grade Checker	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Gunite Combination Mixer & Compressor	$40.64	7B	1M	8D
Grant	Power Equipment Operators	H.d. Mechanic	$41.51	7B	1M	8D
Grant	Power Equipment Operators	H.d. Welder	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Heavy Equipment Robotics Operator	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Helicopter Pilot	$42.61	7B	1M	8D
Grant	Power Equipment Operators	Helper, Mechanic Or Welder, H.D	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Hoe Ram	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Hoist (2 Or More Drums Or Tower Hoist)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Hoist, Single Drum	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Hydraulic Platform Trailers (goldhofer, Shaurerly And Similar)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Hydro-seeder, Mulcher, Nozzleman	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Lime Batch Tank Operator (recycle Train)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Lime Brain Operator (recycle Train)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Loader (360 Degrees Revolving Koehring Scooper Or Similar)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Loader Operator (front-end & Overhead, 4 Yds. Incl. 8 Yds.)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Loaders (bucket Elevators And Conveyors)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Loaders (overhead & Front-end, Over 8 Yds. To 10 Yds.)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Loaders (overhead & Front-end, Under 4 Yds.. R/t)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Loaders (overhead And Front-end, 10 Yds. & Over)	$42.61	7B	1M	8D
Grant	Power Equipment Operators	Locomotive Engineer	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Longitudinal Float	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Master Environmental Maintenance Technician	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Mixer (portable - Concrete)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Mixermobile	$40.64	7B	1M	8D

Grant	Power Equipment Operators	Mobile Crusher Operator (recycle Train)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Mucking Machine	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Multiple Dozer Units With Single Blade	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Pavement Breaker, Hydra-hammer & Similar	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Paving (dual Drum)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Paving Machine (asphalt And Concrete)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Piledriving Engineers	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Plant Oiler	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Posthole Auger Or Punch	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Power Broom	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Pump (grout Or Jet)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Pumpman	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Quad-track Or Similar Equipment	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Railroad Ballast Regulation Operator (self-propelled)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Railroad Power Tamper Operator (self-propelled)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Railroad Tamper Jack Operator (self-propelled)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Railroad Track Liner Operator (self-propelled)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Refrigeration Plant Engineer (1000 Tons & Over)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Refrigeration Plant Engineer (under 1000 Ton)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Rollerman (finishing Asphalt Pavement)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Rollers, All Types On Subgrade, Including Seal And Chip Coating (farm Type, Case, John Deere And Similar,or Compacting Vibrator), Except When Pulled B	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Roto Mill (pavement Grinder)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Rotomill Groundsman	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Rubber-tired Scrapers (multiple Engine With Three Or More Scrapers)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Rubber-tired Skidders (r/t With Or Without Attachments)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Scrapers, All, Rubber-tired	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Screed Operator	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Shovels (3 Yds. & Over)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Shovels (under 3 Yds.)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Signalman (whirleys, Highline, Hammerheads Or Similar)	$40.96	7B	1M	8D
Grant	Power Equipment Operators	Soil Stabilizer (p & H Or Similar)	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Spray Curing Machine (concrete)	$40.03	7B	1M	8D

Grant	Power Equipment Operators	Spreader Box (self-propelled)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Spreader Machine	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Steam Cleaner	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Straddle Buggy (ross & Similar On Construction Job Only)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Surface Heater & Planer Machine	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Tractor (farm Type R/t With Attachments, Except Backhoe)	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Traverse Finish Machine	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Trenching Machines (7 Ft. Depth & Over)	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Trenching Machines (under 7 Ft. Depth Capacity)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Tug Boat Operator	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Tugger Operator	$40.03	7B	1M	8D
Grant	Power Equipment Operators	Turnhead (with Re-screening)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Turnhead Operator	$40.64	7B	1M	8D
Grant	Power Equipment Operators	Ultra High Pressure Wateriet Cutting Tool System Operator, (30,000 Psi)	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Vactor Guzzler, Super Sucker	$41.24	7B	1M	8D
Grant	Power Equipment Operators	Vacuum Blasting Machine Operator	$41.51	7B	1M	8D
Grant	Power Equipment Operators	Vacuum Drill (reverse Circulation Drill Under 8" Bit)	$40.80	7B	1M	8D
Grant	Power Equipment Operators	Welding Machine	$39.71	7B	1M	8D
Grant	Power Equipment Operators	Whirleys & Hammerheads, All	$41.51	7B	1M	8D
Grant	Surveyors	All Classifications	$28.57	Null	1	
Grant	Truck Drivers	Dump Truck	$26.09		1	
Grant	Truck Drivers	Dump Truck And Trailer	$26.09		1	
Grant	Truck Drivers	Other Trucks	$27.84		1	
Grant	Truck Drivers	Transit Mixer	$10.00		1	

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Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.

R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

S. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays and all other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.

W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.

Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.

Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   C. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two times the hourly rate of wage.

   F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.

   G. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

   H. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   O. All hours worked on Sundays and holidays shall be paid at one and one-half times the hourly rate of wage.

   R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

   W. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The first eight (8) hours worked on the fifth day shall be paid at one and one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   A. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar ($1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   C. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays shall be paid at double the hourly rate of wage. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

3. D. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 15% over the hourly rate of wage. All other hours worked after 6:00 am on Saturdays, shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.

F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.

I. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions during a five day work week (Monday through Friday,) or a four day-ten hour work week (Tuesday through Friday,) then Saturday may be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

B. All hours worked over twelve (12) hours per day and all hours worked on holidays shall be paid at double the hourly rate of wage.

C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

Overtime Codes Continued

4. D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 20% over the hourly rate of wage. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).

C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).

H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

Holiday Codes Continued

5. I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).

K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).

N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.

Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).

S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).

T. Paid Holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And The Day Before Or After Christmas (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

6. A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

E. Paid Holidays: New Year's Day, Day Before Or After New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and a Half-Day On Christmas Eve Day. (9 1/2).

G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).

H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).

Holiday Codes Continued

6. T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

M. Paid Holidays: New Year's Day, The Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, And the Day after or before Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

R. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

T. Paid Holidays: New Year's Day, the Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and The Day after or before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Note Codes

8. A. In addition to the hourly wage and fringe benefits, the following depth premiums apply to depths of fifty feet or more:
Over 50' To 100' -$2.00 per Foot for Each Foot Over 50 Feet
Over 100' To 150' -$3.00 per Foot for Each Foot Over 100 Feet
Over 150' To 220' -$4.00 per Foot for Each Foot Over 150 Feet
Over 220' -$5.00 per Foot for Each Foot Over 220 Feet

Note Codes Continued

8. C. In addition to the hourly wage and fringe benefits, the following depth premiums apply to depths of fifty feet or more:
Over 50' To 100' -$1.00 per Foot for Each Foot Over 50 Feet
Over 100' To 150' -$1.50 per Foot for Each Foot Over 100 Feet
Over 150' To 200' -$2.00 per Foot for Each Foot Over 150 Feet
Over 200' -Divers May Name Their Own Price

D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

P. Workers on hazmat projects receive additional hourly premiums as follows -Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, And Class D Suit $0.50.

Q. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

R. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do "pioneer" work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

Washington State Department of Labor and Industries
Policy Statement
(Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.

2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.

3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.

4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.

5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.

6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

WSDOT's
Predetermined List for
Suppliers - Manufactures - Fabricator

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered non-standard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

	ITEM DESCRIPTION	YES	NO
1.	Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		X
2.	Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		X
3.	Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		X
4.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		X
5.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		X
6.	Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		X
7.	Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

	ITEM DESCRIPTION	YES	NO
8.	Anchor Bolts & Nuts - Anchor Bolts and Nuts, for mounting sign structures, luminaries and other items, shall be made from commercial bolt stock. See Contract Plans and Std. Plans for size and material type.		X
9.	Aluminum Pedestrian Handrail - Pedestrian handrail conforming to the type and material specifications set forth in the contract plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).	X	
10.	Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	X	
11.	Minor Structural Steel Fabrication - Fabrication of minor steel Items such as special hangers, brackets, access doors for structures, access ladders for irrigation boxes, bridge expansion joint systems, etc., involving welding, cutting, punching and/or boring of holes. See Contact Plans for item description and shop drawings.	X	
12.	Aluminum Bridge Railing Type BP - Metal bridge railing conforming to the type and material specifications set forth in the Contract Plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).		X
13.	Concrete Piling--Precast-Prestressed concrete piling for use as 55 and 70 ton concrete piling. Concrete to conform to Section 9-19.1 of Std. Spec..	X	
14.	Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		X
15.	Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		X
16.	Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
17.	Precast Concrete Inlet - with adjustment sections, See Std. Plans		X
18.	Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19.	Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		X
20.	Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		X
21.	Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting		X
22.	Vault Risers - For use with Valve Vaults and Utilities Vaults.		X
23.	Valve Vault - For use with underground utilities. See Contract Plans for details.		X
24.	Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		X
25.	Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	X	
26.	Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	X	

	ITEM DESCRIPTION	YES	NO
27.	Precast Railroad Crossings - Concrete Crossing Structure Slabs.	X	
28.	12, 18 and 26 inch Standard Precast Prestressed Girder – Standard Precast Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
29.	Prestressed Concrete Girder Series 4-14 - Prestressed Concrete Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A .	X	
30.	Prestressed Tri-Beam Girder - Prestressed Tri-Beam Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
31.	Prestressed Precast Hollow-Core Slab – Precast Prestressed Hollow-core slab for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	X	
32.	Prestressed-Bulb Tee Girder - Bulb Tee Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
33.	Monument Case and Cover See Std. Plan.		X

	ITEM DESCRIPTION	YES	NO
34.	Cantilever Sign Structure - Cantilever Sign Structure fabricated from steel tubing meeting AASHTO-M-183. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
35.	Mono-tube Sign Structures - Mono-tube Sign Bridge fabricated to details shown in the Plans. Shop drawings for approval are required prior to fabrication.	X	
36.	Steel Sign Bridges - Steel Sign Bridges fabricated from steel tubing meeting AASHTO-M-138 for Aluminum Alloys. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
37.	Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		X
38.	Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	X	
39.	Light Standards - Lighting Standards for use on highway illumination systems, poles to be fabricated to conform with methods and materials as specified on Std. Plans. See Specia Provisions for pre-approved drawings.	X	
40.	Traffic Signal Standards - Traffic Signal Standards for use on highway and/or street signal systems. Standards to be fabricated to conform with methods and material as specified on Std. Plans. See Special Provisions for pre-approved drawings	X	
41.	Precast Concrete Sloped Mountable Curb (Single and DualFaced) See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
42.	Traffic Signs - Prior to approval of a Fabricator of Traffic Signs, the sources of the following materials must be submitted and approved for reflective sheeting, legend material, and aluminum sheeting. **NOTE:** *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed	X	X
		Custom Message	Std Signing Message
43.	Cutting & bending reinforcing steel		X
44.	Guardrail components	X	X
		Custom End Sec	Standard Sec
45.	Aggregates/Concrete mixes	Covered by WAC 296-127-018	
46.	Asphalt	Covered by WAC 296-127-018	
47.	Fiber fabrics		X
48.	Electrical wiring/components		X
49.	treated or untreated timber pile		X
50.	Girder pads (elastomeric bearing)	X	
51.	Standard Dimension lumber		X
52.	Irrigation components		X

ITEM DESCRIPTION	YES	NO
53. Fencing materials		X
54. Guide Posts		X
55. Traffic Buttons		X
56. Epoxy		X
57. Cribbing		X
58. Water distribution materials		X
59. Steel "H" piles		X
60. Steel pipe for concrete pile casings		X
61. Steel pile tips, standard		X
62. Steel pile tips, custom	X	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

See RCW 39.12.010
(The definition of "locality" in RCW 39.12.010(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries.
The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.
When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians - Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers - Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators - Underground Sewer & Water
- Residential *** ALL ASSOCIATED RATES ***
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

Washington State Department of Labor and Industries
Policy Statements
(Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)

WAC 296-127-018 Agency filings affecting this section

Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

(1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.

(2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:

(a) They deliver or discharge any of the above-listed materials to a public works project site:

(i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or

(ii) At multiple points at the project; or

(iii) Adjacent to the location and coordinated with the incorporation of those materials.

(b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.

(c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).

(d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.,) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.

(e) They deliver concrete to a public works site regardless of the method of incorporation.

(f) They assist or participate in the incorporation of any materials into the public works project.

(3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.

(4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.

(a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.

(b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.

(5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

CONSTRUCTION SIGN PLAN

DATE: 6/2/2016

PROJ. NAME: ADAMS RD RECONSTRUCTION **CRP #** 14-08

ADAMS RD RECONSTRUCTION			SIGN	# CHK	# CHK			
ITEM #	MUTCD #	QTY	STATUS	OUT	IN	DESCRIPTION	SIZE	COLOR
1	W20-1	14				ROAD WORK AHEAD	36X36	B/O
2	G20-1	7				ROAD CLOSED AHEAD	36X36	B/O
3	W8-8	7				ROUGH ROAD	36X36	B/O
	W21-1701	7				MC USE EXTREME CAUTION	30X24	B/O
4		5				RESIDENT TRAFFIC ONLY	60X30	B/O
5	R11-3A	9				BRIDGE OUT	36X36	B/O
6	W11-2	10				BRIDGE OUT 500'	36X36	B/O
7		5				BRIDGE OUT 1 MI AHEAD	48X30	B/O
8	PLAQUE	5				USE ALT ROUTE	30X24	B/O

*NOTE: 1

CLASS "B" WORK ZONE FLAGGER SIGNS TO BE PROVIDED BY CONTRACTOR ON TEMPORARY STANDS. IF NECESSARY SIGNS LEFT OVERNIGHT WILL HAVE FLASHERS ATTACHED.

*NOTE: 2

SIGN TO BE MOUNTED ON ONE (1) EACH TYPE III BARRICADE WITH FLASHERS. MIN EIGNT (8) FT WIDE

--|-|---|-|-- IS THE SYMBOL FOR TWO (2) EACH TYPE III BARRICADES WITH FLASHERS ON THE SIGN PLAN MAP

THERE ARE A TOTAL OF ___18___ TYPE III BARRICADES ON THIS PROJECT.

*NOTE: 3

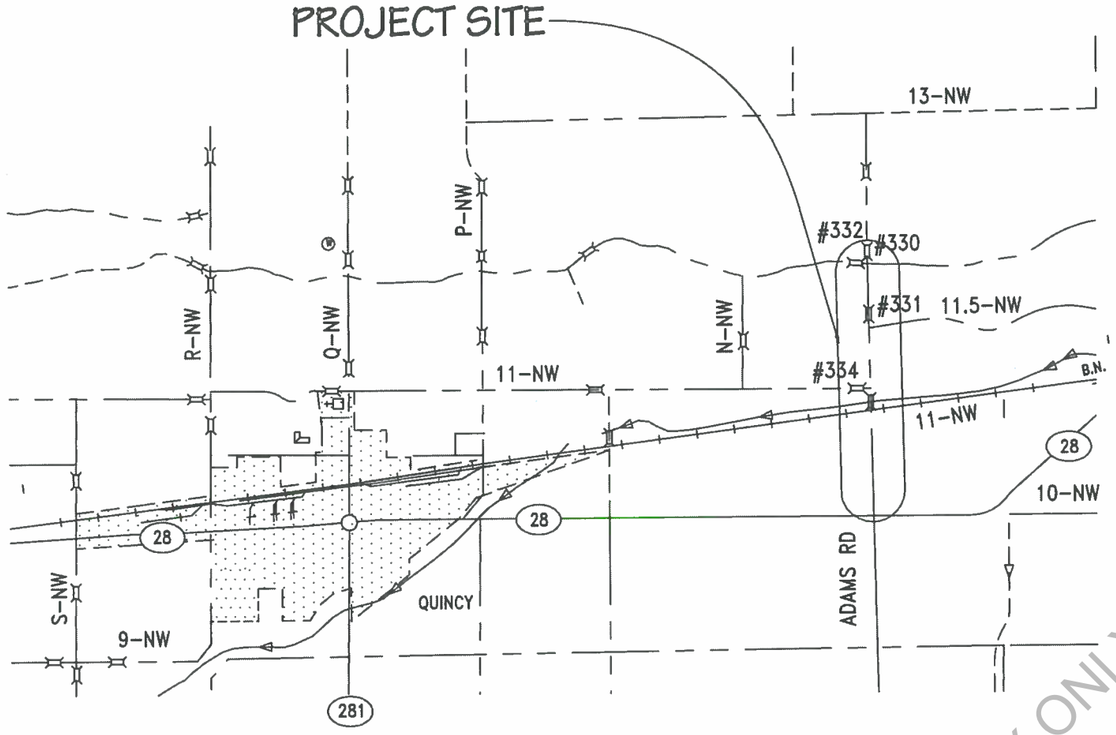
CONTRACTOR IS RESPONSIBLE FOR BARRICADES AND THE MAINTENANCE OF ALL CONSTRUCTION SIGNS AND THE REPLACEMENT OF ALL REMOVED STOP SIGNS. OTHER TRAFFIC SIGNS THAT ARE REMOVED ARE TO BE STORED AT A SITE DETERMINED BY THE PROJECT INSPECTOR. PORTABLE SIGNS AND TRAFFIC CONTROL DEVICES LISTED ARE NOT INTENDED TO BE COMPLETE. OTHER SIGNS MAY BE REQUIRED WITHIN THE PROJECT LIMITS TO ACCOMMODATE CONTRACTORS WORK METHODS.

CHECK OUT--CONTRACTORS REP: _____ DATE _____

CHECK IN---ALL SIGNS IN GOOD ORDER OR AS OTHERWISE NOTED: _____

CHECK IN--COUNTY REP: _____ DATE _____

ADAMS ROAD RECONSTRUCTION
BRIDGES #330, #331, #332 & #334



MATERIAL SOURCE:
QUARRY SITE #580 LOCATED ON COUNTY RD. P-NW
SEC. 28, TWP. 21N., RNG. 24E.W.M.,

LEGEND

- POWER POLE
- TELEPHONE PED.
- FENCE LINE
- CULVERT
- TREE LINE
- CONTROL POINT
- SYPHON
- MAILBOX
- TELEPHONE LINE
- WATER LINE

SHEET		DESCRIPTION
1	—	INDEX & VICINITY MAP
2	—	SUMMARY OF QUANTITIES
3	—	STRUCTURE NOTES
4 - 10	—	ADAMS RD. PLAN AND PROFILE
11	—	TYPICAL X-SECTIONS
12 - 27	—	BRIDGE DETAILS

Grant County
Board Of Commissioners

Richard Stevens, District No. 1
Carolann Swartz, District No. 2
Cindy Carter, District No. 3 (Chair)

GRANT COUNTY PUBLIC WORKS DEPARTMENT
124 ENTERPRISE ST. SE
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(509) 754-6082 FAX (509) 754-6087

ADAMS ROAD NW
(SR 28 to BR. #330)
BR #330, #331, #332, #334

CRP 14-08 & 16-12

DESIGNED BY:	BOB BERSANTI
CHECKED BY:	JEFF TINCHER
APPROVED BY:	JEFF TINCHER
REVISIONS BY:	
DATE REVISED:	6/7/2016
FEDERAL AID NO.:	

JEFFREY C. TINCHER
STATE OF WASHINGTON
42338
REGISTERED
PROFESSIONAL ENGINEER
6/9/16

SHEET 1 OF 27

SUMMARY OF QUANTITIES

ITEM NO.	TOTAL QUANTITY	UNIT	ITEM DESCRIPTION	CRP 14-08 ADAMS RD. STA. 10+75 TO STA. 107+70 State Funded	CRP 16-12 ADAMS RD. STA. 107+70 TO STA. 109+00 County Funded
			PREPARATION		
1	100%	L.S.	Mobilization	80%	20%
2	100%	L.S.	Notification	80%	20%
3	100%	L.S.	Clearing & Grubbing	80%	20%
4	100%	L.S.	Removal Of Existing Bridge #330 M-NW Road		100%
5	100%	L.S.	Removal Of Existing Bridge #331 Adams Road	100%	
6	100%	L.S.	Removal Of Existing Bridge #332 Martin Road	100%	
7	100%	L.S.	Removal Of Existing Bridge #334 11-NW Road		100%
			GRADING		
8	25,000	S.Y.	Rotomilling Bituminous Pavement	24,700	300
9	3,064	C.Y.	Roadway Excavation Including Haul	2,768	296
10	1,610	C.Y.	Embankment Compaction	1,605	5
11	640	S.Y.	Construction Geotextile For Separation	320	320
			DRAINAGE		
12	170	L.F.	Plain Steel Culver Pipe 0.064" Th. - 12" Diameter	170	
13	145	L.F.	Plain Steel Culver Pipe 0.064" Th. - 18" Diameter	145	
			SURFACING		
14	11,100	TON	Crushed Surfacing Base Course From Stockpile #580	10,750	350
			HOT MIX ASPHALT		
15	5,000	TON	Commercial HMA Class 3/8" Incl. PG64-28 Paving Asphalt	4,900	100
			STRUCTURE		
16	100%	L.S.	Bridge #330 M-NW Road		100%
17	100%	L.S.	Bridge #331 Adams Road	100%	
18	100%	L.S.	Bridge #332 Martin Road	100%	
19	100%	L.S.	Bridge #334 11-NW Road		100%
			TRAFFIC		
20	302	L.F.	Beam Guardrail Type 31	108.5	193.5
21	6	EACH	Beam Guardrail Anchor Type 10	4	2
22	5	EACH	Beam Guardrail Non-Flared Terminal, 25'-0"	2	3
23	3	EACH	Beam Guardrail Non-Flared Terminal, 50'-0"	1	2
24	29,109	L.F.	Paint Line	29,009	100
			OTHER ITEMS		
25	591	C.Y.	Structure Excavation Class "A" Including Haul	392	199
26	16	C.Y.	Gravel Backfill For Pipe Zone Bedding	16	
27	74	C.Y.	Gravel Backfill For Walls	50	24
28	100%	L.S.	Spill Prevention, Control, and Countermeasure (SPCC) Plan	50%	50%
29	1	EACH	Monument	1	
30	100%	L.S.	Trimming and Cleanup	80%	20%
31	4	ACRE	Seeding, Fertilizing and Mulching with Roadside Mix	4	
32	-2.00	Dol.	Minor Change	-1.00	-1.00

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SHEET 2
OF 27

STRUCTURE NOTES

NOTE: THE FIRST NUMBER OF THE "CODE" REFERS TO THE PLAN SHEET NUMBER OF THE CONTRACT PLANS. THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THE PARTICULAR SHEET.

CODE	LOCATION	R/L	ELEV.	MISC.	Pl. St. Culvert Pipe 12" Dia. 0.064" Th. L.F.	Pl. St. Culvert Pipe 18" Dia. 0.064" Th. L.F.	Crushed Maintenance Rock TONS	Gravel Backfill For Pipe Zone Bedding C.Y.	Structure Ex. Class "B" Incl. Haul C.Y.	Monument EACH	REMARKS
4-1	STA. 19+90 TO 20+10	R	PLAN	F			2				6
4-2	STA. 22+80 TO 23+00	R	PLAN	O&M			2				6
4-3	STA. 23+10 TO 23+30	L	PLAN	F			2				6
4-4	STA. 23+10 TO 23+30	R	PLAN	O&M			2				6
5-1	STA. 35+40 TO 35+70	L	PLAN	F	40		3				1,2,6
5-2	STA. 36+00 TO 36+20	L	PLAN	O&M	25		2				1,2,6
5-3	STA. 36+30 TO 36+50	R	PLAN	O&M			2				6
5-4	STA. 36+60 TO 36+90	L	PLAN	F	45		3				1,2,6
5-5	STA. 36+70 TO 36+90	R	PLAN	F			2				6
5-6	STA. 37+40 TO 37+60	R	PLAN	F			2				6
5-7	STA. 37+80 TO 38+00	R	PLAN	F			2				6
7-1	STA. 77+50 TO 77+76	L	PLAN	ROAD		75	70	16	25		1,2,6
7-2	STA. 62+85.74	CL	PLAN	MON						1	4, 5
7-3	STA. 69+20 TO 69+40	R	PLAN	F			2				6
8-1	STA. 80+90 TO 81+18	R	PLAN	ROAD			70				1,2,6
8-2	STA. 81+20 TO 81+40	L	PLAN	O&M		30	2				1,2,6
8-3	STA. 81+70 TO 81+90	L	PLAN	O&M		30	2				1,2,6
8-4	STA. 81+70 TO 81+90	R	PLAN	O&M			2				6
9-1	STA. 90+50 TO 90+70	R	PLAN	O&M	30		2				1,2,6
9-2	STA. 98+40 TO 98+60	R	PLAN	O&M	30		2				1,2,6
10-1	STA. 107+25 TO 107+53	L	PLAN	ROAD			70				6
10-2	STA. 108+40 TO 108+60	L	PLAN	O&M			2				6
10-3	STA. 108+40 TO 108+60	R	PLAN	O&M			2				6
Page Total					170	145	250	16	25	1	

GENERAL NOTES

Miscellaneous

BD = Bottom of Ditch
CP = Catch point
CROSS = Crossing Pipe
R = Residential
F = Farm
PLAN = Elevation on Plans
MON = Monument
O&M = O&M Road
C = Commercial

1. Field adjust termini as directed by the engineer.
2. Install 3:1 beveled end sections per standard plans.
3. Remove existing culvert and salvage to the contractor.
4. Remove existing monument and case if necessary.
5. Install monument and monument case per standard plans.
6. Quantities for embankment and roadway excavation are included in plan quantities whether shown or not.

NOTE: For Special Features See Special Provisions.

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BR #330, #331, #332, #334

CRP 14-08 & 16-12

DESIGNED BY:	BOB BERSANTI
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APPROVED BY:	JEFF TINCHER
REVISIONS BY:	
DATE REVISED:	6/7/2016
FEDERAL AID NO.:	

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42338
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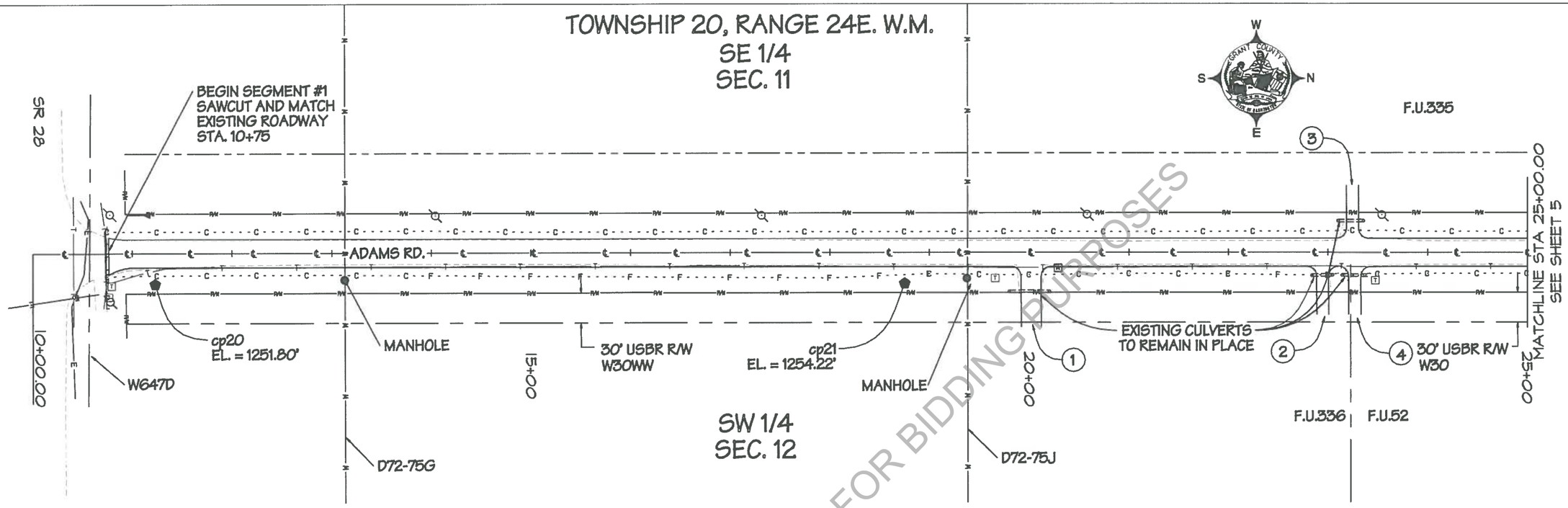
PROFESSIONAL ENGINEER
6/9/16

SHEET 3
OF 27

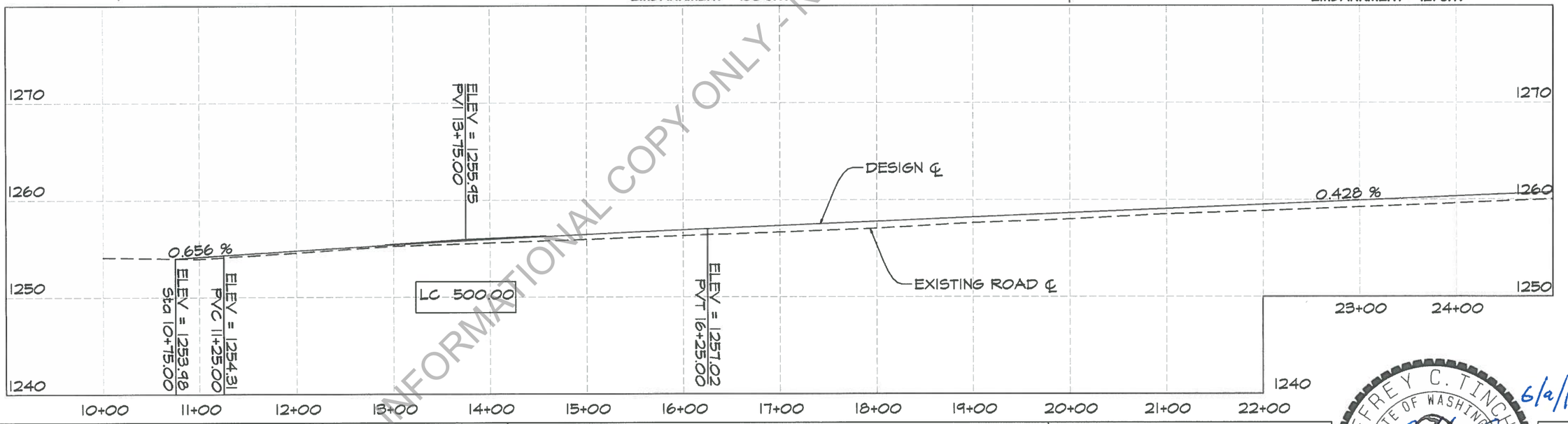
TOWNSHIP 20, RANGE 24E. W.M.
SE 1/4
SEC. 11

SW 1/4
SEC. 12



ROADWAY EXCAVATION = 336 C.Y.
EMBANKMENT = 103 C.Y.

ROADWAY EXCAVATION = 105 C.Y.
EMBANKMENT = 121 C.Y.



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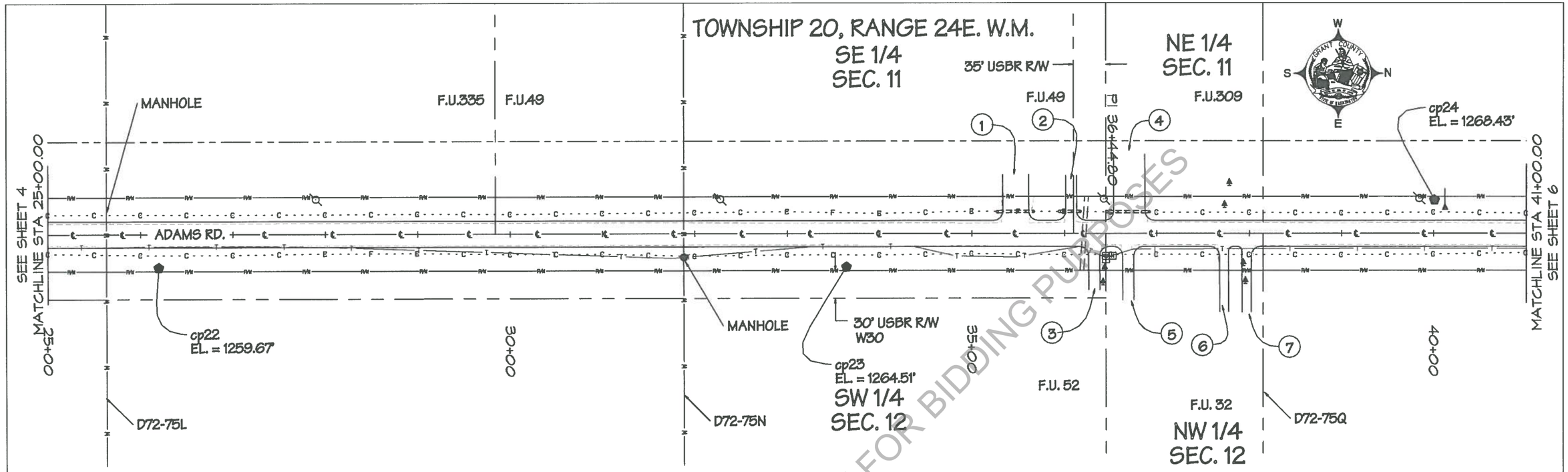
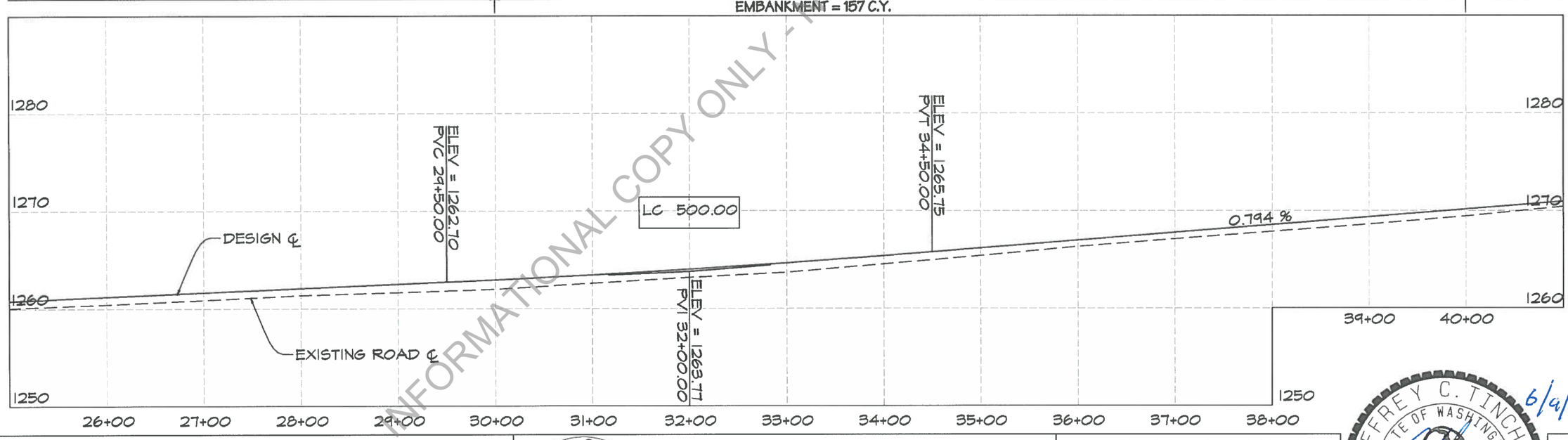
6/9/16

SHEET 4
OF 27



ROADWAY EXCAVATION = 249 C.Y.
EMBANKMENT = 157 C.Y.



