

Invitation to Bid No. 69350

Special Trackwork

Issued by
Port of Tacoma
One Sitcum Plaza
P.O. Box 1837
Tacoma, WA 98401-1837

The Port reserves the right to modify this schedule at the Port's discretion. Notification of changes in the response due date would be posted on the Port website or as otherwise stated herein.

Solicitation Schedule	Date
ITB Issued	9/9/2015
Bid Due Date/Time	9/29/2015 @ 2:00 PM (PST)
ITB Information	
ITB Coordinator	Sharon Rothwell
E-mail Address	procurement@portoftacoma.com
Phone	(253) 592-6758

Please submit all correspondence via e-mail directly to the ITB coordinator and include the **ITB** #69350 in the subject line.

## 1. PURPOSE

In this solicitation the Port seeks to obtain Special Trackwork as detailed in this ITB. The Special Trackwork will be used in construction the North Lead Rail Improvement project.

To learn more about the Port of Tacoma, visit www.portoftacoma.com.

#### Single Award

With this solicitation, the Port intends to award one contract and does not anticipate multiple awards. Regardless, the Port reserves the right to make multiple or partial awards.

## 2. SOLICITATION OBJECTIVES

The Port expects to achieve the following outcomes through this solicitation:

- To obtain quality Special Trackwork delivered in a timely manner.
- · Get the best value; and
- Accurate and timely invoicing.

## 3. MINIMUM QUALIFICATIONS

There are no minimum qualifications.

## 4. LICENSING AND BUSINESS TAX REQUIREMENTS

This solicitation and resultant contract may require additional licensing as listed below. The Vendor needs to meet all licensing requirements that apply to their business immediately after contract award or the Port may reject the Vendor.

Companies must license, report and pay revenue taxes for the Washington State business License (UBI#) and Tacoma Business License, if they are required to hold such a license by the laws of those jurisdictions. The Vendor should carefully consider those costs prior to submitting their offer, as the Port will not separately pay or reimburse those costs to the Vendor.

#### State Business Licensing and associated taxes

Before the contract is signed, provide the State of Washington business license (a State "Unified Business Identifier" known as a UBI#) and a Contractor License if required. If the State of Washington has exempted your business from State licensing (for example, some foreign companies are exempt and in some cases, the State waives licensing because the company does not have a physical presence in the State), then submit proof of that exemption to the Port. All costs for any licenses, permits and associated tax payments due to the State as a result of licensing shall be borne by the Vendor and not charged separately to the Port. Instructions and applications are at <a href="http://bls.dor.wa.gov/file.aspx">http://bls.dor.wa.gov/file.aspx</a>

## 5. SPECIFICATIONS

See Attachment A, Offer sheet and attachments C & D, plans, specifications, and drawings, as listed below:

- 1. Attachment D R10, Rail Details
- 2. Attachment D R11, No. 9 Turnout Plan
- 3. Attachment D R12, No. 9 Double Diamond Crossing
- 4. Attachment D R13, No. 9 Crossover Plan
- 5. Attachment C Section 34 11 23 Special Trackwork

Vendor to confirm delivery date prior to beginning fabrication. Desired Delivery date for material is as follows:

Delivery	Description	Qty.	U/M	Earliest Delivery Date	Latest Delivery Date
1	Left Hand Turnout Non – Insulated Left Hand – Left Hand Crossover – Non-	7 2	EA EA	5/27/16	8/8/16
	Insulated, 14' Track Center Left Hand – Left Hand Crossover – Non-Insulated,	3	EA		
	15' Track Center Right Hand – Left Hand Crossover – Non- Insulated, 15' Track Center	1	EA		
2	Left Hand Turnout Insulated Right Hand Turnout Non-Insulated	2	EA EA	11/18/16	1/9/17
	Right Hand Turnout Insulated Right Hand – Right Hand Crossover – Insulated,	2	EA EA		
	14' Track Center  Double Diamond Crossing (2 crossings)	1	EA		
3	Left Hand Turnout Non-Insulated Left Hand Turnout Insulated Right Hand Turnout Non-Insulated Right Hand Turnout Insulated	4 1 1 1	EA EA EA	12/20/16	2/6/17

## **Right to Cancel**

The Port reserves the right to cancel or reissue all or part of this Solicitation at any time, as allowed by law, without obligation or liability.

#### **Expansion Clause**

Expansion of scope of this contract may occur when in the opinion of the Port Contracts and Purchasing Department the circumstances meet the following criteria:

- (a) It could not be separately bid:
- (b) The change is for a reasonable purpose;
- (c) The change was not reasonably known to either the Port or Contractors at time of bid or else was mentioned as a possibility in the bid (such as a change in environmental regulation or other law);
- (d) The change is not significant enough to reasonably regard it as an independent body of work;
- (e) The change could not have attracted a different field of competition; and
- (f) And the change does not vary the essential identity or main purpose of the contract.

Agreement to such a contract modification must be mutual. Only the Port Contracts and Purchasing department has the authority make such agreements on behalf of the Port. No other Port department has the authority to make such written notices. Written formal notices will document all expansions. The Port Purchasing shall make this determination, and may make exceptions for immaterial changes, emergency or sole source conditions, or for other situations as required in the opinion of the Port purchasing manager.

Note that certain changes are not considered an expansion of scope, including an increase in quantities ordered, the exercise of options and alternates in the bid, or ordering of work originally identified within the originating solicitation. Approval of such changes will be by written order issued by the ITB Coordinator.

#### **Prohibition on Advance Payments**

The Port does not accept requests for early payment, down payment, or partial payment, unless the ITB specifically allows such. Maintenance subscriptions may be paid up to one year in advance provided that should the Port

terminate early, the amount paid shall be reimbursed to the Port on a prorated basis; all other expenses are payable net 30 days after receipt and acceptance of satisfactory compliance.

#### **Taxes on Invoice**

Contractor shall calculate and enter the appropriate state and local sales tax on all invoices. Tax is to be computed on new items after deduction of any trade-in in accordance with <a href="Chapter 458-296-127-02620-247">Chapter 458-296-127-02620-247</a> WAC.

#### Identification

All invoices, correspondence, and other written materials associated with this Contract shall be identified by the Contract number or the applicable Purchaser's order number.

#### Invoicing

Invoices are to detail the materials provided or services performed each month and must identify the Contract number or Purchase Order number on the invoice. Submit invoices electronically to cpinvoices@portoftacoma.com

#### **Price Protection**

For the term of the Contract, pricing for all Services will be no greater than the prices quoted in the Contractor's Bid. If, however, during any term of the Contract lower prices and rates become effective for like quantities of Services under similar terms and conditions, through reduction in Contractor's list prices, promotional discounts, or other circumstances, Purchasers must be given immediate benefit of such lower prices and rates.

#### No Additional Charges

Unless otherwise specified in the Solicitation, no additional charges by the Contractor will be allowed including, but not limited to: handling charges such as packing, wrapping, bags, containers, reels; or the processing fees associated with the use of credit cards. Notwithstanding the foregoing, in the event that market conditions, laws, regulations or other unforeseen factors dictate, at the Contract Administrators sole discretion, additional charges may be allowed.

