



Yelm Hwy Pavement Rehab & Citywide Utility Adjustments

LACEY CONTRACT NUMBER PW 2024-18

**SPECIFICATIONS AND BID DOCUMENTS
DEPARTMENT OF PUBLIC WORKS**

LACEY PROJECT NUMBER PW 2024-18

***CITY OF LACEY
WASHINGTON***

CITY OFFICIALS

MAYOR

ANDY RYDER

DEPUTY MAYOR

MALCOLM MILLER

COUNCIL MEMBERS

LENNY GREENSTEIN

MICHAEL STEADMAN

CAROLYN COX

ROBIN VAZQUEZ

NICOLAS DUNNING

CITY MANAGER

RICK WALK

CITY ATTORNEY

DAVID S. SCHNEIDER

DIRECTOR OF PUBLIC WORKS

SCOTT EGGER, P.E.

CITY ENGINEER

AUBREY COLLIER, P.E., S.E.

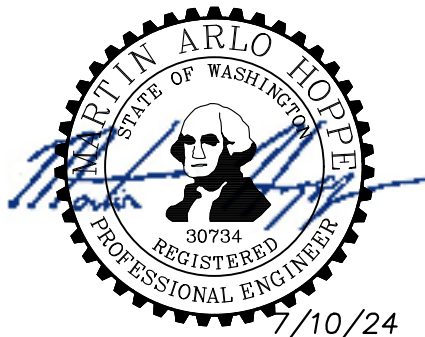


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ADVERTISEMENT FOR BIDS

Yelm Hwy Pavement Rehab & Citywide Utility Adjustments

NOTICE IS HEREBY GIVEN that sealed bids will be received by the City of Lacey at City Hall, Lacey, Washington until 2:30 p.m., July 25th, 2024, at which time bids will be publicly opened via a live video stream. Links to the YouTube live video stream can be found at <https://cityoflacey.org/rfp-rfq-rfi/> under the specific project section and on the specific project page on the Builders Exchange website located at http://bxwa.com/bxwa_toc/pub/2080/toc.html for the following work:

This contract provides for street reconstruction and hot mix asphalt overlay of one (1) street to include road removal, major reconstruction, citywide adjustments of utility appurtenances, striping, and other work.

Each bid must be accompanied by a certified check for five percent of the amount of the proposal made payable to the City Treasurer, or an approved bid bond for five percent of the amount of the proposal executed on the approved form attached to these specifications. If bid bond is used, the five percent may be shown in dollars and cents or the form may be filled in by inserting therein, in lieu thereof, "five percent of the amount of the accompanying proposal". Check of unsuccessful bidders will be returned immediately upon award of contract.

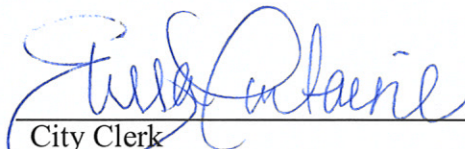
The City Council reserves the right to reject any and all bids and to waive all informalities.

Plans, Specifications, and Addenda for this project are available through the "City of Lacey" on-line plan room. Free of charge access is provided by going to <http://bxwa.com> and clicking on: "Posted Projects", "Public Works", "City of Lacey", and "Projects Bidding". Bidders are asked to "Register" in order to receive automatic email notification of future addenda and to be placed on the "Bidders List". Any questions regarding this contract can be directed to:

Brian Petrin
(360)790-7846
brian.petrin@cityoflacey.org

The range for this project is \$1,350,000 to \$1,650,000

Publish: **7/12/2024**
7/19/2024



City Clerk
City of Lacey, Washington

A INSTRUCTIONS

INSTRUCTIONS TO BIDDERS

Bidders shall examine contract and bid documents and the site and shall satisfy themselves as to conditions that exist.

Each Bidder shall submit to the City Clerk, Lacey, Washington a sealed bid endorsed upon the outside wrapper with **Yelm Hwy Pavement Rehab & Citywide Utility Adjustments** at the time and place designated in the advertisement.

Bids may be delivered in person to Lacey City Hall, 420 College Street SE, or by mail to City of Lacey 420 College St SE Lacey, WA 98503.

Bids will be publicly opened via a live video stream. Links to the YouTube live video stream can be found at <https://cityoflacey.org/rfp-rfq-rfi/> or under the specific project section and on the specific project page on the Builders Exchange website.

The City of Lacey is committed to offering reasonable accommodations to persons with disabilities. We invite any person with special needs to contact the City Clerk at (360) 491-3212 at least seventy-two (72) hours before the meeting to discuss any special accommodations that may be necessary. Citizens with hearing impairment may call the TDD line at (800) 833-6388.

Each Bidder shall complete the proposal with prices in figures with the extension properly computed. The proposal must be properly signed by a duly authorized agent. Proposal must acknowledge addenda, if any, received.

If alternates are included in the proposal the Bidder shall complete the alternates. The City will award the contract to the lowest responsible Bidder as determined by the Special Provisions. The City reserves the right to delete alternates after award.

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1).

The City does not pre-qualify Bidders. However, if the apparent low Bidder has not already been determined qualified, the City shall afford seven (7) days after notification for the low Bidder to provide evidence for evaluation, as to capability to perform the work. The evaluation will include consideration of experience, personnel, equipment, financial resources as well as performance record. The information must be sufficient to enable the Bidder to obtain the required qualification rating prior to the award of the contract.

No bidder may withdraw his bid after the hour set for the opening of bids or before award of the contract unless said award is delayed for a period of forty-five (45) days.

CONTRACT PARTS

The contract to be executed as a result of this bid consists of multiple parts, all of which pertain as if fully attached hereto and Bidder shall consider all parts as a complete document. In the event of discrepancies between the various parts, precedent shall be in the following order:

1. Contract Form,
 2. Addenda (if any),
 3. Proposal Form,
 4. Special Provisions,
 5. Technical Specifications, if included,
 6. Contract Plans,
 7. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction,
 8. City of Lacey Development Guidelines and Public Works Standards, and
 9. WSDOT Standard Plans for Road, Bridge and Municipal Construction
- The Bidder is directed to complete and return the forms on the following page as a bid proposal.

BIDDER'S CHECKLIST

The bidder's attention is especially called to the following forms which must be executed in full as required, and submitted with the bid proposal:

- Proposal: The unit prices bid must be shown in the space provided.
- Proposal Signature Sheet: To be filled in and signed by the bidder. All addenda must be acknowledged.
- Bid Deposit: Any bid shall be accompanied by a deposit of cash, certified check, cashier's check, or surety bond, in an amount equal to at least five percent (5%) of the total amount bid. Checks shall be payable to the City Clerk, City of Lacey, Washington.
- If a surety bond is used, it shall be submitted on a form furnished by the Commission and signed by the bidder and his surety company. The sureties' "attorney-in-fact" must be registered with the Washington State Insurance Commissioner. The power of attorney must also be submitted with the bond. See Specification section 1-02.7 for more information.
- Non-Collusion and Debarment Affidavit

The following form must be submitted within 1 hour following the bid submittal deadline via email to ProjectAdmin@cityoflacey.org or

- Subcontractors List for HVAC, plumbing, and electrical

The following form must be submitted within 24 hours (excluding weekends and holidays) following the bid submittal deadline via email to ProjectAdmin@cityoflacey.org

- Certification of Compliance with Wage Payment Statutes

The following must be submitted within 48 hours (excluding weekends and holidays) following the bid submittal deadline via email to ProjectAdmin@cityoflacey.org

- Subcontractors List for structural steel and rebar installation

The following must be completed before the contract can be awarded:

- L&I training on the requirements related to public works and prevailing wages per RCW 39.04.350
- Certification of Employment Security Department (ESD) good standing

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

- Contract: This agreement to be executed by the successful bidder
- Performance and Payment Bond
- Insurance Certificate

B

BID DOCUMENTS

CITY OF LACEY

Yelm Hwy Pavement Rehab & Citywide Utility Adjustments

Lacey Contract Number: PW 2024-18

Federal Aid Project Number:

WSDOT Contract Number:

TIB Contract Number:

Contract Proposal

DATE: _____

The undersigned, as bidder, has examined the bid documents as prepared by the Public Works Department, City of Lacey.

The undersigned, as bidder, proposes to furnish all material and perform all labor in accordance with the bid documents at the following prices.

Bidder must fill in unit prices in figures for each item and total.

Bidder shall sign this proposal form and submit all required paperwork with the bid.

A General - TBD Participating

No.	Quantity	Unit	Item ID	Item Description	Unit Price	Extended Price
A1	100000	MC	104-010	Minor Change	\$1.00	\$100,000.00
A2	1	LS	107-010	SPCC Plan	LUMP SUM	
A3	1	LS	109-010	Mobilization	LUMP SUM	
A4	1	LS	110-010	Project Temporary Traffic Control	LUMP SUM	
A5	1700	HR	110-040	Flaggers		
A6	3000	HR	110-070	Portable Changeable Message Sign		
A7	1	LS	202-510	Removal of Structures and Obstructions	LUMP SUM	
A8	3000	CY	203-010	Roadway Excavation Incl. Haul		
A9	3	EA	213-710	Adjust Gas Valve Box		
A10	2300	TN	404-010	Crushed Surfacing Base Course		
A11	800	TN	404-020	Crushed Surfacing Top Course		
A12	35	TN	504-110	Commercial HMA		
A13	11800	SY	504-200	Planing Bituminous Pavement		
A14	4250	TON	504-514	Fiber Reinforced HMA CI 1/2 in. PG 58V-22		
A15	1	LS	504-610	Preparation of Existing Surfaces	LUMP SUM	
A16	1	LS	504-620	Driveway and Shoulder Preparation	LUMP SUM	
A17	420	TN	504-630	Crushed Rock for Shoulder Grading		
A18	3	EA	705-405	Adjust Manhole		
A19	3	EA	705-410	Adjust Catch Basin		
A20	24	EA	705-920	Raise Manhole to Grade		
A21	10	HR	708-810	Utility Potholing		

A22	36	EA	712-915	Raise Valve Box to Grade		
A23	1	LS	801-010	ESC Lead		LUMP SUM
A24	1	LS	801-680	Erosion/Water Pollution Control		LUMP SUM
A25	22	HUND	809-010	Raised Pavement Marker Type 1		
A26	8	HUND	809-020	Raised Pavement Marker Type 2		
A27	1	EA	813-515	Surface Monument		
A28	4	EA	813-520	Monument Case and Cover		
A29	2	EA	820-708	Type 2 Induction Loop, 6 x 6		
A30	7000	LF	822-110	Plastic Wide Line		
A31	64	LF	822-150	Plastic Stop Line		
A32	16	EA	822-190	Plastic Traffic Arrow		
A33	24	EA	822-210	Plastic Traffic Letter		
A34	500	LF	822-670	Plastic Crosswalk Line		
A35	4	EA	822-770	Plastic Bicycle Legend		
A36	5280	LF	823-010	Temporary Pavement Marking - Short Duration		
A37	1	LS	850-792	Project Closeout	\$10,000.00	\$10,000.00

Schedule A Subtotal: _____

Tax Rate (%) : 0.00 Tax: _____

\$0.00

Schedule A Total: _____

Contract Total: _____

(All Schedules)

BID DEPOSIT SELECTION

A bid deposit in an amount of five percent (5%) of the total bid amount is attached hereto:

CASH In the amount of _____

CASHIER'S CHECK In the amount of _____

CERTIFIED CHECK In the amount of _____

BID BOND In the amount of 5% of the total bid amount

NON-COLLUSION AND DEBARMENT AFFIDAVIT

I, the undersigned, being duly sworn, deposes and says that the person, firm, association, copartnership or corporation herein named, has 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 the preparation and submission of a proposal of the City of Lacey for consideration in the award of a contract on the improvement described as follows.

I further certify that, except as noted below, the firm, association or corporation or any person in a controlling capacity associated therewith or any position involving the administration of State or federal funds; is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal or State agency; has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal or State agency within the past three years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against said person, firm, association or corporation by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

I further acknowledge that by signing my signature, I am deemed to have signed and have agreed to the provisions of this affidavit.

Name of Project

Name of Firm

Signature of Authorized Member

CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date, the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Bidder’s Business Name

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Sole Proprietorship Partnership Joint Venture Corporation

State of Incorporation, or if not a corporation, State where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

This form must be submitted with the Bid Proposal or as a Supplement to the Bid no later than 24 hours after the time for delivery of the Bid Proposal, as provided for in Section 1-02.9 of the Contract Provisions.

**CERTIFICATION OF EMPLOYMENT SECURITY DEPARTMENT (ESD)
GOOD STANDING AND NUMBER**

The bidder hereby provides an ESD number and certifies that per RCW 39.04.350 and Title 50 RCW, in which the City will verify prior to entering into contract with the Contractor, that the Bidder has a valid ESD number and is deemed to be in good standing with Washington State's Employment Security Department.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Bidder's Business Name

Employment Security Department (ESD) Number

WA State Unified Business Identifier (UBI #)

Signature of Authorized Official*

Printed Name

Title

Date

City

State

SUBCONTRACTOR LIST

TO BE SUBMITTED WITH THE BID PROPOSAL OR VIA EMAIL TO PROJECTADMIN@CITYOFLACEY.ORG

Project Name: _____

Subcontractor(s) with whom the bidder will directly subcontract that are proposed to perform the work of structural steel installation, rebar installation, heating, ventilation and air conditioning, and plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW **must** be listed below. Failure to list subcontractors, naming more than one subcontractor to perform the same work, or submit by the deadline will result in your bid being non-responsive, and therefore, void.

HVAC, plumbing, and electrical names must be submitted within one (1) hour of the published bid time. Structural steel and rebar names must be submitted within forty-eight (48) hours of the published bid time in accordance with Chapter 39.30 RCW.

To the extent the project includes one or more categories of work below, and no subcontractor is listed below to perform such work, the bidder certifies that the work will either (i) be performed by the bidder itself, or (ii) be performed by a lower tier subcontractor who will not contract directly with the bidder.

Work to be Performed: PLUMBING
<input type="checkbox"/> Subcontractor Name:
OR <input type="checkbox"/> N/A or Work performed by bidder or lower tier subcontractor
Work to be Performed: HEATING VENTILATION AND AIR CONDITIONING (HVAC)
<input type="checkbox"/> Subcontractor Name:
OR <input type="checkbox"/> N/A or Work performed by bidder or lower tier subcontractor
Work to be Performed: *ELECTRICAL
<input type="checkbox"/> Subcontractor Name:
OR <input type="checkbox"/> N/A or Work performed by bidder or lower tier subcontractor
Work to be Performed: STRUCTURAL STEEL INSTALLATION
<input type="checkbox"/> Subcontractor Name:
OR <input type="checkbox"/> N/A or Work performed by bidder or lower tier subcontractor
Work to be Performed: REBAR INSTALLATION
<input type="checkbox"/> Subcontractor Name:
OR <input type="checkbox"/> N/A or Work performed by bidder or lower tier subcontractor

* Bidders are notified that is the opinion of the enforcement agency that PVC or metal conduit, junction boxes, etc., are considered electrical equipment and therefore considered part of electrical work, even if the installation is for future use and no wiring or electrical current is connected during the project.