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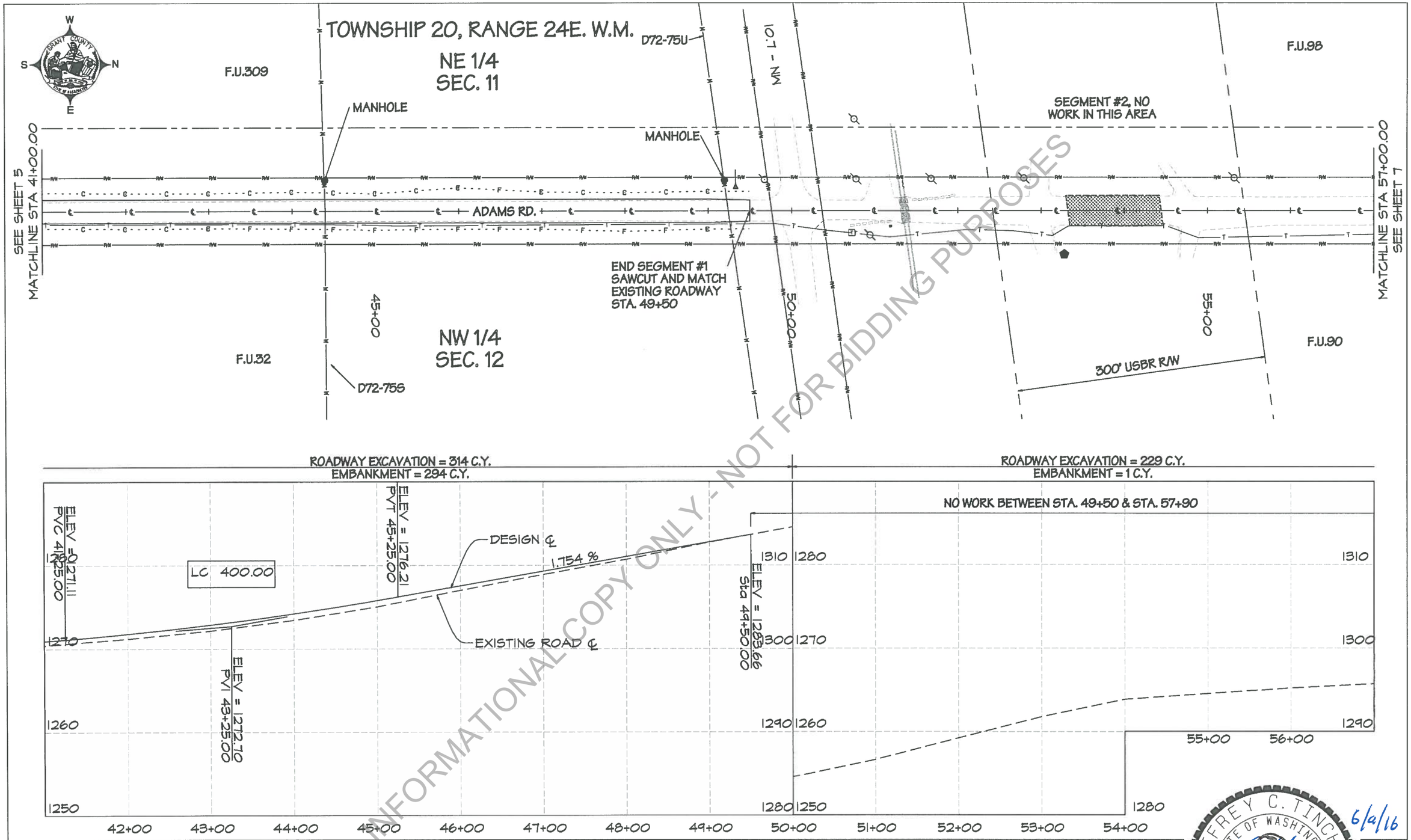
SHEET 5
OF 27



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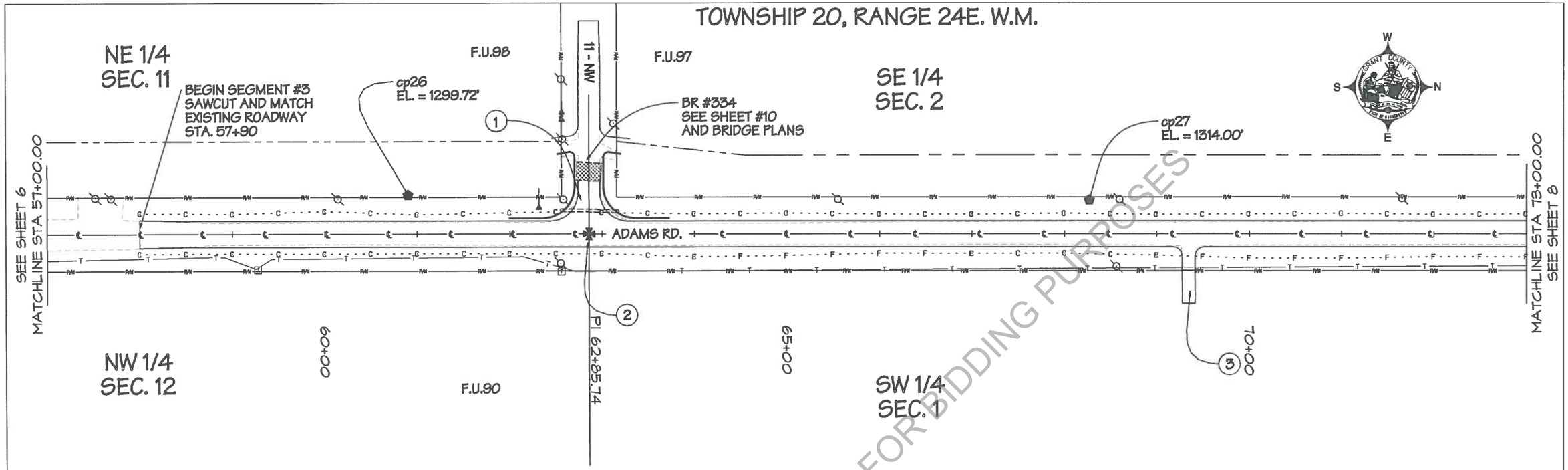
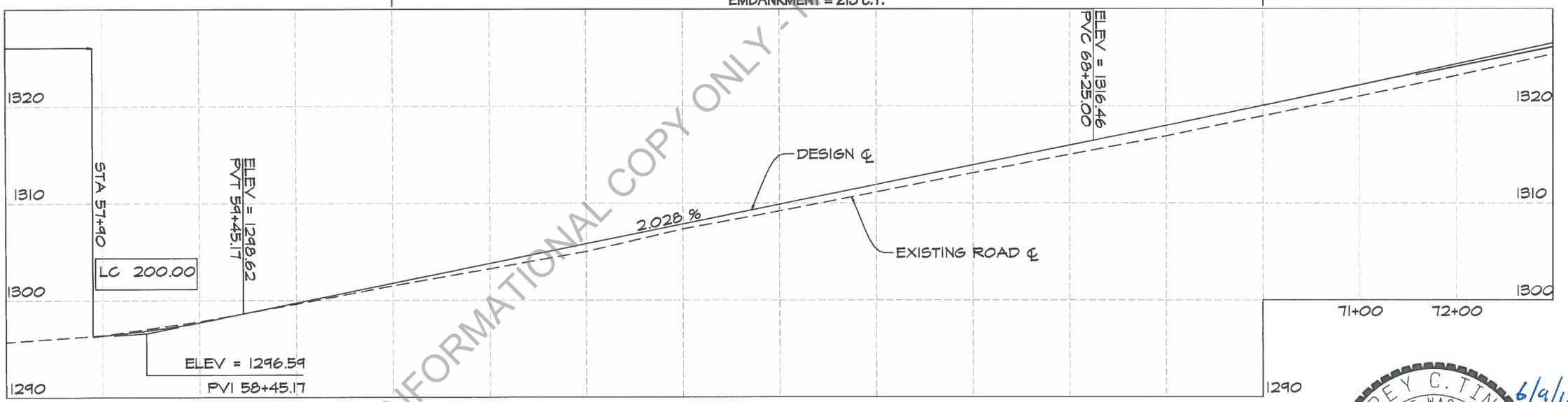
6/1/16

SHEET 6
OF 27

TOWNSHIP 20, RANGE 24E. W.M.





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22338
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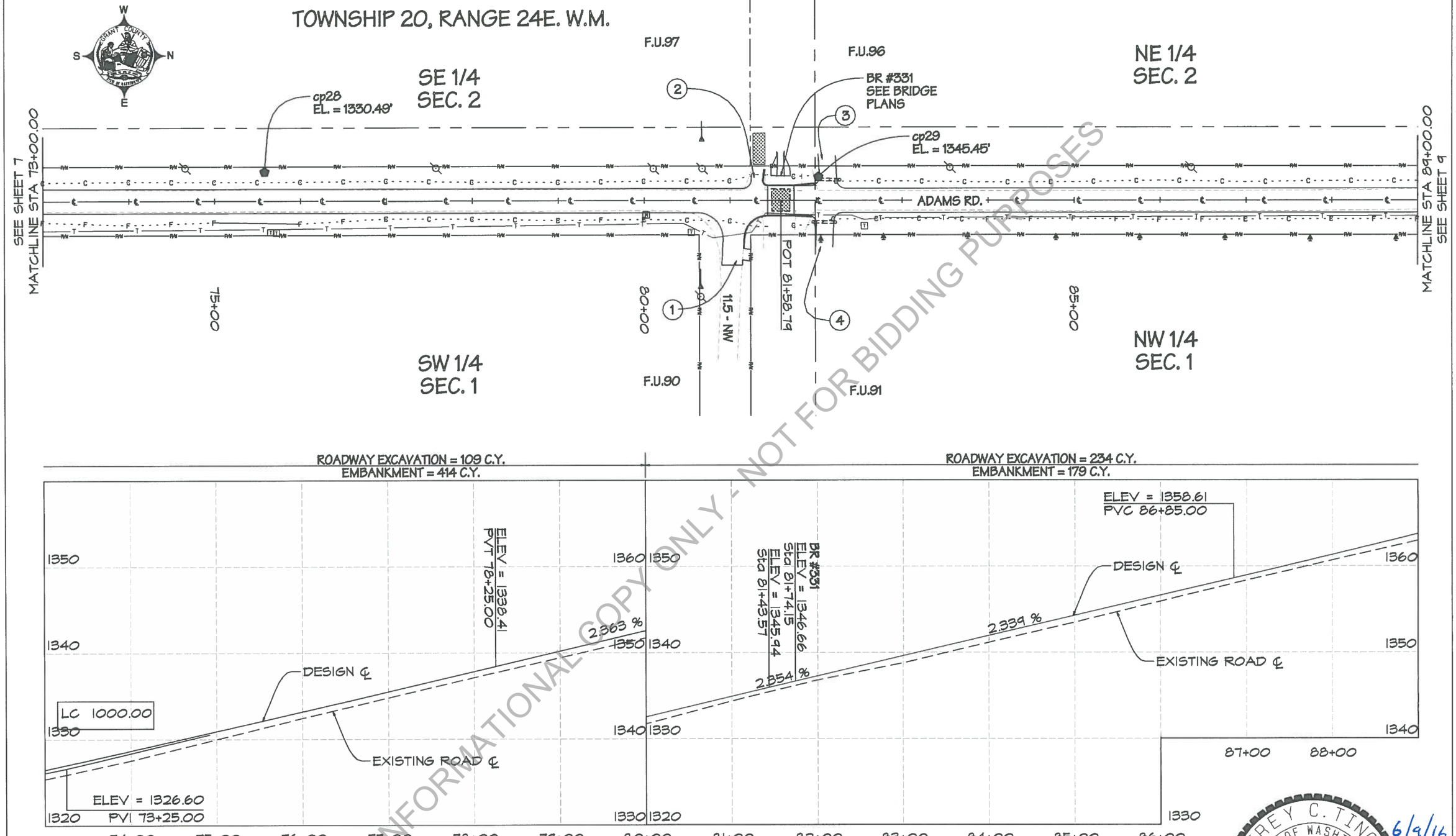
SHEET 7
OF 27



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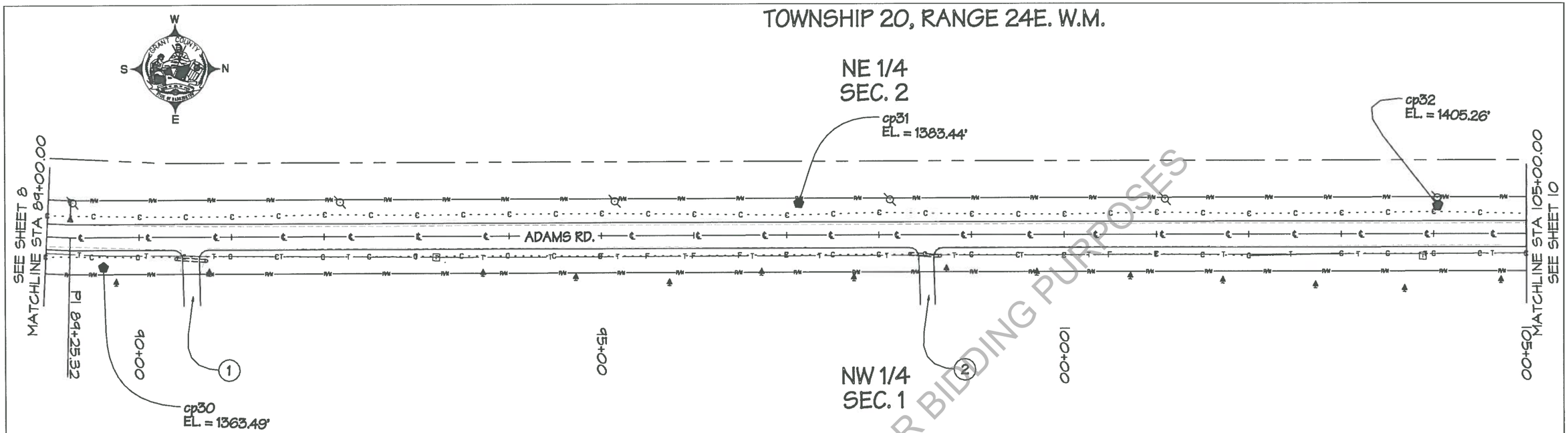
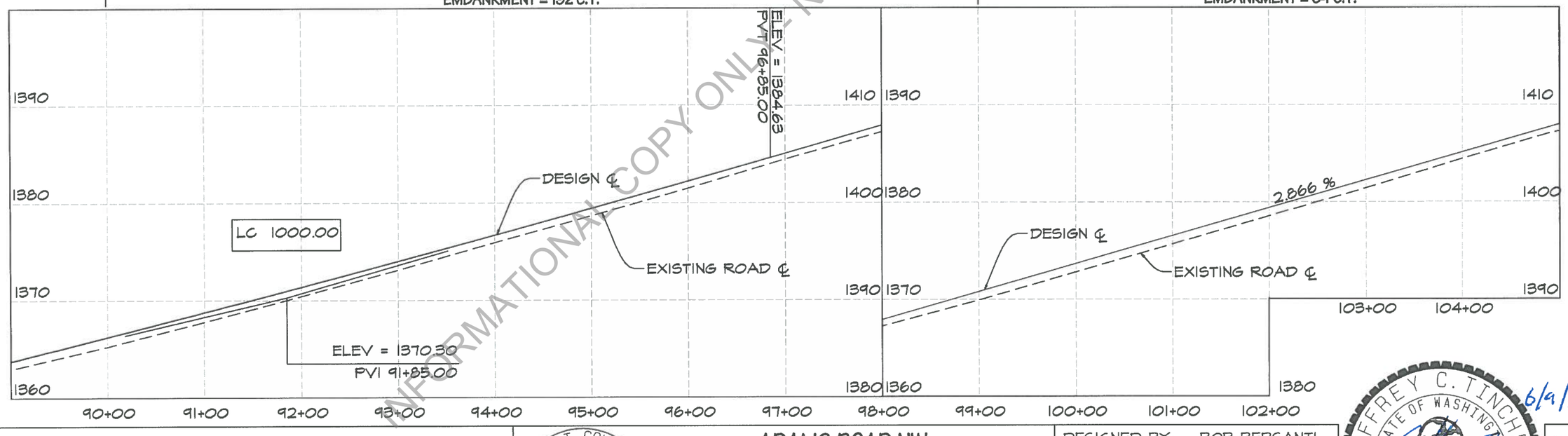
SHEET 8
OF 27

TOWNSHIP 20, RANGE 24E. W.M.





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SHEET 9
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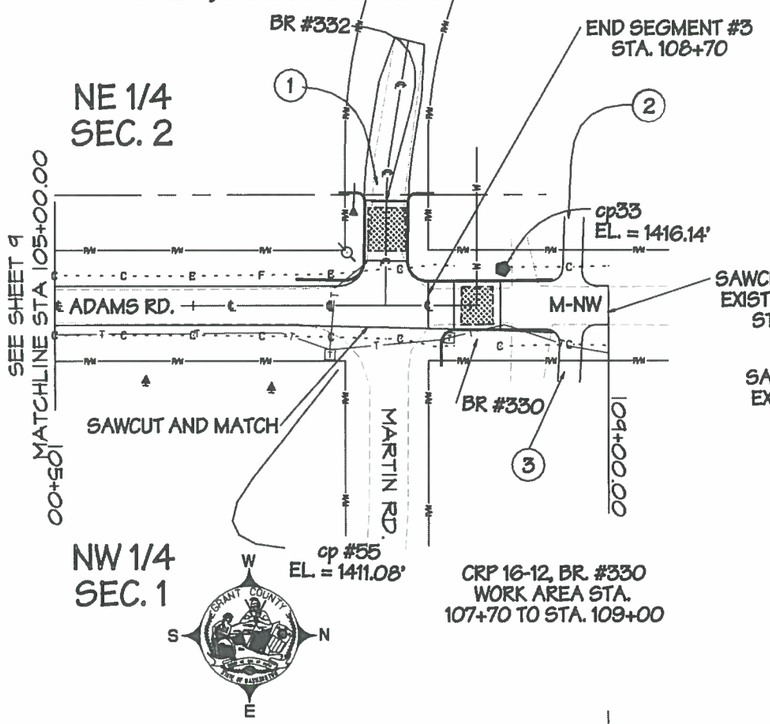
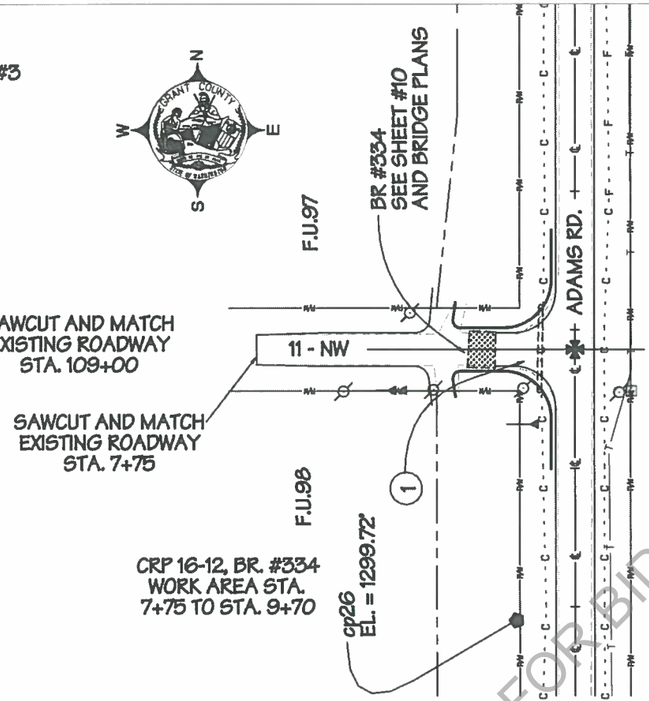
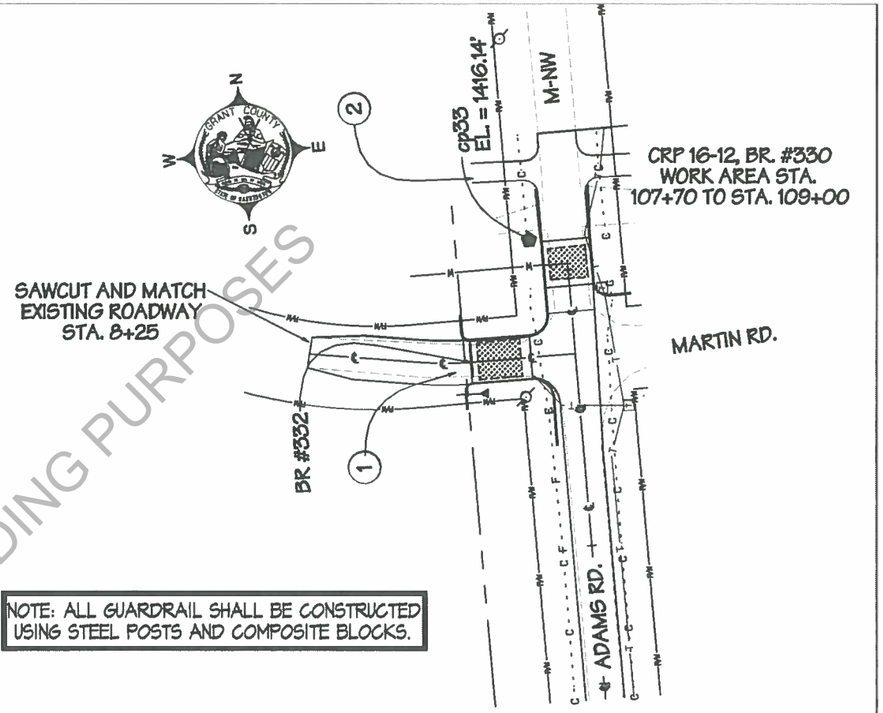
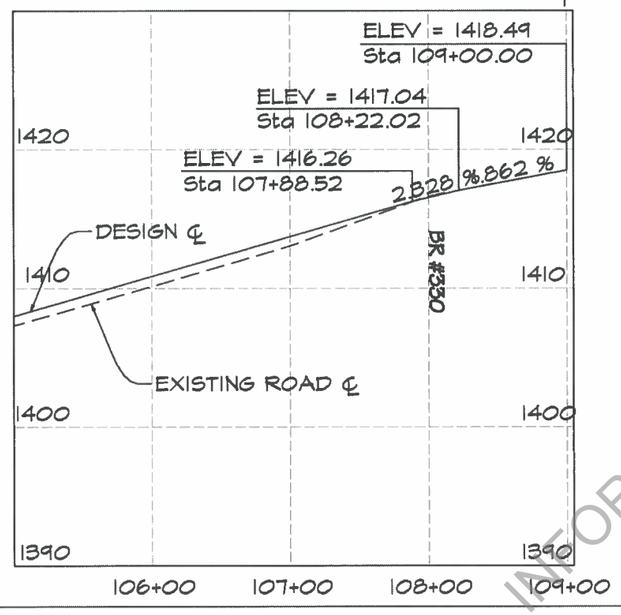
TOWNSHIP 20, RANGE 24E. W.M.

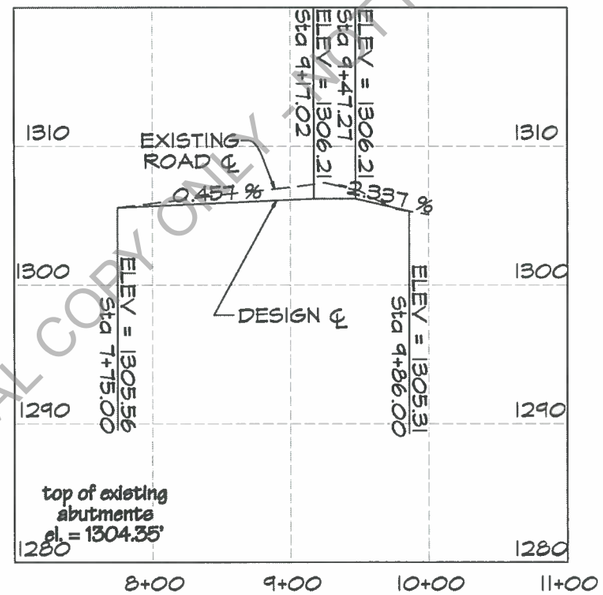




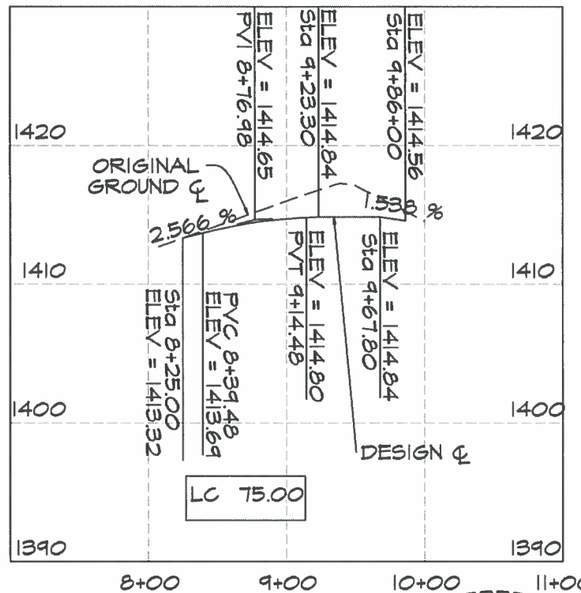


NOTE: ALL GUARDRAIL SHALL BE CONSTRUCTED USING STEEL POSTS AND COMPOSITE BLOCKS.





BRIDGE #334 11-NW



BRIDGE #332 MARTIN RD.

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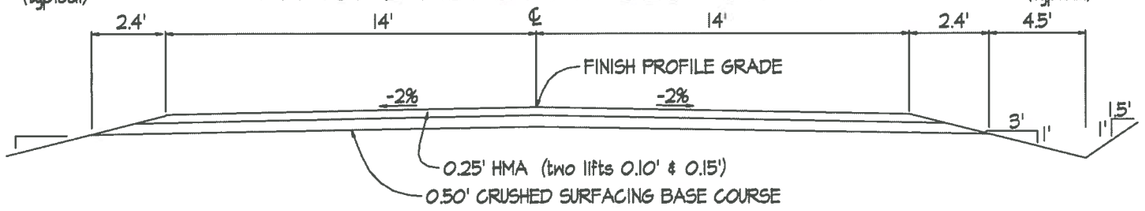
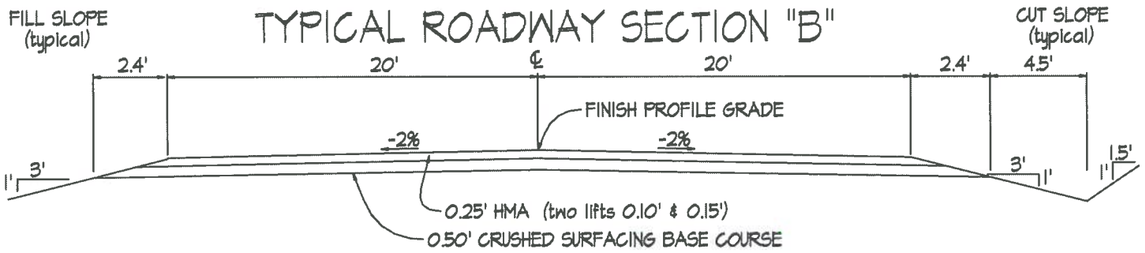
6/9/16

TYPICAL ROADWAY SECTION "A"



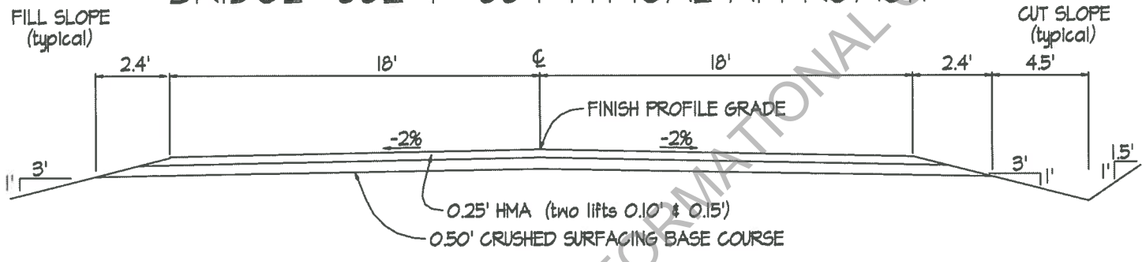
STA. 10+75 TO STA. 49+49
NO WORK BETWEEN STA. 49+50 AND STA. 57+90
STA. 57+90 TO STA. 81+00
TRANSITION ROADWAY SECTION "A" STA. 81+00 TO ROADWAY SECTION "B" STA. 81+30
STA. 82+20 TO STA. 107+50
TRANSITION ROADWAY SECTION "A" STA. 107+50 TO ROADWAY SECTION "B" STA. 107+75

TYPICAL ROADWAY SECTION "B"



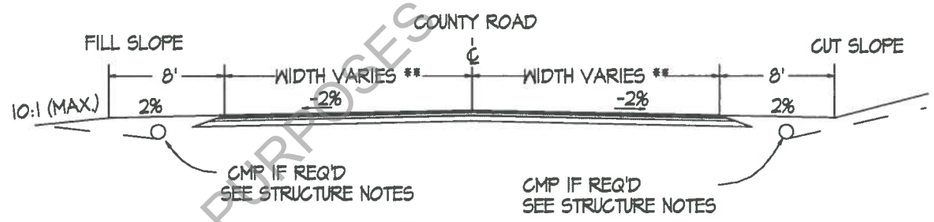
STA. 81+30 TO STA. 81+43.57
BRIDGE #331 STA. 81+43.57 TO STA. 81+74.15
STA. 81+74.15 TO STA. 81+90
TRANSITION ROADWAY SECTION "B" STA. 81+90 TO ROADWAY SECTION "A" STA. 82+20
STA. 107+75 TO STA. 107+88.52
BRIDGE #330 STA. 107+88.52 TO STA. 108+22.02
STA. 108+22.02 TO STA. 108+35
TRANSITION ROADWAY SECTION "B" STA. 108+35 TO EXISTING ROADWAY STA. 109+00

BRIDGE #332 & #334 TYPICAL APPROACH



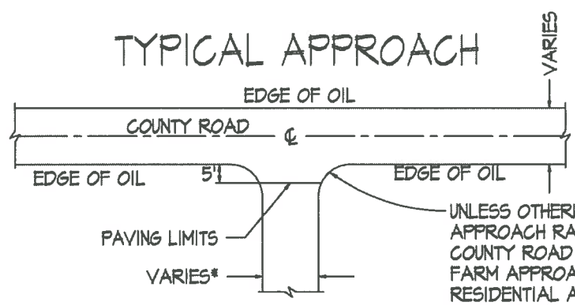
CONTRACTOR TO SHAPE SLOPES TO INSURE
3:1 DITCH SECTION AFTER PLACEMENT OF HMA

TYPICAL APPROACH DETAIL



** SEE PLANS FOR APPROACH WIDTHS

TYPICAL APPROACH



UNLESS OTHERWISE NOTED ON THE PLANS
APPROACH RADII WILL BE AS FOLLOWS:
COUNTY ROAD 30' RADIUS
FARM APPROACH 15' RADIUS
RESIDENTIAL APPROACH 10' RADIUS
COMMERCIAL APPROACH 20' RADIUS
" SEE STRUCTURE NOTES FOR LOCATIONS"

GRANT COUNTY PUBLIC WORKS DEPARTMENT
124 ENTERPRISE ST. SE
EPHRATA, WASHINGTON 98823
(509) 754-6082 FAX (509) 754-6087

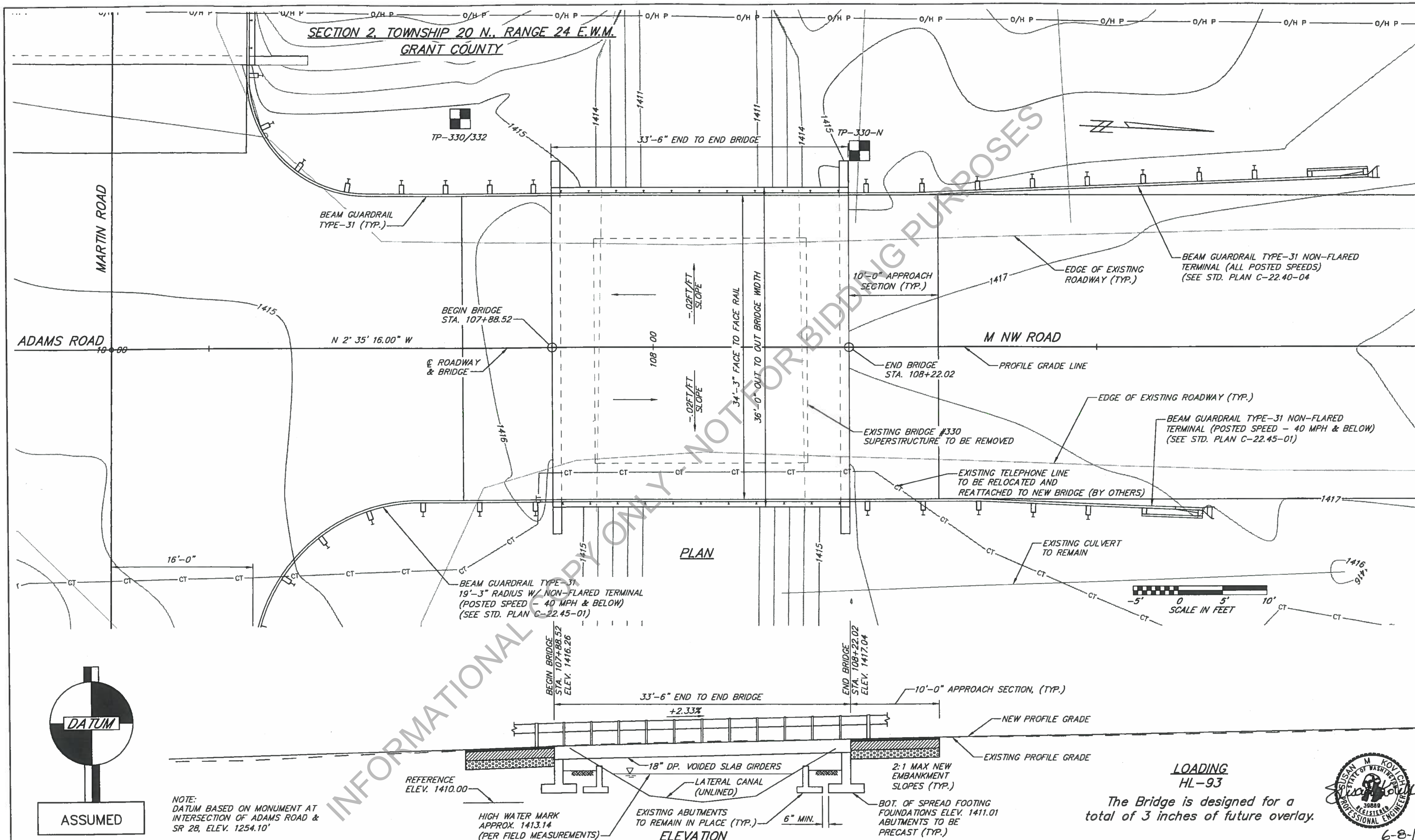
ADAMS ROAD NW
(SR 28 to BR. #330)
BR #330, #331, #332, #334