## **Subcontracts and Assignment**

Contractor shall not Subcontract, assign, or otherwise transfer its obligations under this Contract without the prior written consent of the Contract Administrator. Contractor shall provide a minimum of 30 calendar days advance notification of intent to Subcontract, assign, or otherwise transfer its obligations under this Contract. Violation of this condition may be a material breach establishing grounds for Contract termination. The Contractor shall be responsible to ensure that all requirements of the Contract shall flow down to any and all Subcontractors. In no event shall the existence of a Subcontract operate to release or reduce the liability of Contractor to the Port of Tacoma for any breach in the performance of the Contractor's duties.

#### Specifications by Reference

Any material specified by reference to the number, symbol or title of a specific standard such as a commercial standard, federal specifications, a trade association standard, or other similar standard, will comply with the requirements in the latest revision thereof, and any amendment or supplement thereof in effect on the date of the ITB, except as limited to type class or grade, or modified in the specification, shall have full force and effect as though printed in specifications.

## **Quality of Labor and Material**

The entire work shall be done in every particular in a good substantial and workman like manner, fully up to the standards of first class work of this manner.

#### **Substitutions**

The product, equipment, materials, or methods described or noted within the bidding documents are to establish a standard of quality, function, appearance, and dimension, and shall be deemed to be followed by the words "or equal". A proposed substitute shall have approved equal attributes in all respects and the Port shall be the sole judge of the equality of the product, equipment, materials, or methods offered in the substitution.

#### Warranty

The vendor shall guarantee the satisfactory operation of all materials. Materials and equipment furnished under this contract, shall be repaired or replaced to the satisfaction of the Port, for any defective materials, equipment or workmanship which may discovered.

Without invalidating this guarantee the Port of Tacoma may procure products from the most available source when necessary to eliminate or hold downtime to a minimum. Charge back will be to Contractor. All costs for replacements or repairs under the guarantee to be borne by the Contractor. The Port of Tacoma will coordinate any procurement to guarantee items with the Contractor before placing order.

The Port of Tacoma will deal only with the Contractor and not with second or third parties supplying to the Contractor, insofar as guarantees are concerned.

Manufacturer's warranties/product liability responsibilities apply in addition to the terms addressed in the contract.

#### Time

The parties expressly agree that time is of the essence of this contract, and that any unexcused delay in the completion of work will cause inconvenience and expense to the Port, its lessees, and other users of its facilities.

#### **Extension of Time**

Any extension of delivery and completion time under this contract must have written approval of the Port of Tacoma. In the event of delay in completion of the work caused by acts of God, of the public enemy, of the Port of Tacoma, of another Contractor in the performance of a contract with the owner, or caused by fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes or weather, the sole remedy of the Contractor will be an equitable extension of time allowed for completion.

#### **Contractor Authority and Infringement**

Contractor has authorization to sell under this Contract, only those services stated herein and allowed for by the provisions of this Contract. Contractor shall not represent to any Purchasers that they have the Contract authority to sell any other materials, supplies, services, and/or equipment. Further, Contractor may not intentionally infringe on other established Port Contracts.

## 6. INSTRUCTIONS, INFORMATION, AND COMMUNICATION

#### **Bid Procedures and Process**

This chapter details Port procedures for directing the ITB process. The Port reserves the right in its sole discretion to reject the Bid of any Contractor that fails to comply with any procedures outlined in this chapter.

#### **Communications**

All Contractor communications concerning this acquisition shall be directed to the ITB Coordinator shown below:

Sharon Rothwell (253) 592-6758 srothwell@portoftacoma.com

Unless authorized by the ITB Coordinator, no other Port official or Port employee is empowered to speak for the Port with respect to this solicitation. Any Contractor seeking to obtain information, clarification, or interpretations from any other Port official or Port employee other than the ITB Coordinator is advised that such material is used at the Contractor's own risk. The Port will not be bound by any such information, clarification, or interpretation.

Following the bid deadline, Contractors shall continue to direct communications to only the Port ITB Coordinator. The ITB Coordinator will send out information to responding companies as decisions are concluded.

#### Questions

Contractors are encouraged to submit any questions they may have regarding this procurement. Getting answers during the procurement process allows Contractors to make a more informed bid offer. Questions are to be submitted to the ITB Coordinator no later than the date and time on page 1, in order to allow sufficient time for the Port ITB Coordinator to consider the question before the bids are due. The Port prefers such questions to be through e-mail directed to the Port ITB Coordinator e-mail address. Failure to request clarification of any inadequacy, omission, or conflict will not relieve the Contractor of any responsibilities under this Bid or any subsequent contract. It is the responsibility of the Contractor to assure that they received responses to the questions if any are issued.

## Changes to the ITB/Addenda

A change may be made by the Port if, in the sole judgment of the Port, the change will not compromise the Port's objectives in this acquisition. A change to this ITB will be made by formal written addendum issued by the Port's ITB Coordinator. Addenda issued by the Port shall become part of this ITB specification and will be included as part of the final Contract. It is the responsibility of the interested Contractor to assure that they have received Addenda.

#### Receiving Addenda and/or Question and Answers

The ITB Coordinator will make efforts to provide you notice, by posting addendums have been on the Port website. Contractors are encouraged to register as Plan Holders for the specific solicitation you are bidding on so automatic notification are sent out any time changes are made. Notwithstanding efforts by the Port, it remains the obligation and responsibility of the Contractor to learn of any addendums, responses, or notices issued by the Port. Such efforts by the Port to provide notice or to make it available on the website do not relieve the Contractor from the sole obligation for learning of such material.

Some third-party services independently post Port of Tacoma bids on their websites. The Port does not guarantee that such services have accurately provided Contractors with all information particularly Addendums or changes to bid date/time.

All Bids sent to the Port shall be considered compliant to all Addendums, with or without specific confirmation from the Contractor that the Addendum was received and incorporated. However, the ITB Coordinator can reject the Bid if it does not reasonably appear to have incorporated the Addendum. The ITB Coordinator could decide that the Contractor did incorporate the Addendum information, or could determine that the Contractor failed to incorporate the Addendum changes and that the changes were material so that the ITB Coordinator must reject the Offer, or the ITB Coordinator may determine that the Contractor failed to incorporate the Addendum changes but that the changes were not material and therefore the Bid may continue to be accepted by the ITB Coordinator.

#### **Bid Opening**

The Bid shall be publicly opened by the Port at the date and time specified, at the Port Purchasing office.

## **Bid and Price Specifications**

Contractor shall provide their Offer on forms provided by the Port, indicating unit prices for each item, if applicable, attaching additional pages if needed. In the case of difference between the unit price and the extended price, the Port shall use the unit price. The Port may correct the extended price accordingly. Unless specified otherwise on the Offer Form, Contractor shall quote prices F.O.B. Destination, with freight prepaid and allowed. All prices are to be in US Dollars.

#### Do Not Submit Extra Comments, Explanations, Information or Changes

The Port will reject bids that the ITB Coordinator finds to be taking material exception to the Port specifications and Port contract. Therefore, be careful that you do not add information or explanations on your Offer form. Do not take exceptions, do not offer alternatives (unless the Port specifically requests), and do not mark the Offer with changes to specifications or the contract. Do not attach your own boilerplate. Even adding an explanation about your pricing could result in rejection of your bid. This decision will be made in the sole opinion of the ITB Coordinator. If the Offer Form doesn't seem to adequately address your concern or clarification, call the ITB Coordinator for direction.