C
CONTRACT
DOCUMENTS

CONSTRUCTION CONTRACT

THIS AGREEMENT, made and effective as of the date of the last signature below, between the City of Lacey, hereinafter called Owner, under and by virtue of the charter, laws and ordinances of the said Owner and the laws of the State of Washington, and _____ hereinafter called Contractor,

WITNESSETH:

That in consideration of the payment, covenants and agreement hereinafter mentioned, attached and made a part of this Agreement, to be made and performed by the parties hereto, the parties covenant and agree as follows regarding:

City of Lacey Contract No. PW 2024-18 for the “**Yelm Hwy Pavement Rehab & Citywide Utility Adjustments**” project in the sum of Dollars (\$ _____) including applicable sales tax.

1. The Contractor shall do all work and furnish all tools, materials and equipment in accordance with and as described in the attached Plans and Specifications, and in full compliance with the terms, conditions and stipulations herein set forth and attached, now referred to and by such reference incorporated herein and made a part hereof as fully for all purposes as if here set forth at length, and shall perform any alterations in or in addition to the work covered by this Contract and every part thereof and any force account work which may be ordered as provided in this Contract and every part thereof.

The Contractor shall provide and bear the expense of all materials, labor, equipment, 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, except such as are mentioned in the Specifications to be furnished by the Owner.
2. The Owner 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 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.
3. Contractor, for himself and for his heirs, executors, administrators, successors, assigns, does hereby agree to the full performance of all the covenants herein contained upon the part of Contractor.
4. It is further provided that no liability shall attach to Owner or Agent thereof by reason of entering into this Contract, except as expressly provided herein.
5. Payments will be made under the Contract according to the schedule of rates and prices and the specification attached and made a part thereof. Partial payments under the Contract will be made at the request of the Contractor not more than once each month upon approval of the Owner, as hereinafter specified, provided they are in accordance

with the provisions of RCW 60.28.010. There will be reserved and retained from monies earned by the Contractor, as determined by such monthly estimates, a sum equal to 5 percent of the Contract price.

Payment of the retained percentage shall be withheld for a period of forty-five (45) days following the final acceptance of the work and materials by the Owner, and shall be paid the Contractor at the expiration of said forty-five (45) days in event no claims, as provided by law, have been filed against such funds; and provided further, that releases have been obtained from all departments and agencies having jurisdiction over the activities of the Contractor. In the event such claims are filed, Contractor shall be paid such retained percentages less an amount sufficient to pay any such claims together with a sum sufficient to pay the cost of such action, and to cover attorney fees as determined by the Owner.

6. Requests for review of substitute items of material or equipment will not be accepted by the Owner or Agent from anyone other than the Contractor. If the Contractor wishes to furnish a substitute item, the Contractor shall make written application to the Owner's Agent for acceptance thereof, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equal substance to that specified and be suited to the same use and capable of performing the same function as that specified. All variations of the proposed substitute from that specified shall be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, which shall be considered by the Owner in evaluating the proposed substitute. The Owner may require the Contractor to furnish at the Contractor's expense, additional data about the proposed substitute. The Owner will be the sole judge of acceptability, and no substitute will be ordered without the Owner's prior written acceptance. The Owner may require the Contractor to furnish at the Contractor's expense, a special performance guarantee or other surety with respect to any other substitute.

The Owner or Agent will record the time and expenses in evaluating substitutions proposed by the Contractor. Whether or not the Owner accepts a proposed substitute, the Contractor shall reimburse the Owner for the costs of evaluating any proposed substitute.

7. The Owner reserves the right, after the final payment has been made, to claim and recover by process of law such sums as may be sufficient to make good any defects in the equipment or to recover any over-payment resulting from dishonest acts of the Contractor.
8. The contract time will commence to run, and the Contractor shall start to perform his obligation under the contract documents, on the day indicated in the Notice to Proceed given by Owner to Contractor; but in no event shall contract time commence to run later than the 30th calendar day after the date when both Owner and Contractor execute the Contract. A Notice to Proceed may be given at any time within thirty (30) calendar days after the date when both Owner and Contractor execute the Contract.
9. The Contractor shall guarantee the materials and workmanship for a period of one (1) year from and after the date of final acceptance by the Owner.

If, within said guarantee period, repairs are required which, in the opinion of the Owner, are rendered necessary as a result of work or materials which are inferior, defective or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Owner, and without expense to the Owner, (a) correct all defects and

place in satisfactory condition in every particular all of such guaranteed work and materials; (b) make good all damage which in the opinion of the Owner is caused by such defects; and (c) make good any other work or material or the equipment and contents of a building, structure or site disturbed in fulfilling any such guarantee.

If the Contractor, after notice, fails within ten (10) days to proceed to comply to the terms of this guarantee, the Owner may have the defects corrected, and the Contractor and his Surety shall be liable for all expense incurred, provided, however, that in case of an emergency where, in the opinion of the Owner, delay would cause serious loss or damage, repairs may be made without notice being given to the Contractor and the Contractor shall pay the cost thereof.

IN WITNESS WHEREOF, the said Contractor has executed this instrument and the City Manager, pursuant to resolution duly adopted, has caused this instrument to be executed in the name of the City of Lacey the day and year first above-written.

Contractor Date

Contractor's Registration Number (UBI No.)

City of Lacey Business License Number

City Manager Date

ATTEST:

By:

City Clerk

APPROVED AS TO FORM:

By :

City Attorney

**DECLARATION OF OPTION FOR MANAGEMENT OF
STATUTORY RETAINED PERCENTAGE**

- A. I hereby elect to have the retained percentage of this contract held in a fund by the City of Lacey until forty-five (45) days following final acceptance of the work.

Contractor (please print)

Date

Signature

- B. I hereby elect to have the City of Lacey invest the retained percentage of this contract from time to time as such retained percentage accrues and in accordance with RCW Ch. 60.28.

I hereby designate _____ as the repository for the escrow of said funds.

I hereby further agree to be fully responsible for payment of all costs or fees incurred as a result of placing said percentage in escrow and investing it as authorized by statute.

The City of Lacey shall not be liable in any way for any costs or fees in connection therewith.

Contractor (please print)

Date

Signature

- C. I hereby elect to hold a retainage bond.

Contractor (please print)

Date
Signature

D
SPECIAL
PROVISIONS

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SPECIAL PROVISIONS

INTRODUCTION TO THE SPECIAL PROVISIONS

(January 4, 2024 APWA GSP, Option A)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2024 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(March 8, 2013 APWA GSP)
(April 1, 2013)
(May 1, 2013 2013 Lacey GSP)

Project specific special provisions are labeled without a date as such:
(*****)

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT Manual M21-01, current edition
- *City of Lacey Development Guidelines and Public Works Standards*, current edition

Contractor shall obtain copies of these publications, at Contractor’s own expense.

DESCRIPTION OF WORK

This contract provides for street reconstruction and hot mix asphalt overlay of one (1) street to include road removal, major reconstruction, citywide adjustments of utility appurtenances, striping, and other work.

1-01 DEFINITIONS AND TERMS

1-01.3 Definitions

(January 19, 2022 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 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.

1-02 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

(January 24, 2011 APWA GSP)

Before award of a public works contract, a bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

1-02.2 Plans and Specifications

(April 1, 2024 Lacey GSP)

Delete this section and replace it with the following:

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

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

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	3	Furnished only upon request
Contract Provisions	1	Furnished only upon request
Large plans (22" x 34")	1	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.

1-02.4 Examination of Plans, Specifications and Site of Work

1-02.4(1) General

(December 30, 2022 APWA GSP Option A)

The first sentence of the ninth paragraph, beginning with "Prospective Bidder desiring...", is revised to read:

Prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing soon enough to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.5 Proposal Forms

(July 31, 2017 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 UDBE/DBE/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

(April 1, 2024 Lacey 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 four paragraphs, and replace them with the following:

The Bidder shall submit a completed list as provided in the bid documents naming subcontractors who will perform the work of structural steel installation, rebar installation, heating, ventilation, air conditioning, and plumbing as described in RCW 18.106 and electrical as described in RCW 19.28 in accordance with RCW 39.30.

The Bidder shall submit the completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency either with the Bid Proposal or as a Supplement to the Bid no later than 24 hours (not including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal. Failure to return this certification will make this Bid Nonresponsive and ineligible for Award.

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 DBE 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 DBE requirements are to be satisfied through such an agreement.

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 **(April 1, 2024 Lacey GSP)**

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. The proposal shall be submitted to the City of Lacey at 420 College Street SE, Lacey WA 98503 at the date and time shown in the advertisement.

If supplemental information is due after the Bid Proposal is due, the document(s) shall be submitted as follows:

1. In a sealed envelope labeled the same as for the Proposal, with “Supplemental Information” added, or
2. By e-mail to the following e-mail address: ProjectAdmin@cityoflacey.org

All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. 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. The Contracting Agency will not open or consider any “Supplemental Information” that is received after the time specified, or received in a location other than that specified in the Call for Bids.

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.

1-02.10 Withdrawing, Revising, or Supplementing Proposal **(July 23, 2015 APWA GSP)**

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

After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Mailed, Emailed, or faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable.

1-02.12 Public Opening of Proposals **(November 20, 2020 Lacey GSP)**

Delete and replace this section with the following:

Proposals will be opened and publicly read by live video stream per the "Instructions to Bidders" in Section A of these Specifications at the time as indicated in the call for Bids.

1-02.13 Irregular Proposals **(January 4, 2024 APWA GSP)**

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
 - a. The Bidder is not prequalified when so required;
 - b. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
 - c. A price per unit cannot be determined from the Bid Proposal;
 - d. The Proposal form is not properly executed;
 - e. The Bidder fails to submit or properly complete a subcontractor list (WSDOT Form 271-015), if applicable, as required in Section 1-02.6;
 - f. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification (WSDOT Form 272-056), if applicable, as required in Section 1-02.6;
 - g. The Bidder fails to submit Written Confirmations (WSDOT Form 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidder's 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;
 - h. 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 in accordance with Section 1-07.11;
 - i. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
 - j. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

2. A Proposal may be considered irregular and may be rejected if:
 - a. The Proposal does not include a unit price for every Bid item;
 - b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
 - c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
 - d. The completed Proposal form contains unauthorized additions, deletions, alternate Bids, or conditions;

- e. Receipt of Addenda is not acknowledged;
- f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
- g. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders
(May 17, 2018 APWA GSP Option A)

Delete this Section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1). To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the Bidder and third parties concerning the Bidder's compliance with the mandatory bidder responsibility criteria.

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

1-02.15 Pre-Award Information
(August 14, 2013 APWA GSP)

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.
7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.3 Execution of Contract

(January 4, 2024 APWA GSP Option B)

Revise this section to read:

Within 3 calendar days of Award date (not including Saturdays, Sundays and Holidays), the successful Bidder shall provide the information necessary to execute the Contract to the Contracting Agency. The Bidder shall send the contact information, including the full name, email address, and phone number, for the authorized signer and bonding agent to the Contracting Agency.

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.

Within 10 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, a satisfactory bond as required by law and Section 1-03.4, the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided. 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 the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 10 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).

1-03.7 Judicial Review
(December 30, 2022 APWA GSP)

Revise this section to read:

All decisions made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction.

1-04 SCOPE OF THE WORK

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda
(November 20, 2020 Lacey 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 presiding over 3, 3 over 4, and so forth):

1. Contract Form,
2. Addenda (if any),
3. Proposal Form,
4. Special Provisions,
5. Technical Specifications, if included,
6. Contract Plans,
7. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction,
8. City of Lacey Development Guidelines and Public Works Standards, and
9. WSDOT Standard Plans for Road, Bridge and Municipal Construction

1-04.4(1) Minor Changes
(May 30, 2019 APWA GSP)

Delete the first paragraph and replace it with the following:

Payments or credits for changes amounting to \$25,000 or less may be made under the Bid item “Minor Change”. At the discretion of the Contracting Agency, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in Section 1-04.4, Changes. All “Minor Change” work will be within the scope of the Contract Work and will not change Contract Time.

1-04.5 Procedure, Protest, and Dispute by the Contractor **(January 19, 2022 APWA GSP)**

Revise item 1 of the first paragraph to read:

1. Give a signed written notice of protest to the Engineer or the Engineer’s field Inspectors within 5 calendar days of receiving a change order or an Engineer’s Written Determination.

1-04.6 Variation in Estimated Quantities **(May 25, 2006 APWA GSP)**

Supplement this Section with the following:

The quantities for “Utility Potholing” have been entered into the Proposal only to provide a common proposal for bidders. Actual quantities will be determined in the field as the work progresses, and will be paid at the original bid price, regardless of final quantity. These bid items shall not be subject to the provisions of 1-04.6 of the Standard Specifications.

1-04.6 Variations in Estimated Quantities **(December 30, 2022 APWA GSP Option B)**

Revise the first paragraph to read:

Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original Proposal quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of the Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25 percent from the original Proposal quantity, and if the total extended bid price for that item at time of award is equal to or greater than 10 percent of the total contract price at time of award. In that case, payment for contract work may be adjusted as described herein.

1-05 CONTROL OF WORK

1-05.4 Conformity With and Deviations from Plans and Stakes

Supplement this section with the following:

Roadway and Utility Surveys **(July 23, 2015 APWA GSP, Option 1)**

The Engineer shall furnish to the Contractor one time only all principal lines, grades, and measurements the Engineer deems necessary for completion of the work. These shall generally consist of one initial set of:

1. Slope stakes for establishing grading;
2. Curb grade stakes;
3. Centerline finish grade stakes for pavement sections wider than 25 feet; and

4. Offset points to establish line and grade for underground utilities such as water, sewers, and storm drains.

On alley construction projects with minor grade changes, the Engineer shall provide only offset hubs on one side of the alley to establish the alignment and grade.

1-05.4(2) Survey Control and Electronic Files **(August 10, 2010 Lacey GSP)**

Add the following new section:

The Contractor shall re-establish the survey control used in design by using existing survey monuments and other control points as provided by the City.