CRP 14-08 & 16-12

DESIGNED BY:	BOB BERSANTI
CHECKED BY:	JEFF TINCHER
APPROVED BY:	JEFF TINCHER
REVISIONS BY:	
DATE REVISED:	6/7/2016
FEDERAL AID NO.:	

JEFFREY C. TINCHER
STATE OF WASHINGTON
A2338
REGISTERED
PROFESSIONAL ENGINEER
6/9/16

SHEET 11
OF 27


SECTION 2, TOWNSHIP 20 N., RANGE 24 E.W.M.
GRANT COUNTY
TP-330/332
TP-330-N
33'-6" END TO END BRIDGE
MARTIN ROAD
BEAM GUARDRAIL TYPE-31 (TYP.)
EDGE OF EXISTING ROADWAY (TYP.)
BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (ALL POSTED SPEEDS) (SEE STD. PLAN C-22.40-04
10'-0" APPROACH SECTION (TYP.)
BEGIN BRIDGE STA. 107+88.52
ADAMS ROAD
N 2° 35' 16.00" W
M NW ROAD
℄ ROADWAY & BRIDGE
108+00
-.02FT/FT SLOPE
34'-3" FACE TO FACE RAIL
36'-0" OUT TO OUT BRIDGE WIDTH
END BRIDGE STA. 108+22.02
PROFILE GRADE LINE
EDGE OF EXISTING ROADWAY (TYP.)
BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (POSTED SPEED - 40 MPH & BELOW) (SEE STD. PLAN C-22.45-01)
EXISTING BRIDGE #330 SUPERSTRUCTURE TO BE REMOVED
EXISTING TELEPHONE LINE TO BE RELOCATED AND REATTACHED TO NEW BRIDGE (BY OTHERS)
EXISTING CULVERT TO REMAIN
16'-0"
PLAN
BEAM GUARDRAIL TYPE-31 19'-3" RADIUS W/ NON-FLARED TERMINAL (POSTED SPEED - 40 MPH & BELOW) (SEE STD. PLAN C-22.45-01)
-5' 0 5' 10'
SCALE IN FEET
DATUM
ASSUMED
NOTE: DATUM BASED ON MONUMENT AT INTERSECTION OF ADAMS ROAD & SR 28, ELEV. 1254.10'
BEGIN BRIDGE STA. 107+88.52 ELEV. 1416.26
END BRIDGE STA. 108+22.02 ELEV. 1417.04
10'-0" APPROACH SECTION, (TYP.)
33'-6" END TO END BRIDGE
+2.33%
NEW PROFILE GRADE
EXISTING PROFILE GRADE
18" DP. VOIDED SLAB GIRDERS
LATERAL CANAL (UNLINED)
REFERENCE ELEV. 1410.00
2:1 MAX NEW EMBANKMENT SLOPES (TYP.)
HIGH WATER MARK APPROX. 1413.14 (PER FIELD MEASUREMENTS)
EXISTING ABUTMENTS TO REMAIN IN PLACE (TYP.)
6" MIN.
BOT. OF SPREAD FOOTING FOUNDATIONS ELEV. 1411.01 ABUTMENTS TO BE PRECAST (TYP.)
ELEVATION
LOADING
HL-93
The Bridge is designed for a total of 3 inches of future overlay.
SUSAN M KOVICH STATE OF WASHINGTON 39889 REGISTERED PROFESSIONAL ENGINEER
6-8-16

NO.	REVISIONS	DATE	APPR.		
				DESIGNED BY: SMK	DATE: 3/16
				DRAWN BY: AVK	DATE: 3/16
				CHECKED BY: SMK	DATE: 5/16
				PLOT SCALE: AS SHOWN	
				ISSUE DATE: 6/7/2016	

Nicholls Kovich Engineering, PLLC
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Phone: (509) 921-6747 Fax: (509) 242-8777
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GRANT COUNTY PUBLIC WORKS
124 Enterprise St. S.E.
Ephrata, WA 98823
Phone: (509) 754-6082 Fax: (509) 754-6087

APPROVED
DATE 6/9/2016

ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

LAYOUT - BRIDGE 330

SECTION 2, TOWNSHIP 20 N., RANGE 24 E.W.M.
GRANT COUNTY

EXISTING O&M ROAD BRIDGE

BEAM GUARDRAIL ANCHOR TYPE 10 (TYP. SW & SE CORNERS)

BEAM GUARDRAIL TYPE-31 TIGHTEST RADIUS POSSIBLE (TYP. SW & SE CORNERS)

20'

1345 1340 1340 1345

30'-7" END TO END BRIDGE LENGTH

TP-331-N

BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (ALL POSTED SPEEDS) (SEE STD. PLAN C-22.40-04

BEGIN BRIDGE STA. 81+43.57

N 0° 12' 57.00" E

℄ ROADWAY & BRIDGE

-.02FT/FT SLOPE

34'-3" FACE TO FACE RAIL

36'-0" OUT TO OUT BRIDGE WIDTH

10'-0" APPROACH SECTION (TYP.)

END BRIDGE STA. 81+74.15

PROFILE GRADE LINE

81+00

82+00

ADAMS ROAD

EXISTING BRIDGE #331 SUPERSTRUCTURE TO BE REMOVED

EXISTING TELEPHONE UTILITY TO BE RELOCATED AND REATTACHED TO NEW BRIDGE (BY OTHERS)

BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (POSTED SPEED - 40 MPH & BELOW) (SEE STD. PLAN C-22.45-01)

CT

-5' 0 5' 10'
SCALE IN FEET

PLAN

BEGIN BRIDGE STA. 81+43.57 ELEV. 1345.94

END BRIDGE STA. 81+74.15 ELEV. 1346.66

30'-7" END TO END BRIDGE

+2.34% SLOPE

10'-0" APPR. SECTION, (TYP.)

NEW PROFILE GRADE

EXISTING PROFILE GRADE

REFERENCE ELEV. 1340.00

LATERAL CANAL (UNLINED)

18" DP. VOIDED SLAB GIRDERS

2:1 MAX NEW EMBANKMENT SLOPES(TYP.)

HIGH WATER MARK APPROX. 1343.29 (PER FIELD MEASUREMENTS)

EXISTING ABUTMENTS TO REMAIN IN PLACE (TYP.)

6" MIN.

BOT. OF SPREAD FOOTING FOUNDATIONS ELEV. 1340.15 ABUTMENTS TO BE PRECAST (TYP.)

ELEVATION

DATUM
ASSUMED

NOTE:
DATUM BASED ON MONUMENT AT INTERSECTION OF ADAMS ROAD & SR 28, ELEV. 1254.10'

LOADING
HL-93

The Bridge is designed for a total of 3 inches of future overlay.

STATE OF WASHINGTON SUSAN M KOVICH 38860 REGISTERED PROFESSIONAL ENGINEER
6-8-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY: SMK DATE: 3/16
DRAWN BY: AVK DATE: 3/16
CHECKED BY: SMK DATE: 5/16
PLOT SCALE: AS SHOWN
ISSUE DATE: 6/7/2016

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Ephrata, WA 98823
Phone: (509) 754-6082 Fax: (509) 754-6087

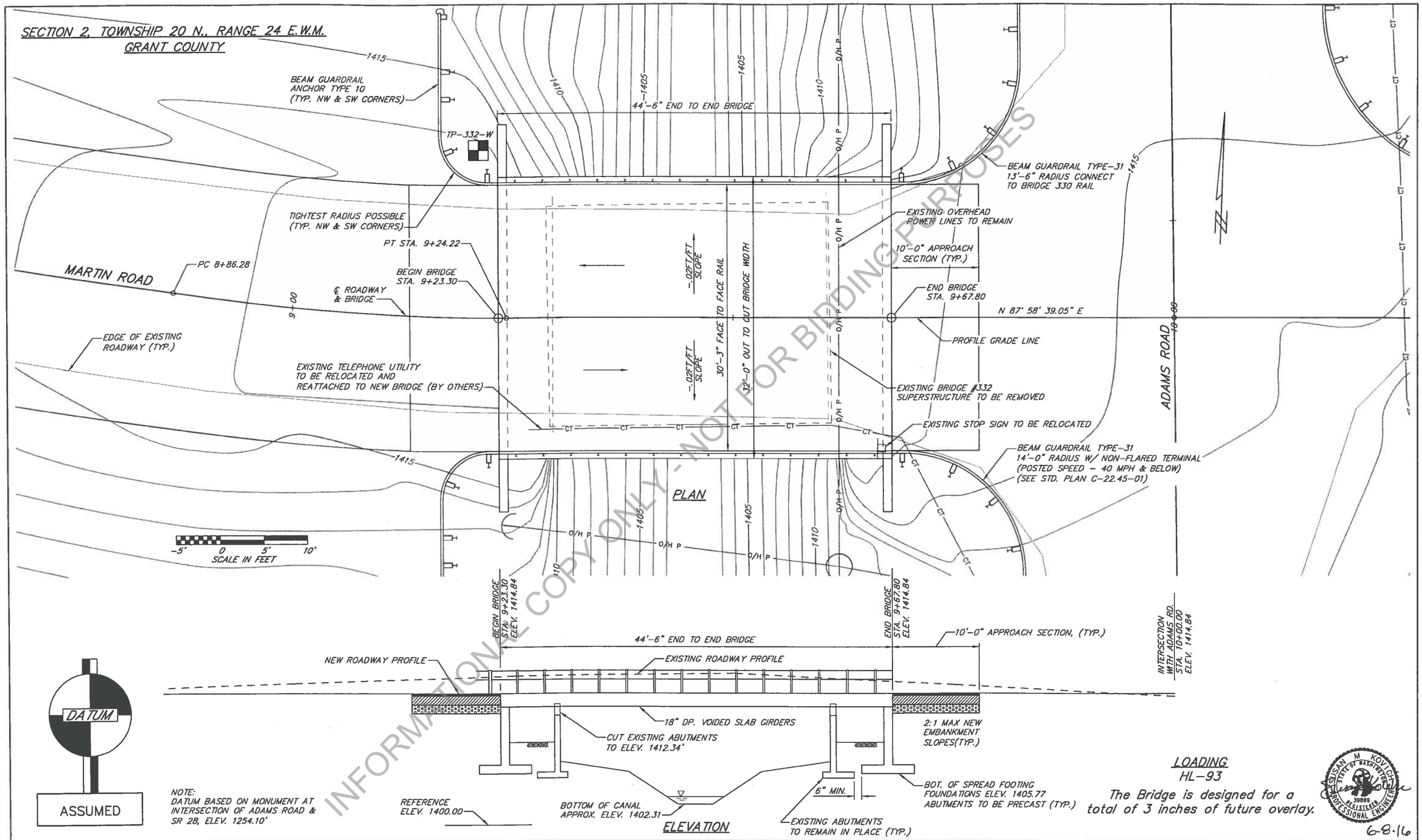
APPROVED 6/9/2016 DATE

ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

LAYOUT - BRIDGE 331

SHEET 13 of 27

SECTION 2, TOWNSHIP 20 N., RANGE 24 E.W.M.
GRANT COUNTY



LOADING
HL-93

The Bridge is designed for a total of 3 inches of future overlay.

SUSAN M KOVICH STATE OF WASHINGTON 39869 REGISTERED PROFESSIONAL ENGINEER
6-8-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY:	SMK	DATE:	3/16
DRAWN BY:	AVK	DATE:	3/16
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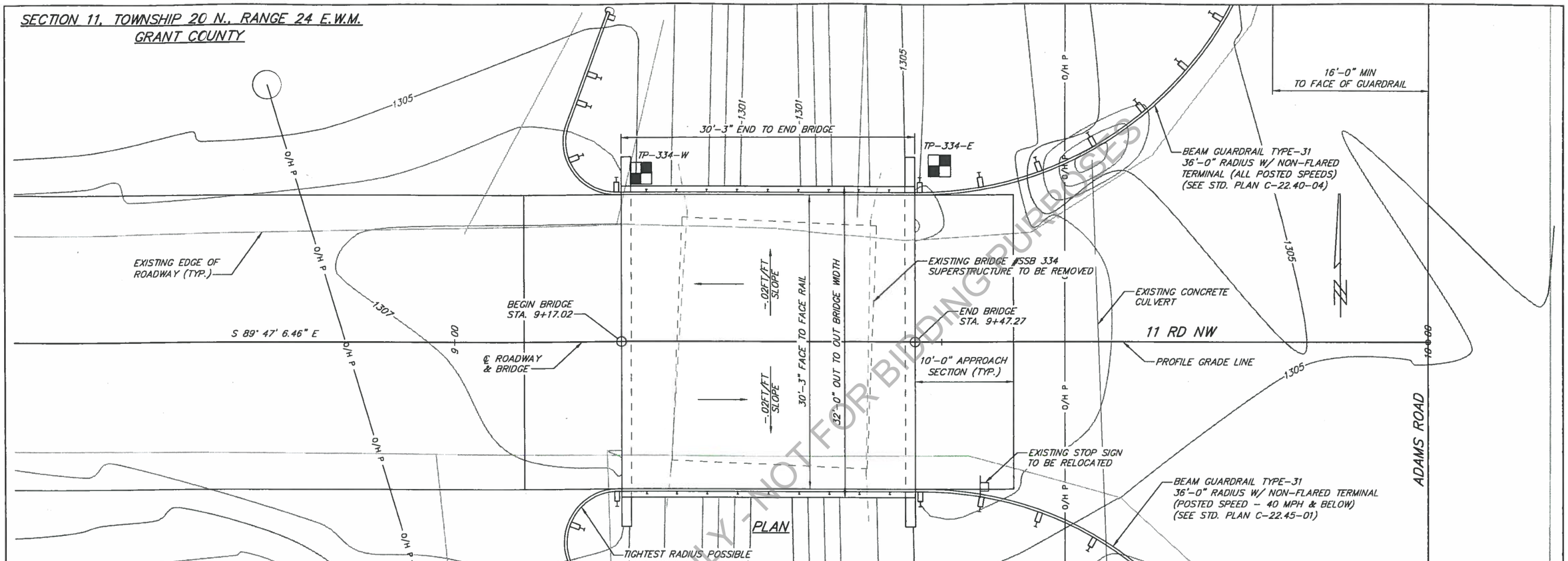
APPROVED 6/9/2016 DATE

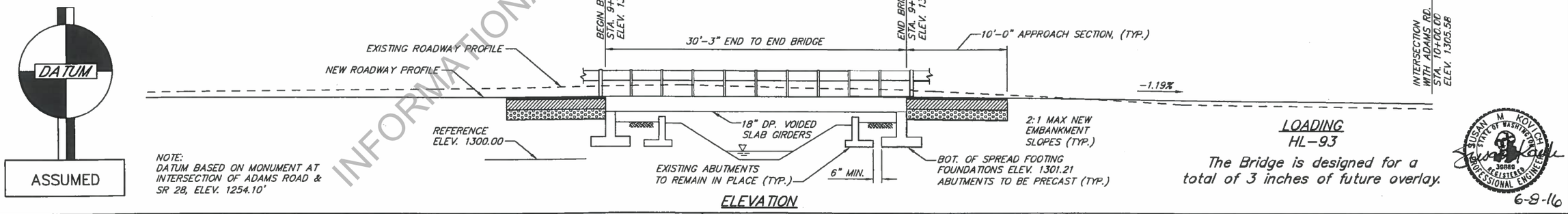
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

LAYOUT - BRIDGE 332

SHEET 14 of 27

SECTION 11, TOWNSHIP 20 N., RANGE 24 E.W.M.
GRANT COUNTY





ELEVATION

LOADING
HL-93

The Bridge is designed for a total of 3 inches of future overlay.

SUSAN M. KOVICH
STATE OF WASHINGTON
36880
REGISTERED
PROFESSIONAL ENGINEER
6-8-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY: SMK DATE: 3/16
DRAWN BY: AVK DATE: 3/16
CHECKED BY: SMK DATE: 5/16
PLOT SCALE: AS SHOWN
ISSUE DATE: 6/7/2016

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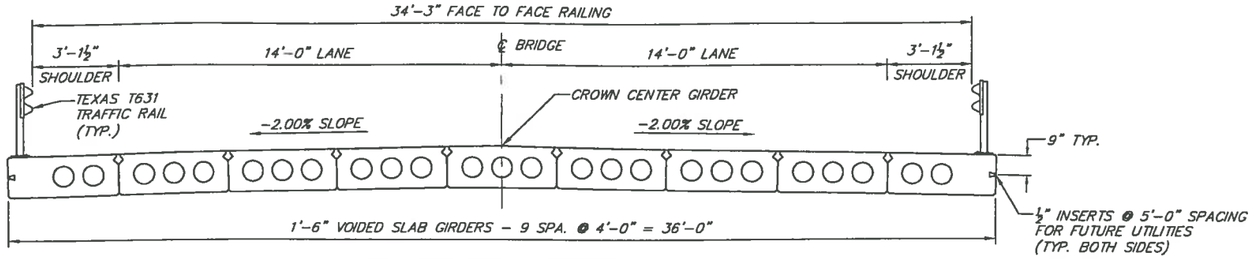
APPROVED 6/9/2016
DATE

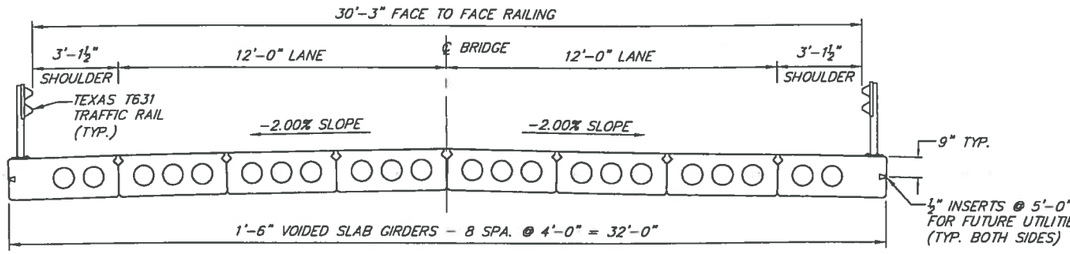
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

LAYOUT - BRIDGE 334

SHEET 15 of 27



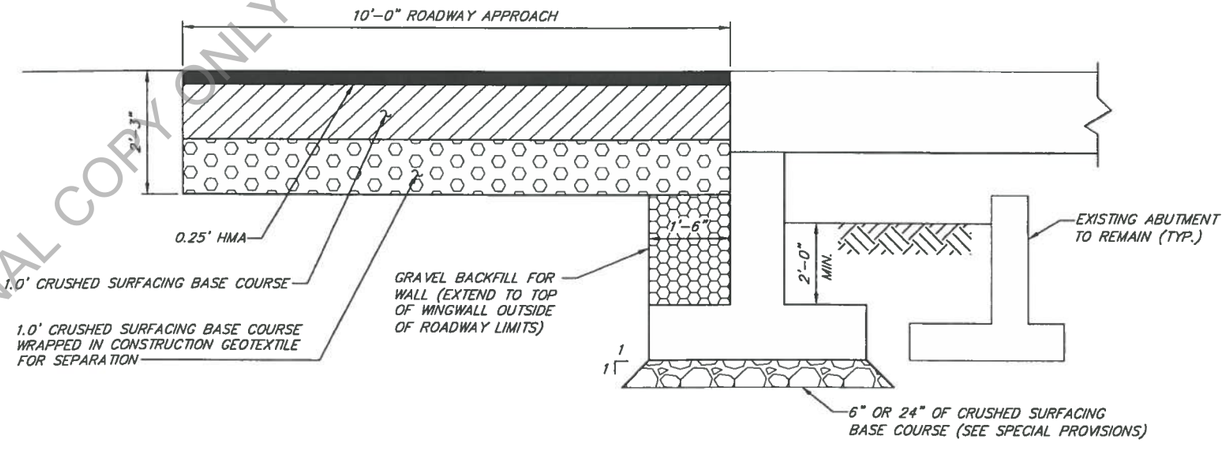
TYPICAL BRIDGE SECTION
BRIDGE 330 & 331 ADAMS ROAD



TYPICAL BRIDGE SECTION
BRIDGE 332 - MARTIN ROAD
BRIDGE 334 - 11 ROAD NW

GENERAL NOTES

1. ALL MATERIALS AND WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, DATED 2016.
2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS", DATED 2014. THE PRESTRESSED CONCRETE GIRDERS HAVE BEEN DESIGNED BY LOAD & RESISTANCE FACTOR DESIGN.
3. ABUTMENT CONCRETE SHALL BE CLASS 4000 MIX.
4. UNLESS OTHERWISE SHOWN ON THE PLANS, CONCRETE COVER SHALL BE MEASURED FROM THE FACE OF CONCRETE TO THE FACE OF ANY REINFORCING BAR. COVER SHALL BE 2½" AT THE TOP OF THE ROADWAY, 2" AT FACE OF CONCRETE EXPOSED TO EARTH, 1" AT BOTTOM OF GIRDERS AND 1½" AT ALL OTHER LOCATIONS.



TYPICAL APPROACH & ABUTMENT SECTION

SUSAN M KOVICH STATE OF WASHINGTON 39869 REGISTERED PROFESSIONAL ENGINEER

68-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY: SMK DATE: 3/16
DRAWN BY: AVK DATE: 3/16
CHECKED BY: SMK DATE: 5/16
PLOT SCALE: AS SHOWN
ISSUE DATE: 6/7/2016

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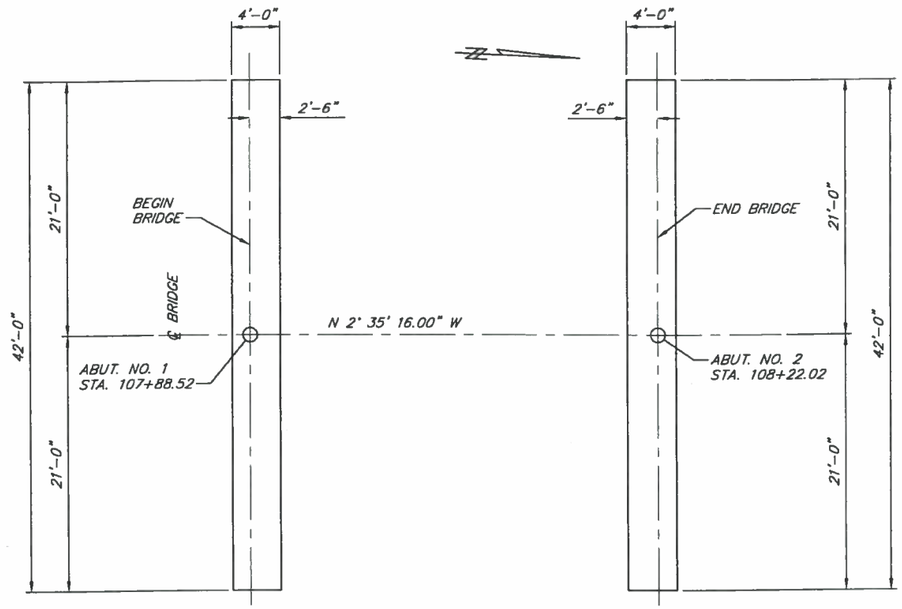
124 Enterprise St. S.E.
Ephrata, WA 98823
Phone: (509) 754-6082 Fax: (509) 754-6087

APPROVED 6/9/2016 DATE

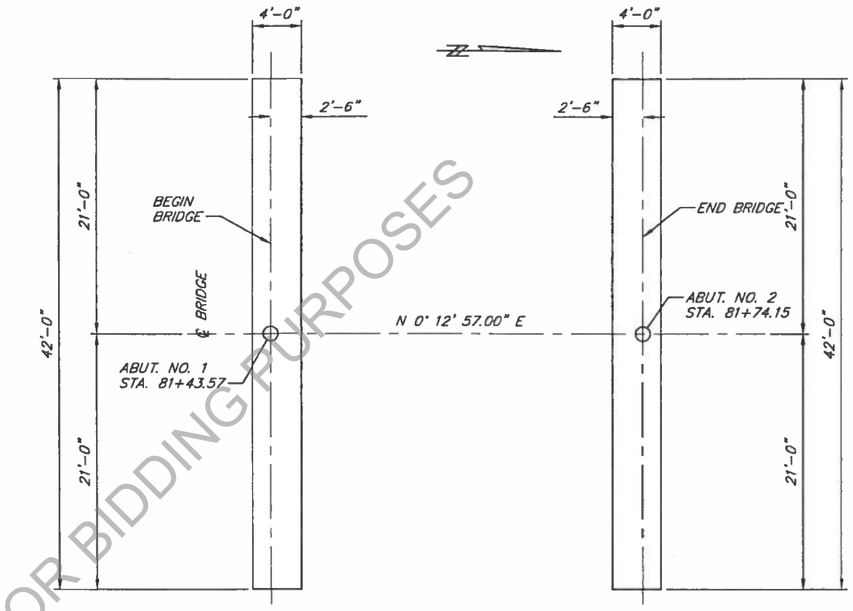
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

TYPICAL BRIDGE SECTIONS

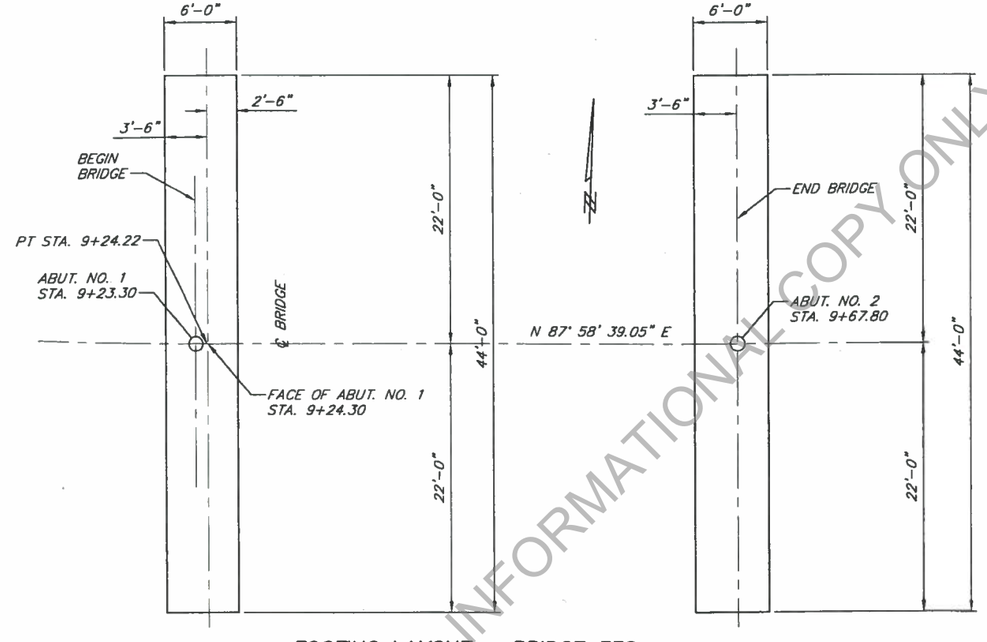
SHEET 16 of 27



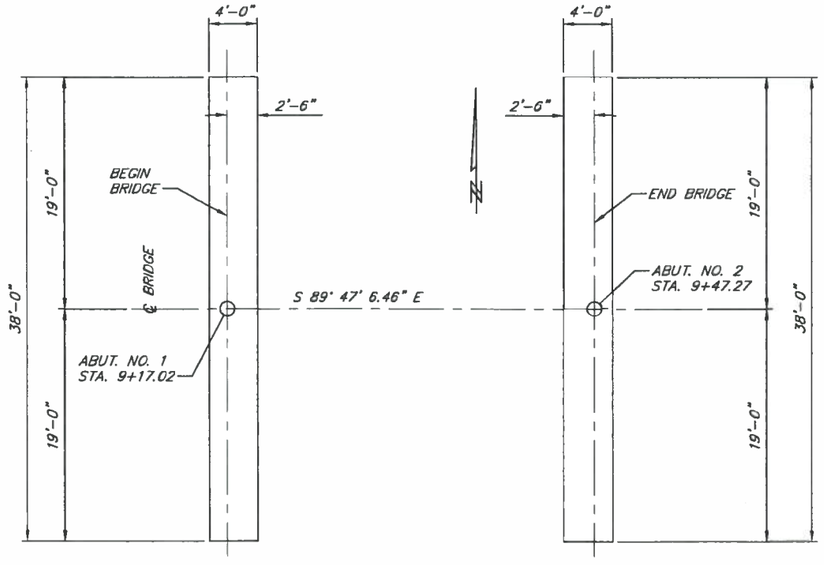
FOOTING LAYOUT – BRIDGE 330



FOOTING LAYOUT – BRIDGE 331



FOOTING LAYOUT – BRIDGE 332



FOOTING LAYOUT – BRIDGE 334

SUSAN M KOVICH
STATE OF WASHINGTON
30863
REGISTERED
PROFESSIONAL ENGINEER

6-8-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY: SMK DATE: 3/16
DRAWN BY: AVK DATE: 3/16
CHECKED BY: SMK DATE: 5/16
PLOT SCALE: AS SHOWN
ISSUE DATE: 6/7/2016

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Ephrata, WA 98823
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APPROVED 6/9/2016
DATE

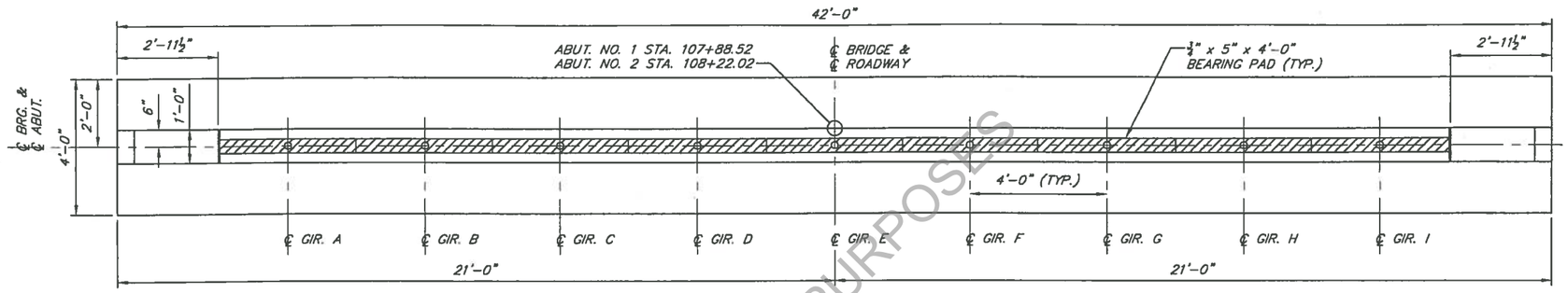
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

FOOTING LAYOUTS

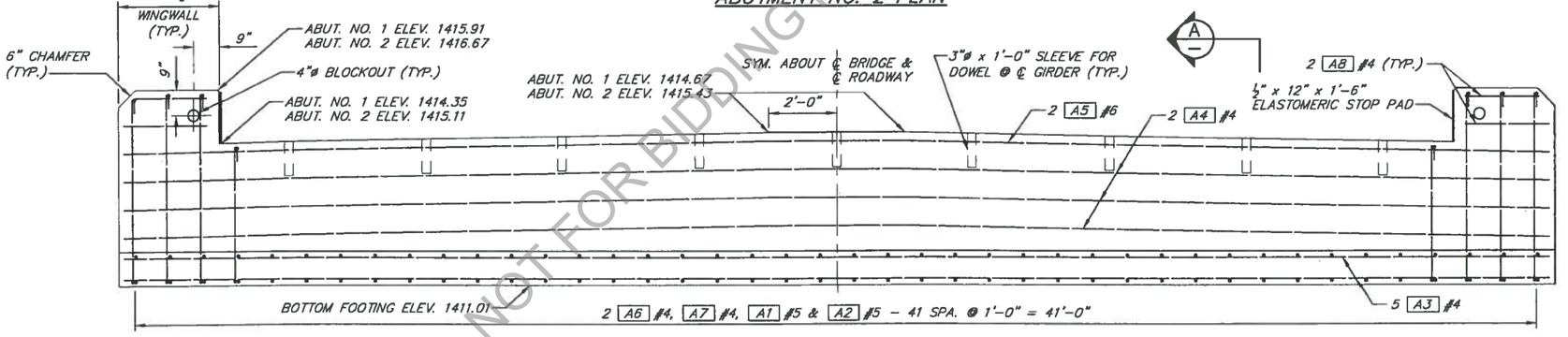
SHEET 17 of 27

PRECAST ABUTMENT NOTES

1. FOOTINGS AND WALLS ARE TO BE PRECAST (SEE SPECIAL PROVISIONS).
2. JOINTS IN THE PRECAST ABUTMENT ARE ALLOWED. ALL CONNECTIONS AND SPLICE DETAILS ARE TO BE DESIGNED BY PRECAST SUPPLIER, SUBMITTED ON SHOP PLANS, AND APPROVED BY THE ENGINEER.
3. WEIGHTS OF ALL PRECAST COMPONENTS ARE NOT TO EXCEED HANDLING CAPABILITY OF CONTRACTOR.
4. UNLESS OTHERWISE SHOWN ON THE PLANS, CONCRETE COVER SHALL BE MEASURED FROM THE FACE OF CONCRETE TO THE FACE OF ANY REINFORCING BAR. COVER SHALL BE 2" AT FACE OF CONCRETE EXPOSED TO EARTH AND 1½" AT ALL OTHER LOCATIONS.
5. PRECASTER TO PROVIDE ERECTION CALCULATIONS, REINFORCING AND LIFTING INSERTS IN ABUTMENT AS REQUIRED FOR HANDLING IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS.
6. A WINGWALL CLOSURE POUR OR PIECE MAY BE DESIGNED AND PROPOSED BY THE CONTRACTOR FOR FLEXIBILITY TO SET THE GIRDERS.