#### **Partial and Multiple Awards**

Unless stated to the contrary in the Solicitation, the Port reserves the right to name a partial and/or multiple awards, in the best interest of the Port. Contractors are to prepare pricing and Offers given the Port's intention to utilize the right to a partial or multiple award, in the best interest of the Port. Further, the Port may eliminate an individual line item when calculating award, in order to best meet the needs of the Port, if a particular line item is not routinely available or is a cost that exceeds the Port funds.

#### **Prompt Payment Discount**

On the Offer form or submittal, the Contractor may state a prompt payment discount term, if the Contractor offers one to the Port. A prompt payment discount term of ten or more days will be considered for bid tabulation.

#### **Interlocal Purchasing Agreements**

This is for information only and consent of the Contractor, and will not be used to determine award. RCW 39.34 allows cooperative purchasing between public agencies, nonprofits and other political subdivisions. Public agencies

that file an Intergovernmental Cooperative Purchasing Agreement with the Port of Tacoma may purchase from Contracts established by the Port. The seller agrees to sell additional items at the bid prices, terms and conditions, to other eligible governmental agencies that have such agreements with the Port. The Port of Tacoma accepts no responsibility for the payment of the purchase price by other governmental agencies. Should the Contractor require additional pricing for such purchases, the Contractor is to name such additional pricing upon Offer.

#### **Contract Terms and Conditions**

Contractors are to carefully review all specifications, requirements, Terms and Conditions (see Attachment #D), and insurance requirements. Submittal of a response is agreement to all Terms and Conditions. All specifications, requirements, terms and conditions are mandatory and all submittals should anticipate full compliance with no exceptions to these Terms and Conditions.

## **Incorporation of ITB and Bid in Contract**

This ITB and the Contractor's response, including all promises, warranties, commitments, and representations made in the successful Bid, shall be binding and incorporated by reference in the Port's contract with the Contractor.

#### **Effective Dates of Offer**

Offered prices in Bid must remain valid until Port completes award. Should any Contractor object to this condition, the Contractor must provide objection through a question and/or complaint to the ITB Coordinator prior to the bid closing date.

## **Cost of Preparing Bids**

The Port will not be liable for any costs incurred by the Contractor in the preparation and presentation of Bids submitted in response to this ITB including, but not limited to, costs incurred in connection with the Contractor's participation in demonstrations and the pre-Bid conference.

## **Contractor Responsibility to Examine Documents**

It is the Contractor responsibility to examine all specifications and conditions thoroughly, and comply fully with specifications and all attached terms and conditions. Contractors must comply with all Federal, State, and City laws, ordinances and rules, and meet any and all registration requirements where required for Contractors as set forth in the Washington Revised Statutes. By responding to this Invitation to Bid (ITB), Contractor agrees that he/she has read and understands all documents within this ITB package.

#### Contractor Responsibility to Provide Full Response

It is the Contractor's responsibility to provide a full and complete written response and Offer Form that does not require interpretation or clarification by the ITB Coordinator. The Contractor is to provide all requested materials, forms and information. The Contractor is responsible to ensure the Offer properly and accurately reflects the Contractor specifications and offering. The Port does not accept materials to supplement the bid after the bid deadline; however this does not limit the right of the Port to consider additional materials that are obtained by the Port such as references or past experience, even if such materials were not specifically submitted by the Contractor, or to seek clarifications from the Contractor as needed by the Port.

## Do Not Attach Additional Materials with your Bid

Do not insert material sheets, extra product options, comments on boilerplate, supplemental or suggested contract terms, or other similar materials unless such materials are specifically requested by the Port or are necessary to show an "or equal" product specification. Such additional materials can compromise the clarity of your bid and result in rejection of your offer. If the materials conflict with your Offer, the Port will not be obligated to clarify or determine which has priority; the Port may instead reject your bid.

## **Changes or Corrections to Bids**

Prior to the bid submittal closing date and time established for this ITB, a Contractor may make changes to its bid provided the change is initialed and dated by the Contractor. No change to a bid shall be made after the bid closing date and time. Note that you cannot change, mark-up or cross-out any condition, format, provision or term that appears on the Port's published Offer Form. If you need to change any of your own prices or answers that you write on the Offer Form must be made in pen, initialed, and be clear in intent. Do not use white-out.

#### **Errors in Bids**

Contractors are responsible for errors and omissions in their Bids. No such error or omission shall diminish the Contractor's obligations to the Port.

#### Withdrawal of Bid

A bid submittal may be withdrawn by written request of the submitter, prior to bid closing. After the closing date and time, the submittal may be withdrawn only with permission by the Port.

## Rejection of Bids and Rights of Award

The Port reserves the right to reject any or all Bids at any time with no penalty. The Port also has the right to waive immaterial defects and minor irregularities in any submitted Bid.

#### **Bid Disposition**

All material submitted in response to this ITB shall become the property of the Port upon delivery to the ITB Coordinator.

#### Minority & Women's Business Enterprises (WMBE)

The Port of Tacoma encourages participation in all of its contracts by Minority & Women's Business Enterprises (MWBE) firms either self-identified or certified by the Office of Minority & Women's Business Enterprises (OMWBE). While the Port does not give preferential treatment, it does seek equitable representation from the minority and women's business community.

Participation may be either on a direct basis in response to this Solicitation or as a Subcontractor to a Contractor. However, unless required by Federal statutes, regulations, grants, or contract terms referenced in the original Solicitation, no preference will be included in the evaluation of Bids, no minimum level of MWBE participation shall be required as a condition for receiving an award, and Bids will not be evaluated, rejected, or considered Non-Responsive on that basis.

Any affirmative action requirements set forth in Federal regulations or statutes included or referenced in the original Solicitation will apply. Contractors may contact the Office of Minority & Women's Business Enterprises (OMWBE) at <a href="http://www.omwbe.wa.gov/index.shtml">http://www.omwbe.wa.gov/index.shtml</a> to obtain information on certified firms for potential sub-contracting arrangements. Nothing in this section is intended to prevent or discourage Contractors from inviting participation from non-MWBE firms, MWBE firms, as well as Small and Emerging Businesses.

#### **Proprietary or Confidential Information**

To the extent consistent with <u>Chapter 42.56 RCW</u>, the Public Disclosure Act, Purchasing shall maintain the confidentiality of Contractor's information marked confidential or proprietary. If a request is made to view Contractor's proprietary information, Purchasing will notify the Contractor of the request and of the date that the records will be released to the requester unless Contractor obtains a court order enjoining that disclosure. If Contractor fails to obtain the court order enjoining disclosure, Purchasing will release the requested information on the date specified.

The Port's sole responsibility shall be limited to maintaining the above data in a secure area and to notify Contractor of any request(s) for disclosure for so long as Purchasing retains Contractor's information in the Purchasing records. Failure to so label such materials or failure to timely respond after notice of request for public disclosure has been given shall be deemed a waiver by Contractor of any claim that such materials are exempt from disclosure.

#### **Requesting Disclosure of Public Records**

The Port asks Contractors/Sub-Contractors and their companies to refrain from requesting public disclosure of proposal records until an intention to award is announced. This measure is intended to shelter the solicitation process, particularly during the evaluation and selection process or in the event of a cancellation or re-solicitation. With this preference stated, the Port will continue to be responsive to all requests for disclosure of public records as required by State Law.