When requested by the Contractor, the City will provide an electronic version of the construction plans (drawings), for use by the Contractor at the Contractor's own risk. In all cases, the approved paper construction plans are the official contract documents. If the Contractor wishes to use the electronic version of the construction plans for the purposes of providing surveying of the proposed improvements, it shall be the Contractor's responsibility to verify that any coordinates used from the electronic file match the station and offset location given in the contract construction plans. Construction plans are diagrammatic in nature. The coordinate locations of the various graphic elements within the electronic files may not necessarily be precisely shown with respect to their coordinate position. In all cases, the location callouts in the contract construction plans shall govern.

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 Inspections and Operational Testing **(October 1, 2005 APWA GSP)**

Delete this section and replace it with the following:

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 therefore.

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.

1-05.12(1) One-Year Guarantee Period
(March 8, 2013 APWA GSP)

Add the following new section:

The Contractor shall return to the project and repair or replace all defects in workmanship and material discovered within one year after Final Acceptance of the Work. The Contractor shall start work to remedy any such defects within 7 calendar days of receiving Contracting Agency's written notice of a defect, and shall complete such work within the time stated in the Contracting Agency's notice. In case of an emergency, where damage may result from delay or where loss of services may result, such corrections may be made by the Contracting Agency's own forces or another contractor, in which case the cost of corrections shall be paid by the Contractor. In the event the Contractor does not accomplish corrections within the time specified, the work will be otherwise accomplished and the cost of same shall be paid by the Contractor.

When corrections of defects are made, the Contractor shall then be responsible for correcting all defects in workmanship and materials in the corrected work for one year after acceptance of the corrections by Contracting Agency.

This guarantee is supplemental to and does not limit or affect the requirements that the Contractor's work comply with the requirements of the Contract or any other legal rights or remedies of the Contracting Agency.

1-05.14 Cooperation with Other Contractors
(August 3, 2015 Lacey GSP)

Supplement this section with the following:

The Contractor shall coordinate residential refuse and recycling pick-up with Pacific Disposal (360) 923-0111. Construction activities shall be planned so that there is no interruption of services.

1-05.15 Method of Serving Notices
(January 4, 2024 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be served and directed to the 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 written in paper format, hand delivered or sent via certified mail delivery service with return receipt requested to the 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.

1-05.16 Water and Power
(October 1, 2005 APWA GSP)

Add the following new section:

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.

1-05.18 Record Drawings
(April 1, 2024 Lacey GSP Option A)

Add the following new section:

The Contractor shall furnish As-Built/Record Drawings of all changes to the original plans in accordance with the following conditions:

One set of 22"x 34" plans showing the changes to the project as installed.

Drawings shall be to scale with all notations neat in appearance.

Turn the record drawings over to the Engineer for review and approval prior to final payment. This work is considered incidental to the contract and no additional compensation is allowed.

1-06 CONTROL OF MATERIAL

1-06.1 Approval of Materials Prior to Use
(January 4, 2016 Lacey GSP)

The second sentence of first paragraph is revised to read:

The Contractor shall use the Qualified Product List (QPL), the Aggregate Source Approval (ASA) Database, or the City of Lacey Request for Approval of Material (COL RAM) form.

1-06.1(2) Request for Approval of Material (RAM)

The first paragraph is revised to read:

The COL RAM shall be used with all submittals. The COL RAM shall be prepared by the Contractor in accordance with the instructions and submitted to the engineer for approval before the material is incorporated into the Work..

Supplement this section with the following:

The Contractor shall submit sufficient information that describes the materials proposed as defined and described in these specifications and plans within 10 working days following the Notice to Proceed.

The Contractor shall submit one electronic of catalog cuts, shop drawings, and a material testing sample, as required for all items to be used in this contract for approval. The Contractor shall circle or highlight products and materials that are specific to this project, and cross out items that are not for this project.

All items not in exact compliance with the specifications must be noted as a change. The Contractor shall include an explanation, product specifications, sample articles, and any other items that will aid the Engineer in approving an item not in exact accordance with the specifications.

All submittals shall be submitted in Adobe Acrobat format and submittals that exceed 10 pages shall include a table of contents. Submittals that are not submitted in the format outlined may be rejected outright and the Contractor is required to resubmit in the correct format. The form and the submittal shall be sent in the same e-mail. Submittals that exceed 10 MB shall either be provided on a CD, a flash drive or via an internet link.

The Engineer will review submittals within 10 working days. The Contractor may request additional working days if approval or disapproval is not received in 10 working days. The Contractor may not request additional working days for failure to submit sufficient information to approve an item, or for rejection of an item not in accordance with the specifications.

Resubmittals shall be submitted within 5 working days from City's transmittal, to the contractor, of the Engineer reviewed submittal. If the submittal is "Rejected", the contractor shall resubmit the entire submittal. If the submittal is marked "Revise and Resubmit", the contractor shall submit items that are identified in the Engineer's comments.

Any material purchased or labor performed prior to such approval shall be at the Contractor's risk. The Contractor must receive all material approvals before the materials will be allowed on the project.

1-06.6 Recycled Materials **(January 4, 2016 APWA GSP)**

Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

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.

1-07 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 Sales Tax **(June 27, 2011 APWA GSP)**

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

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).

1-07.6 Permits and Licenses

[\(January 2, 2018 WSDOT 1-07.6.OPT1.FR1\)](#)

Section 1-07.6 is supplemented with the following:

The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the permit(s) is attached as an appendix for informational purposes. Copies of these permits, including a copy of the Transfer of Coverage form, when applicable, are required to be onsite at all times.

Contact with the permitting agencies, concerning the below-listed permit(s), shall be made through the Engineer with the exception of when the Construction Stormwater General Permit coverage is transferred to the Contractor, direct communication with the Department of Ecology is allowed. The Contractor shall be responsible for obtaining Ecology's approval for any Work requiring additional approvals (e.g. Request for Chemical Treatment Form). The Contractor shall obtain additional permits as necessary. All costs to obtain and comply with additional permits shall be included in the applicable Bid items for the Work involved.

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
NPDES Construction Stormwater General Permit	Department of Ecology	

1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

[\(February 14, 2023 Lacey GSP\)](#)

The Contractor shall prepare a project-specific spill prevention, control, and countermeasures plan (SPCC Plan), and shall implement the plan for the duration of the project. No on-site construction activities may commence until the Contracting Agency accepts a SPCC Plan for the project. An SPCC Plan template and guidance information is available at <https://wsdot.wa.gov/engineering-standards/environmental-guidance/stormwater-water-quality>.

The SPCC Plan shall address all fuels, petroleum products, hazardous materials, and other materials defined in Chapter 447 of the WSDOT Environmental Manual M 31-11. Occupational safety and health requirements that may pertain to SPCC Plan implementation are contained in, but not limited to, WAC 296-824 and WAC 296-843. The SPCC Plan shall address conditions that may be required by Section 3406 of the current International Fire Code, or as approved by the local Fire Marshal.

Implementation Requirements

The Contractor shall update the SPCC Plan throughout project construction so that the written plan reflects actual site conditions and practices. The Contractor shall update the SPCC Plan at least annually and maintain a copy of the updated SPCC Plan on the project site. The Contractor shall fully implement the SPCC Plan, as accepted and updated, at all times.

SPCC Plan Element Requirements

The SPCC Plan shall set forth the following information in the following order:

1. Responsible Personnel – Identify the names, titles, and contact information for the personnel responsible for implementing and updating the plan and for responding to spills.
2. Spill Reporting – List the names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a spill as referenced in the abovementioned template.
3. Spill Prevention – Describe the following items:
 - a. The contents and locations of spill response kits that the Contractor shall supply and maintain that are appropriately stocked, located in close proximity to hazardous materials and equipment, and immediately accessible.
 - b. Security measures for potential spill sources to prevent accidental spills and vandalism.
 - c. Site inspection procedures and frequency.
4. Spill Response – Outline the response procedures the Contractor shall follow for each scenario listed below, indicating that if hazardous materials are encountered or spilled during construction, the Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. Include a description of the actions the Contractor shall take and the specific on-site spill response equipment that shall be used to assess the spill, secure the area, contain and eliminate the spill source, clean up spilled material, decontaminate equipment, and dispose of spilled and contaminated material:
 - a. A spill of each type of hazardous material present.
 - b. Stormwater that has come into contact with hazardous materials.
 - c. A release or spill of any unknown preexisting contamination and contaminant sources (such as buried pipes or tanks) encountered during project Work.

Payment

If no bid item for “SPCC Plan” is included in the proposal, any work described in this section shall be incidental to the project.

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, 2024 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.

Under no circumstances shall a wrap up policy be obtained, for either initiating or maintaining coverage, to satisfy insurance requirements for any policy required under this Section. A "wrap up policy" is defined as an insurance agreement or arrangement under which all the parties working on a specified or designated project are insured under one policy for liability arising out of that specified or designated project.

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:

\$2,000,000	Each Occurrence
\$3,000,000	General Aggregate
\$3,000,000	Products & Completed Operations Aggregate
\$2,000,000	Personal & Advertising Injury each offence
\$2,000,000	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.

1-07.23 Public Convenience and Safety

1-07.23(1) Construction Under Traffic

[\(May 2, 2017 APWA GSP\)](#)

Revise the third sentence of the second paragraph to read:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired; if approved by the Contracting Agency activating pedestrian recall timing or other accommodation may be allowed during construction.

1-07.23(1) Construction Under Traffic
(January 5, 2015 WSDOT 1-07.23(1).OPT5.FR1)

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

Lane closures are subject to the following restrictions:

- 7 AM to 4 PM weekdays, from the first day of Thurston County School District summer to the Friday before the first week of Thurston County School District first day of school
- 9 AM to 3 PM weekdays, from the first Monday of the first week of the Thurston County school year, to the last day of school, during school operating days

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours.

Lane closures are not allowed on any of the following:

1. A holiday,
2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
3. After noon on the day prior to a holiday or holiday weekend, and
4. Before 7:00 AM on the day after the holiday or holiday weekend.

1-07.24 Rights of Way
(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

Street Right of Way lines, limits of easements, and limits of construction permits are indicated in the Plans. The Contractor's construction activities shall be confined within these limits, unless arrangements for use of private property are made.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way and easements, both permanent and temporary, necessary for carrying out the work. Exceptions to this are noted in the Bid Documents or will be brought to the Contractor's attention by a duly issued Addendum.

Whenever any of the work is accomplished on or through property other than public Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies of the easement agreements may be included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights of entry have not been acquired prior to advertising, these areas are so noted in the Plans. The Contractor shall not proceed with any portion of the work in areas where right of way, easements or rights of entry have not been acquired until the Engineer certifies to the Contractor that the right of way or easement is available or that the right of entry has been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of

entry or right of way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

1-08 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:

- To review the initial progress schedule;
- To establish a working understanding among the various parties associated or affected by the work;
- To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
- To establish normal working hours for the work;
- To review safety standards and traffic control; and
- 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:

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

1-08.0(2) Hours of Work **(December 8, 2014 APWA GSP)**

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 5 prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. 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. (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 or third-party consultants when, in the opinion of the Engineer, such work necessitates their presence.)
2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. 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.
4. If a 4-10 work schedule is requested and approved the non-working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

1-08.0(2)A Lacey Hours of Work
(October 16, 2014 Lacey GSP Option A)

Add the following new section:

Lacey Municipal Code (LMC) Chapter 14.38.010, prohibits outside construction activities between the hours of 9:00 p.m. and 7:00 a.m. in or adjacent to residential zones of the City. A waiver to this ordinance will not be allowed, except in case of emergency, or where operations are necessary during such hours in order to promote the safety of the traveling public as shown in these specifications or as determined by the Engineer.

1-08.1(7)A Payment Reporting
(January 4, 2024 APWA GSP)

Revise this section to read: "Vacant".

1-08.3(2)A Type A Progress Schedule
(December 30, 2022 APWA GSP)

Revise this section to read:

The Contractor shall submit five (5) copies of a Type A Progress Schedule no later than at the preconstruction conference, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

1-08.3(2)B Type B Progress Schedule
(January 4, 2024 APWA GSP)

Revise the first paragraph to read:

The Contractor shall submit a preliminary Type B Progress Schedule at or prior to the preconstruction conference. The preliminary Type B Progress Schedule shall comply with all of these requirements and the requirements of Section 1-08.3(2), except that it may be limited to only those activities occurring within the first 60-working days of the project.

Revise the first sentence of the second paragraph to read:

The Contractor shall submit five (5) copies of a Type B Progress Schedule depicting the entire project no later than 21-calendar days after the preconstruction conference.

1-08.3(2)D Preliminary Progress Schedule
(January 4, 2024 APWA GSP)

Revise the second paragraph to read:

1. The preliminary progress schedule shall be submitted no later than the preconstruction conference for all Type B and Type C progress schedules.

1-08.4 Prosecution of Work
(July 23, 2015 APWA GSP)

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

1-08.4 Notice to Proceed and Prosecution of Work
(***)**

Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the

Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

1-08.4(1) Order of Work

(*****)

Add the following new section:

Prior to starting construction and issuance of notice to proceed by the City, the Contractor shall furnish the Contracting Agency with a schedule, sequence, and method of proceeding with the work. This schedule shall address all items herein and must be approved by the Contracting Agency prior to commencing any construction operations.

Within the first 10 working days of the project, the Contractor shall prepare the site to resolve any conflicts and relocate any utilities necessary to allow construction.

The following specific requirements shall be included into the project schedule

- In areas requiring roadway excavation and reconstruction, once the pavement has been removed the base lift shall be paved within 5 working days.

1-08.5 Time for Completion

(*****)

This project shall be completed in accordance with the provisions of Section 1-08 of the Standard Specifications within 25 working days. All design and submittal work for this project shall be completed within the first 14 calendar days of the contract.

1-08.5 Time for Completion

(December 30, 2022 APWA GSP Option A)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the Notice to Proceed Date.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If Substantial Completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the Physical Completion of the contract; and (3) remaining for the Physical Completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. The statement will be identified as a Written Determination by the Engineer. If the Contractor does not agree with the Written Determination of working days, the Contractor shall pursue the protest procedures in accordance with Section 1-04.5. By failing to follow the procedures of Section 1-04.5, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the Completion Date of the Contract after all the Contractor's obligations under the Contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical Work on the project must be complete; and
2. The Contractor must furnish all documentation required by the Contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a Completion Date:
 - a. Certified Payrolls (per Section 1-07.9(5)).
 - b. Material Acceptance Certification Documents
 - c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
 - d. Final Contract Voucher Certification
 - e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
 - f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
 - g. Property owner releases per Section 1-07.24

1-08.6 Suspension of Work **(February 15, 2023 Lacey GSP)**

Contract time may be suspended for procurement of critical materials (Procurement Suspension). In order to receive a Procurement Suspension, the Contractor shall within 21 calendar days after execution by the Contracting Agency, place purchase orders for all materials deemed critical by the Contracting Agency for physical completion of the contract. The Contractor shall provide copies of purchase orders for the critical materials. Such purchase orders shall disclose the purchase order date and estimated delivery dates for such critical material.