ABUTMENT NO. 2 PLAN



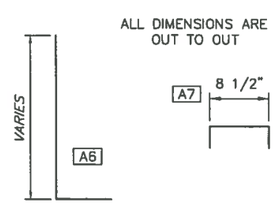
ABUTMENT NO. 2 ELEVATION

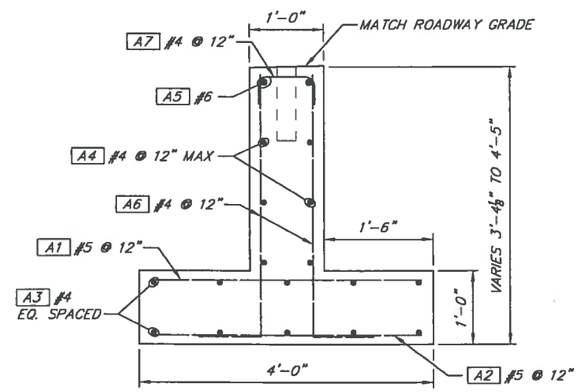
LOOKING AHEAD ON STATIONING – ABUT. NO. 2
LOOKING BACK ON STATIONING – ABUT. NO 1
ELEVATIONS SHOWN ARE AT ℄ BRG.

ABUTMENT BAR LIST

MARK NO.	LOCATION	SIZE	REMARKS
	SUBSTRUCTURE		
A1	FOOTING TOP LONGITUDINAL	5	STR.
A2	FOOTING BOTTOM LONGITUDINAL	5	STR.
A3	FOOTING TOP & BOTTOM TRANSVERSE	4	STR.
A4	STEM WALL HORIZONTAL	4	STR.
A5	STEM WALL HORIZONTAL TOP	6	STR.
A6	STEM WALL VERTICAL	4	STD. HOOK @ BOT.
A7	STEM WALL TIE TOP	4	STD. HOOK @ ENDS
A8	WINGWALL HORIZONTAL	4	STR.
A2a	FOOTING BOTTOM LONGITUDINAL – BR. 332	6	STR.

BENDING DIAGRAM





SECTION A

SUSAN M KOVICH STATE OF WASHINGTON 35869 REGISTERED PROFESSIONAL ENGINEER
6-8-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY: SMK DATE: 3/16
DRAWN BY: AVK DATE: 3/16
CHECKED BY: SMK DATE: 5/16
PLOT SCALE: AS SHOWN
ISSUE DATE: 6/7/2016

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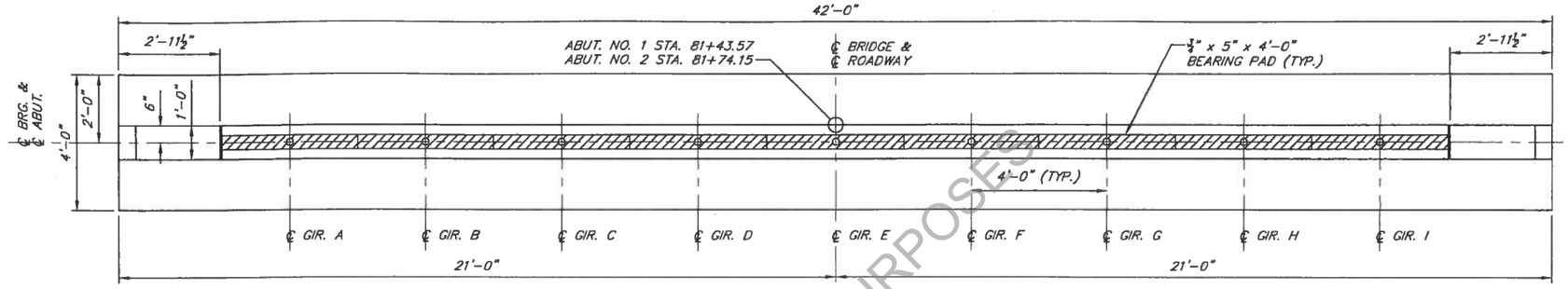
APPROVED 6/9/2016 DATE

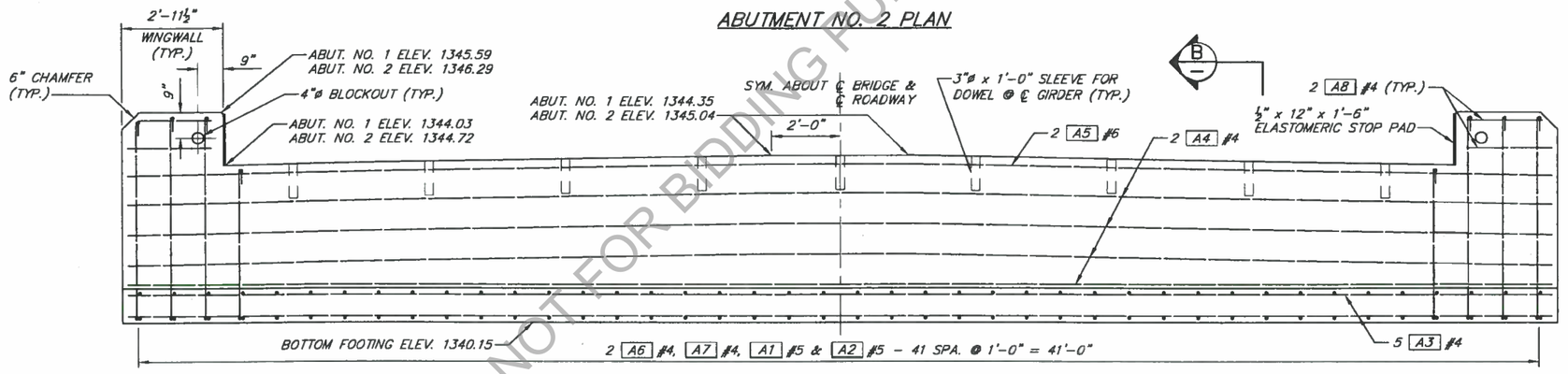
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

ABUTMENT DETAILS - BRIDGE 330

SHEET 18 of 27

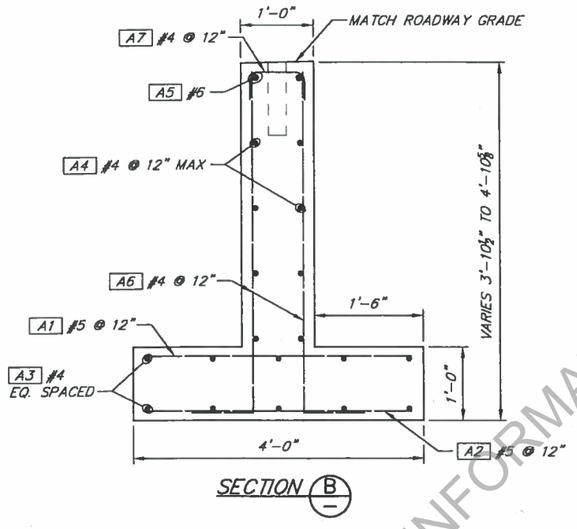


ABUTMENT NO. 2 PLAN



ABUTMENT NO. 2 ELEVATION

LOOKING AHEAD ON STATIONING – ABUT. NO. 2
LOOKING BACK ON STATIONING – ABUT. NO 1
ELEVATIONS SHOWN ARE AT ℄ BRG.



SECTION B

SUSAN M KOVICH
STATE OF WASHINGTON
39849
REGISTERED
PROFESSIONAL ENGINEER

6-8-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY: SMK DATE: 3/16
DRAWN BY: AVK DATE: 3/16
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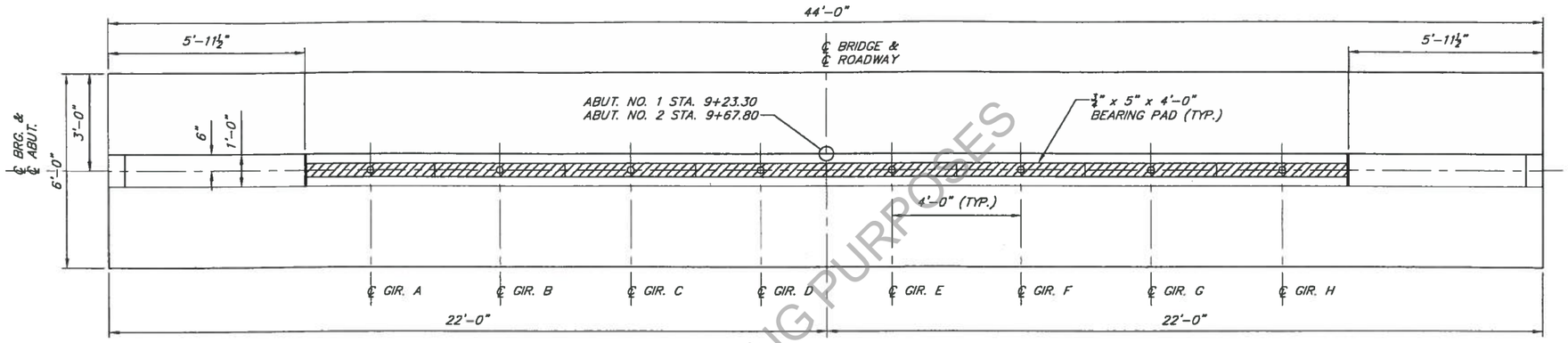
APPROVED
6/9/2016
DATE

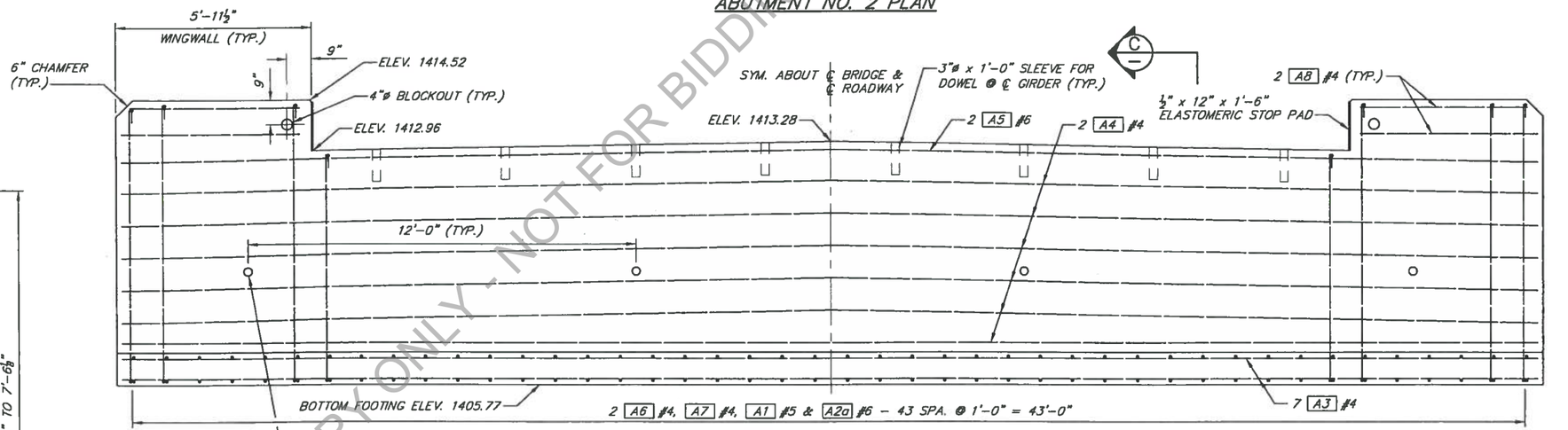
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

ABUTMENT DETAILS - BRIDGE 331

SHEET 19 of 27

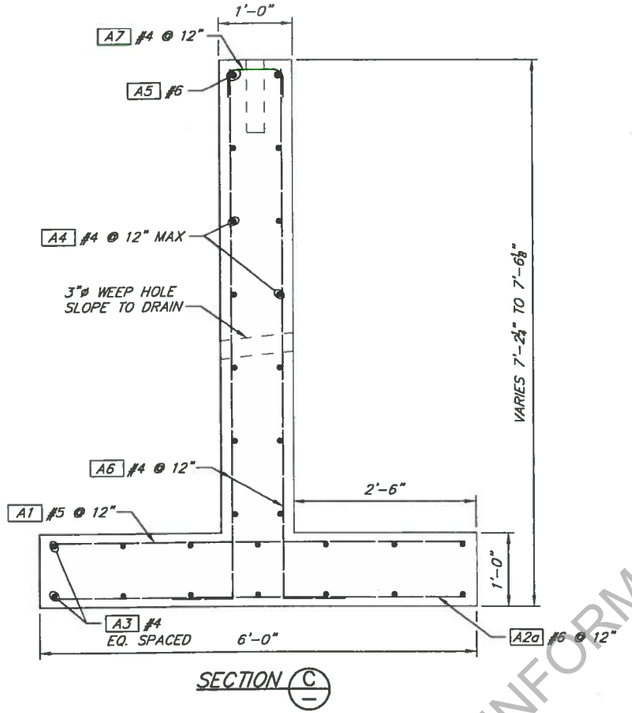


ABUTMENT NO. 2 PLAN



ABUTMENT NO. 2 ELEVATION

LOOKING AHEAD ON STATIONING – ABUT. NO. 2
LOOKING BACK ON STATIONING – ABUT. NO 1
ELEVATIONS SHOWN ARE AT ℄ BRG.



SECTION C

SUSAN M KOVICH STATE OF WASHINGTON 39888 REGISTERED PROFESSIONAL ENGINEER
6-8-16

NO.	REVISIONS	DATE	APPR.

DESIGNED BY: SMK DATE: 3/16
DRAWN BY: AVK DATE: 3/16
CHECKED BY: SMK DATE: 5/16
PLOT SCALE: AS SHOWN
ISSUE DATE: 6/7/2016

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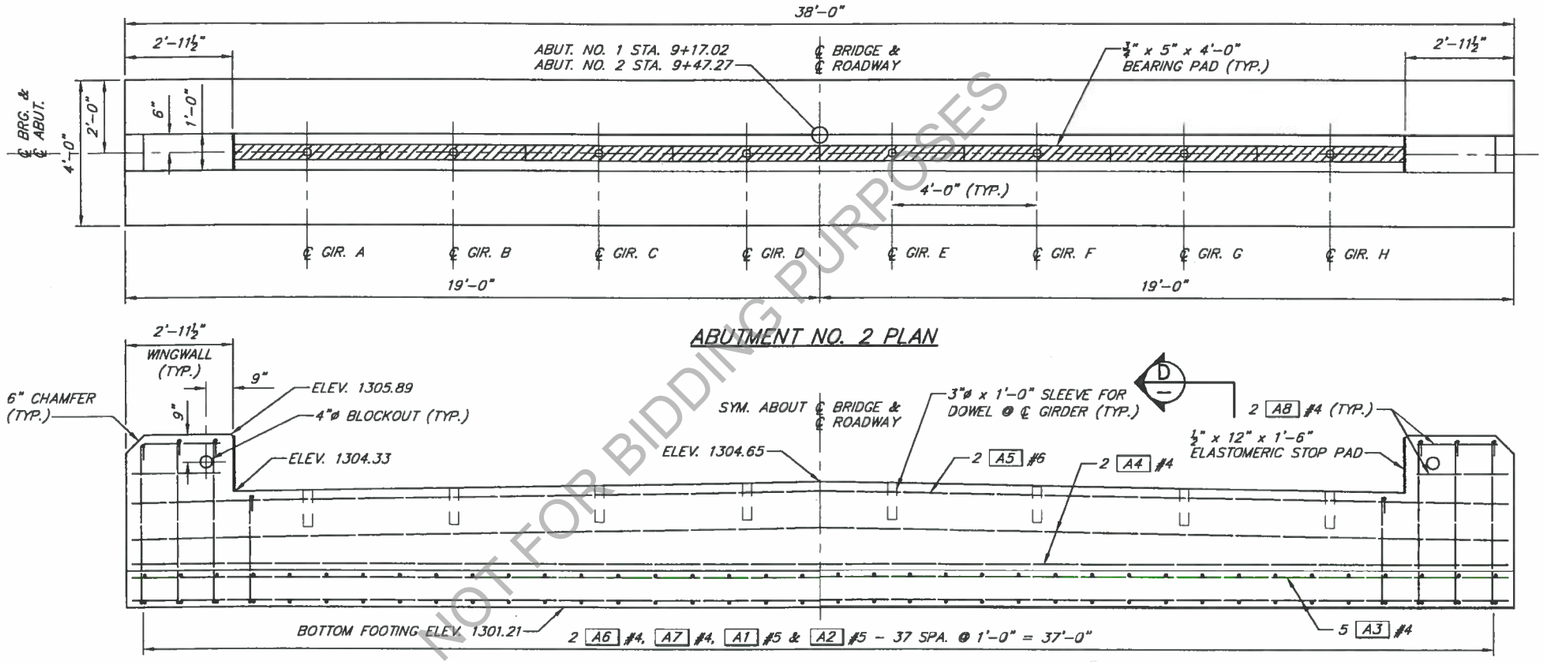
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

ABUTMENT DETAILS - BRIDGE 332

SHEET 20 of 27



ABUTMENT NO. 2 PLAN

ABUTMENT NO. 2 ELEVATION

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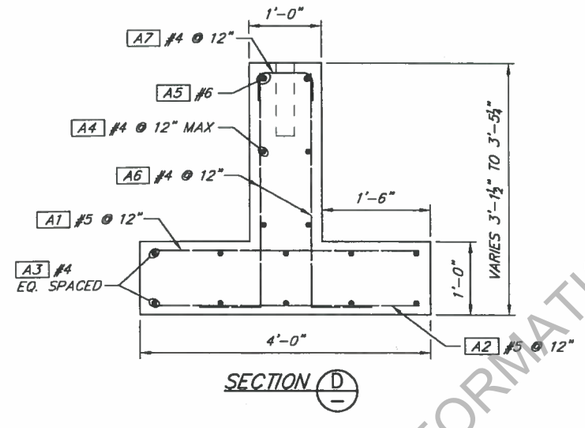
LOOKING BACK ON STATIONING – ABUT. NO 1
ELEVATIONS SHOWN ARE AT ℄ BRG.



SECTION D

SUSAN M. KOVICH STATE OF WASHINGTON 39580 REGISTERED PROFESSIONAL ENGINEER
6-8-16

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DESIGNED BY: SMK DATE: 3/16
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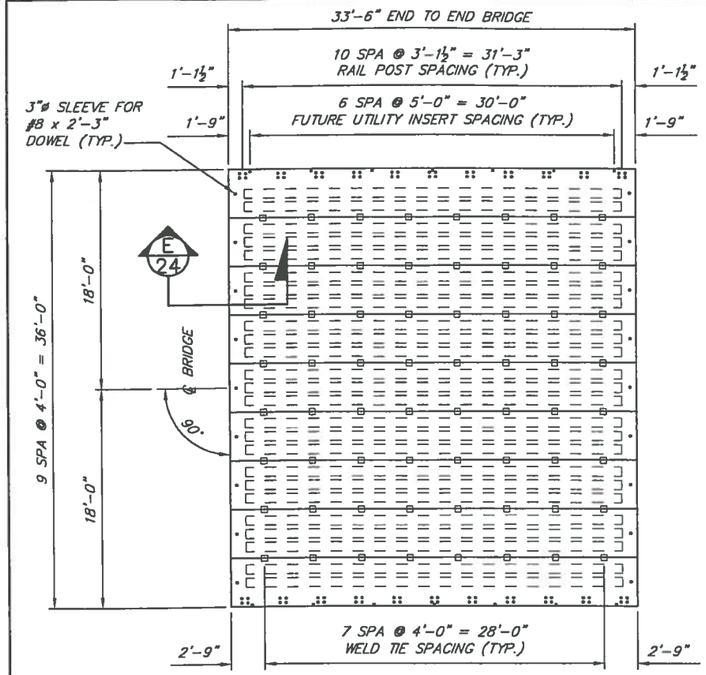
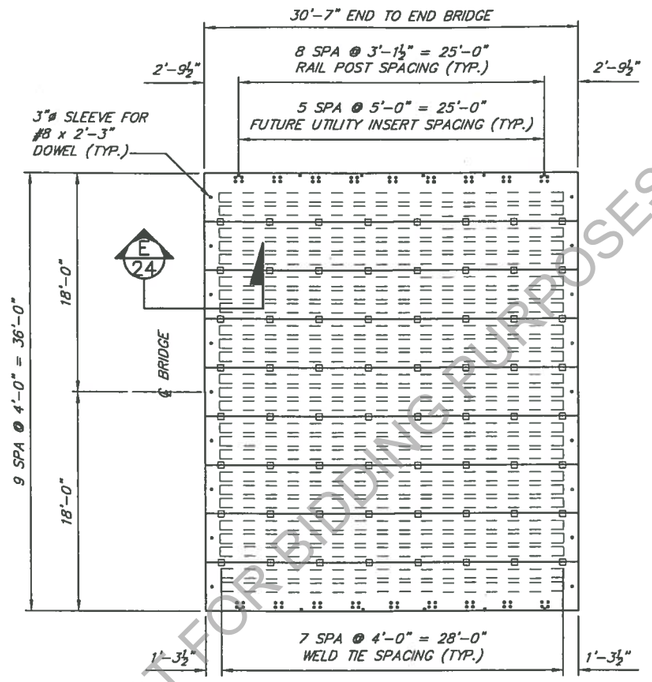
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

ABUTMENT DETAILS - BRIDGE 334

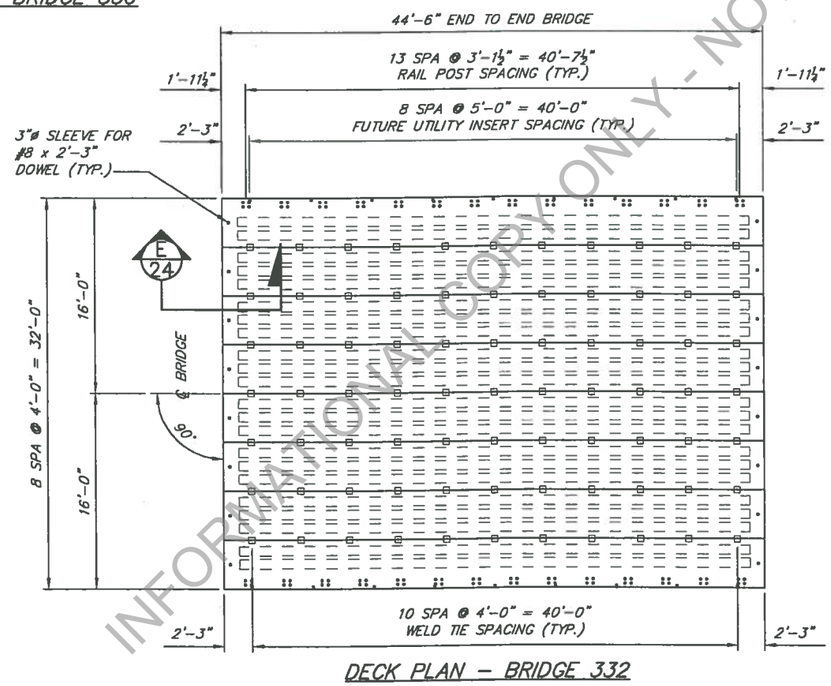
SHEET 21 of 27



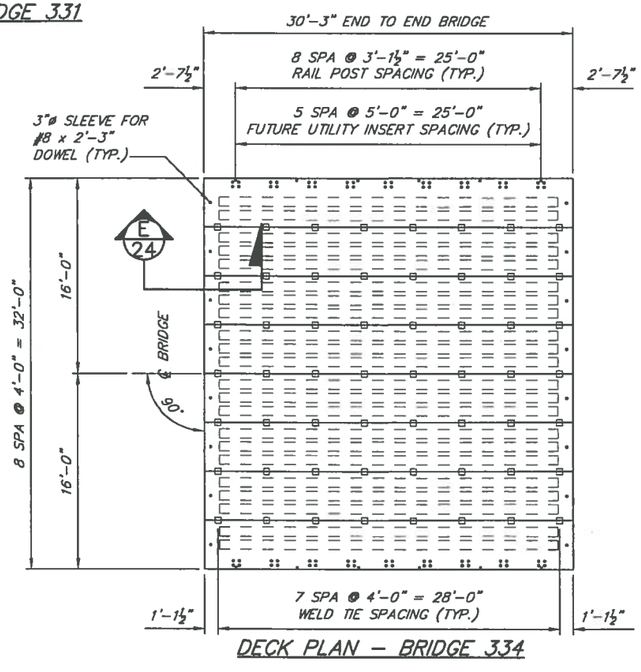
DECK PLAN – BRIDGE 330



DECK PLAN – BRIDGE 331



DECK PLAN – BRIDGE 332



DECK PLAN – BRIDGE 334

SUSAN M KOVICH
STATE OF WASHINGTON
36869
REGISTERED
PROFESSIONAL ENGINEER

6-8-16

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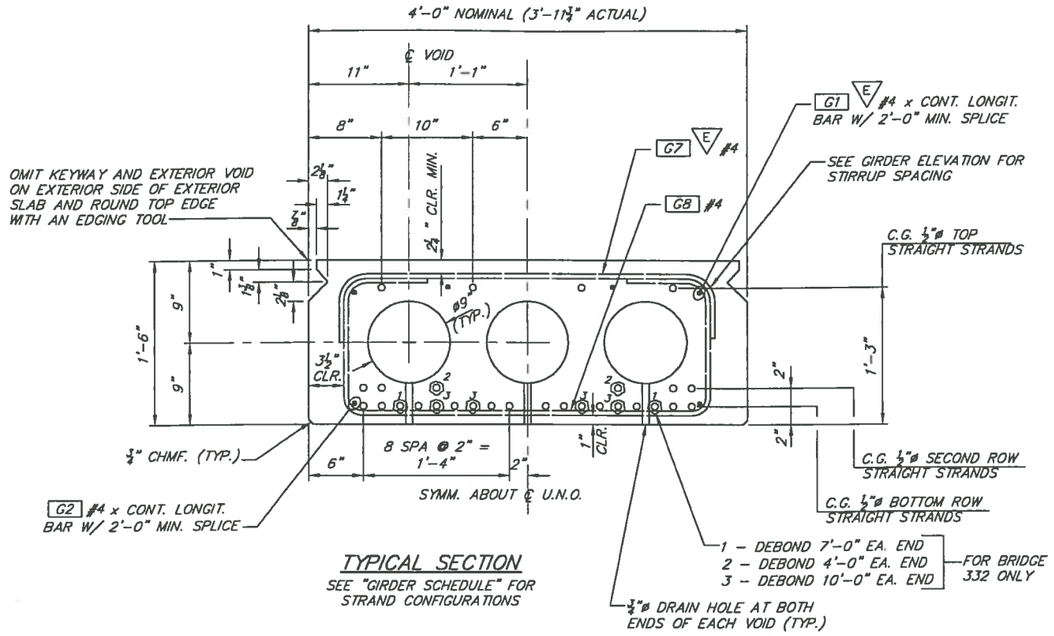
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

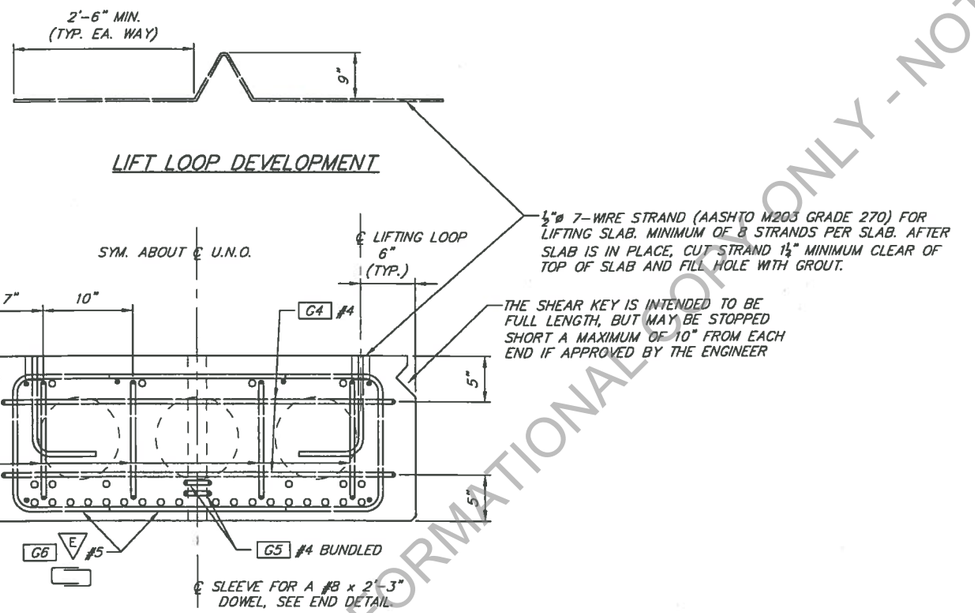
BRIDGE DECK PLANS

SHEET 22 of 27



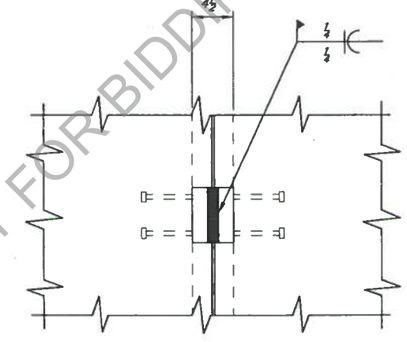
TYPICAL SECTION

SEE "GIRDER SCHEDULE" FOR STRAND CONFIGURATIONS

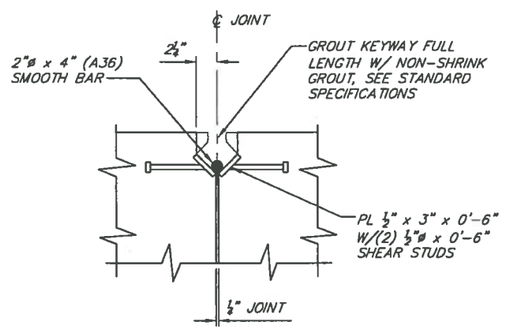


LIFT LOOP DEVELOPMENT

END VIEW



PLAN



TYPICAL WELD TIE DETAIL

THE KEYWAYS AND WELD TIES SHALL BE LIGHTLY SAND BLASTED AT PLANT.

GIRDER NOTES

1. PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.

2. ALL PRESTRESSING STEEL SHALL BE ½"ø LOW-RELAXATION 7-WIRE STRANDS (AASHTO M203 GRADE 270) STRANDS SHALL BE TENSIONED INITIALLY TO 30,980 POUNDS (.75 Fpu).

3. CUT ALL STRANDS FLUSH WITH THE GIRDER ENDS AND PAINT WITH AN APPROVED EPOXY RESIN.

4. THE TOP SURFACE OF THE GIRDER SHALL BE FINISHED IN ACCORDANCE WITH SECTION 6-02.3(25)H OF THE STANDARD SPECIFICATIONS.

5. ALL MILD REINFORCING SHALL CONFORM TO AASHTO M 31, GRADE 60. ALL REINFORCING STEEL SPLICES SHALL BE 2'-0" MINIMUM UNLESS SHOWN OTHERWISE.

6. SEE "GIRDER SCHEDULE" FOR MINIMUM CONCRETE COMPRESSIVE STRENGTHS AT RELEASE AND 28 DAYS.

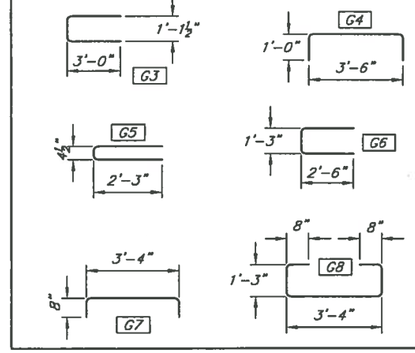
SLAB BAR LIST

ALL REINFORCING SHALL BE AASHTO M 31 (GRADE 60)

MARK	LOCATION	SIZE	
G1	SLAB LONGIT. – TOP	4	STR. EPOXY
G2	SLAB LONGIT. – BOT.	4	STR.
G3	END OF SLAB – TIE	4	
G4	END OF SLAB – TIE	4	
G5	END OF SLAB – TIE	4	
G6	SLAB TRANSV. – TIE	5	EPOXY
G7	SLAB TRANSV. – TIE	4	EPOXY
G8	SLAB TRANSV. – STIRR.	4	

E EPOXY COATED

BENDING DIAGRAMS



SUSAN M KOVICH STATE OF WASHINGTON 39869 REGISTERED PROFESSIONAL ENGINEER

6-8-16

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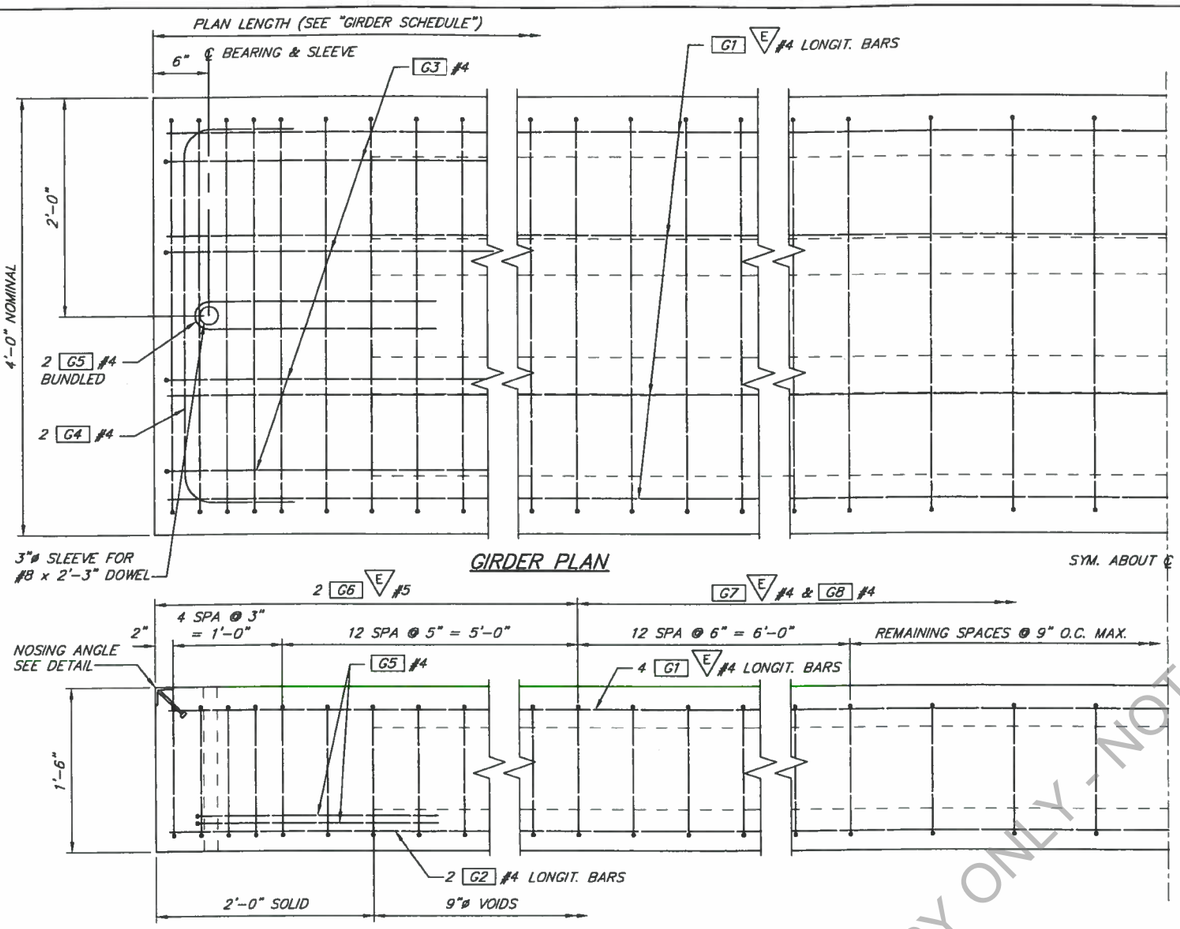
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

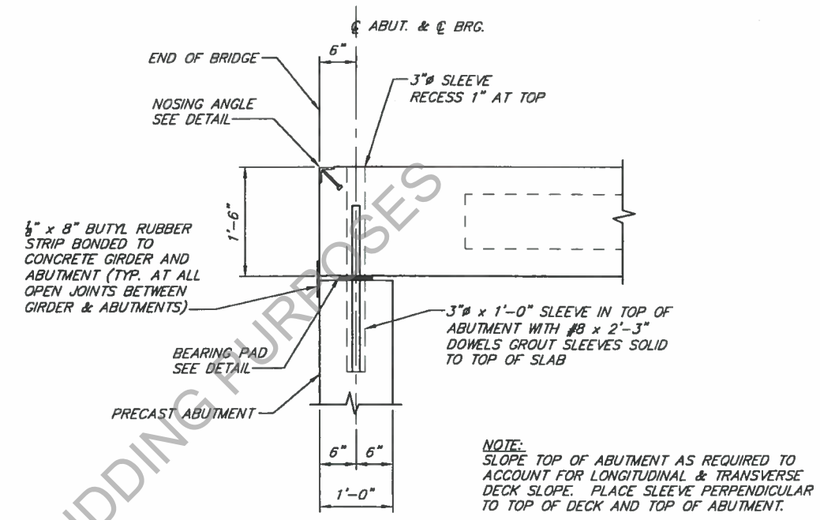
GIRDER DETAILS 1

SHEET 23 of 27



GIRDER PLAN

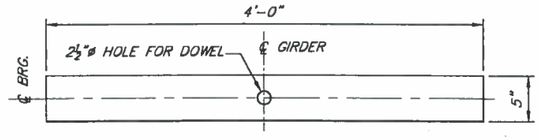
GIRDER ELEVATION



NOTE:
SLOPE TOP OF ABUTMENT AS REQUIRED TO ACCOUNT FOR LONGITUDINAL & TRANSVERSE DECK SLOPE. PLACE SLEEVE PERPENDICULAR TO TOP OF DECK AND TOP OF ABUTMENT.