#### No Gifts and Gratuities

Contractors shall not directly or indirectly offer anything of value (such as retainers, loans, entertainment, favors, gifts, tickets, trips, favors, bonuses, donations, special discounts, work, or meals) to any Port employee, volunteer or official, if it is intended or may appear to a reasonable person to be intended to obtain or give special consideration to the Contractor.

#### **No Conflict of Interest**

Contractor (including officer, director, trustee, partner or employee) must not have a business interest or a close family or domestic relationship with any Port official, officer or employee who was, is, or will be involved in selection, negotiation, drafting, signing, administration or evaluating Contractor performance. The Port shall make sole determination as to compliance.

## 7. BID SUBMITTALS

a) Legal Name: Submit a certificate, copy of web-page, or other documentation from the Corporation Commission in which you incorporated that shows your legal name as a company. Many companies use a "Doing Business As" name or a nickname in their daily business. However, the Port requires the legal name of your company, as it is legally registered. When preparing all forms below, be sure to use the proper company legal name. Your company's legal name can be verified through the State Corporation Commission in the state in which you were established, which is often located within the Secretary of State's Office for each state at:

http://www.coordinatedlegal.com/SecretaryOfState.html

b) Bid Offer Form: This response is mandatory. See Attachment- A

#### **Submittal Checklist**

This checklist is for your convenience only. It does not need to be submitted with your bid. This checklist summarizes each form that is required to complete and submit your bid package to the Port.

Cover Sheet	Optional
Legal Name	Important
Bid Offer & Non Collusion Form-	Mandatory
Attachment A	

## c) Submittal Requirements

This section details Port procedures for bid submittal.

- 1. The format should follow closely that requested in this ITB.
- 2. Contractors have full responsibility to ensure the response arrives at the Port within the deadline. Late bids will be rejected.

#### d). Electronic Submittal

The bid number and title should appear in the subject line of the e-mail. The electronic submittal is to be e-mailed to the <a href="maileographe">procurement@portoftacoma.com</a>, on or before the deadline (ITB Schedule, on the cover page or as otherwise amended). Any risks associated are borne by the Bidder. The Port e-mail system will generally allow documents up to, but no larger than, 10 Megabytes. If the Bidder also submits a hard-copy, the Port will determine which form takes precedence in the event of discrepancies.

## 8. EVALUATION PROCESS

The Port shall select the lowest responsive and responsible Contractor(s), and may consider multiple awards or partial awards to achieve the best overall price to the Port.

**Responsiveness and Responsibility**: Port Purchasing shall review submittals to determine basic responsiveness (timely submittal, all required forms submitted, etc.), responsibility (minimum qualifications, etc.), a responsive and responsible. An initial review will be made after opening, however additional and more detailed reviews may also be made during evaluation and prior to contract award. The review may be made of all Contractors or only as needed to determine the lowest responsive and responsible Contractor for purposes of award.

**Specifications**: Before tabulating pricing, the Port will evaluate Contractor compliance with specifications and bid requirements, and determinations of "or equal" alternates. If submitting an "or equal" the Contractor is to provide sufficient materials to show that the product is equivalent, by attaching comprehensive manufacturer specifications or other appropriate materials. Separately, the ITB Coordinator may also obtain and rely upon a manufacturer line card if the ITB Coordinator needs verification that the product is compliant. In the event the manufacturer specification material differs from the Contractors response or Contractor materials, the Contractor must clearly explain in their bid why the manufacturer specification material would be different than the specifications in the Bid or the ITB Coordinator may rely upon the manufacturer specification materials alone to make the determination.

**Pricing**: Items on price sheets shall then be calculated for purposes of award. Item pricing will be multiplied by the number of units required for an item total. Item totals will be totaled for all items for a tabulated total. In the event of an error in math, unit pricing will be considered the correct price and will be used. If any cost item is missing from a Contractor Offer Form, the Port reserves the right to reject that Bid or to calculate and compare bids without that cost item considered.

**Delivery**: Requirements warrant that lead-times may be considered to accommodate the timely receipt of materials.

**Prompt Payment Discount**: The Port will then calculate and reduce the pricing submitted, by applying any prompt payment discounts to evaluate price.

**Tie Bids:** In the event that the top two Contractors provide the same price, the Port gives preference to local products and local Contractors. When the tied Contractors are out- of- state and there are no local bidders/Contractors, or in the event two local bidders/Contractors are tied, the Procurement Coordinator will use a coin toss to determine the winner. Those on the evaluation team shall serve as witness to the event.

## 9. AWARD AND CONTRACT EXECUTION INSTRUCTIONS

The ITB Coordinator intends to provide written notice of the intention to award in a timely manner and to all Contractors responding to the Solicitation.

#### **Protests and Complaints**

Protests and/or complaints are to be filed with the Director of Contracts and Purchasing. The Port has rules to govern the rights and obligations of interested parties that desire to submit a complaint or protest to this RFP process. They are:

- For specification protests, the protester must state exact location of the challenged portion or clause, unless
  the challenge concerns an omission, an explanation of why any provision should be struck, added, or altered,
  and contain suggested corrections. A specification protest must be filed within five (5) working days of
  solicitation release:
- For non-responsive determinations, the aggrieved Contractor must specifically state why the determination is in error, identify where its submittal where it believes it is responsive, and why it believes, the Port was in error when it made the non-responsive determination. A non-responsive protest must be filed within two (2) working days of notification: and
- For protests regarding award determinations, the aggrieved Contractor(s) protest must set forth in specific terms the reasons why the Port's decision is thought to be erroneous. An award determination protest must be filed within two (2) working days of notification.

Interested parties have the obligation to be aware of and understand these rules, and to seek clarification as necessary from the Port. Note that there are time limits on protests and Contractors have final responsibility to learn of results in sufficient time for such protests to be filed in a timely manner.

## Instructions to the Apparently Successful Contractor

The Apparently Successful Contractor will receive an Intention to Award Letter from the ITB Coordinator after award decisions are made by the Port. The Letter will include instructions for final submittals that are due prior to execution of the contract or Purchase Order.

The Contractor will be expected to provide all essential documents within ten (10) business days. This includes attaining a providing proper proof of insurance. If the selected Contractor fails to complete all the final submittals within the allotted ten (10) days, the Port may elect to cancel the intended award and award to the next ranked Contractor, or cancel or reissue this solicitation. Cancellation of an award for failure to execute the Contract in the timeframes above may result in Contractor disqualification for future solicitations for this same or similar product/service.

## **Final Submittals Prior to Award**

The Contractor(s) should anticipate that the Letter will require at least the following. Contractors are encouraged to prepare these documents as soon as possible, to eliminate risks of late compliance.