The Contractor shall show procurement of the materials anticipated to be critical materials as activities in the Progress Schedule. If approved Progress Schedule indicates that the materials procurement are critical activities, and if the Contractor has provided documentation that purchase orders are placed for the critical materials within the prescribed 21 calendar days, then contract time will be suspended upon physical completion of all critical work except that work dependent upon the critical materials. Items anticipated to be critical materials include but are not limited to:

Manhole Frame & Grate

Charging of contract time will resume upon delivery of the critical materials to the Contractor or 30 calendar days, whichever occurs first.

1-08.9 Liquidated Damages **(March 3, 2021 APWA GSP, Option B)**

Revise the second and third paragraphs to read: Accordingly, the Contractor agrees: 1. To pay (according to the following formula) liquidated damages for each working day beyond the number of working days established for Physical Completion, and 2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor. Liquidated Damages Formula $LD = 0.15C/T$ Where: LD = liquidated damages per working day (rounded to the nearest dollar) C = original Contract amount T = original time for Physical Completion When the Contract Work has

progressed to Substantial Completion as defined in the Contract, the Engineer may determine the Contract 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.

1-09 MEASUREMENT AND PAYMENT

1-09.2(1) General Requirements for Weighing Equipment **(January 4, 2024 APWA GSP, Option B)**

Revise item 4 of the fifth paragraph to read:

4. Test results and scale weight records for each day's hauling operations are provided to the Engineer daily. Reporting shall utilize WSDOT form 422-027A, Scaleman's Daily Report, unless the printed ticket contains the same information that is on the Scaleman's Daily Report Form. The scale operator must provide an AM and/or PM tare weight for each truck on the printed ticket.

1-09.2(5) Measurement **(December 30, 2022 APWA GSP)**

Revise the first paragraph to read:

Scale Verification Checks – At the Engineer's discretion, the Engineer may perform verification checks on the accuracy of each batch, hopper, or platform scale used in weighing contract items of Work.

1-09.9 Payments **(December 30, 2022 APWA GSP)**

Section 1-09.9 is revised to read:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer's determination of the cost of work shall be final.

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of

determining progress payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of progress payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

Failure to perform obligations under the Contract by the Contractor may be decreed by the Contracting Agency to be adequate reason for withholding any payments until compliance is achieved.

Upon completion of all Work and after final inspection (Section 1-05.11), the amount due the Contractor under the Contract will be paid based upon the final estimate made by the Engineer and presentation of a Final Contract Voucher Certification to be signed by the Contractor. The Contractor's signature on such voucher shall be deemed a release of all claims of the Contractor unless a Certified Claim is filed in accordance with the requirements of Section 1-09.11 and is expressly excepted from the Contractor's certification on the Final Contract Voucher Certification. The date the Contracting Agency signs the Final Contract Voucher Certification constitutes the final acceptance date (Section 1-05.12).

If the Contractor fails, refuses, or is unable to sign and return the Final Contract Voucher Certification or any other documentation required for completion and final acceptance of the Contract, the Contracting Agency reserves the right to establish a Completion Date (for the purpose of meeting the requirements of RCW 60.28) and unilaterally accept the Contract. Unilateral final acceptance will occur only after the Contractor has been provided the opportunity, by written request from the Engineer, to voluntarily submit such documents. If voluntary compliance is not achieved, formal notification of the impending establishment of a Completion Date and unilateral final acceptance will be provided by email with delivery confirmation from the Contracting Agency to the Contractor, which will provide 30 calendar days for the Contractor to submit the necessary documents. The 30 calendar day period will begin on the date the email with delivery confirmation is received by the Contractor. The date the Contracting Agency unilaterally signs the Final Contract Voucher Certification shall constitute the Completion Date and the final acceptance date (Section 1-05.12). The reservation by the Contracting Agency to unilaterally accept the Contract will apply to Contracts that are Physically Completed in accordance with Section 1-08.5, or for Contracts that are terminated in accordance with Section 1-08.10. Unilateral final acceptance of the Contract by the Contracting Agency does not in any way relieve the Contractor of their responsibility to comply with all Federal, State, tribal, or local laws, ordinances, and regulations that affect the Work under the Contract.

Payment to the Contractor of partial estimates, final estimates, and retained percentages shall be subject to controlling laws.

1-09.9 Payments

(November 20, 2020 Lacey GSP)

Section 1-09.9 is supplemented with the following:

Progress payments and the Final Contract Voucher Certification (FCVC) will be transmitted electronically to the Contractor for signature. The Contractor shall apply all signatures electronically using the software provided by the Contracting Agency. Within 21 days of execution of the Contract, the Contractor shall submit the names, email addresses, and text-message capable phone numbers for the authorized signers and shall bear the name, phone number and email of the officer providing this authorization. Delegation of authority to sign progress payments and the FCVC shall be by the officer authorized to sign the Contract.

1-09.11(3) Time Limitation and Jurisdiction

(December 30, 2022 APWA GSP)

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that all claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that all such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to all such claims or causes of action. It is further mutually agreed by the parties that when claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to all records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13(1) General

(January 19, 2022 APWA GSP)

Revise this section to read:

Prior to seeking claims resolution through arbitration or litigation, the Contractor shall proceed in accordance with Sections 1-04.5 and 1-09.11. The provisions of Sections 1-04.5 and 1-09.11 must be complied with in full as a condition precedent to the Contractor's right to seek claim resolution through binding arbitration or litigation.

Any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be resolved, as prescribed herein, through binding arbitration or litigation.

The Contractor and the Contracting Agency mutually agree that those claims or causes of action which total \$1,000,000 or less, which are not resolved by mediation, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

The Contractor and the Contracting Agency mutually agree that those claims or causes of action in excess of \$1,000,000, which are not resolved by mediation, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Arbitration General
(January 19, 2022 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 is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. 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.

1-09.13(4) Venue for Litigation
(December 30, 2022 APWA GSP)

Revise this section to read:

Litigation shall be brought in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. It is mutually agreed by the parties that when litigation occurs, the Contractor shall permit the Contracting Agency to have timely access to all records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.1 General
(January 3, 2017 Lacey GSP)

Supplement this section with the following:

Delays to traffic shall be held to a minimum. There shall be no restrictions or interruptions to traffic on Saturdays, Sundays or Holidays. In addition, there shall be no restrictions or interruptions to traffic after 12:00 noon on the day prior to a holiday or holiday weekend.

There shall be no delay to medical, fire, police, or other emergency vehicles with flashing lights or sirens. The Contractor shall alert all flaggers and personnel of this requirement.

The Contractor shall be responsible for removing the permanent traffic signs, as deemed necessary by the Engineer, and shall install and maintain any temporary signs necessary for the safety of the public.

The Contractor shall maintain pedestrian access at all times, without having pedestrians enter the travel lane.

All lane restrictions shall be held to a minimum time and length. Lane closures shall comply with the traffic control plans and these specifications. If the Contractor wishes to deviate from the plans, the Contractor shall submit a traffic control plan to the Engineer, at no additional cost, that complies with the MUTCD, and the Traffic Control Plans, for approval by the Engineer within (5) five working days before the proposed lane closure. If the Engineer determines that lane restrictions are causing congestion, the Contractor will be required to open any lanes, as determined by the Engineer, until the congestion is eliminated.

During non-working hours, Saturdays, Sundays, and Holidays, the Contractor shall keep all lanes open to traffic throughout the limits of the project with the lane and sidewalk area completely clear of all material, tools, personnel, and equipment as directed by the Engineer.

1-10.4(3) Reinstating Unit Items With Lump Sum Traffic Control **(August 2, 2004 WSDOT GSP)**

Section 1-10.4(3) is supplemented with the following:

The bid proposal contains the item “Project Temporary Traffic Control,” lump sum and the additional temporary traffic control items listed below. The provisions of Section 1-10.4(1), Section 1-10.4(3), and Section 1-10.5(3) shall apply.

“Flaggers”, per hour.

“Portable Changeable Message Sign”, per hour.

2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description

(October 16, 2009 Lacey GSP)

Supplement this section with the following:

The City of Lacey is a Tree City USA, and has deemed it necessary to protect all trees to the best of their ability. Only the trees that are evaluated by a certified Arborist as being diseased or detrimental to the project shall be removed as shown in the plans. The Contractor shall conduct a site review noting all trees within the construction zone prior to submitting a bid. Ease of construction, spoils, or stockpiling needs shall not justify tree removal.

A high visibility fence shall be installed around all trees and vegetation as required by the Engineer prior to beginning work. The Contractor shall be responsible for installing, maintaining and removing the high visibility fence as required.

Disposal of all organic waste shall be by Disposal Method No. 2. Disposal Method No. 1 and No. 3 will not be permitted in this contract. The City of Lacey encourages recycling of organic material at a certified organic recycling center.

The Contractor shall take all precautions necessary to protect the public, property, trees, and natural vegetation from harm. Any damage to utilities or other structures on public right-of-way or private property shall be restored by the Contractor or authorized agent at the Contractor's expense.

2-01.5 Payment

(October 16, 2009 Lacey GSP)

Modify this section with the following:

The unit contract price per acre or lump sum for “Clearing and Grubbing” shall be full pay for all work described in this section including “Roadside Cleanup”. If no bid item for “Clearing and Grubbing” or “High Visibility Fence” is included in the proposal, any work described in this section shall be incidental to the project.

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.1 Description

(*** Lacey)**

Supplement this section with the following:

The following items plus all materials resulting from incidental work including clearing; grubbing and roadside cleanup shall be removed from the job site, disposed of in a waste site or when noted on the plans, delivered to the City.

This work consists of but shall not be limited to the following items:

Pavement	Lane Markings (Buttons, Paint, Plastic, RPM)
Concrete	Curb and Gutter
Catch Basins	Manholes
Refuse	Valve Boxes
Roadside Cleanup	

The Contractor shall notify property owners/residents prior to all grading, clearing, and fence removal on newly acquired right-of-way a minimum of 3 days before any work.

The Contractor shall provide the temporary fencing immediately upon removal of the existing fence and will maintain the temporary fence until the permanent fence is installed.

The septic system drain field removal shall consist of abandoning the septic system per Thurston County Department of Health standards. The Contractor shall obtain all necessary permits required to decommission the Septic System. The building will be connected to sewer as part of this project and shall be sewer at all times. All costs to connect to sewer will be paid by various bid items. All permit costs to connect to sewer will be paid by the Contracting Agency.

2-02.2 Video

(March 3, 2022 Lacey GSP)

Add the following new section:

The Contractor shall provide pre-construction video of the existing conditions for the construction area including all easements, streets, alleys, and driveways within the project area. Further, video shall include existing drainage, driveways, sidewalks, and other frontage improvements. The Contractor shall also provide pre-construction video of the existing conditions of each face of an existing structure (houses, garages, sheds, fences, etc.), within 30 feet of the construction area.

The Contractor shall provide a copy of the video, in electronic format, to the City prior to any construction.

All costs for providing and furnishing the pre-construction video shall be considered incidental to the Project and no other payment will be allowed.

2-02.3 Construction Requirements

(*** Lacey GSP)**

Supplement this section with the following:

Unless otherwise noted, catch basins and manholes shall be removed entirely.

Street lights, barricades, pedestrian signal heads, vehicular signal heads, pedestrian push button assemblies, and street signs shall be salvaged and delivered to the City of Lacey Shop located at 1200 College St. S.E.

The Contractor shall use due care and caution during removal and transportation of the salvaged material so that no damage occurs to the salvaged material. Any damage caused by the Contractor shall be deducted from the amount due.

2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters **(October 16, 2016 Lacey GSP)**

Supplement this section with the following:

In removing pavement, sidewalks, and curbs, the Contractor shall:

1. Mark all cut lines in the field and have the Engineer approve them prior to commencing cutting operations. The Engineer reserves the right to adjust removal to the nearest construction joint.
2. Make a vertical saw cut between any existing pavement, sidewalk, or curb that is to remain and the portion to be removed.
3. All sawcuts shall be continuous and made with saws designed specifically for this purpose; no skip cutting, wheel cutting, or jack hammering will be allowed unless given prior approval by the Engineer.
4. Replace at no expense to the Contracting Agency any pavement designated to remain that is damaged during the removal of other pavement. All damaged sidewalks and curbs shall be replaced to the nearest existing joint.
5. Haul all broken-up pieces of pavement, sidewalks, and curbs to an off-project disposal site.

All transitions to existing asphalt or cement concrete driveways, parking lots, curb and gutter and walkways shall be vertically sawcut full-depth with straight, uniform edges. Existing asphalt pavement roadway edge may be cut with a wheel, provided the wheel cut is full depth and no damage occurs to the pavement which is to remain. Neither impact tools nor pavement breakers may be used for trench crossing of existing pavement. Trench crossing of existing pavement shall be vertically sawcut.

When sawcutting the existing roadway is needed to widen the road to perform excavation, the Contractor shall take extra precaution to make a neat, uniform cut, and shall sawcut pavement to full depth, regardless of number of passes necessary. Compaction of asphalt near the sawcut is critical and a vertical, neat line sawcut is required. If in the opinion of the Engineer, the cut is not satisfactory due to Contractor's workmanship or equipment, or if the sawcut becomes damaged and irregular, the Contractor shall fix the problem to the satisfaction of the Engineer, at Contractor's own expense.

Existing asphalt pavement shall be expected to have a 4-6" thickness. No additional compensation for saw cutting shall be considered unless the depth of the total pavement is greater than 12 inches.

The Contractor may grind the existing pavement in lieu of excavation and haul. Spoils from grinding can be stockpiled and used and paid for per sections 4-04.3(12), 4-04.4 and 4-04.5. If the Contractor elects to grind and stockpile the existing pavement, all costs and expenses necessary to furnish all labor,

equipment, tools and materials shall be incidental to other bid items and no additional compensation will be allowed.

2-02.5 Payment

(April 1, 2024 Lacey GSP)

Delete this section and replace with the following:

If no bid item for “Sawcutting” is included, any work described in this section shall be incidental to the project.

“Removal of Structures and Obstructions”, lump sum.

The lump sum contract price for these bid items shall be full compensation for all labor, equipment and materials necessary to complete the requirements of this section.

2-03.3(7)C Contractor-Provided Disposal Site

(October 16, 2009 Lacey GSP)

Supplement this section with the following:

The Contracting Agency has not provided a waste site for disposal of excess materials and debris.

2-03.4 Measurement

(October 29, 2010 Lacey GSP)

Supplement this section with the following:

The quantity of the following items to be paid for on this project shall be quantities shown on the bid proposal:

“Roadway Excavation Incl. Haul”, per cubic yard.