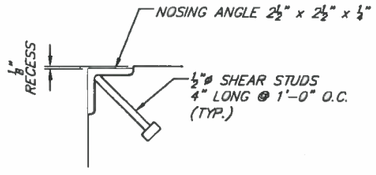
E 22 END DETAIL

ABUTMENT REINFORCING NOT SHOWN FOR CLARITY



BEARING PAD DETAIL

½" THICK ELASTOMERIC BEARING PAD (60 DUROMETER HARDNESS)



NOSING ANGLE DETAIL

GALVANIZE AFTER FABRICATION

GIRDER SCHEDULE

BRIDGE NUMBER	SPAN	NUMBER OF GIRDERS	GIRDER HEIGHT H	GIRDER WIDTH W	VOIDS NUMBER	VOIDS DIAMETER	END 1 TYPE	END 2 TYPE	PLAN LENGTH (ALONG GIRDER GRADE) (SEE GIRDER NOTE 1)	MIN. CONCRETE COMP. STRENGTH @ 28 DAYS F'C (KSI)	MIN. CONCRETE COMP. STRENGTH @ RELEASE F'CI (KSI)	PRESTRESSING STRANDS (SEE GIRDER NOTES 2 & 3) ROW 1 PERMANENT STRANDS	ROW 1 DEBONDED NUMBER AND LENGTH	ROW 2 PERMANENT STRANDS	ROW 2 DEBONDED NUMBER AND LENGTH	TOP ROW PERMANENT STRANDS	D (EST. CAMBER) LOWER BOUND @ 40 DAYS	D (EST. CAMBER) UPPER BOUND @ 120 DAYS
330	1	9	1'-6"	4'-0"	3	9"	B	B	33'-6"	6	4.5	14	–	0	–	4	3/8"	1/2"
331	1	9	1'-6"	4'-0"	3	9"	B	B	30'-7"	6	4.5	14	–	0	–	4	3/8"	1/2"
332	1	8	1'-6"	4'-0"	3	9"	B	B	44'-6"	6	4.5	18	6 – VARIES	6	2 – 4'-0"	4	3/4"	1"
334	1	8	1'-6"	4'-0"	3	9"	B	B	30'-3"	6	4.5	14	–	0	–	4	3/8"	1/2"

SUSAN M. KOVICH STATE OF WASHINGTON 30869 REGISTERED PROFESSIONAL ENGINEER

6-8-16

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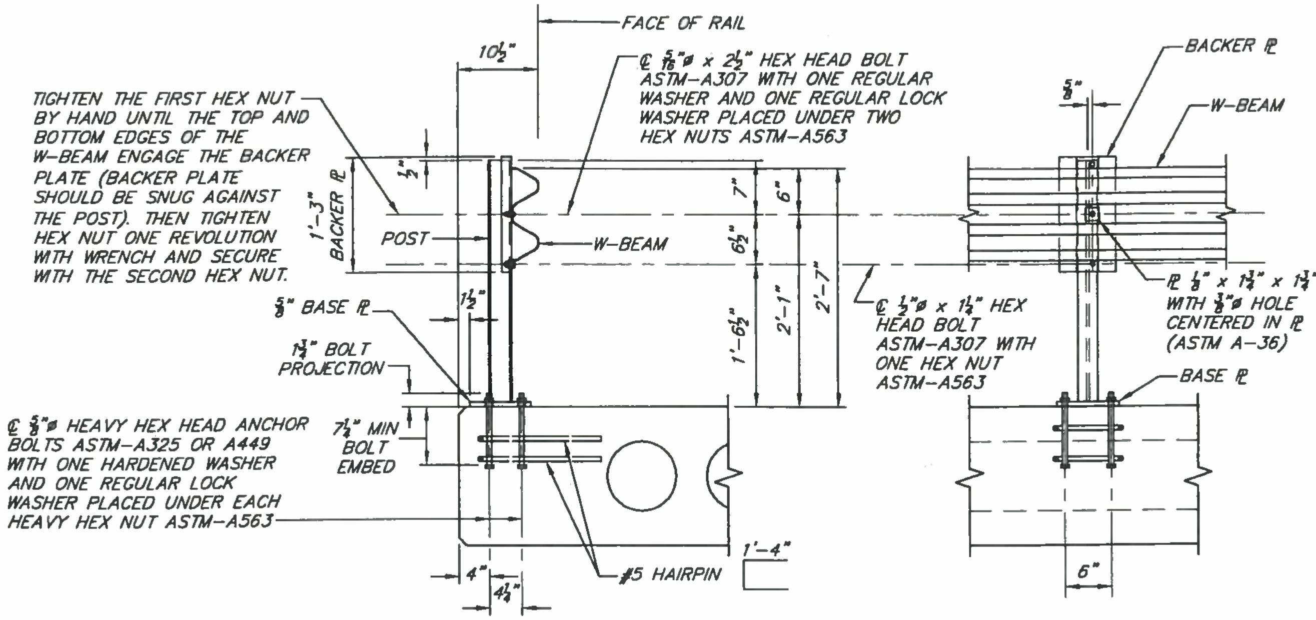
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

GIRDER DETAILS 2

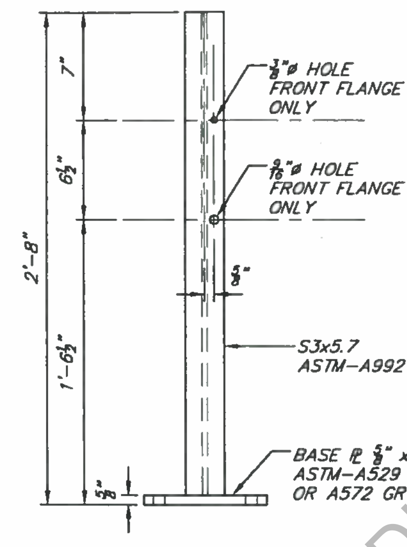
SHEET 24 of 27



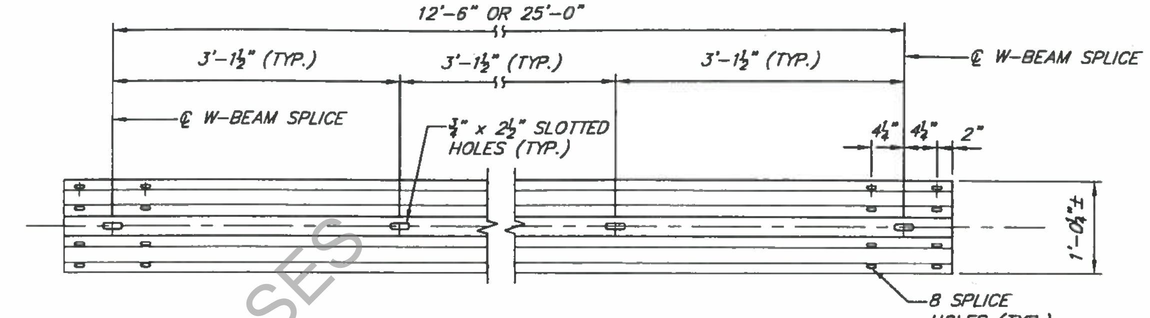
RAIL SECTION

TRAFFIC SIDE RAIL VIEW

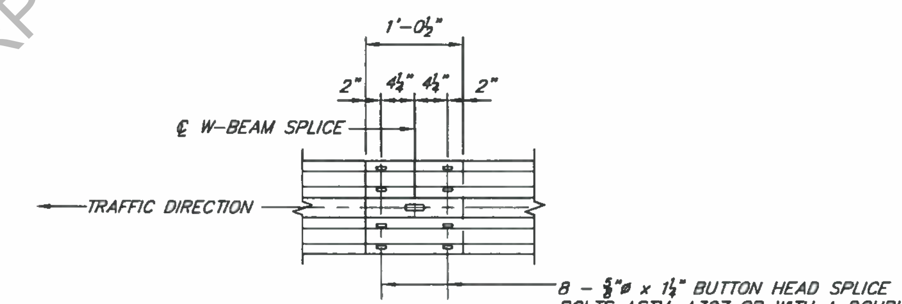
RAIL DETAILS ON BRIDGE SLAB



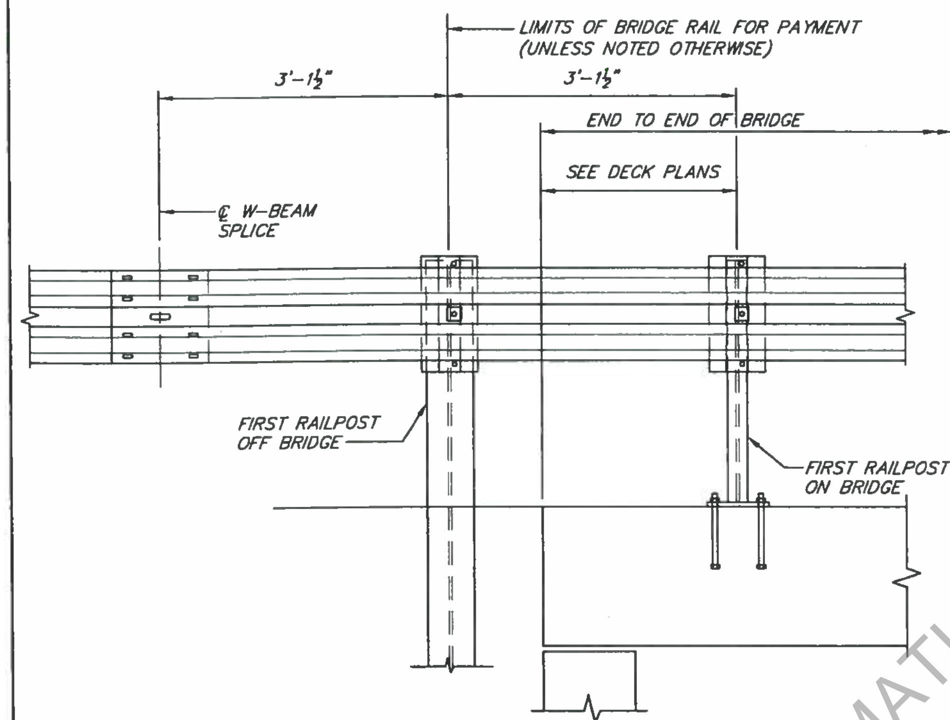
POST ELEVATION



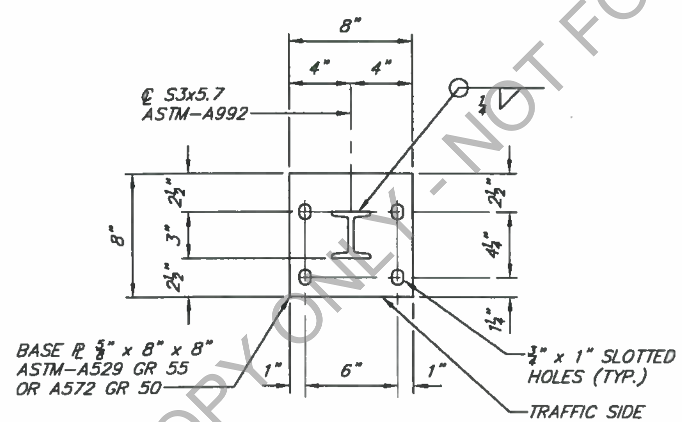
W–BEAM ELEVATION



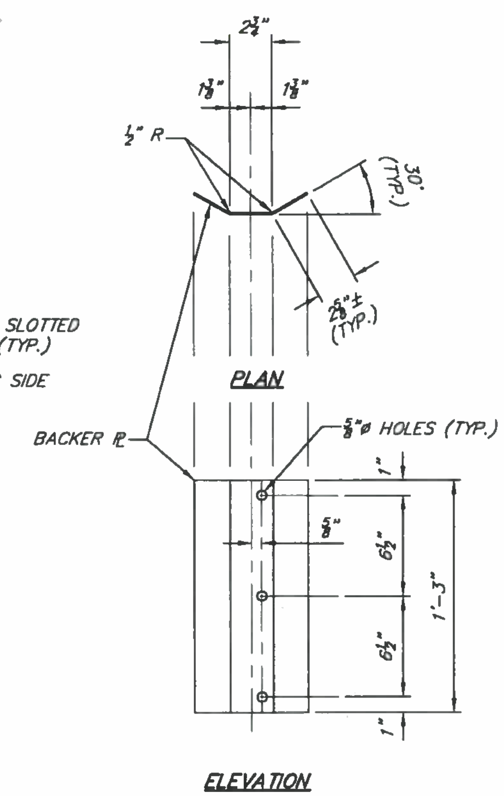
W–BEAM SPLICE ELEVATION



END OF BRIDGE RAIL SECTION



BASE PLATE DETAIL



BACKER PLATE

GUARDRAIL NOTES

CONSTRUCTION NOTES:

Face of rail post must be plumb unless otherwise approved by the Engineer. Post must be perpendicular to adjacent roadway grade. Use epoxy mortar under post base plates if gaps larger than 1/16" exist.

Fabricator must submit shop drawings to the Engineer for approval.

Round or chamfer exposed edges of rail post and backer plate to approximately 1/16" by grinding.

MATERIAL NOTES:

Galvanize all steel components.

Anchor bolts for base plate must be ⅝" Dia ASTM–A325 or A449 bolts with one hardened washer and one regular lock washer placed under each heavy hex nut. Nuts must conform to A563 requirements.

The Contractor may furnish rail elements of 25'–0", or 12'–6" (Nominal) lengths. W–Beam must have slotted holes at 3'–1½".

GENERAL NOTES:

This railing has been successfully evaluated by full–scale crash test to meet MASH TL–3 criteria with fully anchored guardrail at each end. This railing can be used for speeds of 50 mph and greater.

Repairs to impact–damaged post and base plate unit are not permitted. Replace all impact–damaged posts with a new post and base plate unit.

Average weight of railing with no overlay: 19 plf total.

SUSAN M KOVICH, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER
6-8-16

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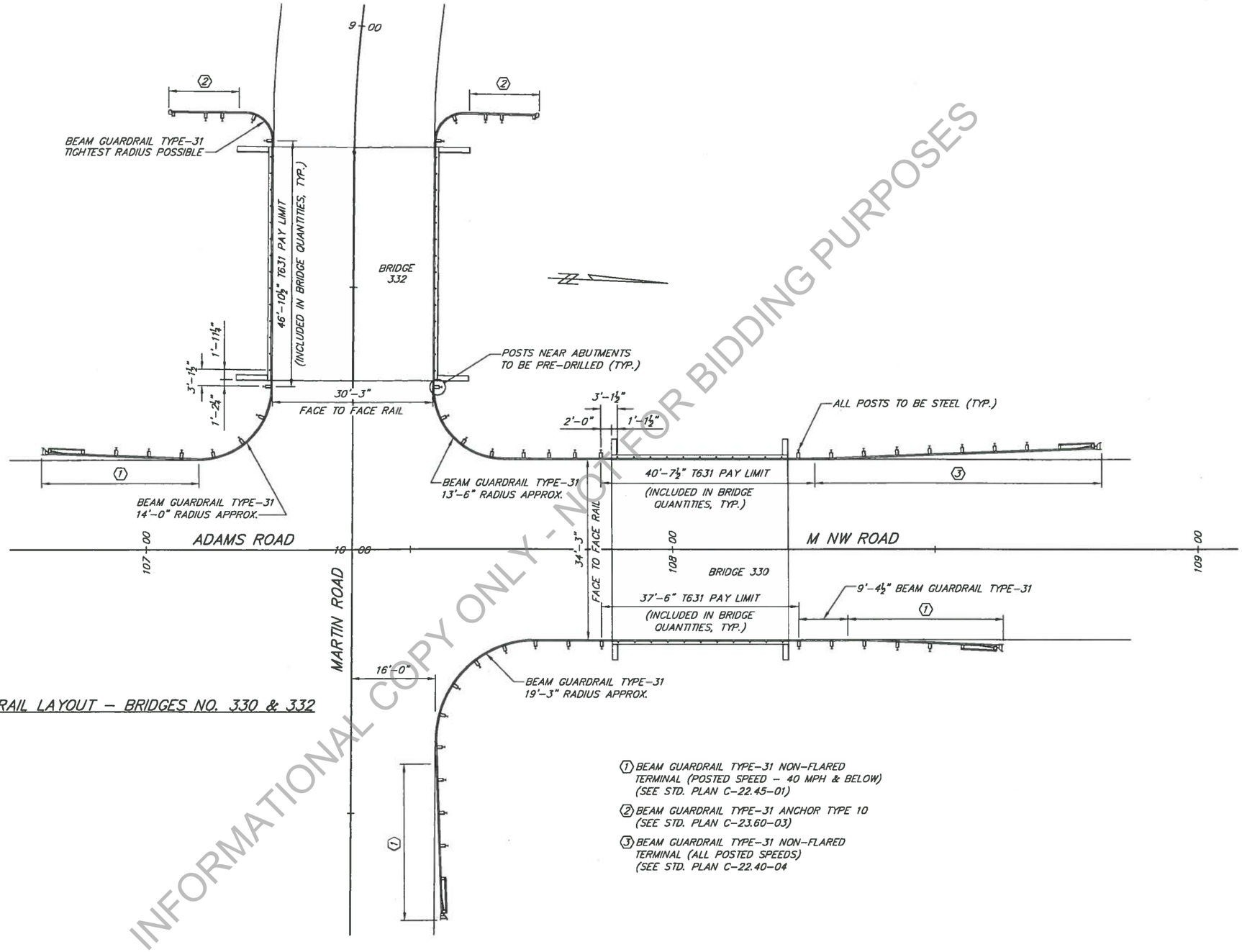
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

RAILING DETAILS



GUARDRAIL LAYOUT – BRIDGES NO. 330 & 332

① BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (POSTED SPEED – 40 MPH & BELOW) (SEE STD. PLAN C-22.45-01)

② BEAM GUARDRAIL TYPE-31 ANCHOR TYPE 10 (SEE STD. PLAN C-23.60-03)

③ BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (ALL POSTED SPEEDS) (SEE STD. PLAN C-22.40-04

SUSAN M KOVICH STATE OF WASHINGTON 36040 REGISTERED PROFESSIONAL ENGINEER

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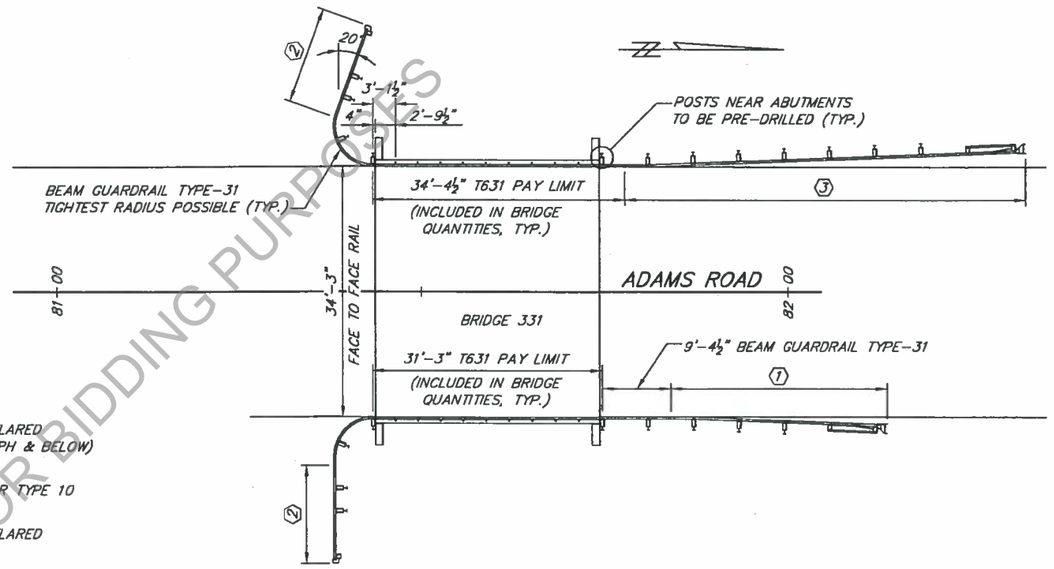
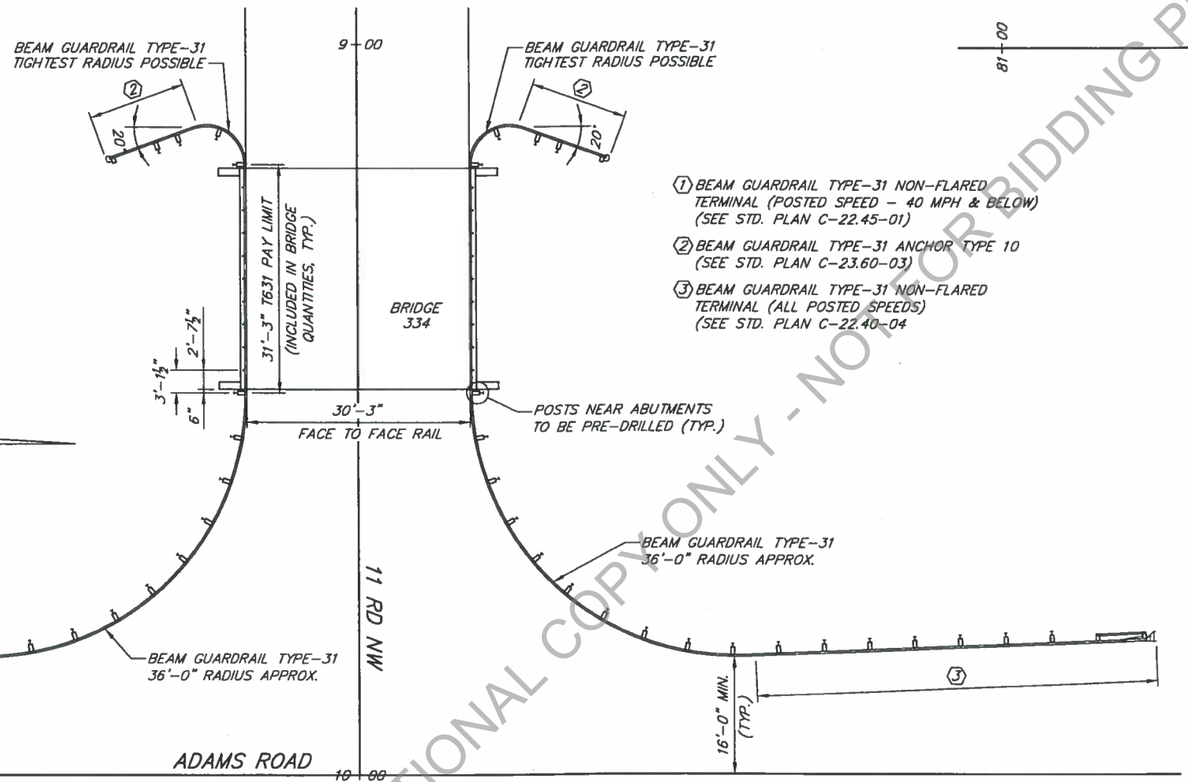
ADAMS ROAD BRIDGES REPLACEMENT
COUNTY ROAD PROJECT #14-08 & #16-12

GUARDRAIL LAYOUT - BRIDGES 330 & 332

SHEET 26 of 27



GUARDRAIL LAYOUT – BRIDGE NO. 331



GUARDRAIL LAYOUT – BRIDGE NO. 334

(1) BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (POSTED SPEED – 40 MPH & BELOW) (SEE STD. PLAN C-22.45-01)

(2) BEAM GUARDRAIL TYPE-31 ANCHOR TYPE 10 (SEE STD. PLAN C-23.60-03)

(3) BEAM GUARDRAIL TYPE-31 NON-FLARED TERMINAL (ALL POSTED SPEEDS) (SEE STD. PLAN C-22.40-04

SUSAN M KOVICH STATE OF WASHINGTON 39589 REGISTERED PROFESSIONAL ENGINEER

6-8-16

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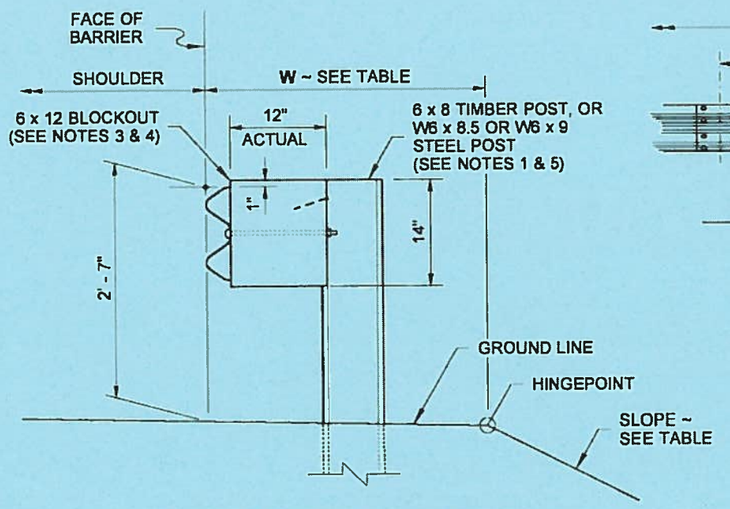
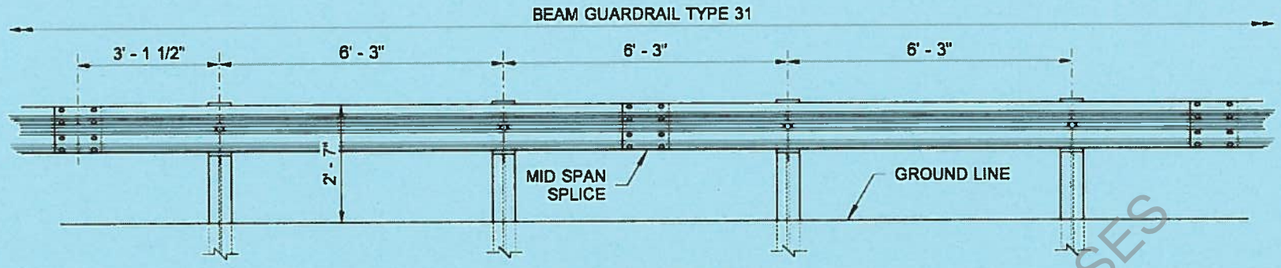
COUNTY ROAD PROJECT #14-08 & #16-12

GUARDRAIL LAYOUT - BRIDGES 331 & 334

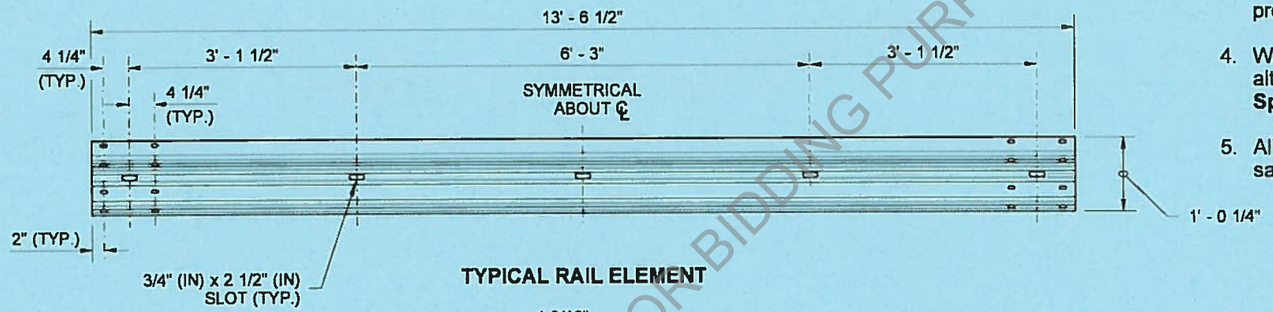
SHEET 27 of 27



TYPICAL SECTION ~ WITHOUT CURB
(6' - 0" LONG POSTS)



TYPICAL ELEVATION



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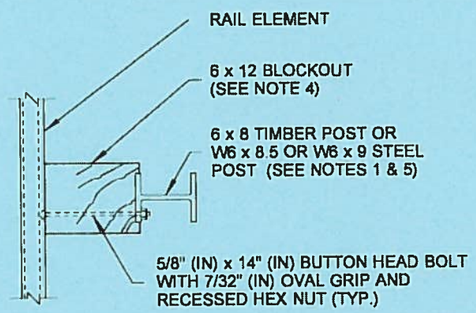
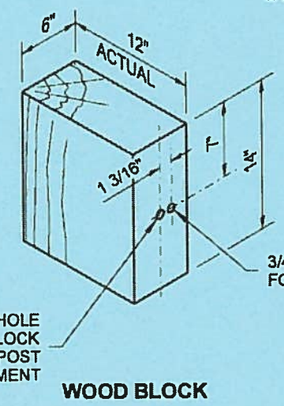


PLAN VIEW



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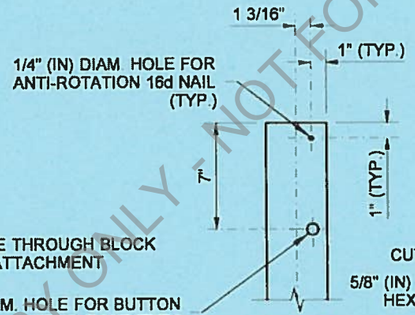
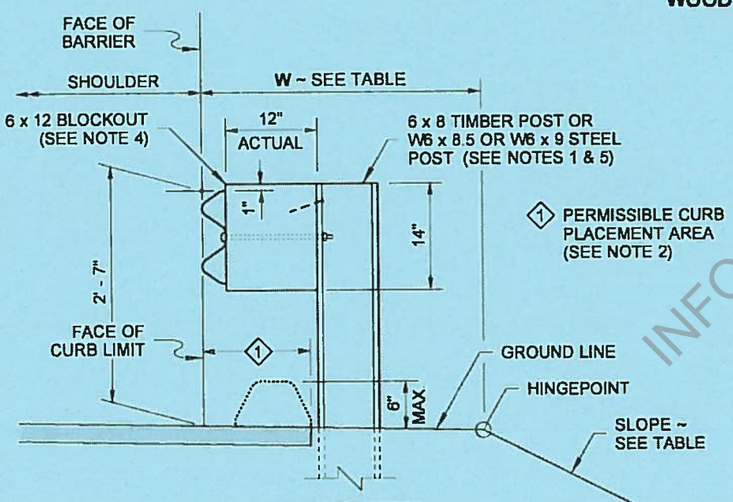
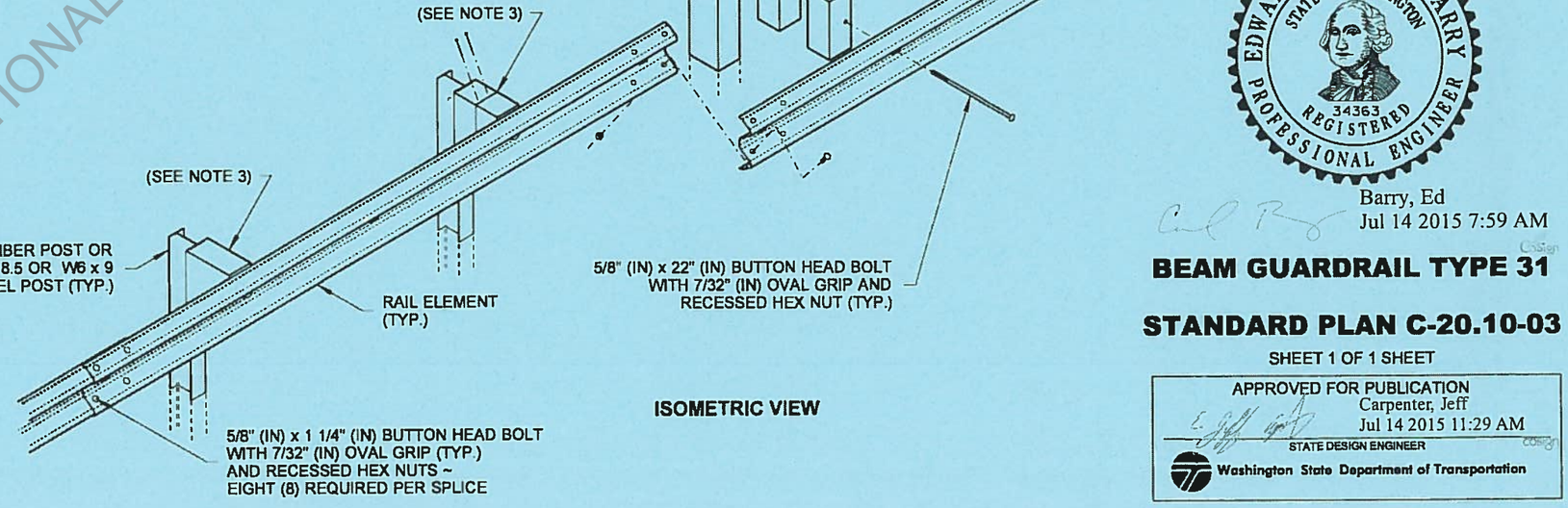


STEEL POST



ELEVATION VIEW

TYPICAL SECTION ~ WITH CURB
(6' - 0" LONG POSTS)



ISOMETRIC VIEW

NOTES

1. Refer to **Standard Plans C-1** and **C-1b** for additional details not shown on this plan.
2. Extend shoulder pavement to provide a base for the extruded curb. See Contract Plans for exceptions to distances shown.
3. Use a single block or combination of blocks (no more than two (2) to achieve the actual 12" (in) offset. See **Standard Specification 9-16.3(2)**. Wood blocks shall be secured to the posts with anti-rotation nails. If combination blocks are used, the adjacent blocks shall be toenailed with two 16d galvanized nails to prevent block rotation.
4. Wood blocks are shown. Blocks of an approved alternative material may be used. See **Standard Specification 9-16.3(2).**
5. All posts for any standard barrier run shall be of the same type: timber or steel.