- Supply Evidence of Insurance
- Completion of a New supplier package
- Supply a Taxpayer Identification Number and W-9 Form

## **Attachments**

Attachment A - Offer Sheet & Non-Collusion Form

Attachment B - Terms and Conditions

Attachment C – Division 34

Attachment D - Drawings R10, R11, R12, and R13

## ATTACHMENT A - OFFER SHEET

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# Port of Tacoma ITB# 69350

**Title: Special Trackwork** 

## NOTES:

- All freight and delivery is to be included in the cost of Special Trackwork package;
- Materials shall conform to Attachments C and D;
- Turnouts will be bolted not welded;
- Deliveries to be coordinated with on-site installer. Installer to unload; and
- Vendor/Seller is not to install turnouts;

Item #	Description	Est. Qty.	U/M	Unit Price (MANDATORY)	Total Extended Price (excluding sales tax)
1	Double Diamond Crossing (2 crossings)	1	EA	\$	\$
2	No. 9 Left Hand Turnout Non-Insulated	11	EA	\$	\$
3	No. 9 Left Hand Turnout Insulated	3	EA	\$	\$
4	No. 9 Right Hand Turnout Non-Insulated	2	EA	\$	\$
5	No. 9 Right Hand Turnout Insulated	3	EA	\$	\$
6	No. 9 Right Hand – Right Hand Crossover – Insulated 14' track center	1	EA	\$	\$
7	No. 9 Left Hand – Left Hand Crossover – Non- Insulated, 14' Track Center	2	EA	\$	\$
8	No. 9 Left Hand - Left Hand Crossover – Non-Insulated 15' Track Center	3	EA	\$	\$
9	No. 9 Right Hand – Left Hand Crossover – Non- Insulated 15' track center	1	EA	\$	\$
				Total	\$

See next page.

Materials shall be made according to the table below and will be available for delivery by the earliest deliver date. The Port may delay delivery from the earliest delivery date until the Latest delivery date and no cost to the Port.

Delivery	Description	Qty.	U/M	Earliest Delivery Date	Latest Delivery Date
1	Left Hand Turnout Non - Insulated	7	EA	5/27/16	8/8/16
	Left Hand-Left Hand Crossover – Non-Insulated, 14' Track Center	2	EA		
	Left Hand-Left Hand Crossover – Non-Insulated, 15' Track Center	3	EA		
	Right Hand-Left Hand Crossover – Non- Insulated, 15' Track Center	1	EA		
	insulated, 13 Track Center				
2	Double Diamond Crossing (2 crossings)	1	EA	11/18/16	1//9/17
	Left Hand Turnout Insulated	2	EA		
	Right Hand Turnout Non-Insulated	1	EA		
	Right Hand Turnout Insulated	2	EA		
	Right Hand-Right Hand Crossover – Insulated, 14' Track Center	1	EA		
3	Left Hand Turnout Non-Insulated	4	EA	12/20/16	2/6/17
	Left Hand Turnout Insulated	1	EA		
	Right Hand Turnout Non-Insulated	1	EA		
	Right Hand Turnout Insulated	1	EA		

- 1. It is MANDATORY that you provide a Unit Price. If there is an error between the Unit Price and Extended Price, the Port will correct the Extended Price.
- 2. The bid prices shall include and cover all duties, handling and transportation charges and all charges incidental to the requested work excluding Sales Tax or Use Tax. Offer shall agree to all Port contract Terms and Conditions without exception.
- 3. Do not mark, write-in or add any exceptions to the specifications, schedule, terms or conditions. Do not attach alternative boilerplate. Any such exceptions can invalidate your Offer and the Buyer can reject your Bid.
- 4. If you make an error in typing your prices or any corrections to your Offer Submittal, you may mark it in ink and initial the correction. If it is not marked in ink and or it is not initialled, the Buyer may reject your bid. Do not use whiteout.
- 5. Prompt Payment Discount: \_\_\_\_\_\_%\_\_\_ days. Note: Prompt payment discount periods equal to or greater than 10 calendar days will receive consideration and bid pricing will be reduced for evaluation by the amount of that discount.

6.	Interlocal Agreement: The Port of Tacoma has entered into Interlocal Agreements with other governmental agencies
	pursuant to RCW 39.34, in lieu of those agencies conducting a separate competitive bid. Does Vendor agree to
	provide this product or service to such agencies?
	Yes: No

**Non-collusion**: The undersigned declares under penalty of perjury that the bid/proposal submitted is a genuine and not a sham or collusive bid, or made in the interest or on behalf of any person or firm not therein named. That the bidder/Contractor has not directly or indirectly induced or solicited any bidder on the above work or supplies to put in a sham bid, or any other person or corporation to refrain from bidding. Lastly, that said bidder/Contractor has not in any manner sought by collusion to secure to the bidder an advantage over any other bidder or bidders.

Mailing Address, City, State, Zip Code			
Telephone Number	Fax Number	Email Address	
Washington State Contractor's License No		Date of Issue	
Expiration Date	DUNNS Number_		
Unified Business Identifier (UBI) No		_ Federal Tax Id No	·
Full Legal Name of Company:			
Signed By:			
Printed Name:		Date:	

1. Entire Agreement: The Contract represents the entire and integrated agreement between the Port and the Vendor. supersedes all prior discussions, negotiations, representations or agreements pertaining to the Work, whether written or oral. In the event of a conflict between the contract documents and applicable laws, codes, ordinances, regulations or orders of governmental authorities having jurisdiction over the work or any portion thereof, or in the event of any conflict between such applicable laws, codes, ordinances, regulations, or orders, the most stringent requirements of any of the above shall govern and be considered as a part of this Contract in order to afford the Port the maximum benefits thereof. The contract documents which set forth the rights and responsibilities of the Port and the Vendor with respect to this contract shall be construed in accordance with the laws of the State of Washington. Venue for any action between the Port and the Vendor, arising out of or in connection with this contract shall be in Pierce County, Washington.

The contract includes the following terms and conditions and includes the invitation to bid, request for quotations, specifications, plans, resolutions and policies of the Port of Tacoma and the laws of the state of Washington, incorporated herein by reference.

- 2. **Definitions**: "Buyer" means Port of Tacoma. "Seller" means the party with whom Buyer is contracting and any reference to "vendor", "subcontractor", "contractor" or "supplier" shall also mean "Seller". The term "purchase order" or "order" shall mean the name or title of the instrument of contracting, including all documents, exhibits, and attachments referenced therein.
- 3. **Acceptance**: This order expressly limits acceptance to the terms and conditions stated herein. All additional or different terms proposed by Seller are objected to and hereby rejected, unless otherwise provided in writing by the Purchasing Manager.
- 4. **Anti-Trust**: Seller and Buyer recognize that in actual economic practice, overcharges resulting from anti-trust violations are in fact borne by the Buyer. Therefore, Seller hereby assigns to the Buyer any and all claims for such overcharges.
- 5. **Assignments**: The provisions or monies due under this contract shall only be assignable with prior written consent of the Purchasing Manager. Shipment and billings made under any name other than Seller's must indicate that shipment is being made through and is subject to all instructions, terms and conditions of this order.
- 6. **Blanket Purchase Order**: This order is subject to these terms and conditions. Purchases are made as required without minimum or maximum amounts. Purchases are subject to price list provided by Vendor. Order may be terminated by the Port at anytime.
- 7. **Brands**: When a special brand is named it shall be construed solely for the purpose of indicating the standard of quality, performance, or use described. Brands of equal quality, performance and use shall be considered, provided Seller specifies the brand and model and submits descriptive literature, when available. Any bid containing a brand which is not equal quality, performance, or use specified must be represented as an alternate and not as an equal, and failure to do so shall be sufficient reason to disregard the bid.
- 8. **Changes:** No alteration in any of the terms, conditions, delivery, prices, quality, quantities, or specifications of this order will be effective without written order of the Purchasing Manager. Unauthorized substitutions will be made entirely at Seller's risk and, at Buyer's option, may be returned without prior authorization at Seller's expense.