The quantities in the bid proposal are based on a computer generated earthwork calculated on the existing ground survey. The quantities do not incorporate expansion, clearing and grubbing, or construction methodology. These values are listed for the convenience of the Contractor in determining the volume of work involved as calculated by the Engineer and are not guaranteed to be accurate. The prospective bidders shall verify these quantities prior to submitting the bid. A digital copy of the survey is available to prospective bidders from the Contracting Agency at the Contractor’s request. No adjustments will be made in these quantities although the actual quantities may deviate from those listed.

2-07 WATERING

2-07.3 Construction Requirements

(October 16, 2009 Lacey GSP)

Supplement this section with the following:

If the Contractor anticipates the use of City water, the Contractor shall apply for a water meter through the City of Lacey. Any damage rendered to the meter shall be repaired or replaced by the Contracting Agency and those costs deducted from monies due to the Contractor. All water used shall be metered and used sparingly for the entire length of the project. The Contractor will not be charged for water used on the project. The meter shall be returned promptly at the end of the project.

The Contractor is responsible for complying with backflow prevention requirements, which may include but are not limited to providing a certified air gap or reduced pressure backflow assembly (RPBA).

The Contractor shall use the water to keep the project site clean and to control dust during and after construction hours as determined by the Engineer.

2-07.4 Measurement
(October 16, 2009 Lacey GSP)

Delete and replace this section with the following:

The Contractor shall apply for a construction meter through the Contracting Agency. All water used shall be measured with the Contracting Agency supplied meter.

2-07.5 Payment
(February 14, 2023 Lacey GSP)

Delete and replace this section with the following:

The Contractor will not be charged for water used on this project. A construction meter will also be provided for a deposit and can be obtained at the City of Lacey Maintenance Service Center. Any costs to repair meters damaged by the Contractor shall be recovered from monies due the Contractor.

All costs to use or apply water as directed by the Engineer, including but not limited to supplying tank trucks, reduced pressure backflow assemblies (RPBA), and certification of approved backflow prevention methods, shall be considered incidental to the project and no other payment will be allowed.

2-13 PRIVATE UTILITY COORDINATION AND CONSTRUCTION
(January 3, 2016 Lacey GSP)

Add the following new sections:

2-13.3(6) Gas Valve Box Adjustment
(October 29, 2010 Lacey GSP)

All existing gas valve boxes shall be adjusted to line and grade staked in the field or otherwise designated by the Engineer. The Contractor shall be responsible for coordination with Puget Sound Energy (PSE) for replacement of the existing gas valve boxes and lids if they are determined to be non-adjustable. PSE will provide new valve boxes and lids if the existing is determined to be unusable by the Engineer.

2-13.4 Measurement
(January 3, 2011 Lacey GSP)

Adjust Gas Valve Box shall be measured per each.

2-13.5 Payment
(October 29, 2010 Lacey GSP)

The unit contract price per each for “Adjust Gas Valve Box” shall be full pay for all labor, materials, tools, and equipment, necessary to remove, replace and adjust gas valve box to line and grade staked in the field. This work is dependent on Puget Sound Energy’s acceptance of the bid. The Engineer reserves the right to delete this work. No extra compensation will be permitted if the Engineer elects to delete this work.

4-04 BALLAST AND CRUSHED SURFACING

4-04.3(13) Asphalt Grindings

(April 2, 2018 Lacey GSP)

Add the following new section:

The Contractor may grind the existing pavement in lieu of excavation and haul. Spoils from the grinding can be stockpiled and used in any locations that require Crushed Surfacing Base Course, as approved by the Engineer. Grindings must be well ground and free of debris. Any large pieces 4” or greater of asphalt will be removed and disposed of at the Contractor’s expense.

All grindings shall be proof rolled the entire length and width of the roadway with a truck weighing a minimum of 40,000 lb. Offset each trip of the roller by at most 2 tires width. Operate rollers at a speed between 2 and 6 miles per hour, as directed. Proof rolling shall be done in the presence of the Engineer.

The Engineer will visually inspect the asphalt grindings. If the Contractor elects to grind and stockpile the existing pavement, all costs and expenses necessary to furnish all labor, equipment, tools and materials shall be incidental to other bid items and no additional compensation will be allowed.

4-04.4 Measurement

(January 3, 2017 Lacey GSP)

Supplement this section with the following:

Asphalt Grindings will be measured by the cubic yard. Measurement by cubic yard will be made in the hauling vehicle and multiplied 2 tons/cy to convert asphalt grindings into tons. The asphalt grindings used on the project will be paid as Crushed Surfacing Base Course.

5-04 HOT MIX ASPHALT

5-04.1 Description

(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

This Work shall consist 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. WMA processes include organic additives, chemical additives, and foaming.

HMA shall be composed of asphalt binder and mineral materials as may be required, mixed in the proportions specified to provide a homogeneous, stable, and workable mixture.

5-04.2 Materials
(October 30, 2018 Lacey GSP)

Delete this entire section and replace it with the following:

Materials shall meet the requirements of the following sections:

Asphalt Binder 9-02.1(4)
Cationic Emulsified Asphalt 9-02.1(6)
Anti-Stripping Additive 9-02.4
HMA Additive 9-02.5
Aggregates 9-03.8
Recycled Asphalt Pavement 9-03.8(3)B
Mineral Filler 9-03.8(5)
Recycled Material 9-03.21
Portland Cement 9-01
Sand 9-03.1(2)
(As noted in 5-04.3(5)C for crack sealing)
Joint Sealant 9-04.2
Foam Backer Rod 9-04.2(3)A

The Contract documents may establish that the various mineral materials required for the manufacture of HMA will be furnished in whole or in part by the Contracting Agency. If the documents do not establish the furnishing of any of these mineral materials by the Contracting Agency, the Contractor shall be required to furnish such materials in the amounts required for the designated mix. Mineral materials include coarse and fine aggregates, and mineral filler.

Reclaimed/recycled asphalt pavement and/or shingles (RAP and/or RAS) will not be allowed on this project.

The grade of asphalt binder shall be as required by the Contract. Blending of asphalt binder from different sources is not permitted.

Production of aggregates shall comply with the requirements of Section 3-01.

Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

5-04.2(1) How to Get an HMA Mix Design on the QPL
(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

If the Contractor wishes to submit a mix design for inclusion in the Qualified Products List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1).

5-04.2(1)A

Delete this entire section

5-04.2(2) Mix Design – Obtaining Project Approval
(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

No paving shall begin prior to the approval of the mix design by the Engineer.

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

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, 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. The Proposal quantity of HMA that is accepted by commercial evaluation will be excluded from the quantities used in the determination of nonstatistical evaluation.

Nonstatistical Mix Design. Fifteen days prior to the first day of paving the Contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.
- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.

The mix design shall 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: resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall:

- Be designed for 4.5 million equivalent single axle loads (ESALs).
- 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), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324 or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Commercial Evaluation Mix Design. Approval of a mix design for "Commercial Evaluation" will be based on a review of the Contractor's submittal of WSDOT Form 350-042 (for commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of ESALs appropriate for the required use.

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

Delete this section

5-04.2(2)B Using Warm Mix Asphalt Processes
(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

The Contractor may elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature more than allowed in Section 5-04.3(6) in the production of mixtures.
- Before using additives, obtain the Engineer’s approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.2(3) Fiber Reinforced HMA
(April 2, 2018 Lacey GSP)

Add the following new section:

Aramid fibers will be added to the HMA mix at a minimum dosage 2.1 ounces of aramid fibers per (1) ton of asphalt.

Reinforcing fibers shall be one of the following products:

1. Forti-Fi Fiber Reinforcement by Alliance Geosynthetics:
Aramid-polyolefin fiber mix at a dosage of (1) pound of product per (1) ton of asphalt.
2. ACE Fiber Reinforcement:
Pure aramid fiber with wax treatment at a dosage of 4.2 ounces of product per (1) ton of asphalt.
3. Non-aramid fiber blends will not be considered acceptable alternatives. If an alternate aramid-based fiber blend is proposed, the proposed alternate must meet the same performance testing requirements as one of the products listed above and be approved by the Engineer. Indirect Tensile Strength and Aramid dispersion State Ratio tests are required. All testing must be performed by an AASHTO accredited laboratory or nationally recognized university testing lab.

No modifications to the HMA job mix formula are required. Submit product data sheet and manufacturer’s instructions and general recommendations to the Engineer for approval.

Store aramid product in a dry environment and do not allow it to be in contact with moisture.

Aramid fibers shall meet the following properties:

Property	Measure
Material	Aramid
Form	Monofilament
Length	0.75 inches (+/- 10%)
Specific Gravity	1.44
Minimum Tensile Strength	400,000 psi

Polyolefin fibers shall meet the following properties:

Property	Measure
Material	Polyolefin
Form	Serrated
Length	0.75 inches (+/- 10%)
Specific Gravity	.91

Fiber reinforcing shall be mixed with the asphalt per the fiber manufacturer's instructions. The fiber manufacturer's representative shall be on site during mixing and production. This requirement can be waived if fiber manufacturer and asphalt producer can supply evidence of manufacturer's brand of fiber being successfully produced a minimum of three times at the asphalt plant to be used for the project.

Visually observe the reinforced HMA from the at the plant. Collect a small sample from the discharge chute during the first 50 tons of production. If there are one or more undistributed fiber clips or bundles, adjust mixing operations per manufacturer's recommendations to eliminate fiber bundles. If undistributed fiber clips or bundles cannot be eliminated, cease production until a remedy is identified.

Visually observe the reinforced HMA in first three trucks and every tenth truck thereafter at the point of discharge. Observation shall include using a shovel or other device. Look for proper distribution of aramid fibers and make mixing adjustments if needed. Remove any observed fiber balls from placed mixture and adjust operations per the manufacturer's recommendation to eliminate future fiber ball development.

Fiber Supply System

Introduce the aramid product as follows:

Batch Plant:

When a batch type plant is used, add the aramid product dosage to the aggregate in the weigh hopper. Increase the batch dry and wet mixing times to ensure the fibers are uniformly distributed prior to the injection of asphalt cement into the mixer.

Drum Plant:

1. Inject fibers through the RAP collar by placing fibers on the RAP belt or by feeding them with an automated dosing/blower tube system. Rate the feeding of fibers with the rate the plant is producing asphalt mix, and add to the mixing drum in a continuous way. If there is any evidence of fiber balls at the discharge chute, increase the mixing time and/or temperature or change the angle of the fiber feeder line to increase dry mixing time.

2. For manual feeding (allowed on Forti-Fi Fiber Reinforcement product only), place fibers on the RAP belt at intervals based on the plant production rate. Fibers should be contained in individual dosage packaging, such as a plastic bag which will quickly melt/dissolve in the drum, to protect the fibers from rain or wind while on the RAP belt and allow quick, accurate feeding by one person.

3. When using a blower tube/automated dosing system, add fibers continuously and in a steady uniform manner. Provide automated proportioning and control delivery within $\pm 10\%$ of the mass of the fibers required. Perform an equipment calibration to the satisfaction of the fiber manufacturer's representative to show that the fiber is being accurately metered and uniformly distributed into the mix.

Include the following with the blower tube/automated dosing system:

- Low level indicators
- No-flow indicators

- A printout of feed rate status in pounds/minute
- A section of transparent pipe in the fiber supply line for observing consistency of flow or feed.
- Manufacturer’s representative’s approval of fiber addition system

Mix the aramid fiber with the heated aggregate and RAP longer, if needed, to allow thorough distribution of aramid fibers at the end of the mixing process and to promote asphalt coating of individual strands of aramid fiber.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations
[\(January 31, 2023 APWA GSP\)](#)

Delete this entire section and replace it with the following:

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 below, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

Minimum Surface Temperature for Paving

Compacted Thickness (Feet)	Wearing Course	Other Courses
Less than 0.10	55°F	45°F
0.10 to .20	45°F	35°F
More than 0.20	35°F	35°F

5-04.3(2) Paving Under Traffic
[\(April 2, 2018 Lacey GSP\)](#)

Delete this section and replace it with the following:

When the Roadway being paved is open to traffic, the requirements of this Section shall apply. The Contractor shall keep intersections open to traffic at all times except when paving the intersection or paving across the intersection. During such time, and provided that there has been an advance warning to the public, the intersection may be closed for the minimum time required to place and compact the mixture. Before closing an intersection, advance warning signs shall be placed and signs shall also be placed marking the detour or alternate route.

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, temporary pavement markings shall be maintained throughout the project. Temporary pavement markings shall be installed on the Roadway prior to opening to traffic. Temporary pavement markings shall be in accordance with Section 8-23.

The Contractor shall remove all pavement markings including paint, tape, thermoplastic and RPM's.

All costs in connection with performing the Work associated with these requirements shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant **(January 31, 2023 APWA GSP)**

Delete this entire section and replace it with the following:

Plants used for the preparation of HMA shall conform to the following requirements:

1. Equipment for Preparation of Asphalt Binder – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. Thermometric Equipment – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. Heating of Asphalt Binder – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.
4. Sampling and Testing of Mineral Materials – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field-testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
5. Sampling HMA – The HMA plant shall provide for sampling HMA by one of the following methods:
 - (a) A mechanical sampling device attached to the HMA plant.
 - (b) Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment
(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

Trucks used for hauling HMA shall have tight, clean, smooth metal beds and shall have a cover of canvas or other suitable material of sufficient size to protect the mixture from adverse weather. Whenever the weather conditions during the work shift include, or are forecast to include precipitation or an air temperature less than 45°F or when time from loading to unloading exceeds 30 minutes, the cover shall be securely attached to protect the HMA.

The Contractor shall provide an environmentally benign means to prevent the HMA mixture from adhering to the hauling equipment. Excess release agent shall be drained prior to filling hauling equipment with HMA. Petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA shall not be used. For live bed trucks, the conveyer shall be in operation during the process of applying the release agent.

5-04.3(3)C Pavers
(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

HMA pavers shall be self-contained, power-propelled units, provided with an internally heated vibratory screed and shall be capable of spreading and finishing courses of HMA plant mix material in lane widths required by the paving section shown in the Plans.

The HMA paver shall be in good condition and shall have the most current equipment available from the manufacturer for the prevention of segregation of the HMA mixture installed, in good condition, and in working order. The equipment certification shall list the make, model, and year of the paver and any equipment that has been retrofitted.

The screed shall be operated in accordance with the manufacturer's recommendations and shall effectively produce a finished surface of the required evenness and texture without tearing, showing, segregating, or gouging the mixture. A copy of the manufacturer's recommendations shall be provided upon request by the Contracting Agency. Extensions will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. Extensions without augers and an internally heated vibratory screed shall not be used in the Traveled Way.