SLOPE \ EMBANKMENT TABLE	
SLOPE	W (FT)
2H : 1V OR FLATTER	2.5' MIN.
STEEPER THAN 2H : 1V BUT NOT STEEPER THAN 1H : 1V	4.0' MIN.

DRAWN BY: FERN LIDDELL

EDWARD PATRICK BARRY
STATE OF WASHINGTON
34363
REGISTERED PROFESSIONAL ENGINEER

Barry, Ed
Jul 14 2015 7:59 AM

BEAM GUARDRAIL TYPE 31

STANDARD PLAN C-20.10-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 14 2015 11:29 AM
STATE DESIGN ENGINEER

Washington State Department of Transportation

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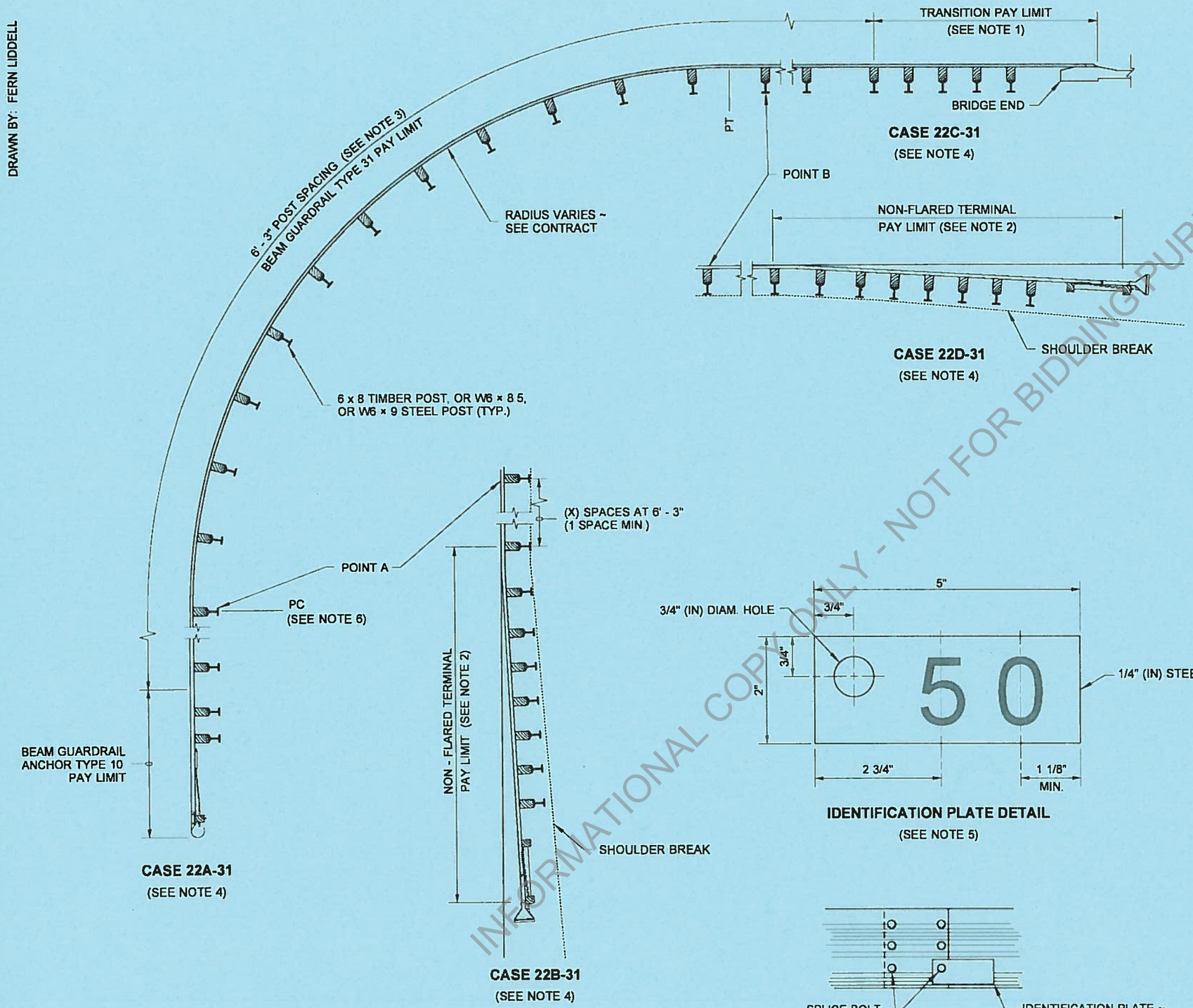

IDENTIFICATION PLATE DETAIL
(SEE NOTE 5)

IDENTIFICATION PLATE MOUNTING DETAIL
(SEE NOTE 6)

NOTES

1. See Contract for transition and connection type.
2. For additional installation requirements for Non-Flared Terminal placement, see **Standard Plan C-22.40.**
3. Guardrail installation shall be Beam Guardrail Type 31 with standard post and block. See **Standard Plan C-20.10** for additional details.
4. The first letter of case designation indicates the end treatment on the side road. The second letter indicates the end treatment on the main road. For instance, a terminal on a side road and a bridge connection on the main road would be Case 22BC-31.
5. The radius dimension shall be etched into the plate as shown in the example on the Identification Plate Detail. Numerals shall be 1 1/2" (in) high minimum, and 3/4" (in) wide maximum. Plate shall be galvanized after etching and the letter shall remain permanently legible.
6. The guardrail Identification Plate shall be mounted at the lower splice bolt on the back side of the rail element at the PC of the guardrail radius.

EDWARD PATRICK BARRY
STATE OF WASHINGTON
34363
REGISTERED PROFESSIONAL ENGINEER

Barry, Ed
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GUARDRAIL PLACEMENT STRONG POST ~ TYPE 31 INTERSECTION DESIGN STANDARD PLAN C-20.42-05

SHEET 1 OF 1 SHEET

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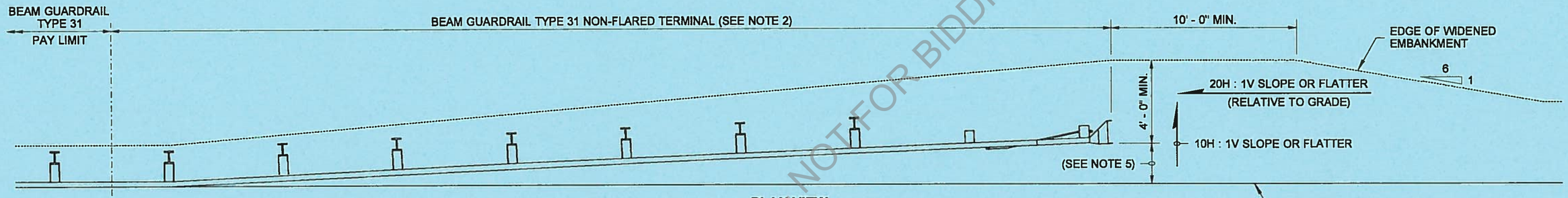
Carpenter, Jeff
Jul 14 2015 11:27 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

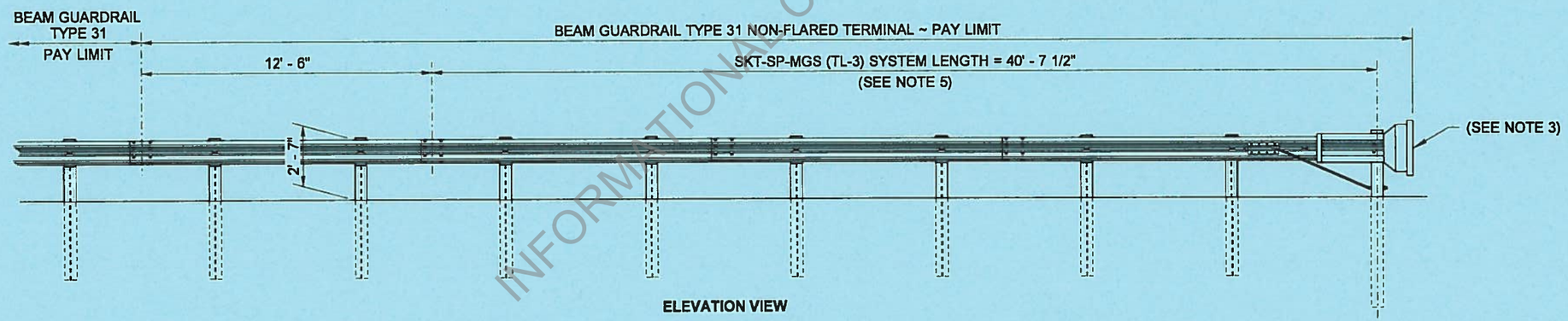
DRAWN BY: COLBY FLETCHER

NOTES

1. This terminal is FHWA accepted at Test Level Three (TL-3) and may be used for all posted speeds.
2. An SKT-SP-MGS (TL-3) as manufactured by Road Systems, Inc. shall be installed according to manufacturer's recommendations.
3. A reflectorized object marker shall be installed according to manufacturer's recommendations.
4. When snow load post washers and snow load rail washers are required by the Contract, the snow load rail washers shall not be installed within the terminal limits.
5. Terminal shall be installed at a widening, ensuring the end piece is entirely off the shoulder. While this terminal does not require an offset at the end, a flare is recommended. A maximum flare of 25 : 1 or flatter over the length of the terminal is allowed for the SKT-SP-MGS (TL-3), with a maximum offset of 24" (in) over 50' (ft).
6. For terminal details, see WSDOT approved manufacturer's drawings.



PLAN VIEW



ELEVATION VIEW

EDWARD PATRICK BARRY
STATE OF WASHINGTON
34363
REGISTERED
PROFESSIONAL ENGINEER

Barry, Ed
Oct 23 2014 11:34 AM

BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL STEEL POSTS (ALL POSTED SPEEDS) STANDARD PLAN C-22.40-04

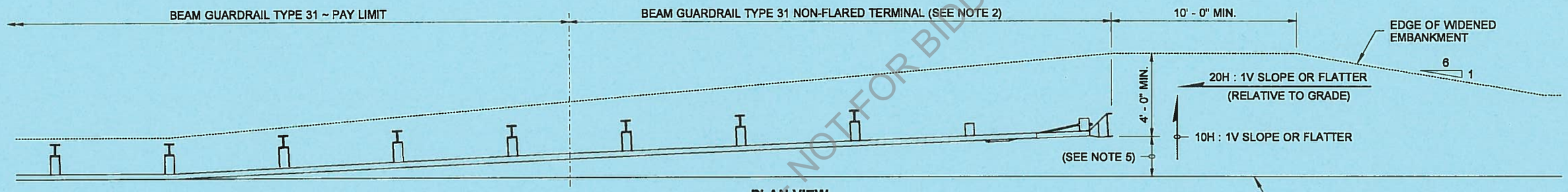
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Bakotich, Pasco
Oct 23 2014 12:10 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

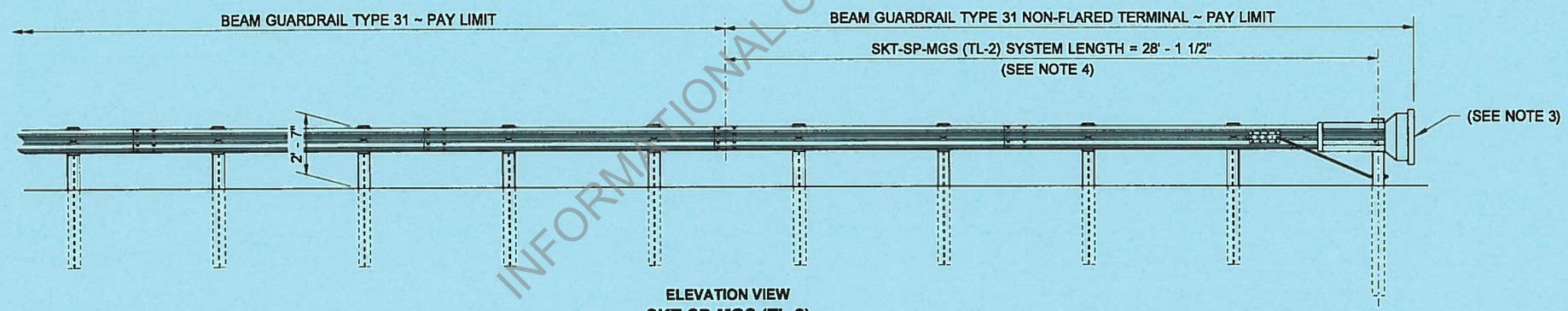
DRAWN BY: COLBY FLETCHER

NOTES

1. This terminal is FHWA accepted at Test Level Two (TL-2) and may be used in applications with speeds of 40 MPH or less.
2. An SKT-SP-MGS (TL-2) as manufactured by Road Systems Inc. shall be installed according to manufacturer's recommendations.
3. A reflectorized object marker shall be installed according to manufacturer's recommendations.
4. When snow load post washers and snow load rail washers are required by the Contract, the snow load rail washers shall not be installed within the terminal limits.
5. Terminal shall be installed at a widening, ensuring the end piece is entirely off the shoulder. While this terminal does not require an offset at the end, a flare is recommended. A maximum flare of 25 : 1 or flatter over the length of the terminal is allowed for the SKT-SP-MGS (TL-2), with a maximum offset of 24" (in) over 50' (ft).
6. For terminal details, see WSDOT-approved manufacturer's drawings.



PLAN VIEW



ELEVATION VIEW
SKT-SP-MGS (TL-2)

EDWARD PATRICK BARRY
STATE OF WASHINGTON
34363
REGISTERED
PROFESSIONAL ENGINEER

Barry, Ed
Oct 23 2014 11:46 AM

BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL STEEL POSTS (POSTED SPEED ~ 40 MPH AND BELOW) STANDARD PLAN C-22.45-01

SHEET 1 OF 1 SHEET

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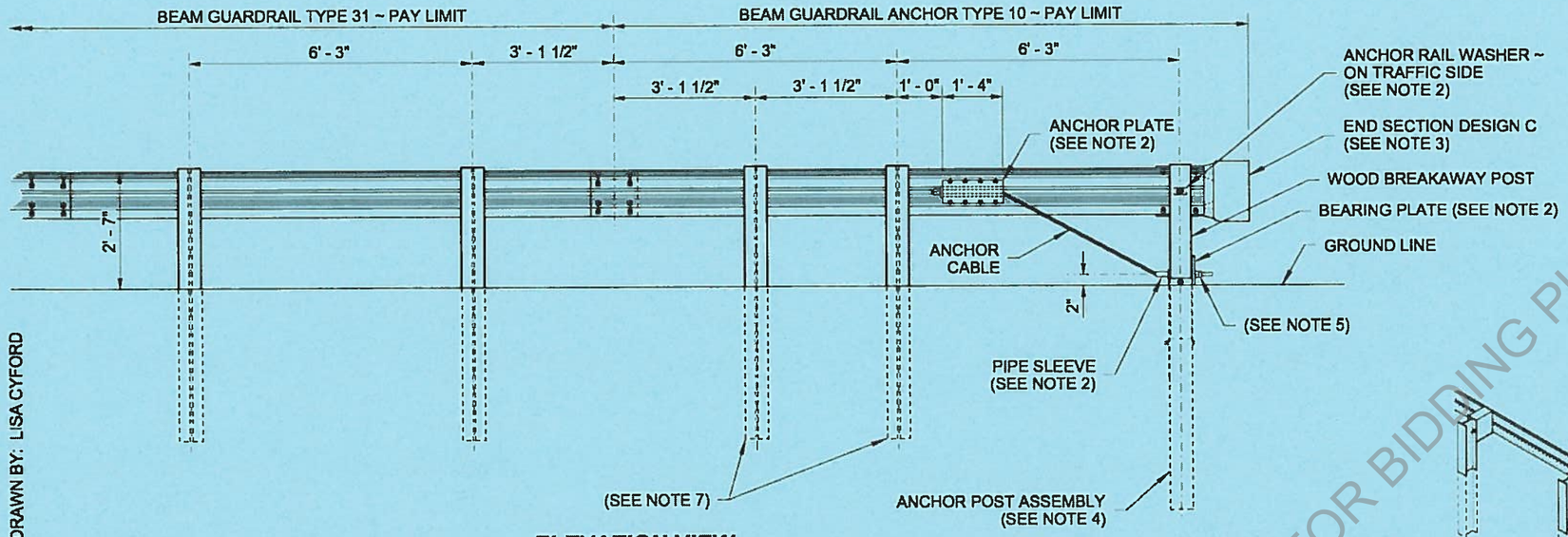
Oct 23 2014 12:10 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

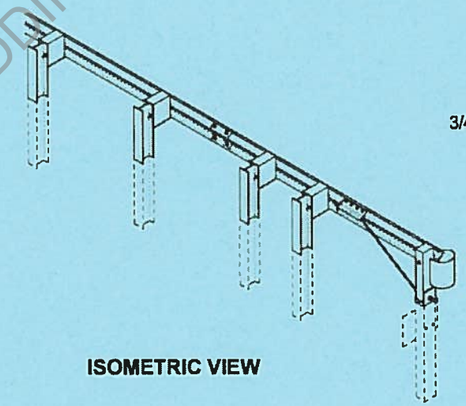


ELEVATION VIEW
W-BEAM

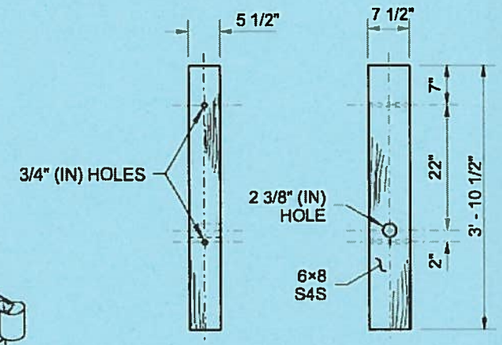
DRAWN BY: LISA CYFORD

NOTES

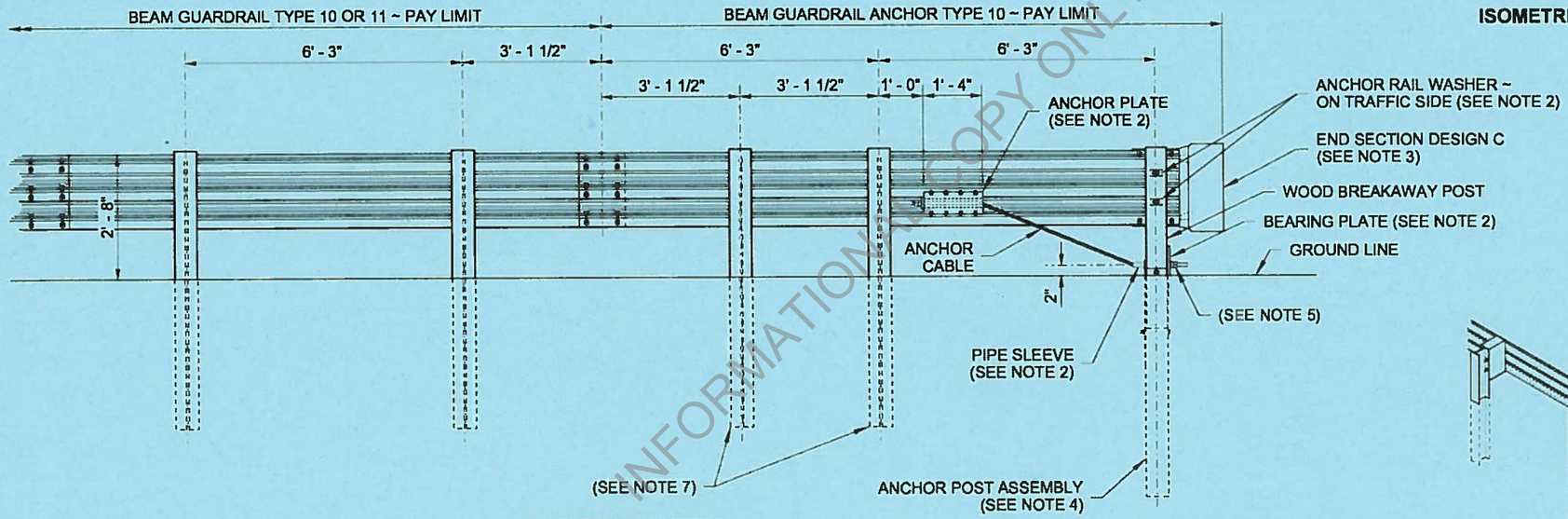
1. For use on the end of guardrail runs when a crashworthy terminal is not required.
2. For additional details not shown, see **Standard Plan C-6c**.
3. For end section details, see **Standard Plans C-7** and **C-7a**.
4. Use details for Wood Breakaway post shown on this plan and components shown on **Standard Plan C-1b**.
5. Fasten the Anchor Cable using two 1" (in) nuts and washer, at both ends of cable. Outside nut shall be torqued against inside nut a minimum of 100 ft.-lbs.
6. Wood blocks shown. Blocks of alternate material may be used. See **Standard Specification 9-16.3(2)**.
7. Posts shall match those of the connecting run: timber or steel.



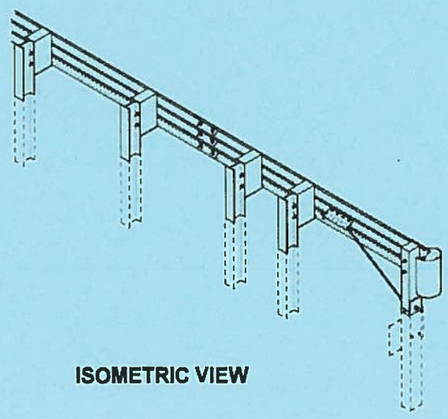
ISOMETRIC VIEW



WOOD BREAKAWAY POST DETAIL



ELEVATION VIEW
THRIE BEAM



ISOMETRIC VIEW

EDWARD PATRICK BARRY
STATE OF WASHINGTON
34363
REGISTERED PROFESSIONAL ENGINEER

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May 6 2014 3:16 PM

BEAM GUARDRAIL (TYPE 31) ANCHOR TYPE 10

STANDARD PLAN C-23.60-03

SHEET 1 OF 1 SHEET

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Washington State Department of Transportation

GEOTECHNICAL REPORT: ADAMS ROAD BRIDGES 330, 331, 332, AND 334

Prepared for: Nicholls Kovich Engineering, PLLC and Grant County

Project No. 150380 • May 31, 2016 Final

Aspect CONSULTING

earth + water

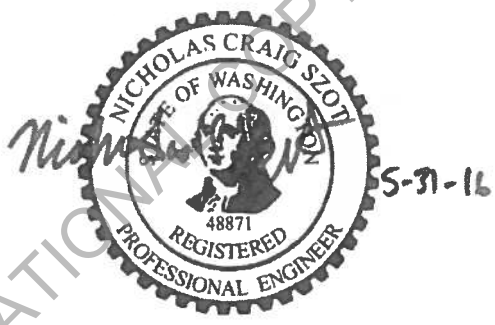
Aspect CONSULTING

GEOTECHNICAL REPORT: ADAMS ROAD BRIDGES 330, 331, 332, AND 334

Prepared for: Nicholls Kovich Engineering, PLLC and Grant County

Project No. 150380 • May 31, 2016

Aspect Consulting, LLC



5-31-16

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A Test Pit Logs

B Geotechnical Laboratory Testing Results

1 Introduction and Project Description

This report presents the results of geotechnical engineering evaluations in support of the replacement of Adams Road Bridges 330, 331, 332, and 334 (four bridges) located at the intersections of Adams Road with Road 11 NW, Road 11.5 NW, and Martin Road east of Quincy in Grant County, Washington (see Figure 1 – Site Map). The locations of the bridges are shown on Figures 2, 3, and 4.

The four bridges consist of single-span timber-girder decks crossing over concrete-lined irrigation canals with spans ranging from about 20 to 32 feet. As-built drawings provided by Grant County (County) indicate the four bridges are supported by concrete shallow foundation abutments. The as-built drawings indicate foundation abutments are founded about 5 to 6 feet below the decks of Bridges 330, 331 and 334, and 9 to 10 feet below the deck of Bridge 332, roughly equal to the bottom of the irrigation canals over which they span.

We understand the project consists of replacing the four bridges with four new single-span prestressed concrete slab girder decks supported by precast concrete shallow foundation abutments constructed just behind (further from mid-span) and at the same elevation/depth as the existing shallow foundation abutments. The existing foundation abutments will be left in place.

The geotechnical analysis and recommendations supporting design and construction of the bridge replacements contained herein are based on a site reconnaissance, test pit explorations completed near the existing bridge abutments, nearby Washington State Department of Ecology (Ecology) well logs, and geologic research of the project area.

2 Site Conditions

2.1 General Surface Conditions

The surface conditions at and around the existing bridges generally consists of relatively flat or mildly sloping asphalt-paved roadway bordered on each side by a bare-soil ditch. The bridges span over irrigation canals that have bank slopes ranging from 1.5H:1V to 2H:1V (horizontal:vertical). Sections of canal beneath Bridges 330 and 331 are not lined. Sections of canal beneath Bridges 332 and 334 are lined with concrete.

Existing vegetation around the bridges consists of tall grass and shrubs along the roadway ditches, the edges of the irrigation canals, and on unpaved areas near the bridge abutments. Private driveways and unpaved access roads are also located near the bridges. The surrounding landscape is comprised of farmland and orchards.

2.2 Geology

The geologic map of the area (Gulick, 1990) indicates that the project area consists of mass-wasting talus and colluvium deposits (Qls) typically consisting of unstratified silt, sand, gravel sediments and bedrock materials deposited by very large landslide flows. Also mapped nearby are low-energy slackwater outburst flood deposits (Qfs) consisting of silt and fine sand which may contain lenses of basaltic sand, gravel, and hard cemented zones referred to as caliche. Fill is not mapped in the project area, but is expected to be present from previous roadway, irrigation canal, and bridge construction projects.

2.3 Subsurface Conditions

2.3.1 Field and Laboratory Investigations

The field exploration program consisted of six test pit explorations and soil sampling. The test pits were located in proximity to the bridge abutments and were positioned to avoid damaging buried utilities and roads. The test pits were completed on January 5, 2016, by a Deere 410G rubber-tire backhoe and operator provided by Grant County. Test pit excavations were observed and documented by an Aspect geologist. Hand-operated Dynamic Cone Penetrometer (DCP) measurements were collected at selected depths during test pit explorations to correlate *in situ* soil density. The approximate locations of the test pits are tabulated below in Table 1 and shown on Figure 2. Due to conflicts with buried utilities and private driveway and access roads there was not sufficient space to complete a test pit at the south abutment of Bridge 331.

Table 1 – Test Pit Locations

Test Pits Designation	Approximate Location
TP-334-E	Bridge 334 East Abutment
TP-334-W	Bridge 334 West Abutment
TP-331-N	Bridge 331 North Abutment
TP-330/332	Bridge 330 South Abutment Bridge 332 East Abutment
TP-332-W	Bridge 332 West Abutment
TP-330-N	Bridge 330 North Abutment

Upon completion, the test pits were backfilled with excavated soil and tamped into place by the Grant County backhoe and operator.

Descriptions of the soils encountered in the test pits, DCP measurements, and the depths where characteristics of soils changed, are indicated on the test pit logs presented as Figures A-2 through A-7 in Appendix A of this report. Definitions of the terminology and symbols used on the logs are included as Figure A-1.

2.3.2 Geotechnical Laboratory Testing

Select soil samples collected from the test pits were submitted to a soil testing lab to aid in soil classification and evaluate material for reuse as structural fill. Tests included natural moisture content, grain size distribution, and moisture-density relationships (modified Proctor). The results of the geotechnical laboratory testing are shown in Appendix B.

2.3.3 Stratigraphy

The following sections present a summary of subsurface conditions encountered in the test pit explorations organized from the upper to the lower soil types. Detailed descriptions of the soils encountered in our explorations, as well as the depths where characteristics of the soils changed, are indicated on the test pit logs in Appendix A.

Fill

A layer of fill was encountered from the ground surface to depths ranging from 1.5 to 3.5 feet below ground surface. The fill was observed to consist of loose to medium dense, moist, brown, gravelly, slightly to very silty, SAND (SP-SM, SM)[1], very sandy silt (ML), and very sandy, slightly silty, GRAVEL (GP-GM). We anticipate the fill was placed during irrigation canal, roadway and bridge construction. The existing abutment foundations, reported to vary between 6 to 9 feet deep, were backfilled after being constructed and therefore we expect the fill is thicker than observed the test pits explorations immediately adjacent the existing foundation abutments.

This material is anticipated to exhibit low to moderate shear strength and behave elastically when subjected to new loads.

Sandy Silt Outburst Flood Deposits

Sandy silt, interpreted to be outburst flood deposits (Qfs), was observed beneath the fill layer in all test pit locations and extended to a depth ranging from 3.5 to 7.5 feet below ground surface. The non-plastic silt was typically observed to consist of soft to stiff, slightly moist to moist, brown, non-plastic, slightly sandy to very sandy silt (ML) with trace gravel and caliche fragments.

This material is anticipated to exhibit low to moderate shear strength and behave elastically when subjected to new loads.

Caliche

The non-plastic silt was observed to transition into caliche at a depth of 3.5 to 7.5 feet below ground surface. The caliche consists of "rock-like," hard, slightly moist, light brown, very silty fine sand to sandy silt (SM, ML). The caliche is chemically cemented due to the presence of calcium carbonite that has precipitated downward through the subsurface profile. All of the test pits were terminated in the cemented caliche at a depth ranging from 6 to 9 feet below ground surface. The backhoe was unable to excavate

[1] Soil Classification per the United Soil Classification System (USCS). Refer to ASTM D2488.

further into this hard material (refusal). The caliche was observed to be as thick as 3.5 feet in the test pits before encountering refusal.

The caliche is anticipated to exhibit high shear strength and behave elastically when subjected to new loads.

Review of nearby Ecology well logs indicate the caliche may have a total thickness greater than 3.5 feet and is underlain by sequences of sand, basalt gravel, and basalt bedrock (Ecology, 2015). These materials are also anticipated to exhibit moderate to high shear strength behave elastically when subjected to new loads.

2.3.4 Groundwater

Review of nearby Ecology well logs indicate the depth to static groundwater in the area ranges from 20 to 100 feet below grade (Ecology, 2015). Based on our explorations the nearby well logs we estimate that static groundwater is not likely to be encountered during construction of this new bridges and abutments.

Although not encountered in our explorations, it is possible that water from rain, snow melt, irrigation, leaks in the concrete-lined canals, or seepage through unlined canal sections may percolate through the subsurface and perch atop low permeability sandy silt and caliche layers.

3 Geotechnical Recommendations and Considerations

3.1 Summary

Based on the results of our field exploration, laboratory testing, and engineering analyses, we conclude that the new bridge foundation abutments (foundations) can be grade-supported, on a 6-inch-thick crushed rock leveling pad placed atop the hard caliche, or on a 2-foot-thick crushed rock bearing pad overlying the existing competent sandy silt glacial outburst deposits (if caliche is not present at the foundation subgrade elevation).

The following sections of this report present recommendations for foundation design, including bearing resistance and lateral parameters, foundation subgrade preparation, structural fill placement and compaction, and considerations for placement of new foundation abutments near the existing abutments (to remain).

3.2 Bridge Abutment Design and Construction Recommendations

This section provides geotechnical design recommendations for vertical and lateral support of the bridges with shallow foundations, considering the Service and Strength limit states, in accordance with AASHTO Load Resistance Factor Design (LRFD) methodology.

3.2.1 Vertical Foundation Support

We recommend the pre-cast concrete shallow foundation abutments (foundations) bear on a 6-inch-thick crushed rock leveling pad placed atop the hard caliche, or on a 2-foot-thick crushed rock bearing pad overlying the existing competent sandy silt glacial outburst deposits (if caliche is not present at the foundation subgrade elevation). The crushed rock should consist of compacted crushed surfacing base course (CSBC), per Section 9-03.9(3) of the Washington State Department of Transportation (WSDOT) Standard Specifications (WSDOT, 2016).

To avoid imposing new bridge loads onto existing footings, new footings should be located such that their zone of influence (which can be taken as a 45-degree prism extending downward and outward from the edge of the footing) does not intersect with the existing footings or abutment walls.

Foundations should be founded at least 2 feet below adjacent grade for frost protection.

3.2.2 Bearing Resistance and Resistance Factors

Using the subsurface configuration described in the above section, we analyzed the nominal bearing resistance for the Strength and Service limit states for use in design of foundations.

For foundations ranging in width from 2 to 6 feet, we recommend a nominal (unfactored) bearing resistance of 12,000 pounds per square foot (psf) and the Strength LRFD resistance factors provided in Table 2.

Table 2 – LRFD Resistance Factors for Shallow Foundations

Limit State	Bearing Resistance	Shear Resistance to Sliding	Passive Pressure Resistance to Sliding
Strength	0.45	0.9	0.5
Service	1.0	1.0	1.0

We recommend utilizing the Service limit state bearing resistances, presented as a function of effective foundation width (corrected for eccentricity), in Table 3, and Service limit LRFD resistance factors provided in Table 2. Service limit state resistances were computed using shallow foundations settlement methods presented in AASHTO LRFD (AASHTO, 2014) assuming a maximum vertical foundation settlement of 1 inch.

Table 3 – Service Limit State Bearing Resistance for Shallow Foundations

Effective Foundation Width (feet)	Bearing Resistance Corresponding to Approximately 1 inch of Settlement (psf)
2	6,000
3	5,000
4	4,500
5	4,000
6	3,700

3.2.3 Lateral Parameters

The bridge foundations should be designed to adequately resist lateral earth pressures considering the Strength and Service LRFD limit state conditions in accordance with AASHTO LRFD (AASHTO, 2014).