- 9. **Default**: The parties agree that in the event a suit is instituted for any default, the prevailing party shall recover its costs, expenses expended or incurred in connection therewith, and reasonable attorney's fees.
- 10. **Delivery**: For any exception to the delivery date as specified on this order, Seller shall give prior notification and obtain written approval from the Buyer. With respect to delivery under this order, time is of the essence. The order is subject to termination for failure to deliver as specified. The acceptance of late performance with or without objection or reservation shall not waive the right to claim damage for such breach nor constitute a waiver of the requirements for the timely performance of any obligation remaining to be performed by Seller.
- 11. **Handling:** No charges will be allowed for handling which includes, but is not limited to packing, wrapping, bags, containers or reels, unless otherwise stated herein.
- 12. **Identification**: All invoices, packing lists, packages, shipping notices, instruction manuals, and other written documents affecting this order shall contain the purchase order number. Packing lists shall be enclosed in each and every box or package shipped pursuant to this order and shall specify contents therein.
- 13. **Independent Contractor**: An independent contractor relationship is created by this contract. The Seller or its employees or agents performing under this contract are not employees or agents of the Port of Tacoma. Conduct and control of the work will be solely with the Seller.
- 14. **Infringements**: Seller agrees to protect and save harmless the Buyer against all claims, suits or proceedings for patent, trademark, copyright or franchise infringement arising from the purchase, installation, or use of goods and materials ordered, and to assume all expenses and damages arising from such claims, suits or proceedings.
- 15. **Liens**: Vendor warrants and represents that all the goods and materials furnished pursuant to this order are free and clear of all liens, claims or encumbrances of any kind.
- 16. **Nondiscrimination:** The Seller agrees not to discriminate against any client, employee or applicant for employment or services because of race, creed, color, national origin, sex, marital status, age or the presence of any sensory, mental or physical handicap with regard to, but not limited to the employment upgrading, demotion or transfer, recruitment or recruitment advertising, lay-off or termination, rates of pay or other forms of compensation, selection for training, or rendition of services. It is further understood and agreed that any Seller who is in violation of this clause or an applicable affirmative action program shall be barred forthwith from receiving awards of any purchase order from the Port of Tacoma unless a satisfactory showing is made that discriminatory practices or noncompliance has terminated and that a recurrence of such acts is unlikely.
- 17. **Nonwaiver by Acceptance of Variation**: No provision of this order, or the right to receive reasonable performance of any act called for by the Terms shall be deemed waived by a waiver by Buyer of a breach thereof as to any particular transaction or occurrence.
- 18. Payments, Cash Discount, Late Payment Charges: Separate numbered invoices are required for each order. Invoice only for goods delivered. Invoices will not be processed for payment nor will the period of computation for cash discount commence until receipt of a properly completed invoice or when invoiced items are received, whichever is later. If an adjustment in payment is necessary due to damage or dispute, the cash discount

period shall commence on the date final approval for payment is authorized.

Unless otherwise stated, standard payment terms shall be net thirty days following month of invoice date. If Buyer fails to make timely payment, Seller may invoice for one percent per month on the amount overdue, or a minimum of one dollar. Payment shall not be considered late if a check or warrant is available or mailed within the time specified, or if no terms are specified. Payments will normally be remitted by mail. Buyer will not honor drafts, nor accept goods on a sight draft basis.

- 19. **Prices**: Seller agrees that goods shall be billed at the lowest price at which it offers to sell or sells goods of the same description at or before time fixed in this order for shipment, if price is not stated on this order.
- 20. **Rejection**: All goods or materials purchased herein are subject to approval by the Buyer. Any rejection of goods or material resulting because of nonconformity to the terms and specifications of this order, whether held by the Buyer or returned, will be at Seller's risk and expense.
- 21. **Risk of Loss**: Regardless of FOB point, Seller agrees to bear all risks of loss, injury or destruction of goods and materials ordered herein which occur prior to delivery. Such loss, injury or destruction shall not release Seller from any obligation hereunder.
- 22. **Save Harmless**: Seller shall protect, indemnify, and save the Buyer harmless from and against any damage, cost or liability for any injuries to persons or property arising from acts or omissions of Seller, its employees, agents, or subcontractors.
- 23. **Shipping Instructions**: Unless otherwise specified, all goods are to be shipped prepaid, FOB destination. When shipping addresses specify room numbers, Seller shall make such delivery thereto without additional charge. When shipment is specified FOB origin, Seller agrees to prepay all shipping charges, route as instructed and, if instructions are not provided, route by most economical common carrier and to bill Buyer as a separate item on the invoice for said charges. If shipping charges are expected to exceed \$100.00, Buyer shall have the option of determining whether shipping shall be prepaid by Seller or billed directly to Buyer. Seller's invoice for shipping charges shall include a copy of the freight bill showing that payment for shipping charges has been made. It is agreed that Buyer reserves the right to refuse COD shipments.
- 24. **Taxes:** Unless otherwise specified, Buyer agrees to pay all state of Washington sales or use tax. No charge by Seller shall be made for federal excise taxes and Buyer agrees to provide exemption certificates when required.
- 25. **Termination for Convenience**: The Port may terminate this contract at any time for government convenience, in which case it shall provide notice to the Seller and reimburse the Seller for its costs and fees incurred prior to the notice of termination.
- 26. **Termination for Default**: In the event of breach by Seller of any of the provisions of this contract, the Buyer reserves the right to terminate this contract forthwith upon giving oral or written notice to Seller. Seller shall be liable for damages suffered by Buyer resulting from Seller's breach of contract.
- 27. **Warranties**: Seller warrants that articles supplied under this order conform to specifications herein and are fit for the purpose or which such goods are ordinarily employed, except that if a particular purpose is stated, the material must also be fit for that particular purpose.

#### PART 1 - GENERAL

#### 1.01 RELATED WORK SPECIFIED ELSEWHERE

A. The provisions and intent of the Contract, including the General Conditions and General Requirements, apply to this work as if specified in this section.

## 1.02 DESCRIPTION OF WORK

- A. This Section specifies the material requirements and performance criteria for complete special trackwork including turnouts, crossovers and crossings to be furnished in accordance with the Contract Drawings.
- B. Except as modified herein, special trackwork shall be designed, manufactured, tested, assembled, inspected, handled and shipped in accordance with the current edition of the American Railway Engineering and Maintenance-of-Way Association (AREMA) Portfolio of Trackwork Plans, and the AREMA Manual of Railway Engineering.

#### 1.03 REFERENCE STANDARDS

- A. Comply with all applicable local, State and Federal codes provisions of most recent edition, including all addenda, of following codes, specifications, standards, and recommended practices, except as otherwise indicated:
  - 1. AREMA MANUAL American Railway Engineering and Maintenance-of-Way Association, Manual for Railway Engineering
  - 2. AREMA PORTFOLIO American Railway Engineering and Maintenance-of-Way Association, Portfolio of Trackwork Plans
  - 3. FRA-DOT Federal Railroad Administration, Department of Transportation

## 1.04 QUALITY ASSURANCE

- A. All special trackwork specified shall be standardized throughout the project trackage. Mixing and matching of different materials from different suppliers shall not be permitted.
- B. Testing and inspection shall conform to the AREMA Manual, AREMA Portfolio and these specifications.