When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line will be permitted. The grade and slope for intermediate lanes shall be controlled automatically from reference lines or by means of 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 the 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.

The Contractor shall 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. Any cleaning or solvent type liquids spilled on the pavement shall be thoroughly removed before paving proceeds.

5-04.3(3)D Material Transfer Device or Material Transfer Vehicle
(April 2, 2018 Lacey GSP, Option 2)

Delete this section and replace it with the following:

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 .30 feet of the pavement unless directed otherwise by the Engineer.

Use of an MTD/V is not required in the following locations:

- Irregularly shaped and minor areas

Where an MTD/V is required by the contract, the Engineer may approve paving without an MTD/V, at the request of the Contractor. The Engineer will determine if an equitable adjustment in cost or time is due.

The MTD/V shall mix the HMA after delivery by the hauling equipment and prior to laydown by the paving machine. Mixing of the HMA shall be sufficient to obtain a uniform temperature throughout the mixture. If a windrow elevator is used, the length of the windrow may be limited in urban areas or through intersections, at the discretion of the Engineer.

To be approved for use, an MTV:

1. Shall be self-propelled vehicle, separate from the hauling vehicle or paver.
2. Shall not be 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
(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good condition and capable of reversing without backlash. Operation of the roller shall be in accordance with the manufacturer's recommendations. When ordered by the Engineer for any roller planned for use on the project, the Contractor shall provide a copy of the manufacturer's recommendation for the use of that roller for compaction of HMA. The number and weight of rollers shall be sufficient to compact the mixture in compliance with the requirements of Section 5-04.3(10). The use of equipment that results in

crushing of the aggregate will not be permitted. Rollers producing pickup, washboard, uneven compaction of the surface, displacement of the mixture or other undesirable results shall not be used.

5-04.3(4) Preparation of Existing Surfaces **(December 19, 2019 Lacey)**

Delete this section and replace it with the following:

When the surface of the existing pavement or old base is irregular, the Contractor shall bring it to a uniform grade and cross-section as shown on the Plans or approved by the Engineer.

Preleveling of uneven or broken surfaces over which HMA is to be placed may be accomplished by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

Compaction of preleveling HMA shall be to the satisfaction of the Engineer and may require the use of small steel wheel rollers, plate compactors, or pneumatic rollers to avoid bridging across preleveled areas by the compaction equipment. Equipment used for the compaction of preleveling HMA shall be approved by the Engineer.

Before construction of HMA on an existing paved surface, the entire surface of the pavement shall be clean. All fatty asphalt patches, grease drippings, and other objectionable matter shall be entirely removed from the existing pavement. All pavements or bituminous surfaces shall be thoroughly cleaned of dust, soil, pavement grindings, and other foreign matter. All holes and small depressions shall be filled with an appropriate class of HMA. The surface of the patched area shall be leveled and compacted thoroughly. Prior to the application of tack coat, or paving, the condition of the surface shall be approved by the Engineer.

A tack coat of asphalt shall be applied to all paved surfaces on which any course of HMA is to be placed or abutted. Tack coat shall be uniformly applied to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between 0.02 and 0.10 gallons per square yard of retained asphalt. The rate of application shall be approved by the Engineer. A heavy application of tack coat shall be applied to all joints. For Roadways open to traffic, the application of tack coat shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material.

Equipment shall not operate on tacked surfaces until the tack has broken and cured. If the Contractor's operation damages the tack coat it shall be repaired prior to placement of the HMA.

The tack coat shall be CSS-1, or CSS-1h emulsified asphalt. The CSS-1 and CSS-1h emulsified asphalt may be diluted once with water at a rate not to exceed one part water to one part emulsified asphalt. The tack coat shall have sufficient temperature such that it may be applied uniformly at the specified rate of application and shall not exceed the maximum temperature recommended by the emulsified asphalt manufacturer

All vegetation including root structures and moss shall be removed in their entirety within the paved areas including adjoining curbs, gutters, and sidewalks. Further, all vegetation overgrowth shall be trimmed and removed 6 inches from back of proposed HMA edge limits as directed by the Engineer.

Driveway preparation shall include saw cutting, cutting, filling, and grading the transitional area required to provide a HMA approach between the edge of pavement and driveway regardless of the existing surface treatment or width. The Engineer shall mark in the field where the asphalt or concrete shall be sawcut. Typical driveway aprons for paved/concrete driveways are 18" unless shown longer on the plans. Typical driveway aprons for gravel driveways are 48" unless shown longer in the plans. All material that

must be removed from the driveway shall be hauled and disposed off the project site. All imported material required to grade and compact driveway bases shall be paid for by the unit bid item "Crushed Surfacing Top Course." All driveways shall require preparation. Temporary access shall be provided for all driveways prior to paving. There shall be no additional compensation for those driveways requiring more preparation than others.

Shoulder preparation shall include cutting, filling, and grading the shoulder to ensure a uniform, longitudinal pavement edge. Maximum distance shall be 12 inches from proposed edge of pavement surface to a maximum depth of 6 inches from edge of roadway finish grade. Backfill requirements beyond these limits shall be repaired at the Contractor's expense. All grading within drainage ditches or swales to establish or maintain existing flowlines shall also be included in shoulder preparation.

All excess asphalt joint filler shall be completely removed and all premolded and rubberized joint filler shall be removed to a minimum 1/2 inch below the surface of the existing pavement.

5-04.3(4)A Crack Sealing
(January 31, 2023 APWA GSP)

Delete this section and replace with the following:

When the Proposal includes a pay item for crack sealing, seal cracks in accordance with Section 5-03.

5-04.3(4)C Pavement Repair
(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

The Contractor shall excavate pavement repair areas and shall backfill these with HMA in accordance with the details shown in the Plans and as marked in the field. The Contractor shall conduct the excavation operations in a manner that will protect the pavement that is to remain. Pavement not designated to be removed that is damaged as a result of the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall excavate only within one lane at a time unless approved otherwise by the Engineer. The Contractor shall not excavate more area than can be completely finished during the same shift, unless approved by the Engineer.

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, the existing pavement shall be sawcut or shall be removed by a pavement grinder. Excavated materials will become 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.

Asphalt for tack coat shall be required as specified in Section 5-04.3(4). A heavy application of tack coat shall be applied to all surfaces of existing pavement in the pavement repair area.

Placement of the HMA backfill shall be accomplished in lifts not to exceed 0.35-foot compacted depth. Lifts that exceed 0.35-foot of compacted depth may be accomplished with the approval of the Engineer. Each lift shall be thoroughly compacted by a mechanical tamper or a roller.

5-04.3(5) Producing/Stockpiling Aggregates, RAP, & RAS
Delete this section and replace it with the following:

5-04.3(5) Producing/Stockpiling Aggregates and RAP
(October 30, 2018 Lacey GSP)

If Recycled asphalt pavement (RAP) is allowed per section 5-04.2, aggregates and RAP shall be stockpiled according to the requirements of Section 3-02. Sufficient storage space shall be provided for each size of aggregate and RAP. Materials shall be removed from stockpile(s) in a manner to ensure minimal segregation when being moved to the HMA plant for processing into the final mixture. Different aggregate sizes shall be kept 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
Delete this section

5-04.3(6) Mixing
(October 30, 2018 Lacey GSP)

Delete this section and replace it with the following:

After the required amount of mineral materials, asphalt binder, recycling agent and anti-stripping additives have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials is ensured.

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the discharge temperature of the HMA shall not exceed 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, the moisture content shall be reduced as directed by the Engineer.

Storing or holding of the HMA in approved storage facilities will be permitted with approval of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the Contractor at no expense to the Contracting Agency. The storage facility shall have an accessible device located at the top of the cone or about the third point. The device shall indicate the amount of material in storage. No HMA shall be accepted from the storage facility when the HMA in storage is 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.

If Recycled asphalt pavement (RAP) is allowed per section 5-04.2, RAP utilized in the production of HMA shall be sized prior to entering the mixer so that a uniform and thoroughly mixed HMA is produced. If there is evidence of the recycled asphalt pavement not breaking down during the heating and mixing of the HMA, the Contractor shall immediately suspend the use of the RAP until changes have been approved by the Engineer. After the required amount of mineral materials, RAP, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, and RAP is ensured.

5-04.3(7) Spreading and Finishing
(January 24, 2024 Lacey GSP)

Delete this section and replace it with the following:

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1”		0.35 feet
HMA Class ¾” and HMA Class ½”		
	wearing course	0.30 feet
	other courses	0.35 feet
HMA Class ⅜”		0.17 feet

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, the material produced for each JMF shall be placed by separate spreading and compacting equipment. The intermingling of HMA produced from more than one JMF is prohibited. 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.

The Contractor shall complete the first lift over the entire length of the project, before the final lift will be allowed to be installed.

If traffic signal loops are required, these loops shall be installed prior to the final lift.

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA
[\(January 31, 2023 APWA GSP\)](#)

Delete this section and replace it with the following:

For HMA accepted by nonstatistical evaluation, the aggregate properties of sand equivalent, uncompacted void content, and fracture will be evaluated in accordance with Section 3-04. Sampling and testing of aggregates for HMA accepted by commercial evaluation will be at the option of the Engineer.

5-04.3(9) HMA Mixture Acceptance
[\(January 31, 2023 APWA GSP\)](#)

Delete this entire section and replace it with the following:

Acceptance of HMA shall be as provided under nonstatistical, or commercial evaluation.

Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Engineer.

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 Engineer and may be made in accordance with this section.

HMA Tolerances and Adjustments

1. Job Mix Formula Tolerances – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:

For Asphalt Binder and Air Voids (Va), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

Property	Non-Statistical Evaluation	Commercial Evaluation
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5% max	N/A

For Aggregates in the mixture:

- (a) First, determine preliminary upper and lower acceptance limits by applying the following tolerances to the approved JMF.

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", ¾", ½", and 3/8" sieves	+/- 6%	+/- 8%
No. 4 sieve	+/-6%	+/- 8%
No. 8 Sieve	+/- 6%	+/-8%
No. 200 sieve	+/- 2.0%	+/- 3.0%

- (b) Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

- (a) Aggregates –2 percent for the aggregate passing the 1½", 1", ¾", ½", ⅜", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).
- (b) Asphalt Binder Content – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent.

5-04.3(9)A Vacant

5-04.3(9)B Vacant

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation
[\(January 31, 2023 APWA GSP\)](#)

HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots **(January 31, 2023 APWA GSP)**

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 800 tons, whichever is less except that the final subplot will be a minimum of 400 tons and may be increased to 1200 tons.

All of the test results obtained from the acceptance samples from a given lot shall be evaluated collectively. If the Contractor requests a change to the JMF that is approved, the material produced after the change will be evaluated on the basis of the new JMF for the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

Sampling and testing for evaluation shall be performed on the frequency of one sample per subplot.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling **(January 31, 2023 APWA GSP)**

Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASHTO T 168. A minimum of three samples should be taken for each class of HMA placed on a project. If used in a structural application, at least one of the three samples shall be tested.

Sampling and testing HMA in a structural application where quantities are less than 400 tons is at the discretion of the Engineer.

For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed. In all cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of one of the three samples will be tested for conformance to the JMF:

- If the test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.
- If test results are found not to be within specification requirements, additional testing of the remaining samples to determine a CPF shall be performed.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing **(January 31, 2023 APWA GSP)**

Testing of HMA for compliance of Va will at the option of the Contracting Agency. If tested, compliance of Va will use WSDOT SOP 731.

Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.

Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors **(January 31, 2023 APWA GSP)**

Add the following new section:

For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a Composite Pay Factor (CPF) using the following price adjustment factors:

Table of 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 (Va) (where applicable)	20

Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical tolerance limits in the Job Mix Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

5-04.3(9)C5 Vacant

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments **(January 31, 2023 APWA GSP)**

For each lot of HMA mix produced under Nonstatistical Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The total job mix compliance price adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

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

5-04.3(9)C7 Mixture Nonstatistical Evaluation – Retests **(January 31, 2023 APWA GSP)**

The Contractor may request a subplot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, Va. The results of the retest will be used for the acceptance of the HMA in place of the original subplot 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 \$500 per sample.

5-04.3 (9)D Mixture Acceptance – Commercial Evaluation
(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the street shall be tested to provide a minimum of three sets of results for evaluation.

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

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

5-04.3(10) HMA Compaction Acceptance
(January 31, 2023 APWA GSP)

Delete this entire section and replace it with the following:

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a CPF of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

Tests for the determination of the pavement density will be taken in accordance with the required procedures for measurement by a nuclear density gauge or Roadway cores after completion of the finish rolling.

If the Contracting Agency uses a nuclear density gauge to determine density the test procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the mix is placed and prior to opening to traffic.

Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.

If the Contract includes the Bid item “Roadway Core”, the cores shall be obtained by the Contractor in the presence of the Engineer on the same day the mix is placed and at locations designated by the Engineer. If the Contract does not include the Bid item “Roadway Core”, the Contracting Agency will obtain the cores.

For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor’s request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed 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.

HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

Test Results

For a subplot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference 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 be used for determination of the relative density of the subplot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the subplot 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 subplot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. 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 cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted 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)A HMA Compaction – General Compaction Requirements **(January 31, 2023 APWA GSP)**

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted 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. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks.

5-04.3(10)B HMA Compaction - Cyclic Density **(January 31, 2023 APWA GSP)**

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 Vacant

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

Delete this section and replace it with the following:

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction – Lots and Sublots

(January 31, 2023 APWA GSP)

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 400 tons, whichever is less except that the final subplot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per subplot per WSDOT T 738.

The subplot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed 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.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

(January 31, 2023 APWA GSP)

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each subplot, with one test per subplot.

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments

(January 31, 2023 APWA GSP)

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a subplot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than

0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92%, a Non-Conforming 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 CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General **(January 31, 2023 APWA GSP)**

Delete this section and replace it with the following:

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

5-04.3(11)B Rejection by Contractor **(January 31, 2023 APWA GSP)**

Delete this section and replace it with the following:

The Contractor may, prior to sampling, 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) **(January 31, 2023 APWA GSP)**

Delete this section and replace it with the following:

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. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. 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 **(January 31, 2023 APWA GSP)**

Delete this section and replace it with the following:

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal subplot 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. A minimum of three random samples of the suspect material will be obtained and tested. 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
(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

An entire subplot that is suspected of being defective may be rejected. When a subplot is rejected a minimum of two additional random samples from this subplot will be obtained. These additional samples and the original subplot 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
(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

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:

1. When the CPF of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PF for any constituent or the CPF of a lot in progress is less than 0.75.

5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)
(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints
(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

The Contractor shall conduct operations such that the placing of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed, and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course.