Design lateral earth pressures are presented in Table 4 below and represent the active, at-rest, and passive conditions assuming properly compacted on-site soils or imported granular structural fill will be used to backfill around the abutments.

Measures should be taken to prevent buildup of hydrostatic pressure behind abutments, otherwise the abutments should be designed to accommodate the additional loading from unbalanced hydrostatic pressure that might occur. Abutment backfill materials within about 12 to 18 inches of the abutment should consist of material meeting the requirements of Gravel Backfill for Walls as specified in Section 9-03.12(2) of the WSDOT Standard Specifications (WSDOT, 2016).

Table 4 – Lateral Earth Pressure Parameters

Earth Pressure Condition	Earth Pressure Coefficient	Equivalent Fluid Weight[1],[2] (pcf)	Surcharge Pressure (psf)
Active (K_a)[2], [3]	0.31	37[2]	0.31*S[6]
At-Rest (K_o)	0.47	56	0.47*S[6]
Passive (K_p)[4]	3.26	390[4],[5]	-

Notes:

1 Backfill with a unit weight of 120 pcf is assumed.

2 Static earth pressures result in a triangular pressure distribution along the height of the abutment. Assumes flat ground behind the abutment.

3 To invoke the active conditions the abutment must rotate about the base with a lateral movement at the top of the abutment of approximately 0.001H to 0.002H, where H exposed height of the abutment, otherwise at-rest conditions should be used.

4 To invoke the passive conditions, the wall must move into the backfill with a lateral movement of approximately 0.020H. Assumes flat ground.

5 Nominal (ultimate) passive pressures are presented; a strength limit state resistance factor (ϕ_{ep}) of 0.50 should be applied for design per AASHTO LRFD 10.5.5.2.

6 Resulting uniform surcharge acting along the height of the abutment, where S is the surcharge pressure.

7 Assuming unbalanced hydrostatic pressures will not develop and therefore need not be considered in abutment design.

3.2.4 Sliding Resistance

Sliding resistance is developed from the friction occurring between the bottom of the foundation and the soil, and the passive resistance developed from the soil around the foundation. For pre-cast concrete foundation abutments set atop compacted CSBC (ϕ_f) we recommend assuming a drained friction angle (ϕ_f) of 36 degrees for sliding resistance calculations. See Table 2 for LRFD resistance factors for sliding failure mode.

3.2.5 Existing Foundation Abutment Considerations

We understand that the existing foundation abutments will not be removed to avoid disturbing or needing to re-construct portions of the irrigation canals at the bridge crossings. We understand the new foundations will be placed behind (further from the irrigation canals) than the existing foundations. In general, the new foundations should not project loads onto the existing foundations abutment or walls. We understand this will not be a concern because the new foundation abutments are planned to be set at an elevation roughly equal to or below the elevation of the existing foundation abutments. We recommend leaving a lateral space or at least a few inches between the new foundations and existing foundations.

We are available to assist Nicholls Kovich Engineering as needed to work through other issues that might arise on this topic.

3.3 Earthwork

Based on the explorations performed on site and our understanding of the project, it is our opinion that the contractor should be able to complete site earthwork with standard construction equipment. The hard cemented caliche was difficult to excavate with a standard backhoe during test pit explorations and a larger track-mounted excavator fitted with a toothed bucket or ripping tools may be needed to excavate into or through the hard cemented caliche.

We recommend completing earthwork and foundation construction during periods when the irrigation canals are empty to reduce the chance of encountering perched groundwater in excavations. If encountered, perched groundwater can likely be handled by sumps and pumps.

Appropriate erosion and sedimentation control measures should be in accordance with the local best management practices (BMPs) and should be implemented prior to beginning earthwork activities.

3.3.1 Temporary Excavation Slopes

Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. All temporary cuts in excess of 4 feet in height that are not protected by trench boxes or otherwise shored, should be sloped in accordance with Part N of Washington Administrative Code (WAC) 296-155 for worker safety. Based on the site soils, it is our opinion that temporary slopes should have a maximum slope of 1.5H:1V. Shallow slopes may need to be considered in accordance with Part N of WAC 296-155.

In addition, the contractor should monitor the stability of the temporary cut slopes and adjust the construction schedule and slope inclination accordingly. Vibrations created by traffic and construction equipment may cause caving and raveling of the temporary slopes. In such an event, lateral support for the temporary slopes should be provided by the contractor.

3.3.2 Foundation Subgrade Preparation

Foundation subgrade should be relatively firm and unyielding prior to placement of foundations or structural fill. If used, structural fill below and around the foundations should be properly compacted in accordance with the Structural Fill section below. Disturbed or yielding areas should be excavated and replaced with properly compacted structural fill.

The subgrade should be free of accumulated water prior to placement of structural fill. The contractor should be prepared to dewater the temporary excavations if necessary. In our opinion, groundwater seepage can likely be managed using sumps and pumps. Dewatering methods should be combined with proper sequencing of the excavation such as excavating a perimeter sump around the excavation to intercept and collect seepage groundwater before it accumulates.

Foundations should not be placed on frozen subgrades.

3.4 Structural Fill Materials and Compaction

3.4.1 Beneath Foundations

CSBC below foundations should be placed and compacted to at least 95 percent of the Modified Proctor maximum dry density (per test method American Society for Testing and Materials (ASTM) D1557). Structural Fill should only be placed on over competent granular subgrade. We recommend that Aspect evaluate subgrade conditions prior to placing CSBC.

The prism of compacted CSBC structural fill should extend outward and downward from the outer edges of the foundation (overbuilt) at an angle no steeper than 1 horizontal to 1 vertical (1H:1V).

3.4.2 Around Foundations

Structural fill materials placed around foundations and above must meet the requirements of WSDOT Common Borrow (WSDOT Standard Specification 9-03.14(3)) (WSDOT, 2016) placed and compacted to a relatively firm and unyielding condition to at least 95 percent of the Modified Proctor maximum dry density (per test method ASTM D1557). The footings should be covered by at least 2 feet of structural fill.

In general, the material excavated for the project above the hard caliche may be suitable as WSDOT Common Borrow. However, these materials generally have a high fines content and will likely be difficult to properly condition for use as common borrow during the non-summer months if the moisture content is above optimum, requiring drying of the material. The results of the laboratory testing indicate the on-site material was near optimum moisture for compaction at the time of the test pit explorations, but may change with seasonal and weather conditions.

On-site soils may be made into suitable Common Borrow by moisture conditioning (wetting or drying) to near the optimum moisture content prior to attempting compaction. Organic-laden soil should not be reused as fill. Excavated material should be visually inspected by the geotechnical engineer to determine its potential use as backfill.

3.5 Seismic Considerations

The risk of seismically-induced hazards, such as liquefaction, lateral spreading or fault rupture at these sites is low. Based on the results of the test pit explorations completed for this project and review of nearby Ecology well logs we recommend classifying the bridge sites as seismic Site Class D – Stiff Soil for code-based seismic design.

4 Recommendations for Continuing Geotechnical Services

Throughout this report, we have provided recommendations where we consider it would be appropriate for Aspect to provide additional geotechnical input to the design and construction process. These are summarized below.

4.1.1 Additional Design and Consultation Services

Before construction begins, we recommend that Aspect:

- Review the project plans and specifications to see that the geotechnical engineering recommendations are properly interpreted.
- We are available to provide continuing design support, upon request.

4.1.2 Construction Services

We are available to provide geotechnical engineering and monitoring services during construction. The integrity of the geotechnical elements depends on proper site preparation and construction procedures. In addition, subsurface conditions may vary from those observed in the test pits and we would like the opportunity to observe site conditions during construction and provide appropriate field recommendations as needed.

During the construction phase of the project, we recommend that Aspect be retained to perform the following tasks:

- Review applicable submittals;
- Observe and evaluate subgrade for all foundations;
- Attend meetings, as needed; and
- Other geotechnical engineering considerations that may arise during the course of construction.

The purpose of our observations is to verify compliance with design concepts and recommendations, and to allow design changes or evaluation of appropriate construction methods in the event that subsurface conditions differ from those anticipated prior to the start of construction.

5 References

American Association of State Highway and Transportation Officials, 2014, Load Resistance Factor Design Bridge Design Specifications, Customary U.S. Units.

Gulick, C., 1990, Geologic Map of the Moses Lake 1:100,000 Quadrangle, Washington.

United States Geological Survey, 2014, U.S. Seismic Design Maps, http://earthquake.usgs.gov/designmaps/us/application.php/.

Washington State Department of Transportation, 2016, Standard Specifications for Road, Bridge and Municipal Construction, Document M 41-10.

Washington State Department of Ecology, 2016, Washington State Well Log Viewer, Website accessed on January 6, 2016, https://fortress.wa.gov/ecy/waterresources/map/WCLSWebMap/.

6 Limitations

Work for this project was performed for Nicholls Kovich Engineering, PLLC (Client) and Grant County, and this memorandum was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This memorandum does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

FIGURES

APPENDIX A

Test Pit Logs

Coarse-Grained Soils - More than 50% [1] Retained on No. 200 Sieve	Gravels - More than 50% [1] of Coarse Fraction Retained on No. 4 Sieve	≤5% Fines [5]	GW	Well-graded gravel and gravel with sand, little to no fines
			GP	Poorly-graded gravel and gravel with sand, little to no fines
		≥15% Fines [5]	GM	Silty gravel and silty gravel with sand
			GC	Clayey gravel and clayey gravel with sand
	Sands - 50% [1] or More of Coarse Fraction Passes No. 4 Sieve	≤5% Fines [5]	SW	Well-graded sand and sand with gravel, little to no fines
			SP	Poorly-graded sand and sand with gravel, little to no fines
		≥15% Fines [5]	SM	Silty sand and silty sand with gravel
			SC	Clayey sand and clayey sand with gravel
Fine-Grained Soils - 50% [1] or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less than 50		ML	Silt, sandy silt, gravelly silt, silt with sand or gravel
			CL	Clay of low to medium plasticity; silty, sandy, or gravelly clay, lean clay
			OL	Organic clay or silt of low plasticity
	Silts and Clays Liquid Limit 50 or More		MH	Elastic silt, clayey silt, silt with micaceous or diato-maceous fine sand or silt
			CH	Clay of high plasticity, sandy or gravelly clay, fat clay with sand or gravel
			OH	Organic clay or silt of medium to high plasticity
Highly Organic Soils			PT	Peat, muck and other highly organic soils

Terms Describing Relative Density and Consistency

	Density	SPT [2] blows/foot
Coarse-Grained Soils	Very Loose	0 to 4
	Loose	4 to 10
	Medium Dense	10 to 30
	Dense	30 to 50
	Very Dense	>50
	Consistency	**SPT [2] blows/foot**
Fine-Grained Soils	Very Soft	0 to 2
	Soft	2 to 4
	Medium Stiff	4 to 8
	Stiff	8 to 15
	Very Stiff	15 to 30
	Hard	>30

Test Symbols

FC = Fines Content
G = Grain Size
M = Moisture Content
A = Atterberg Limits
C = Consolidation
DD = Dry Density
K = Permeability
Str = Shear Strength
Env = Environmental
PID = Photoionization Detector

Component Definitions

Descriptive Term	Size Range and Sieve Number
Boulders	Larger than 12"
Cobbles	3" to 12"
Gravel	3" to No. 4 (4.75 mm)
Coarse Gravel	3" to 3/4"
Fine Gravel	3/4" to No. 4 (4.75 mm)
Sand	No. 4 (4.75 mm) to No. 200 (0.075 mm)
Coarse Sand	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	Smaller than No. 200 (0.075 mm)

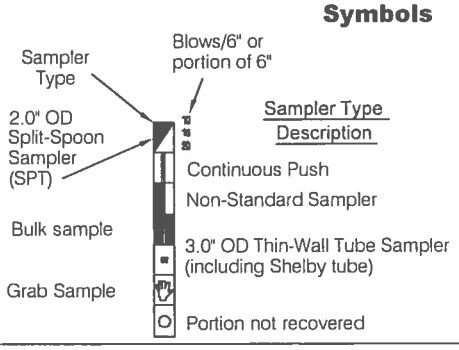
[3] Estimated Percentage

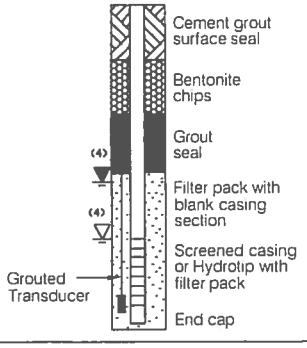
Percentage by Weight	Modifier
<5	Trace
5 to 15	Slightly (sandy, silty, clayey, gravelly)
15 to 30	Sandy, silty, clayey, gravelly)
30 to 49	Very (sandy, silty, clayey, gravelly)

Moisture Content

Dry - Absence of moisture, dusty, dry to the touch
Slightly Moist - Perceptible moisture
Moist - Damp but no visible water
Very Moist - Water visible but not free draining
Wet - Visible free water, usually from below water table

Symbols





(1) Percentage by dry weight
(2) (SPT) Standard Penetration Test (ASTM D-1586)
(3) In General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)
(4) Depth of groundwater — ATD = At time of drilling; Static water level (date); BGS = below ground surface
(5) Combined USCS symbols used for fines between 5% and 15% as estimated in General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)

Classifications of soils in this report are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D-2487 and D-2488 were used as an identification guide for the Unified Soil Classification System.

Aspect CONSULTING

Exploration Log Key

DATE	
DESIGNED BY	
DRAWN BY	
REVISED BY	
PROJECT NO.	
FIGURE NO.	A-1

Q:_ACAD Standards\Standard Details\Exploration Log Key A1.dwg

150380 - Adams Road Bridges

Geotechnical Exploration Log

Aspect CONSULTING

Project Address & Site Specific Location	Coordinates (Lat,Lon WGS84)	Exploration Number
Quincy, Washington, Road 11 NW at Adams Rd, Bridge 334 East Abutment	,	TP-334-E

Contractor	Equipment	Sampling Method	Ground Surface (GS) Elev.	
Grant County	Deere 410G Backhoe	DCPT / Grab	1307'	
Operator	**Exploration Method(s)**	**Work Start/Completion Dates**	**Top of Casing Elev.**	**Depth to Water (Below GS)**
Mark	Backhoe	1/5/2016	NA	No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Completion	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
1	1306							**FILL** Loose to medium dense, moist, brown, slightly gravelly, very sandy SILT (ML) to very silty SAND (SM); non-plastic silt, fine to medium sand, subrounded to angular gravel of basalt and caliche fragments.	1
2	1305	Test pit backfilled with excavated soil.	S1			DCPT= 1,5,7 G			2
3	1304								3
4	1303		S2			DCPT= 10,13,12 G		**OUTBURST FLOOD DEPOSITS** Medium dense, moist, brown, very sandy SILT (ML); non-plastic silt, fine sand, trace gravel.	4
5	1302								5
6	1301								6
7	1300								7
8	1299							**CALICHE** Hard, calcium carbonate cemented silty SAND (SM) and sandy SILT (ML) matrix supported conglomerate; subrounded to subangular basalt fragments.	8
9	1298							Bottom of exploration at 8.5 ft. BGS. Note: Refusal on caliche layer.	9

Legend

Sample Method: Grab Sample

Plastic Limit ⊢—⊣ Liquid Limit

Water Level: No Water Encountered

For detailed Soil Graphic Descriptions, see Figure A- 1.

Logged by: JGF
Approved by: NCS

DRAFT Figure No. A- 2
Sheet 1 of 1

150380 - Adams Road Bridges

eotechnical Exploration Log

Project Address & Site Specific Location	Coordinates (Lat,Lon WGS84)	Exploration Number
Quincy, Washington, Road 11 NW at Adams Rd, Bridge 334 West Abutment	,	TP-334-W

Contractor	Equipment	Sampling Method	Ground Surface (GS) Elev.
Grant County	Deere 410G Backhoe	DCPT / Grab	1307'

Operator	Exploration Method(s)	Work Start/Completion Dates	Top of Casing Elev.	Depth to Water (Below GS)
Mark	Backhoe	1/5/2016	NA	No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Completion	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
1	1306							**FILL** Loose, moist, brown, gravelly, silty SAND (SM); fine to coarse sand, subrounded to angular gravel of basalt and caliche fragments.	1
2	1305	Test pit backfilled with excavated soil.							2
3	1304		S1			DCPT= 2,4,4		**OUTBURST FLOOD DEPOSITS** Loose, to medium dense, moist, brown, SILT (ML); non-plastic silt, trace sand, trace fine gravel.	3
4	1303		S2			DCPT= 2,4,7			4
5	1302								5
6	1301								6
7	1300								7
8	1299							**CALICHE** Hard, calcium carbonate cemented silty SAND (SM) and sandy SILT (ML) matrix supported conglomerate; subrounded to subangular basalt fragments.	8
9	1298							Bottom of exploration at 9 ft. BGS. Note: Refusal on caliche layer.	9

Legend

Sample Method: Grab Sample

Plastic Limit ⊢—⊣ Liquid Limit

Water Level: No Water Encountered

For detailed Soil Graphic Descriptions, see Figure A- 1.

Logged by: JGF
Approved by: NCS

DRAFT
Figure No. A- 3
Sheet 1 of 1

150380 - Adams Road Bridges

Geotechnical Exploration Log

Aspect CONSULTING

Project Address & Site Specific Location	Coordinates (Lat,Lon WGS84)	Exploration Number
Quincy, Washington, Adams Road at Road 11.5 NW, Bridge 331 North Abutment	,	TP-331-N

Contractor	Equipment	Sampling Method	Ground Surface (GS) Elev.
Grant County	Deere 410G Backhoe	DCPT / Grab	1345'

Operator	Exploration Method(s)	Work Start/Completion Dates	Top of Casing Elev.	Depth to Water (Below GS)
Mark	Backhoe	1/5/2016	NA	No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Completion	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
1	1344							**FILL** Loose, slightly moist, brown, gravelly, silty SAND (SM); predominantly fine sand, fine to medium subrounded to subangular gravel of basalt and caliche fragments.	1
2	1343	Test pit backfilled with excavated soil.	S1			DCPT= 1,5,7		**OUTBURST FLOOD DEPOSITS** Loose, moist, brown, slightly sandy SILT (ML); non-plastic silt, trace gravel.	2
3	1342		S2			G			3
4	1341							**CALICHE** Hard, calcium carbonate cemented silty SAND (SM) and sandy SILT (ML) matrix supported conglomerate; subrounded to subangular basalt fragments.	4
5	1340								5
6	1339								6
7	1338							Bottom of exploration at 6.3 ft. BGS. Note: Refusal on caliche layer.	7
8	1337								8
9	1336								9

Legend

Sample Method: Grab Sample

Plastic Limit ⊢—⊣ Liquid Limit

Water Level: No Water Encountered

For detailed Soil Graphic Descriptions, see Figure A- 1.

Logged by: JGF
Approved by: NCS

DRAFT
Figure No. A- 4
Sheet 1 of 1

150380 - Adams Road Bridges

Geotechnical Exploration Log

Aspect CONSULTING

Project Address & Site Specific Location	Coordinates (Lat,Lon WGS84)	Exploration Number
Quincy, Washington, Adams Road at Martin Road, Bridge 330 South Abutment, Bridge 332 East Abutment	,	TP-330/332

Contractor	Equipment	Sampling Method	Ground Surface (GS) Elev.
Grant County	Deere 410G Backhoe	DCPT / Grab	1415'

Operator	Exploration Method(s)	Work Start/Completion Dates	Top of Casing Elev.	Depth to Water (Below GS)
Mark	Backhoe	1/5/2016	NA	No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Completion	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
1	1414							**FILL** Loose, slightly moist, brown, gravelly, slightly silty SAND (SP-SM) to very sandy, slightly silty GRAVEL (GP-GM); well-graded fine to coarse sand, fine to coarse subangular to angular gravel of basalt and caliche fragments.	1
2	1413	Test pit backfilled with excavated soil.							2
3	1412		S1			G			3
4	1411		S2			DCPT= 1,1,2		**OUTBURST FLOOD DEPOSITS** Very loose to loose, moist, brown, sandy SILT (ML); non-plastic silt, trace angular gravel of basalt and caliche.	4
5	1410							**CALICHE** Hard, calcium carbonate cemented silty SAND (SM) and sandy SILT (ML) matrix supported conglomerate; subrounded to subangular basalt fragments.	5
6	1409		S3			DCPT= >30		Bottom of exploration at 6 ft. BGS. Note: Refusal on caliche layer.	6
7	1408								7
8	1407								8
9	1406								9

Legend

Sample Method: ☑ Grab Sample

Plastic Limit ⟷ Liquid Limit

Water Level: No Water Encountered

For detailed Soil Graphic Descriptions, see Figure A- 1.

Logged by: JGF
Approved by: NCS

DRAFT
Figure No. A- 5
Sheet 1 of 1

Aspect CONSULTING	150380 - Adams Road Bridges		Geotechnical Exploration Log	
	Project Address & Site Specific Location: Quincy, Washington, Martin Road at Adams Road, Bridge 332 West Abutment		Coordinates (Lat,Lon WGS84): ,	Exploration Number: TP-332-W
Contractor: Grant County	Equipment: Deere 410G Backhoe	Sampling Method: DCPT / Grab	Ground Surface (GS) Elev.: 1414'	
Operator: Mark	Exploration Method(s): Backhoe	Work Start/Completion Dates: 1/5/2016	Top of Casing Elev.: NA	Depth to Water (Below GS): No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Completion	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
1	1413							**FILL** Loose to medium dense, slightly moist, brown, gravelly, silty SAND (SM); fine to coarse sand, fine to medium rounded to angular gravel of basalt and caliche fragments.	1
2	1412	Test pit backfilled with excavated soil.							2
3	1411		S1			DCPT= 2,5,10			3
4	1410		S2			DCPT= 7,10,>30		**OUTBURST FLOOD DEPOSITS** Medium dense, moist, brown, slightly gravelly, sandy SILT (ML); non-plastic silt, subrounded fine to coarse gravel.	4
5	1409								5
6	1408							**CALICHE** Hard, calcium carbonate cemented silty SAND (SM) and sandy SILT (ML) matrix supported conglomerate; subrounded to subangular basalt fragments.	6
7	1407								7
8	1406								8
9	1405							Bottom of exploration at 9 ft. BGS. Note: Refusal on caliche layer.	9

Legend

Sample Method: Grab Sample

Plastic Limit ⊢—⊣ Liquid Limit

Water Level: No Water Encountered

For detailed Soil Graphic Descriptions, see Figure A- 1.

Logged by: JGF
Approved by: NCS

DRAFT Figure No. A- 6
Sheet 1 of 1

150380 - Adams Road Bridges

Geotechnical Exploration Log

Aspect CONSULTING

Project Address & Site Specific Location	Coordinates (Lat,Lon WGS84)	Exploration Number
Quincy, Washington, Adams Road at Martin Road, Bridge 332 West Abutment	,	TP-330-N

Contractor	Equipment	Sampling Method	Ground Surface (GS) Elev.	
Grant County	Deere 410G Backhoe	DCPT / Grab	1416'	
Operator	**Exploration Method(s)**	**Work Start/Completion Dates**	**Top of Casing Elev.**	**Depth to Water (Below GS)**
Mark	Backhoe	1/5/2016	NA	No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Completion	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
1	1415							**FILL** Loose, moist, brown, gravelly, silty SAND (SM); fine to coarse sand, fine to medium subrounded to subangular gravel of basalt and caliche fragments.	1
2	1414	Test pit backfilled with excavated soil.							2
3	1413		S1			DCPT= 2,2,2		**OUTBURST FLOOD DEPOSITS** Very loose, moist, brown, slightly sandy SILT (ML); non-plastic silt, trace gravel.	3
4	1412								4
5	1411							**CALICHE** Hard, calcium carbonate cemented silty SAND (SM) and sandy SILT (ML) matrix supported conglomerate; subrounded to subangular basalt fragments.	5
6	1410								6
7	1409								7
8	1408							Bottom of exploration at 8 ft. BGS. Note: Refusal on caliche layer.	8
9	1407								9

Legend

Sample Method: Grab Sample

Plastic Limit ⊢—⊣ Liquid Limit

Water Level: No Water Encountered

For detailed Soil Graphic Descriptions, see Figure A- 1.

Logged by: JGF
Approved by: NCS

DRAFT
Figure No. A- 7
Sheet 1 of 1

ASPECT STANDARD EXPLORATION TEMPLATE P:\GINTW\PROJECTS\GRANTCOUNTYBRIDGES-150380.GPJ January 13, 2016

Review Stage:DRAFT Rev1

APPENDIX B

Geotechnical Laboratory Testing Results

CSI: Construction Special Inspection

MATERIALS TESTING & SPECIAL INSPECTION

104 East Ninth Street

Wenatchee, WA 98801

(509) 664-4843

STANDARD MECHANICAL SIEVE ASTM C-136 or ASTM D-422

CLIENT:	Aspect Consulting	LAB NO:	16-2969
PROJECT NO:	16-5	DATE RCVD:	1/7/2016
PROJECT:	Adams Rd Bridge	DATE TESTED:	1/7/2016
CONTRACTOR:		SUBMITTED BY:	Nick S.
LOCATION:	TP-334-E S-1	SAMPLE DEPTH:	1.5-2.0

DESCRIPTION: Sandy Silt (ML)

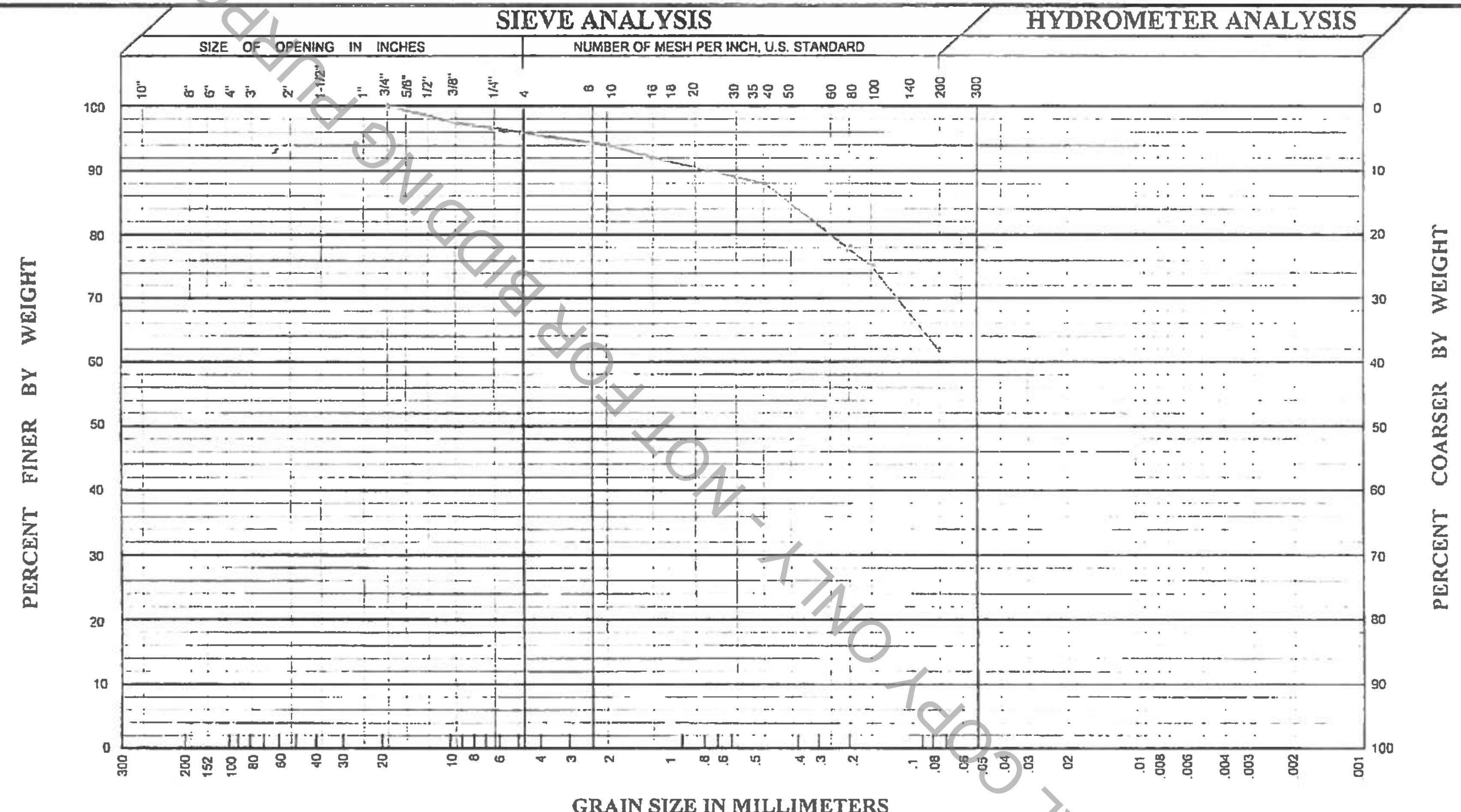
SIEVE SIZE	ACCUMULATED WT. RETAINED (grams)	PERCENT RETAINED	PERCENT PASSING		PERCENT FRACTURE
3/4"	0	0%	100%		
3/8	14.5	3%	97%		
#4	23.2	4%	96%		
10	33.4	6%	94%		
16	43.4	8%	92%		
30	58.5	11%	89%		
40	65.8	12%	88%		
80	116.9	22%	78%		
100	133.4	25%	75%		
200	206.2	38.2%	61.8%		
TOTAL	539.7				

FIELD MOISTURE: 13.6%

REMARKS:

TECHNICIAN: D. Nyland PROJ. MGR. J.HILLS

Note. All sample material will be discarded after 30 days of receipt unless otherwise notified



USDA	GRAVEL		SAND: V. Csa	Coarse	Mediu	Fine	V. Fine	Fines: SILT	CLAY	USDA

USC	COBBLES	GRAVEL: Coarse	Fine	SAND: Coarse	Medium	Fine	Fines: SILT	CLAY	USC

SAMPL	DEPTH - FT.	USC / USDA	CLASSIFICATION	NAT W/C %	LL	PI	PI
TP-334-E S-1	1.5-2'	USC	SANDY SILT	13.6			

Lab No: 16-2464
Proj. No: 16-5
Client: ASPECT
Project: ADAMS Co.
Date Rcv'd: 1-7-16
Date Tested: [illegible]

GRAIN SIZE CLASSIFICATION

CSI: Construction Special Inspection
104 East Ninth Street
Wenatchee, WA 98801
Phone: (509) 664-4843 Fax: (509) 663-8534

CSI: Construction Special Inspection

MATERIALS TESTING & SPECIAL INSPECTION

104 East Ninth Street

Wenatchee, WA 98801

(509) 664-4843

STANDARD MECHANICAL SIEVE ASTM C-136 or ASTM D-422

CLIENT:	Aspect Consulting	LAB NO:	16-2971
PROJECT NO:	16-5	DATE RCVD:	1/7/2016
PROJECT:	Adams Rd Bridge	DATE TESTED:	1/7/2016
CONTRACTOR:		SUBMITTED BY:	Nick S
LOCATION:	TP-334-E S-2	SAMPLE DEPTH:	4.0-4.5'

DESCRIPTION: Sandy Silt (ML)

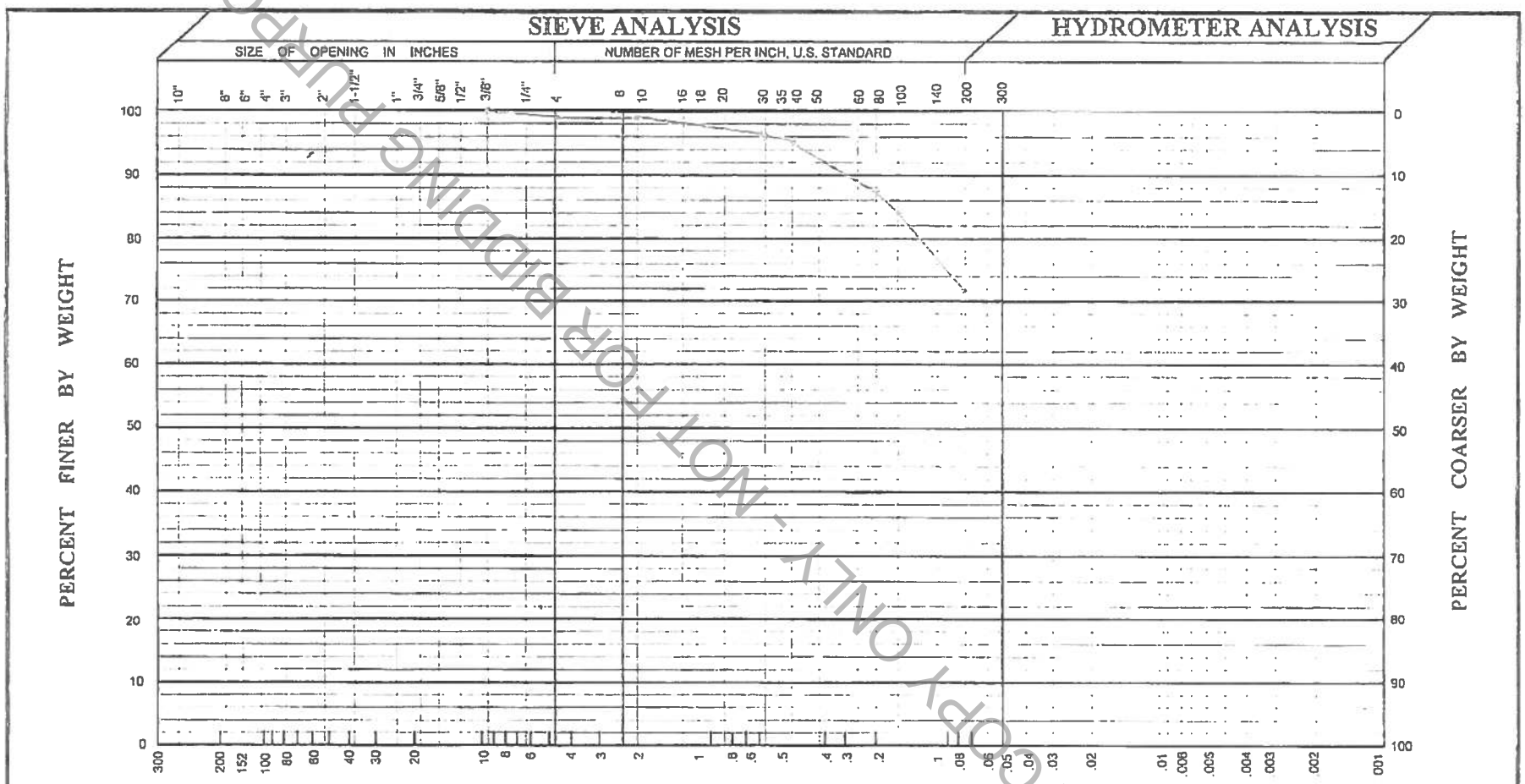
SIEVE SIZE	ACCUMULATED WT. RETAINED (grams)	PERCENT RETAINED	PERCENT PASSING		PERCENT FRACTURE
3/4"	0	0%	100%		
3/8	2.1	0%	100%		
#4	3.9	1%	99%		
10	9.3	1%	99%		
16	16.1	2%	98%		
30	28.6	4%	96%		
40	35.7	5%	95%		
80	94.3	13%	87%		
100	114.9	16%	84%		
200	208.8	28.2%	71.8%		
TOTAL	739.5				

FIELD MOISTURE: 14.2%

REMARKS:

TECHNICIAN: D. Nyland PROJ. MGR. J.HILLS

Note: All sample material will be discarded after 30 days of receipt ur less otherwise notified.