#### 1.05 SUBMITTALS

- A. The Contractor shall submit, under the provisions of Section 01 33 00, "SUBMITTALS", the following information:
  - Compliance: Supplier's certification that the material delivered to the site is in compliance with the Specifications. Include all test results and submittals stipulated in the references sections of AREMA Manual and Portfolio.
  - 2. Shop Drawings: Submit shop drawings for diamond crossing, turnouts, and crossovers detailing trackwork layout and interconnection with other special trackwork, and showing switches, frogs, tie spacing, fasteners, switch stands, point of switch and appurtenant geometric relationships, dimensions and information. All shop drawings shall be approved by the Engineer prior to beginning manufacture or fabrication of special trackwork or production of ties.

#### PART 2 - PRODUCTS

#### 2.01 TURNOUTS AND CROSSOVERS

- A. Turnouts and crossovers shall be new domestic 115RE as shown in the Drawings. Manganese inserts on frogs and switch points are excluded from the domestic only requirement.
- B. Turnouts and crossovers shall have 16'-6" switch points with graduated risers and shall conform to AREMA Portfolio Plan No. 112-08. Turnouts and crossovers shall be furnished with appurtenant hardware for hand throw switches as indicated in these Specifications and as directed by the Engineer. Switch points shall be Knife Point type as indicated in the Drawings. Knife points shall be head hardened double reinforced knife point switch points conforming to AREA Detail 6100, with transit style clips. Turnouts and crossovers shall include curved, straight, closure rails utilizing 115 RE rail with screw spikes and elastic fasteners (Pandrol style). Switches shall have manganese tips (AREA 220).
- C. Guardrails shall be 13'-0" long and conform to AREMA Plan No. 504-03 and fastened with screw spike plates and elastic fasteners.
- D. The special trackwork components shall be designed to be hand thrown capable of providing 300 pounds of force at mid-stroke and 500 pounds of force at the end of the throw.
- E. Frogs shall be one piece, rail-bound manganese, heavy wall, explosion hardened per AREMA M2.7 Depth Hardening. Frogs shall be radiographic tested per AREMA Portfolio Specification M2.5 Workmanship. Contractor shall use resilient fastening system for all frog base plates and gage plates.
- F. Frogs shall conform to AREMA Portfolio of Trackwork Plans, Plan No. 623-03, rail bound manganese steel frog for 115 RE rail with screw spike plates and elastic fasteners. Frogs shall be drilled for three (3) bolts to match the specified rail.
- G. The arm ends of the frogs shall be beveled as per AREMA Portfolio Plan No. 1005-03 "Beveling of Rail Ends for Special Trackwork". Rail bending shall be done with great care to avoid stress build up and injury to the rails. Rail shall be bent cold whenever possible. If heating the rail should be necessary, the surface temperature of the rail shall not exceed 800° F and the surface of the remainder of the rail section shall not exceed 1100° F. Heating shall be done in a manner so as to have a minimal adverse effect on the metal.
- H. Insulated turnouts shall be provided for installation in select locations, as indicated on the ITB Attachment A Offer Sheet. Insulated turnouts shall include all necessary insulated 6 hole joint bars.
- I. Knife points shall be in accordance with AREA Detail 6100.
- J. Adjustable rail braces, switch plates and plates under the closure rails shall conform to details for plates in AREMA Portfolio of Trackwork Plans Plan No. 224-08. Switch plates shall use screw spikes. Turnout plates shall conform to Plan No. 112-08 and as indicated.

- K. Switch point guards shall be installed on all switches. Switch point guards shall be boltless adjustable switch point guard Model U69 as manufactured by A&K Railroad Materials, or approved equal. Switch point guards shall be furnished with appropriate switch plates and mounting hardware.
- L. Switch stands shall be Racor Model 22-E trailable, adjustable switch stands with low banner, "Backsaver" handle, adjustable connecting rod and bolts with cotter pins. The bolt hole in the switch stands, connecting rods and switch rods (42-inches) shall be the same matching diameter with matching size bolts. Mismatch of bolts and bolt holes will be cause for rejection.
- M. Turnout and crossover sizes shall be as indicated in the Contract Drawings.
- N. Turnouts and crossovers shall be of bolted design. All switch bolts shall be designed for cotter pins.
- O. Switch rods and clips shall be insulated with basket adjustment conforming to AREMA Plan No. 222-08. Switch rods and special rods for tandem leads shall conform to AREMA Specifications Section M6, Steel Forgings. The Contractor shall furnish switch rods with all associated slide and runoff plates.
- P. Switch rods shall be insulated and shall conform to the AAR Signal Manual, Part 14.5.3, Signal Specifications, "Recommended Developmental Criteria for Insulating Material".
  - 1. Fiber angles, plates and end posts shall be fabricated of fiberglass mat reinforced polyester, 3/16-inch thick, GPO- I sheet stock, NEMA Class B.
  - 2. Fiber bushings shall be fabricated of NEMA Grade 10 epoxy glass fabric.
  - 3. All cut edges of fiberglass shall be sealed with Sherwin Williams Polane, 2-part coatings or an accepted equal.
  - 4. Prior to assembly, all contact metal surfaces shall be painted with General Electric Insulating Enamel, Red Glyptol No. 1202 or equal.

## Q. Gage Plates

- Gage plate shall be at least 3/4-inch thick and the width shall be 8 inches. Gage
  plates and switch plates within the turnout shall be manufactured in accordance
  with the AREMA Portfolio of Trackwork Plans No. 223 and shall be modified to suit
  elastic fasteners.
- 2. Plates shall conform to the AREMA "Specifications for Special Trackwork", Section M7, rolled "Mild Steel".
- 3. Insulation shall conform to the AAR Signal Manual, Part 116, Signal Specifications, "Assembly and Test of Insulated Track Fittings".
- 4. Insulated gage plates shall be provided for all turnouts and crossovers.

## 2.02 DIAMOND CROSSINGS

A. Crossings shall be reversible manganese steel insert and shall conform to AREMA Portfolio Plan No. 757-02. Crossings shall be furnished with flared guard rails, joint bars, running rail and guard rail, special plates, flangeway fillers and space blocks and all appurtenant hardware as indicated in these Specifications and as directed by the Engineer.

- B. Rail, castings and components shall conform to 136 RE rail section.
- C. Guarding shall be provided per AREMA Plan No. 757-02.
- D. Frogs shall be reversible manganese steel insert, heavy wall, explosion hardened, manufactured per AREMA Specifications for Special Trackwork, Section M2, "Manganese Steel Castings", and with AREMA Plan No. 757-02 and as indicated. Frogs shall be radiographic tested per AREMA Portfolio Specification M2.5 Workmanship
- E. Plates: Crossings shall be furnished with resilient fastening system for all base plates, all plates shall be 1 1/4" with 1/4" deep mill seating and no rail cant. Multi-tie plate shall be used under all casting areas.
- F. The arm ends of the frogs shall be beveled as per AREMA Portfolio Plan No. 1005-03 "Beveling of Rail Ends for Special Trackwork".
- G. For permissible variations in manufacture see AREMA Portfolio Plan No. 100, Section 7.