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

(April 1, 2024 Lacey GSP)

Replace the first paragraph with the following:

This project will require Echelon paving, using side-by-side pavers in operation at the same time and slightly offset on multiple lanes to improve the longitudinal joint between pavers. Rollers behind the echelon pavers shall pass directly over the longitudinal joint while both sides are hot. Hot lap joints shall be constructed in the wearing course and shall be located at the lane lines between travel lanes. Cold joints will only be allowed at locations approved by the Engineer.

All other joints shall be an extended joint (Notched wedge) with a taper placed on the first paved lane to reduce joint air voids. An attachment shall be placed on the paver screed to form the mat edge into a tapered section. Notches on either end of the taper shall eliminate thin taper extremities. The notches shall be at least as deep as the nominal maximum aggregate size of the mix. The taper shall be spread out over 1 foot and the hot lane shall overlap the cold lane notch by about 0.5 to 1 inch. The notched wedge joint shall provide a ramp for traffic transition between the cold lane and the yet unpaved portions of the hot lane.

When HMA is placed adjacent to cement concrete pavement comply with Section 5-03 for sawing and sealing the joint. Measurement and payment for all work related to sawing and sealing this longitudinal joint shall be as provided in Section 5-03

Upon Completion of paving operations, all joints shall be sealed with PG 58H-22 asphalt binder.

5-04.3(13) Surface Smoothness

(April 1, 2024 Lacey GSP)

Delete this section and replace it with the following:

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 $\frac{1}{8}$ 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 $\frac{1}{4}$ 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, the pavement surface shall be corrected by one of the following methods:

1. Removal of material from high places by grinding with an approved grinding machine, or
2. Removal and replacement of the wearing course of HMA, or
3. By other method approved by the Engineer.

Correction of defects shall be carried out 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.

5-04.3(14) Planing Bituminous Pavement

(April 1, 2024 Lacey GSP)

Supplement this section with the following:

The planing plan must be approved by the Engineer and a pre planing meeting must be held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planning submittals. Pavement planing shall be completed to the cross-slopes as shown on the Plans. The Contractor shall provide a smooth transition at the changes in cross-slopes as directed by the Engineer.

Locations of existing surfacing to be planed are as shown in the Plans.

Where planing an existing pavement is specified in the Contract, the Contractor must remove existing surfacing material and to reshape the surface to remove irregularities. The finished product must be a prepared surface acceptable for receiving an HMA overlay.

Use the cold milling method for planing unless otherwise specified in the Contract. Do not use the planer on the final wearing course of new HMA.

Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage the surface which is to remain. The finished planed surface must be slightly grooved or roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The Contractor must repair any damage to the surface by the Contractor's planing equipment, using an Engineer approved method.

Repair or replace any metal castings and other surface improvements damaged by planing, as determined by the Engineer.

A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a minimum of 4 inches of curb reveal after placement and compaction of the final wearing course. The dimensions of the wedge must be as shown on the Drawings or as specified by the Engineer.

A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining pavement.

After planing is complete, planed surfaces must be swept, cleaned, and if required by the Contract, patched and preleveled.

The Engineer may direct additional depth planing. Before performing this additional depth planing, the Contractor must conduct a hidden metal in pavement detection survey as specified in Section 5-04.3(18).

The Contractor can stockpile the grindings for use on the project as identified in section 2-02.3(3).

5-04.3(14)B2 Submittals - Planing Plan and HMA Paving Plan

(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

The planing operation and the paving operation include, but are not limited to, metal detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at the briefing.

When intersections will be partially or totally blocked, provide adequately sized and noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in advance. The traffic control plan must show where police officers will be stationed when signalization is or may be, countermanded, and show areas where flaggers are proposed.

At a minimum, the planing and the paving plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
2. A copy of each intersection's traffic control plan.
3. Haul routes from supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
4. Names and locations of HMA supplier facilities to be used.
5. List of all equipment to be used for paving.
6. List of personnel and associated job classification assigned to each piece of paving equipment.
7. Description (geometric or narrative) of the scheduled sequence of planing and of paving and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordinations to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
9. A copy of the approved Mix Designs.

10. Tonnage of HMA to be placed each day.

11. Approximate times and days for starting and ending daily operations.

5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing
(January 31, 2023 APWA GSP)

Delete this section and replace it with the following:

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other Contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted planing plan and paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to:

1. General for both the Paving and Planing:

- a) The actual times of starting and ending daily operations.
- b) In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
- c) The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, public convenience and safety, and other Contractors who may operate in the Project limits.
- d) Notifications required of Contractor activities and coordinating with other entities and the public as necessary.
- e) Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and paving.
- f) Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed.
- g) Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, streetcar rail, and castings, before planing as per Section 5-04.3(14)B2.
- h) Description of how flaggers will be coordinated with the planing, paving, and related operations.
- i) Description of sequencing of traffic controls for the process of rigid pavement base repairs.
- j) Other items the Engineer deems necessary to address.

2. Paving – additional topics:

- a) When to start applying tack and coordinating with paving.

- b) Types of equipment and numbers of each type of equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type of equipment as it relates to meeting Specification requirements.
- c) Number of JMFs to be placed, and if more than one JMF is used, how the Contractor will ensure different JMFs are distinguished, how pavers and how MTVs are distinguished, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.
- d) Description of contingency plans for that day's operations such as equipment breakdown, rain out, and supplier shutdown of operations.
- e) Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(18) Pre Planing Or Pulverizing Metal Detection Check
(October 30, 2018 Lacey GSP)

Add the following new section:

Before starting planing or pulverizing of pavements, and before any additional depth planing or pulverizing required by the Engineer, the Contractor must conduct a physical survey of existing pavement to be planed with equipment that can identify hidden metal objects.

Should such metal be identified, promptly notify the Engineer.

See Section 1-07.16(1) regarding the protection of survey monuments that may be hidden in pavement.

The Contractor is solely responsible for any damage to equipment resulting from the Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's failure to notify the Engineer of any hidden metal that is detected.

5-04.3(21) Paving Operations Supervisor
(April 2, 2018 Lacey GSP)

Add the following new section:

The Contractor shall identify a Paving Operations Supervisor (POS) at the Preconstruction Conference. The POS shall be employed by the Paving Contractor, shall have direct and immediate control of the paving operations on the Project at all times, and shall perform no other duties on the project. No part of the paving operations shall commence or continue without the physical presence of the POS on-site. The POS shall act as the main point of contact in the field to the Engineer and shall execute all requests by the Engineer promptly and immediately.

Specific duties include, but are not limited to the following:

Ensures all paving operations meet the requirements of Section 5-04.
 Ensures all iron is marked and properly lowered prior to pavement planing operations.
 Ensures paving schedule is communicated to the Engineer 72 hours in advance of paving operations commencing. The Engineer shall be responsible for delivering paving notices to affected business owners and residents. Any changes to the paving schedule must also be communicated to the Engineer 72 hours in advance of the change.

Ensures existing surfaces to be paved are prepared in accordance with Sec. 5-04.3(4) a minimum of two (2) hours prior to paving. Specific attention shall be given to surface cleanliness, match lines to adjoining pavement are vertical and smooth, and matching to existing driveways and rolled gutters are prepared. In the event that preparation of existing surfaces are behind schedule, paving operations may be halted and rescheduled at the Engineer's request if, in his judgment, the delay of paving shall result in a less than satisfactory end product or inconvenience to the public. All costs resulting from paving rescheduling shall be borne by the Contractor.

Ensures all tack coating is completed in accordance with Sec. 5-04.3(4).

5-04.3(22) Temporary Patching

(April 2, 2018 Lacey GSP)

Add the following new section:

All excavations within or across streets, driveways, or failure of existing pavement that will be exposed to traffic shall be temporarily patched by the end of the working day or as directed by the Engineer. The patch shall be constructed of a minimum of 0.17 feet of either Commercial HMA or as directed by the Engineer. The Contractor shall maintain all temporary patches until such time as the permanent pavement is in place.

5-04.3(24) Roadway Shoulder Final Grading

(April 2, 2018 Lacey GSP)

Add the following new section:

The Contractor shall backfill and grade a 5 foot wide or a 5:1 transition (whichever is less) flush from the new edge of pavement down to the existing shoulder grade with Crushed Rock or Topsoil Type A to match existing shoulder material and condition. The Crushed Rock shall match gradation, shape, and color to of the existing rock shoulder. Upon placing and grading either material, the Contractor shall roll and compact the transition as directed by the Engineer. The Contractor shall then hydroseed all shoulder transitions backfilled with topsoil.

5-04.3(25) HMA Wedge Curb

(April 2, 2018 Lacey GSP)

Add the following new section:

The Contractor shall construct a HMA wedge curb where shown on the plans and shall be integral to the mainline paving operation respective to being placed and compacted. HMA used for wedge curb shall be compensated with the HMA bid item per ton and no other compensation shall be allowed.

5-04.3(26) Utility Access

(April 1, 2024 Lacey GSP)

Add the following new section:

When lowering and raising valves the valve riser pipes must remain free of debris. Cap the valve riser pipe to prevent debris from entering the riser and to provide access to the operating nut.

The contractor is responsible for tracking exact locations of all valves and manholes to be lowered or raised. Before asphalt is placed over a valve, metal must be placed directly above the valve location for the purpose of locating the valve with a metal detector. Once asphalt has been placed over a valve or manhole, the location of that valve or manhole must be marked on the asphalt within 3 working days.

The location marks must be maintained until the valves are raised. All valves and manholes must be raised within 20 working days after each time they are paved over. The cost of raising new valves and manholes is incidental to the cost for that bid item. The cost for raising existing valves and manholes will only be paid once for each location, no additional compensation will be allowed if the contractor has to raise the same valve/manhole twice. See sections 7-05 and 7-12 for additional information on raising valves and manholes.

5-04.4 Measurement **(February 14, 2023 Lacey GSP)**

Supplement this section with the following:

“Fiber Reinforced HMA Cl. PG ” 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 mixture. If the Contractor elects to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be measured.

No unit of measure shall apply to the lump sum price for Preparation of Existing Surfaces.

No unit of measure shall apply to the lump sum price for Driveway and Shoulder Preparation.

Crushed Rock for Shoulder Grading shall be measured per ton of material required to complete a smooth transition from the edge of pavement to the existing shoulder grade.

Topsoil Type A for Shoulder Grading shall be measured per cubic yard of material required to complete a smooth transition from the edge of pavement to the existing shoulder grade.

The quantities in the bid proposal for Planing Bituminous Pavement are based on a computer generated earthwork calculation from the existing ground survey. The quantities do not incorporate expansion, clearing and grubbing, or construction methodology. These values are listed for the convenience of the Contractor in determining the volume of work involved as calculated by the Engineer and are for estimating purposes only. The prospective bidders shall verify these quantities prior to submitting the bid. A digital copy of the survey is available to prospective bidders from the Contracting Agency at the Contractor’s request. No adjustments will be made in these quantities although the actual quantities may deviate from those listed.

5-04.5 Payment **(April 1, 2024 Lacey GSP)**

Supplement this section with the following:

The unit Contract price per ton for all HMA bid items shall also include Paving Operations Supervisor (POS) and the removal of excess tack coat of asphalt from existing surfaces, including, but not limited to existing pavement markings. Pavement markings shall be restored to a pre-construction condition or better. No additional compensation shall be given to the Contractor for installing new pavement markings if existing pavement markings cannot be restored to a pre-construction condition or better as directed by the Engineer.

If no bid item for “HMA for Pre-leveling Cl. __ PG __” is included, all materials, equipment, and labor necessary to pre-level the existing pavement prior to paving shall be fully compensated by the bid item “HMA Cl. __ PG __” and “Fiber Reinforced HMA Cl. PG ” and no other pay shall be allowed.

The unit Contract price per ton for “Fiber Reinforced HMA Cl. PG ” shall be full compensation for all costs, including fiber and 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.

“Fiber Reinforcing for HMA”, per Ton of HMA, shall be full compensation for all labor, equipment and materials required to provide and add the fiber reinforcing required per ton of hot mix asphalt.

“Preparation of Existing Surfaces,” lump sum.

The lump sum contract price for “Preparation of Existing Surfaces” shall be full pay for all labor, materials, and equipment to comply with the plans and specifications, including but not limited to cleaning and removal of all vegetation from proposed paved surfaces or that vegetation that will interfere with paving operations prior to paving.

“Driveway and Shoulder Preparation”, lump sum.

The lump sum contract price for “Driveway and Shoulder Preparation” shall be full pay for all labor, materials, and equipment to comply with the plans and specifications, including but not limited to sawcuts, cuts, fills, and grading all driveways and shoulders prior to paving.

“Crushed Rock for Shoulder Grading,” per ton.

“Topsoil Type A for Shoulder Grading,” per cubic yard.

The unit contract price for the above bid items shall be full compensation for all labor, material and equipment, including seeding of topsoil, to provide a smooth transition between the new edge of pavement and existing roadway.

7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

7-05.2 Materials

[\(April 1, 2024 Lacey GSP\)](#)

Section 7-05.2 is supplemented with the following:

Patching Material for Concrete Structure Repair 9-20.2

7-05.3 Construction Requirements

[\(April 1, 2024 Lacey GSP\)](#)

Modify this section by deleting the eighth paragraph and replacing it with the following:

Rubber gaskets or flexible plastic gaskets may be used in tongue and groove joints of precast units. Joints between precast manhole units used for sanitary sewers shall be rubber gasketed. All other joints and all openings cut through the walls shall be grouted and watertight. Mortar shall conform to the requirements of Section 9-20.2 or 9-20.4(3)

7-05.3(1)A Adjust Manhole

[\(April 1, 2024 Lacey GSP\)](#)

Add the following new section:

All manholes and Type 2 catch basins within the paved area, except those which are called out to be raised to grade, shall be adjusted flush to the new pavement surface. No wood adjustment nor bricks of any kind will be allowed.

Refer to Section 5-04.3(26) Utility Access for additional requirements.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.3(1)B Raise Manhole To Grade

(April 1, 2024 Lacey GSP)

Add the following new section:

Where shown on the plans or where directed by the Engineer, existing manholes and Type 2 catch basins shall be raised to the grade as staked or as directed by the Engineer. The Contractor shall supply and install new manhole rings, frames, and covers as part of raising the manhole to grade. The finished installation shall conform to the detail shown in plans. No wood adjustment nor bricks of any kind will be allowed.

Refer to Section 5-04.3(26) Utility Access for additional requirements.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.3(1)D Raise Catch Basin to Grade

(April 1, 2024 Lacey GSP)

Section 7-05.3(1)D is added with the following:

Where shown on the plans or as directed by the Engineer, existing catch basins shall be raised to the grade as staked or as directed by the Engineer. The Contractor shall remove and replace adjacent curb and gutter as required. Further, the Contractor shall supply and install concrete riser sections, and new frame and grate. The finished installation shall conform to the detail shown in plans. No wood adjustment nor bricks of any kind will be allowed.