USDA	GRAVEL		V. Cse	Coarse	SAND Medium	Fine	V. Fine	Fines SILT	CLAY	USDA
USC	COBBLES	GRAVEL Coarse	Fine	Coarse	SAND Medium	Fine		Fines SILT	CLAY	USC

SAMPL	DEPTH - FT.	USC / USDA	CLASSIFICATION	NAT W/C %	LL	PL	PI
TP-3S4-B S-2	4-4.5'	USC	SANDY SILT	14.2			

Lab No: 16-227
Proj. No: 16-5
Client: ASPEC
Project: ADA
Date Rcv'd: 1-7-2
Date Tested:

GRAIN SIZE CLASSIFICATION

CSI: Construction Special Inspection
104 East Ninth Street
Wenatchee, WA 98801
Phone: (509) 664-4843 Fax: (509) 663-8534

CSI: Construction Special Inspection

MATERIALS TESTING & SPECIAL INSPECTION

104 East Ninth Street

Wenatchee, WA 98801

(509) 664-4843

STANDARD MECHANICAL SIEVE ASTM C-136 or ASTM D-422

CLIENT:	Aspect Consulting	LAB NO:	16-2972
PROJECT NO:	16-5	DATE RCVD:	1/7/2016
PROJECT:	Adams Rd Bridge	DATE TESTED:	1/7/2016
CONTRACTOR:		SUBMITTED BY:	Nick S.
LOCATION:	Tp-331-N S-2	SAMPLE DEPTH:	3.0-3.5

DESCRIPTION: Sandy Silt (ML)

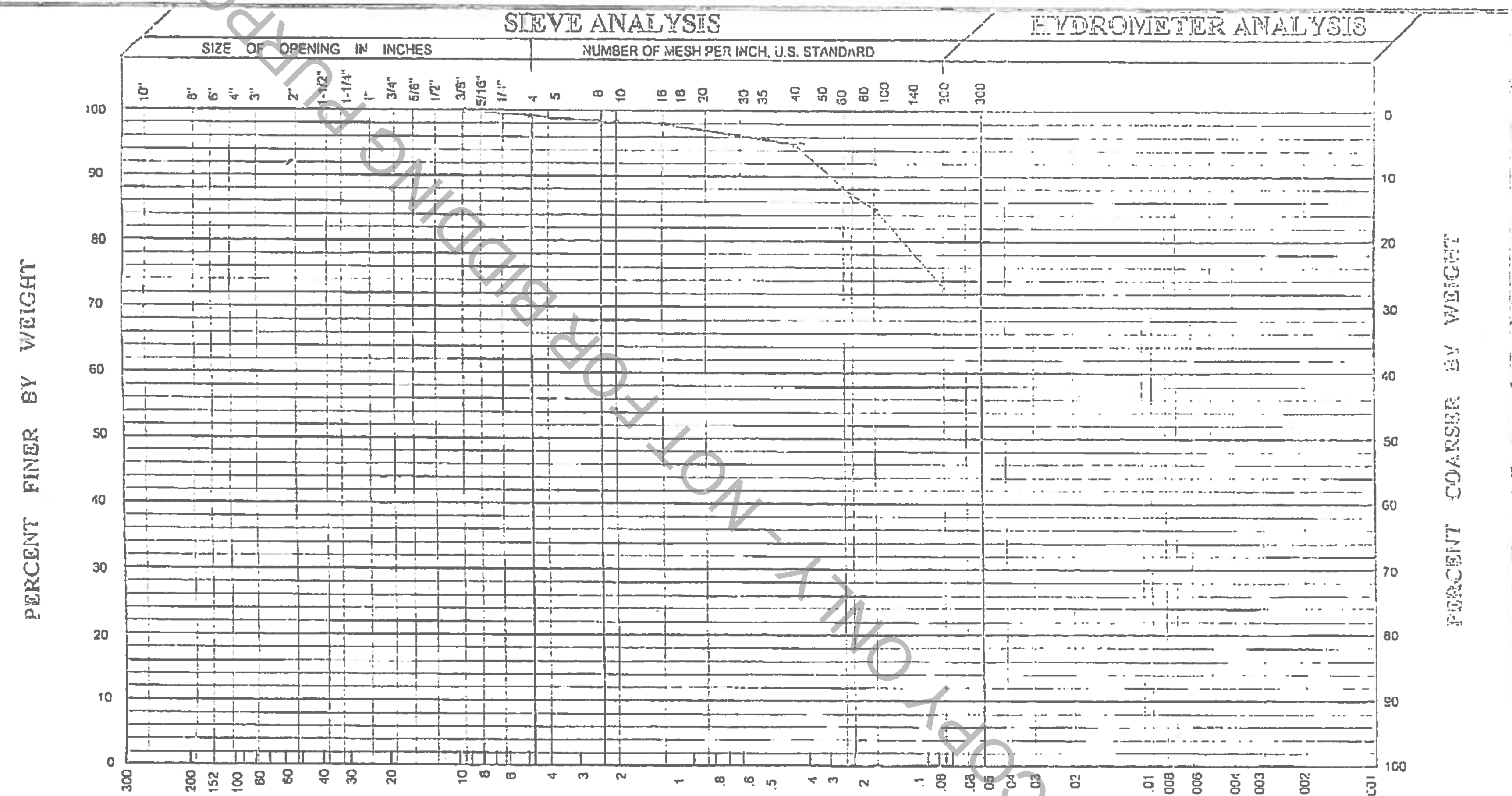
SIEVE SIZE	ACCUMULATED WT. RETAINED (grams)	PERCENT RETAINED	PERCENT PASSING		PERCENT FRACTURE
3/8"	0	0%	100%		
#4	6.6	1%	99%		
10	11.4	2%	98%		
16	18.0	2%	98%		
30	30.2	4%	96%		
40	36.6	5%	95%		
80	91.2	13%	87%		
100	110.0	15%	85%		
200	197.4	27.4%	72.6%		
TOTAL	720.5				

FIELD MOISTURE: 14.6%

REMARKS:

TECHNICIAN: D. Nyland PROJ. MGR. J.HILLS

Note: All sample material will be discarded after 30 days of receipt unless otherwise notified.



USDA	GRAVEL	SAND: V. Csa	SAND: Coarse	SAND: Mediu	SAND: Fine	SAND: V. Fine	Fines: SILT	Fines: CLAY	USDA

USC	COBBLES	GRAVEL: Coarse	GRAVEL: Fine	SAND: Coarse	SAND: Medium	SAND: Fine	Fines: SILT	Fines: CLAY	USC

SAMPLE	DEPTH - FT.	USC/USDA	CLASSIFICATION	NAT W/C %	LL	PL	PI
TP-331-W S-2	3-3.5'	USC	SANDY SILT	14.6			

Lab No: 16-2372
Proj. No. 16-5
Client: ASPECT
Project: ADAM...
Date Rcv'd. 1-7-16
Date Tested: 1-7-16

GRAIN SIZE CLASSIFICATION

CSI: Construction Special Inspection
104 East Ninth Street
Wenatchee, WA 98801
Phone: (509) 664-4843 Fax: (509) 663-8534

CSI: Construction Special Inspection

MATERIALS TESTING & SPECIAL INSPECTION

104 East Ninth Street

Wenatchee, WA 98801

(509) 664-4843

STANDARD MECHANICAL SIEVE ASTM C-136 or ASTM D-422

CLIENT:	Aspect Consulting	LAB NO:	16-2970
PROJECT NO:	16-5	DATE RCVD:	1/7/2016
PROJECT:	Adams Rd Bridge	DATE TESTED:	1/7/2016
CONTRACTOR:		SUBMITTED BY:	Nick S.
LOCATION:	TP-332/330 S-1	SAMPLE DEPTH:	2.5 - 3.0

DESCRIPTION: Silty, Sandy Gravel

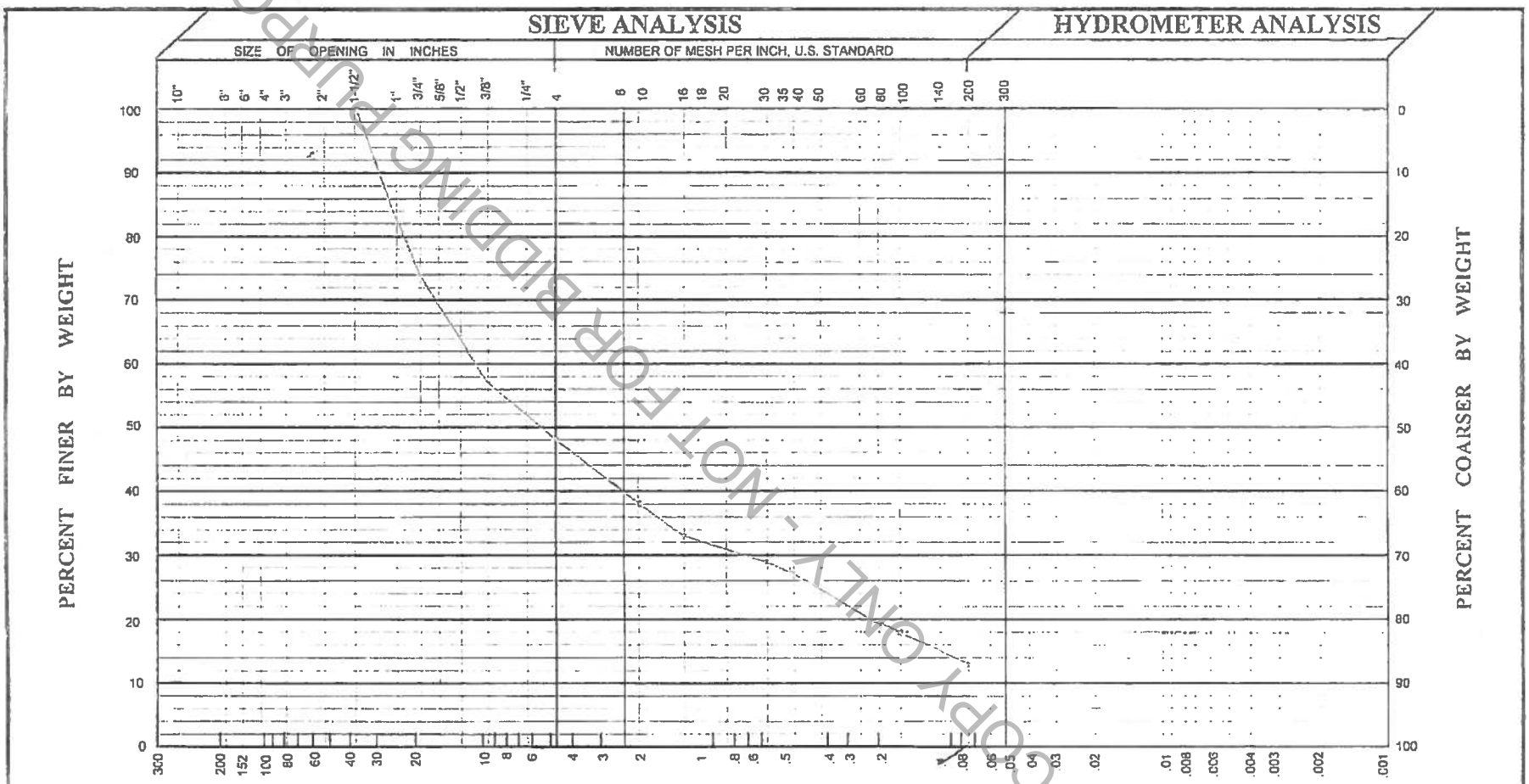
SIEVE SIZE	ACCUMULATED WT. RETAINED (grams)	PERCENT RETAINED	PERCENT PASSING		PERCENT FRACTURE
1 1/2"	0	0%	100%		
1	225.3	18%	82%		
3/4	328.4	26%	74%		
3/8	545.4	43%	57%		
#4	660.1	52%	48%		
10	787.9	62%	38%		
16	847.8	67%	33%		
30	902.3	71%	29%		
40	924.8	73%	27%		
80	1020.8	81%	19%		
100	1041.2	82.1%	17.9%		
200	1102.2	87.0%	13.0%		
TOTAL	1267.6				

FIELD MOISTURE: 9.5%

REMARKS:

TECHNICIAN: D. Nyland PROJ. MGR. J.HILLS

Note: All sample material will be discarded after 30 days of receipt unless otherwise notified.



GRAIN SIZE IN MILLIMETERS

USDA	GRAVEL		V. Cse	Coarse	Medium	Fine	V. Fine	Fines: SILT	Fines: CLAY
			SAND						
USC	COBBLES	Coarse GRAVEL	Fine GRAVEL	Coarse SAND	Medium SAND	Fine SAND		Fines: SILT	Fines: CLAY

SAMPL	DEPTH - FT.	USC / USDA	CLASSIFICATION	NAT W/C %	LL	PI	PI
TP-332 330 S-1	2.5-3'	USC	SILTY SANDY GRAVEL	9.5			

Lab No: 16-2472
Proj. No: 16-7
Client: ASPECT
Project: ADAMS RD.
Date Rcv'd: 1-7-16
Date Tested: 1-7-16

GRAIN SIZE CLASSIFICATION

CSI: Construction Special Inspection
104 East Ninth Street
Wenatchee, WA 98801
Phone: (509) 664-4843 Fax: (509) 663-8534

CSI: Construction Special Inspection
MATERIALS TESTING & SPECIAL INSPECTION
104 East Ninth Street
Wenatchee, WA 98801
(509) 664-4843

MOISTURE DENSITY RELATIONSHIP ASTM-D1557 or ASTM D-698 PROCTOR
UNIT WEIGHT AND WATER CONTENT CORRECTIONS FOR SOILS CONTAINING OVERSIZE PARTICLES - ASTM D-4718

CLIENT:	Aspect Consulting	LAB NO:	16-2973
PROJ. NO:	16-5	SIEVE NO:	16-2972
PROJECT:	Adams Rd. Bridge	DATE TESTED:	1/7/2016
CONTRACTOR:	n/a	TEST METHOD:	D1557-A
LOCATION:	TP-311-N S-2 3.0-3.5'	SUBMITTED BY:	Nick S.

SAMPLE DESCRIPTION: Sandy Silt (ML)

OPTIMUM MOISTURE: 14.8 PCT. + #4 =

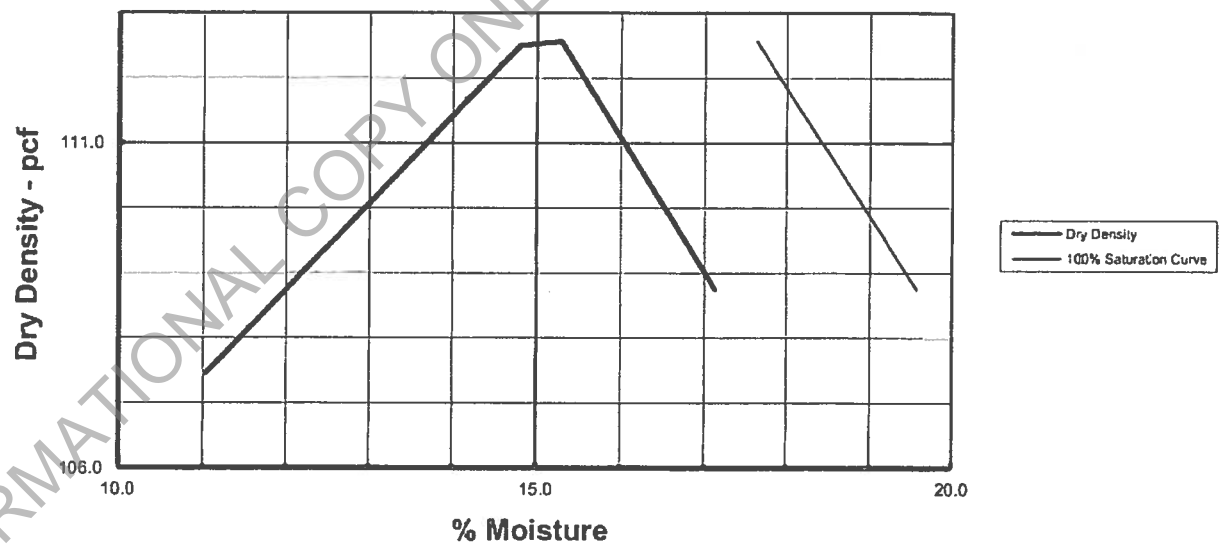
MAXIMUM DRY DENSITY: 112.5 * PCT. + 3/8" =

PCT. + 3/4" =

PREPARATION METHOD: DRY MOIST x

WATER ADDED	-100	-50		0	50		
MOLD + WET SOIL	13.19	13.36		13.54	13.46		
WEIGHT OF MOLD	9.20	9.20		9.20	9.2		
WT. OF WET SOIL	3.99	4.16		4.34	4.26		
WET DENSITY PCF	119.3	124.4		129.8	127.4		

PAN/PAN NUMBER	G-1	B-1		X-1	A-1		
PAN + WET SOIL	899.2	965.0		1063.2	929.5		
PAN + DRY SOIL	828.6	875.7		948.5	820.7		
WEIGHT OF PAN	188.5	188.8		198.2	185.4		
WT. OF WATER	70.6	89.3		114.7	108.8		
WT. OF DRY SOIL	640.1	686.9		750.3	635.3		
PERCENT WATER	11.0	13.0		15.3	17.1		
DRY DENSITY PCF	107.4	110.1		112.6	108.7		



* Rock Correction using Bulk Specific Gravity of 2.65 Calculated Estimated x

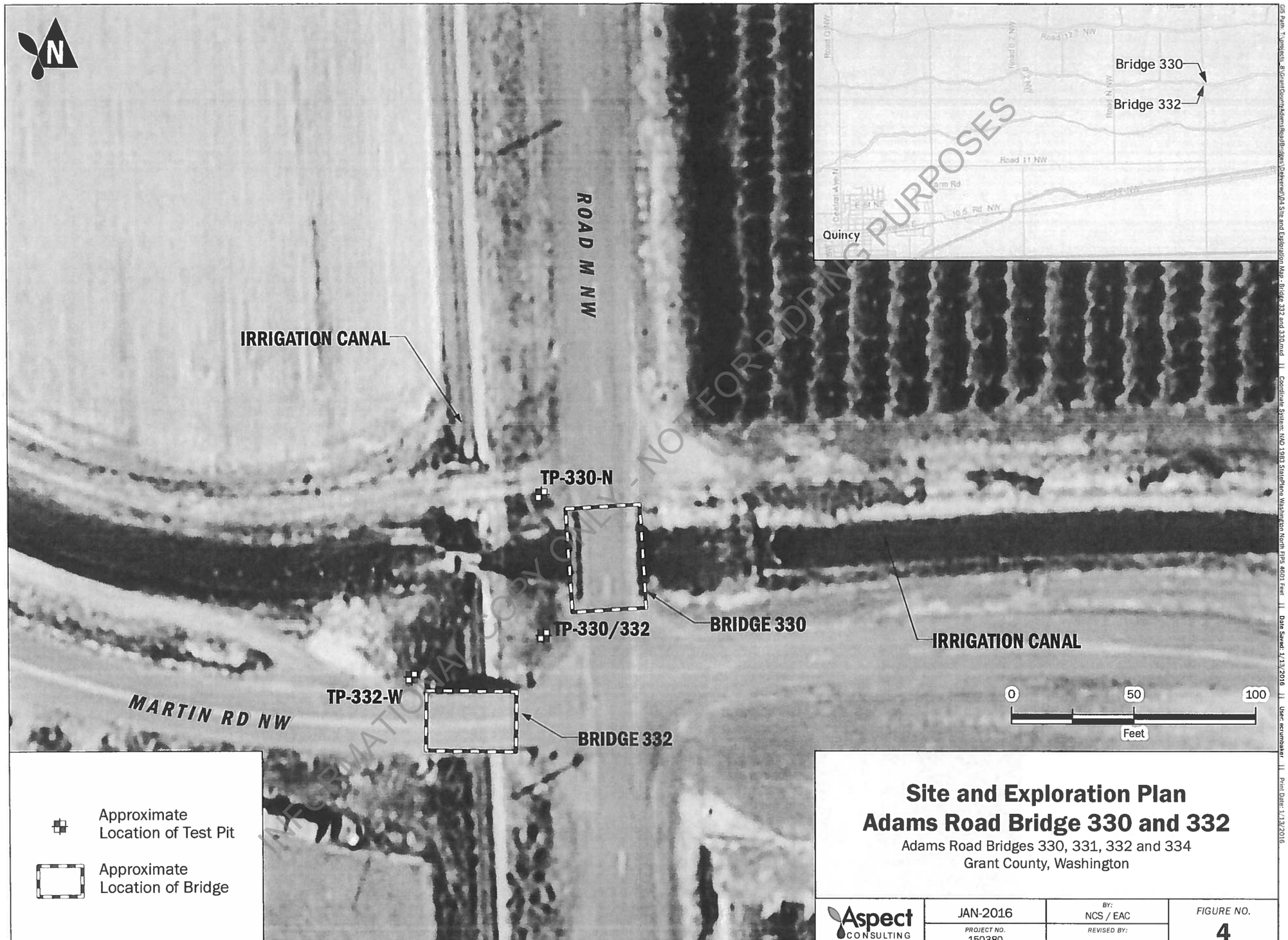
* Moisture Correction = %

Field Moisture = 14.6 % Rammer: Manual x Mechanical

REMARKS:

TECHNICIAN: R. GILL PROJECT MGR: J.HILLS

Proctor 30 - Rev.1/2009



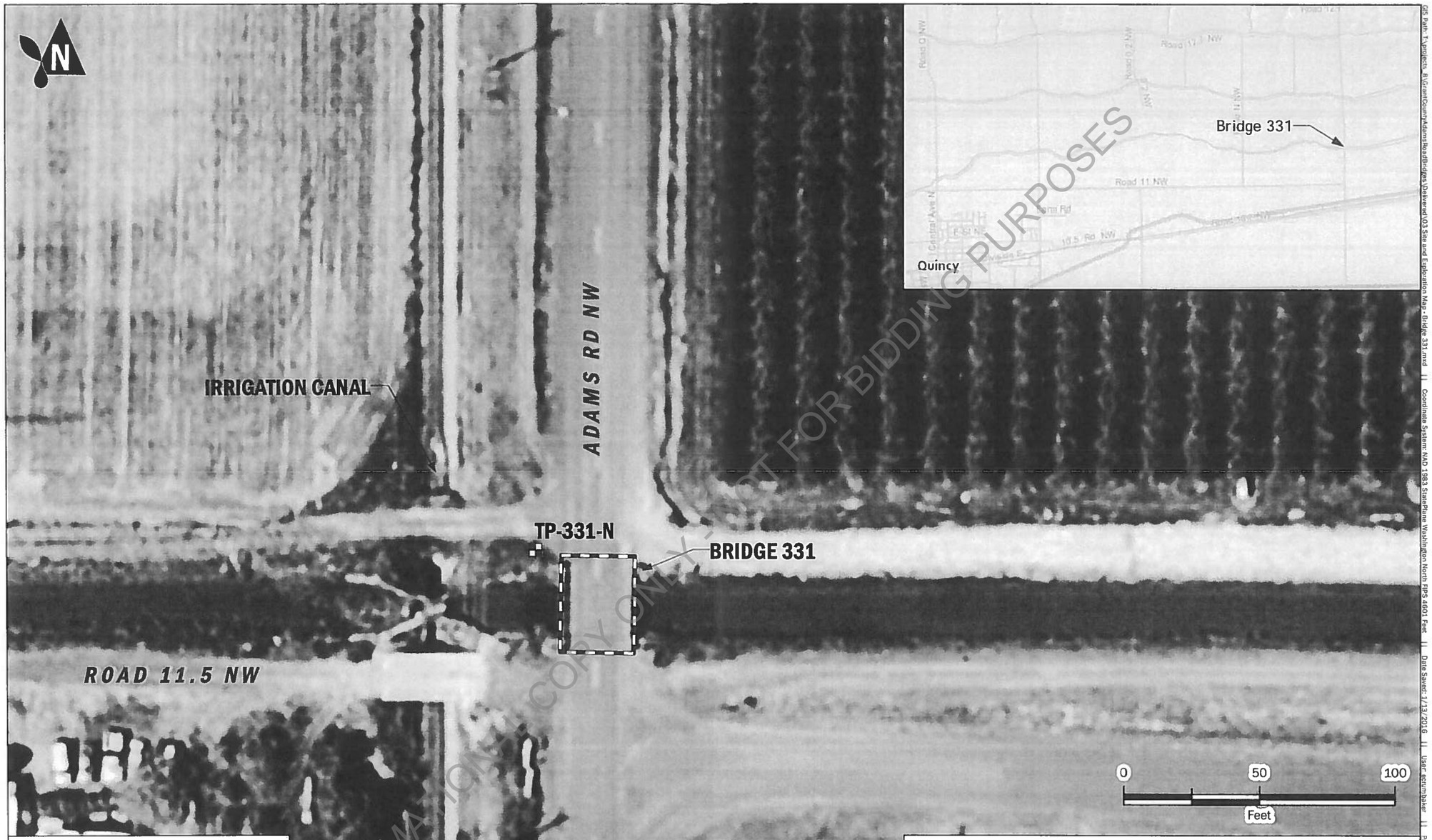
Site and Exploration Plan
Adams Road Bridge 330 and 332

Adams Road Bridges 330, 331, 332 and 334
Grant County, Washington

Aspect Consulting	JAN-2016	BY: NCS / EAC	FIGURE NO. 4
	PROJECT NO. 150380	REVISED BY: ---	

Basemap Layer Credits || Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

GIS Path: T:\projects_8\Grant County\Adams Road Bridges\Delivered\04 Site and Exploration Map - Bridge 332 and 330.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 1/13/2016 || User: ecrumbaker || Print Date: 1/13/2016



Site and Exploration Map
Adams Road Bridge 331

Adams Road Bridges 330, 331, 332 and 334
Grant County, Washington

Aspect CONSULTING	JAN-2016	BY: NCS / EAC	FIGURE NO. 3
	PROJECT NO. 150380	REVISED BY: ---	

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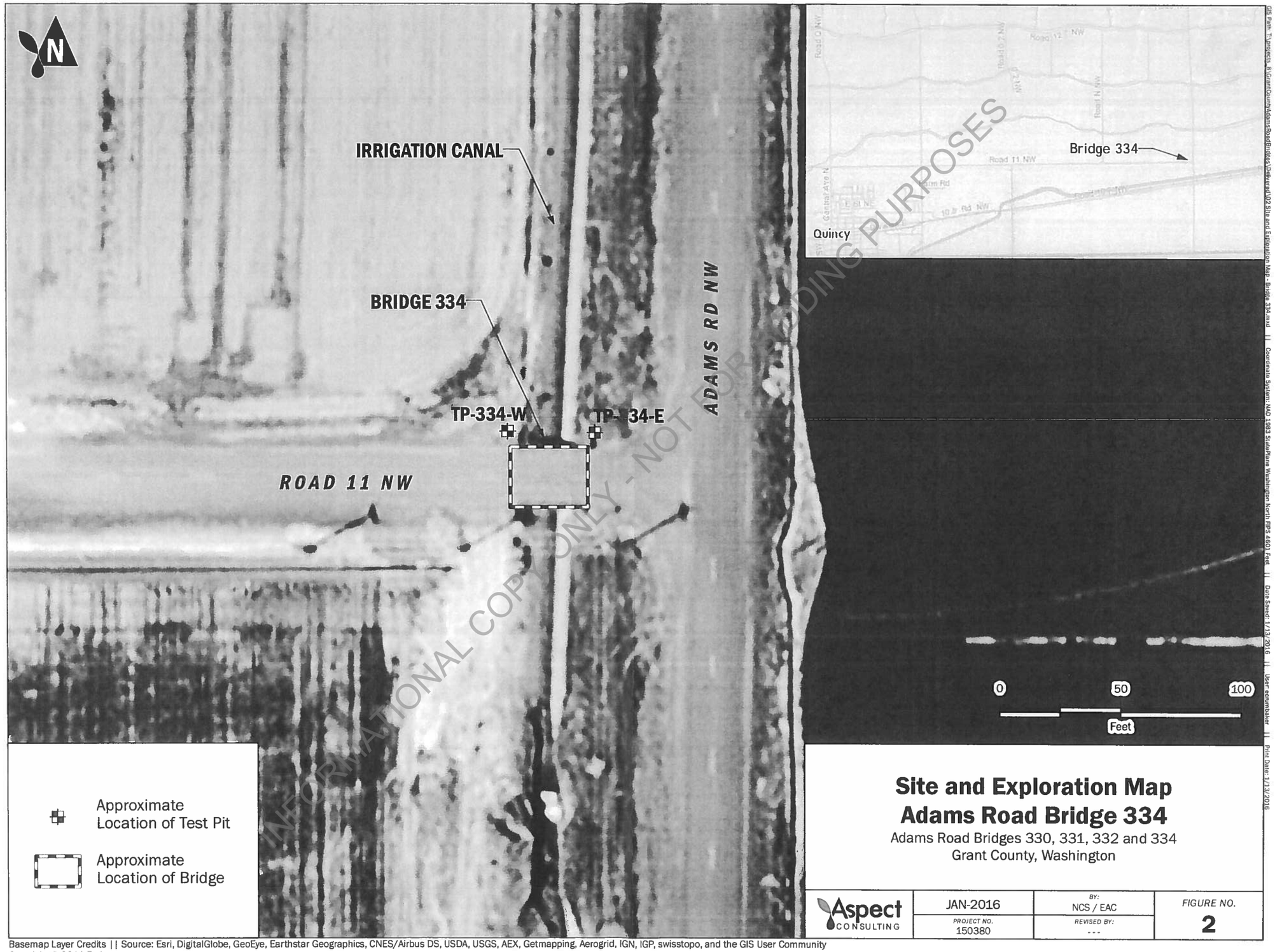


Approximate Location of Test Pit

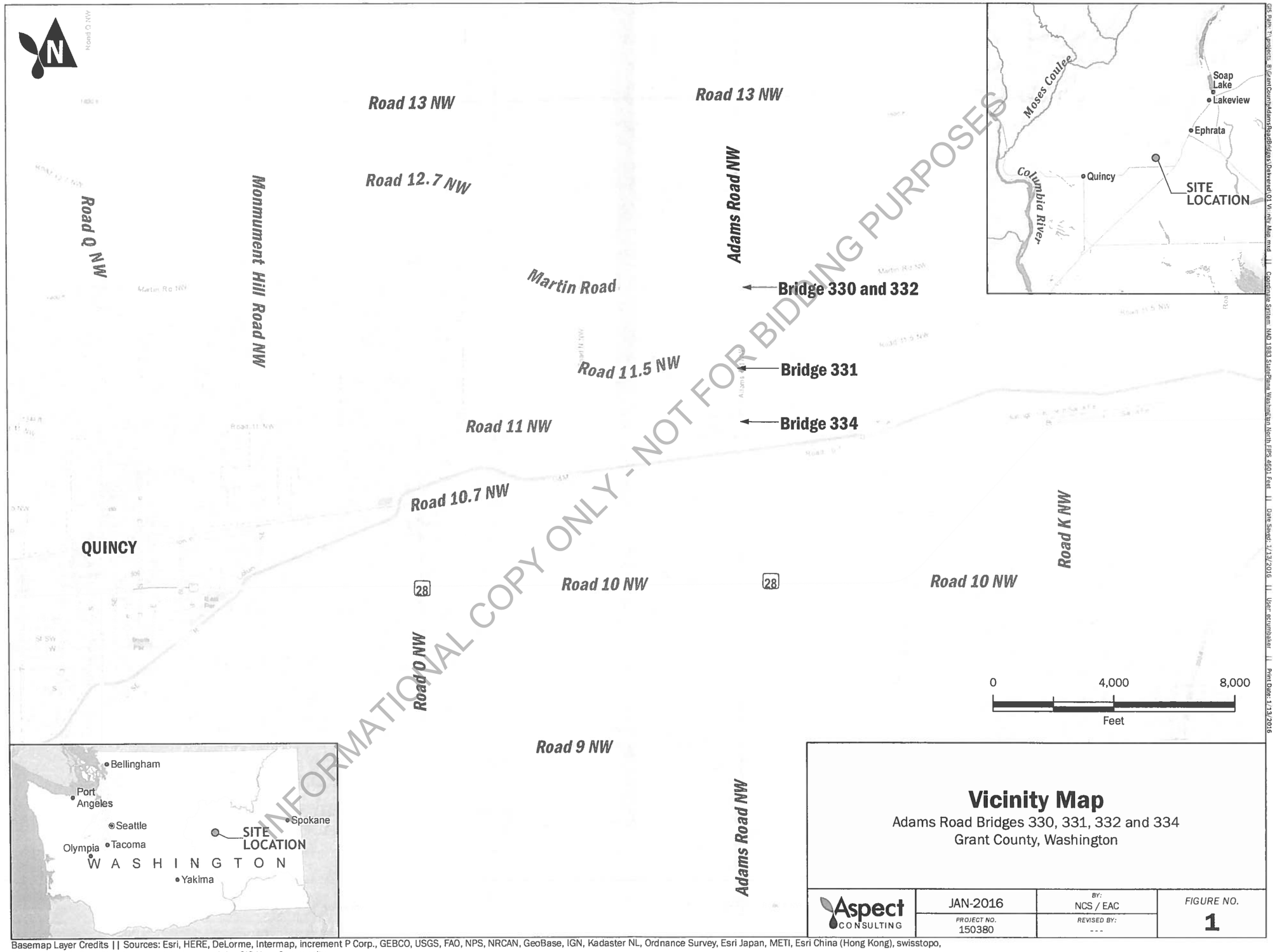
Approximate Location of Bridge

Site and Exploration Map
Adams Road Bridge 334

Adams Road Bridges 330, 331, 332 and 334
Grant County, Washington

Aspect CONSULTING	JAN-2016	BY: NCS / EAC	FIGURE NO. 2
	PROJECT NO. 150380	REVISED BY: ---	

GIS Path: T:\projects_8\Grant County\Adams Road Bridges\Delivered\102 Site and Exploration Map - Bridge 334.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 1/13/2016 || User: ecumbaker || Print Date: 1/13/2016



Vicinity Map

Adams Road Bridges 330, 331, 332 and 334
Grant County, Washington

Aspect CONSULTING	JAN-2016	BY: NCS / EAC	FIGURE NO. 1
	PROJECT NO. 150380	REVISED BY: ---	

GIS Path: T:\projects_8\GrantCounty\AdamsRoadBridges\Delivered\01 Vicinity Map.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 1/13/2016 || User: ecrumbaker || Print Date: 1/13/2016