#### 2.03 RAIL

- A. Rail for turnouts and crossovers shall be new, 115 RE head hardened rail conforming to AREMA Chapter 4.
- B. Rail for crossings shall be new, 136 RE head hardened rail conforming to AREMA Chapter 4.

#### 2.04 TIES

- A. Wood ties shall conform to the requirements of AREMA Chapter 30, Part 1 and Part 3.
- B. Ties shall be new and treated, manufactured from hardwood for switch and turnout ties.
- C. Ties shall be the length as indicated in the Drawings with a thickness of 7" and width of 9" throughout the section between 12" and 20" from each end of the tie. Ties shall be treated per AREMA with steel end plates.
- D. Ties may be field-punched and the holes filled with preservative prior to installation.
- E. Steel end plates required at both ends of each wood ties to prevent splitting.
- F. Ties shall be treated to conform to AREMA Chapter 30, Part 3, and as follows:
  - 1. The preservative shall consist of pure coal tar creosote conforming to American Wood Preservers Association (APWA) Standard P1/P13, or a mixture by of 50% by volume of such creosote and 50% of an approved petroleum oil conforming to APWA Standard P4. The preservative used shall comply with all Local, State and Federal requirements. The creosote and oil shall be thoroughly mixed in the working tank until the mixture is of uniform composition.
  - 2. Retention of preservatives shall conform to APWA Standards C1 and C6. Holes that may be gored shall be filled with tight fitting treated plugs. Cross ties not conforming to stipulated minimum requirements may be retreated and re-offered for acceptance.
  - 3. Incising before treatment is required on soft wood ties and on all switch ties.

## G. Timber ties shall be rejected:

- 1. When decayed to the slightest degree.
- 2. A large hole exists that is more than 1 /2" in diameter and 3" deep within, or more than 1" in diameter and 3" deep outside the sections of the tie between 20" and 40" from its middle. Numerous smaller holes are any number equaling a large hole in damaging effect.
- 3. A large knot is present where the width exceeds one quarter of the width of the surface on which it appears but such knot, if sound, may be allowed if it occurs outside the sections of the tie between 20" and 40" from its middle. Numerous knots are any number equaling a large knot in damaging effect.
- 4. A shake indicating separation of one ring of annular growth from another. A tie containing a shake more than one-third the width of the tie in length or more than 1/8" wide will be rejected.
- 5. A split exists (a break across annular rings) over 8" long or 1/8" wide or 2" deep.
- 6. Not straight, square-sawn, cut at the ends, having top and bottom parallel, or/and having bark entirely removed.
  - (1) A tie will be considered straight when a straight line from a point on one end to a corresponding point on the other end is no more than 2" from the surface of all points.
  - (2) A tie is not well-sawn when its surfaces are cut into with scoremarks more than 1/2" deep, or when its surfaces are not even.
  - (3) The top and bottom of a tie will be considered parallel if any difference at the sides or ends does not exceed 1/4".
  - (4) For proper seating of nail plates, tie ends must be flat, and will be considered square with a sloped end of up to 1/2", which equals a 1 in 20 cant.
- 7. If more than 1/4" narrower in width or 1/4" thinner in thickness or 2" shorter in length than size as specified.
- 8. Ties which do not conform to the foregoing specifications are to be termed "culls" and will be rejected.

#### 2.05 JOINT BARS AND COMPROMISE JOINTS:

- A. Joint bars shall conform to the AREMA Manual, Chapter 4, Part 3 "Joining of Rail", Section 3.1 and 3.2. Joint Bars shall be 6-hole, 36 inches long, conforming to the AREMA Manual for Railway Engineering, Section 3.2 "Joint Bars and Assemblies."
- B. The bars shall be smoothly rolled, or forged, true to template and shall accurately fit the rails for which they are intended and shall provide a true alignment of the gage and running surfaces of the two rails being connected. A variation of ±1/32 inch from the specified size of holes, or ±1/16 inch from the specified location of holes, and of ±1/8 inch from the specified length of joint bar will be permitted.
- C. Each compromise joint bar shall also have the rail sections shown at each end along with the word "Gage" or "Out" to indicate on which side of the rail the bar is to be used.

(If the compromise joint bars are interchangeable, the words gage and out will be omitted.)

## 2.06 TIE PLATES:

- A. Tie plates shall conform to AREMA Manual Chapter 5, Part 1, "Specifications for Steel Tie Plates".
- B. Either low carbon or high carbon steel tie plates may be furnished.
- C. Tie plates shall accommodate two elastic spring clips and at least four screw spikes to secure the plates to the timber ties. Tie plates to have a minimum length of 16" for 136 RE and minimum length of 15" for 115 RE. Tie plates shall have minimum width of 7-3/4" and minimum thickness of 5/8" under the rail in base section.
- D. Tie plates to have 1" diameter holes to accommodate 15/16" diameter screw spikes.
- E. Tie plates to provide for 115 RE with 5.5" base. 115 lb. tie plates to be provided under 115 lb. rail remaining near the turnouts at each end of the work.
- F. Tie plate section to be canted 1:40,+/-5, toward the center line of track.
- G. Tie plates shall have smooth flat bases with no ridges or indentations.

## 2.07 TRACK BOLTS, NUTS, AND SPRING WASHERS:

A. Track bolts and square nuts shall be new, conforming to the current AREMA Manual, Chapter 4, Part 3, "Specifications for Heated Treated Carbon Steel Track Bolts and Carbon Steel Nuts". Spring washers shall be new conforming to the current AREMA manual Chapter 4, Part 2, "Specification for Spring Washers". For each track bolt, provide a square nut and spring washer of proper size for each bolt.

## 2.08 ELASTIC RAIL CLIPS:

- A. The elastic rail clips to be used shall be one piece, threadless fasteners of spring steel Pandrol e-2055 Rail or approved equal, which must meet all the following requirements:
- B. An easy to install one piece elastic spring steel rail clip without threaded elements which can be easily removed from its housing without any possible damage to or the loss of the lateral support provided by the shoulder. The design and configuration of the clips, their housing and their area in contact with the rail should be such that a nominal rail seat clamping force of 2500 pounds per clip is provided and frequent rail slippage can be allowed without stressing, bending, twisting or damaging the clips or their housing.

## 2.09 SCREW SPIKES:

- A. Screw spikes shall be new, conforming to the current AREMA Manual, Chapter 5, Part 10, Section 10.1.
- B. Screw spikes used to fasten the plates to the timber ties shall be one piece with reinforced throat, 3/4" square head, 15/16-inch diameter, 6-inches long per AREMA plan 2S Square Head Screw Spike.
- C. The head shall be concentric with and firmly joined to the body of the screw. The material shall be free from injurious defects and shall have a workmanlike finish. Screws shall be provided with plain finish.

- D. Finished screws shall conform to the following minimum requirements for tensile properties:
  - 1. High Strength
- (1) Tensile Strength, psi 120,000 Min
- (2) Yield Strength, psi 80,000 Min
- (3) Elongation, % 18 Min
- E. Except for heat-treated screws, steel mill cert data may be used for tensile strength with approval of the Port.
- F. A letter or brand indicating the manufacturer shall be located on the top of the washer of each screw.
- G. High strength screws shall be marked with an "H" of the top of the washer.

## PART 3 - EXECUTION

A. NOT USED

**END OF SECTION** 