Refer to Section 5-04.3(26) Utility Access for additional requirements.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.5 Payment

(April 1, 2024 Lacey GSP)

Supplement this section with the following:

The unit contract price per each for manholes and catch basins shall be full pay for furnishing all labor, tools, equipment, and materials required to place the structure including excavation, haul, backfill, testing, and all accessories, such as rings, covers, grates, steps, grate inlets, trash racks, beehive grates and debris cages, removable silt trap tees, GU liners, inside drops, outside drops, lowering and raising after the paving or concrete restoration and all other items needed to install the manhole complete in place in accordance with the plans and these specifications in conformity with the lines and grades staked.

“Adjust Manhole,” per each.

“Raise Manhole to Grade”, per each.

The unit Contract price per each for “Adjust Manhole” and “Raise Manhole to Grade shall be full pay for all costs necessary to adjust, raise, or elevate existing manholes to include furnishing and installing new materials such as rings, covers, grates, grate inlets as shown in the details complete in place, including restoration of adjacent areas. New manholes will not be paid to be adjusted, raised nor elevated. The adjusting, raising or elevating of new manholes shall be included in the price of the new manhole.

“Connect to Existing Manhole”, per each.

The unit contract price per each for “Connect to Existing Manhole” shall be full pay for furnishing all labor, tools, equipment, and materials required to connect to existing manhole in place, including concrete, concrete collars and sealants. Further, all excavation, haul, backfill, testing, and accessories shall be included in the unit contract price. For purposes of payment, there will be no distinction made for the difficulty of connecting to the existing manhole or the quantity of pipes connecting to the manhole. Items not specifically identified on the plans but necessary to properly connect to manhole shall be considered incidental and no other compensation shall be allowed.

7-12 VALVES FOR WATER MAINS

7-12.3(3) Raise Valve Box to Grade

(April 1, 2024 Lacey GSP)

Add the following new section:

Where shown on the plans or where directed by the Engineer, existing valve boxes shall be raised to the grade as staked or otherwise designated by the Engineer. The Contractor shall supply and install new valve boxes and covers as part of raising valve boxes to grade. The finished installation shall conform to the detail shown in plans.

All new and existing valve boxes located in any unpaved area shall have a concrete pad poured or placed entirely around each valve box. The pad shall be a minimum of 36 inches by 36 inches for each valve box. The concrete shall be commercial concrete or better with a minimum thickness of 8 inches.

Refer to Section 5-04.3(26) Utility Access for additional requirements.

Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

See Section 5-04.3(26) Utility Access for additional requirements.

7-12.5 Payment

(April 1, 2024 Lacey GSP)

Supplement this section with the following:

“Raise Valve Box to Grade,” per each.

The unit Contract price per each for “Raise Valve to Grade” shall be full pay for all costs necessary to raise existing valves to include furnishing and installing new materials such as rings, covers, as shown in the details complete in place, including restoration of adjacent areas. New valves will not be paid to be raised. The raising of new valves shall be included in the price of the new valve.

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.3 Construction Requirements

8-01.3(1) General

(May 28, 2020 WSDOT GSP)

Section 8-01.3(1) is supplemented with the following:

The Contractor shall identify the ESC Lead at the preconstruction discussions and in the TESC Plan. The ESC Lead shall have, for the life of the Contract, a current Certificate of Training in Construction Site Erosion and Sediment Control from a course approved by the Washington State Department of Ecology. The ESC Lead must be onsite or on call at all times throughout construction. The ESC Lead shall be listed on the Emergency Contact List required under Section 1-05.13(1).

The ESC Lead shall implement the TESC Plan. Implementation shall include, but is not limited to:

1. Installing, adaptively managing, and maintaining temporary erosion and sediment control BMPs to assure continued performance of their intended function. Damaged or inadequate BMPs shall be corrected immediately.
2. Updating the TESC Plan to reflect current field conditions.
3. Inspecting and reporting on all areas disturbed by construction activities, all on-site erosion and sediment control BMPs, and all storm water discharge points every calendar week and within 24 hours of runoff events in which storm water discharges from the site or as directed by the Engineer.
4. Submit to the Engineer no later than the end of the next working day following the inspection a TESC Inspection Report that includes:
 - a. When, where, and how BMPs were installed, maintained, modified, and removed.
 - b. Observations of BMP effectiveness and proper placement.
 - c. Recommendations for improving future BMP performance with upgraded or replacement BMPs when inspections reveal TESC BMP deficiencies.
 - d. Identify for each discharge point location whether there is compliance with state water quality standards in WAC 173-201A for turbidity and pH.

Inspection of temporarily stabilized, or inactive sites may be reduced to once every calendar month if allowed by the Engineer.

8-01.3(9)A2 Silt Fence

(October 16, 2014 Lacey GSP)

Supplement this section with the following:

If the Engineer determines that site conditions dictate additional silt fence throughout the duration of the project, the Contractor shall immediately install additional silt fence as directed by the Engineer.

8-01.3(9)D Inlet Protection
(November 20, 2020 Lacey GSP)

Delete the first paragraph and replace with the following:

All catch basins and inlets within 500 ft of the project limits, downstream or affected by construction activities shall have inlet protection and as required by the Engineer. Inlet protection devices shall be installed prior to beginning clearing, grubbing, or earthwork activities.

8-01.4 Measurement
(April 30, 2015 Lacey GSP)

Supplement this section with the following:

All items required for erosion control shall be included in the lump sum bid item “Erosion/Water Pollution Control” unless a specific bid item is included in the proposal.

Modify this section with the following:

No specific unit of measure shall apply to the lump sum item “ESC Lead”

8-01.5 Payment
(November 20, 2020 Lacey GSP)

Modify this section with the following:

“Silt Fence”, per linear foot.

“High Visibility Silt Fence”, per linear foot

The unit contract price per linear foot shall be full pay for all equipment, labor and materials to install, maintain, remove and dispose of the silt fence as shown in the Plans and as directed by the Engineer.

The lump sum contract price for “ESC Lead” shall be full compensation for all labor, material, tools, and equipment necessary to meet the requirements of Section 8-01.3(1)B to include conduct site inspections, stormwater sampling, report preparation, report submittal, lab work, and personnel certification.

Delete “Erosion/Water Pollution Control”, by force account and add the following bid item:
“Erosion/Water Pollution Control”, lump sum.

The lump sum contract price for “Erosion/Water Pollution Control” shall be full compensation for all labor, material, and equipment necessary to implement, install, maintain and remove all erosion and water pollution control items including removal and disposal of sediment, stabilization and rehabilitation of soil disturbed by these activities, and any additional Work deemed necessary by the Engineer to control erosion and water pollution and all Work required for compliance with the Construction Stormwater General Permit (CSWGP) including annual permit fees. The requirements for the ESC Lead shall also be included in this lump sum bid item if no bid item is included in the proposal. The Contractor shall bear full responsibility for erosion/water pollution control in all sources of material, disposal sites, and haul roads.

8-02 ROADSIDE RESTORATION

8-02.2 Materials
(October 29, 2010 Lacey GSP)

Supplement this section with the following:

The Contractor shall submit soil analysis from a soils testing laboratory to the Engineer. Indicate source(s) and obtain the Engineer's approval before hauling to the site or placement.

8-02.3(4) Topsoil
(November 20, 2020 Lacey GSP)

Supplement this section with the following:

The Contractor shall thoroughly scarify the subgrade by tilling, disking or harrowing after the subgrade elevation has been established as indicated on the Plans. If the construction includes a roundabout, the Contractor shall scarify the existing subgrade a minimum of 24 inches deep in the center island of the roundabout to break up the base material of the existing road prior to installation of the topsoil.

Topsoil shall be placed at 12" depth in planter strips, and 18" depth in medians, and a minimum of 42" inches below the top of curb in the roundabout island unless otherwise shown in the Plans.

Final grading shall include raking, floating, dragging, and rolling to remove all surface irregularities and to provide a firm, smooth surface with positive drainage. Imported topsoil shall not be placed more than 3 days prior to permanent seeding.

8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation
(November 20, 2020 Lacey GSP)

Section 8-02.3(5) is supplemented with the following:

Planting area preparation will be required in all landscaped areas. Planting area preparation shall include removal of existing vegetation, construction debris, all visible rocks or other detrimental material from planter strips located within the project limits before adding soil amendments to the imported topsoil for the roadside planting areas, uniformly tilling the soil amendments into the top 8"-12" of soil, using a rototiller or similar machine, grading the blended soils, and then thoroughly watering down.

Planting area preparation in the roadside includes preserving and protecting existing trees. Where noted on plan, Engineer shall identify and mark existing trees to be saved. Following marking, Contractor shall provide and place Engineer approved high visibility orange plastic fence around critical root zones of each marked tree or tree groupings. Do not begin construction activity on the roadsides until all plastic mesh fencing is in place, and approved by the Engineer.

Identify existing trees that are to be removed, that were not removed during roadway construction, prior to starting planting. Obtain approval to remove existing trees from Engineer. Contractor to provide, install and maintain tree protection throughout project duration.

All planting area preparation shall be conducted under favorable weather conditions only. Soil shall not be worked when excessively dry or wet. Engineer reserves the right to stop any work taking place when conditions are considered detrimental to soil structure or plant growth.

All planting areas shall be weed free and approved by the Engineer before starting rototilling (with soil amendments distributed over designated surface areas) and after rototilling has been completed. All beds shall then be approved by the Engineer for fine grading, before starting any planting operations.

All planting surface areas shall be left with a firm, uniform surface, free of weeds and undulations or other irregularities. Remove all rocks, clods, and debris from all planting surfaces, unless otherwise specified on the plans or directed by the Engineer.

Preliminary grading shall be done in such a manner as to anticipate the finished grades after placement of topsoil, soil amendments and bark mulch (if specified). Excess soil shall be removed or redistributed before application of soil mix, fertilizer, and mulch. Where soil is to be replaced by plants and mulch, allowance shall be made so that when finish grading has begun, there shall be no deficiency in the specified depth of mulched planting beds.

The Contractor shall bear final responsibility for proper surface drainage of the site and the features thereon. Any discrepancy in the drawings or specifications, obstructions on the site, or prior work done by another party which the Contractor feels precludes establishing proper drainage, shall be brought immediately to the attention of the Engineer in writing for correction or relief of said responsibility.

8-02.3(7) Layout of Planting, Lawn and Seeding Areas **(January 3, 2017 Lacey GSP)**

Delete this section and replace with the following:

All location layout and staking will be the responsibility of the Contractor.

Tree and plant locations shown shall be considered approximate unless otherwise noted or shown with specific distance. Tree locations may be adjusted, with prior Engineer approval, so that the tree does not interfere with sightline requirements, street signs, irrigation, overhead utilities, or any other apparatuses such as utilities.

Do not locate or plant any tree within 15 feet of a streetlight. Do not locate or plant any tree within 3 feet of a utility vault, 2.5 feet of back-of-sidewalks or back-of-curbs, and 15 feet of a fire hydrant.

In mixed planting areas, trees shall be planted first, followed by the larger shrubs, low shrubs, and then groundcover material.

The Contractor shall layout all trees and plants in the approximate location for approval by the Engineer. All coordination shall be done with the Engineer.

8-02.3(8) Planting **(March 3, 2022 Lacey GSP)**

Supplement this section with the following:

The Contractor shall make required field adjustments as directed by the Engineer without additional cost and to avoid obstructions. Plants not properly planted or temporarily heeled-in will be rejected and shall be removed from the site.

Maintenance shall begin following the installation of each plant and shall continue until project acceptance. Work includes, but is not limited to, watering, weeding, cultivating, tightening, and repairing guys, removal of dead materials, resetting plants to proper grades or upright positions and other operations necessary to ensure proper growth and survival of all plant material.

If it is discovered that Common horsetail (*Equisetum Arvense*) has been imported with plant material, the Contractor shall remove the tree or shrub in its entirety including the rootball and surrounding soil, and replace the tree or shrub in-kind.

Before excavation, plants to be installed shall be placed as indicated on Planting Plan. The Engineer shall check locations of all plants in the field and shall indicate the exact position before actual planting operation proceeds.

Set trees and shrubs in center of pits, plumb and straight. Plant at such a level that after settlement, the crown of the plant will be slightly above finish grade.

Set plants in backfill mixture to such depth that the top of the plant ball will be slightly above finished grade. Backfill the remainder of the hole and soak thoroughly. Water the backfill until saturated to the full depth of the hole.

A mound of earth shall be formed as directed around each tree and shrub so as to produce a shallow basin to retain water, the diameter to exceed the diameter of the root spread at planting. Plants shall be watered in place during and after backfilling.

Prune plants only at time of planting and according to standard horticultural practice to preserve the natural character of the plant. All pruning shall be done under supervision of Engineer. Remove all dead wood, suckers, and broken or badly bruised branches, unless plants are deemed to be unacceptable and rejected by the Engineer. Use only clean, sharp tools.

Immediately after planting operations are complete, all planting beds and plant pits shall be dressed off so as to achieve a neat and presentable appearance. Planting operations shall be identical for all plants to be planted. Refer to Plans, specifications and directions from Engineer.

If applicable, Contractor shall plant trees, shrubs, and groundcover material in non-irrigated areas between October 1, and January 31.

Plant bare root and live cutting material during winter dormancy (November 30 and February 1) unless otherwise directed by the Engineer. Install live cuttings the same day as harvest or cutting from parent material.

Notify the Engineer a minimum of 48-hours before beginning any roadside planting-related work.

8-02.3(9) Seeding, Fertilizing and Mulching **(November 20, 2020 Lacey GSP)**

Supplement this section with the following:

The Contractor shall provide water or irrigation to all seeded areas as often as conditions dictate depending on weather and soil conditions. Water will be provided as described in Section 2-07.

Seed shall be broadcast with approved hydraulic seeding equipment, in combination with wood cellulose fiber mulch, soil stabilizer and fertilizer distributed uniformly over designated areas. Half of seed shall be sown with sower moving in one direction, the other half with sower moving at right angles to first sowing. Hydroseeding operator shall remove all seed mulch in its entirety from adjoining paving, structures and plants

Fertilizer shall be applied over the surface of plant basin. Install fertilizer tablets as specified.

All trees shall have an application of beneficial mycorrhizal fungi applied at time of planting in accordance with the manufacturer's recommendations.

8-02.3(9)A Dates For Application of Seed
(November 20, 2020 Lacey GSP)

Delete the second paragraph of this section and replace with the following:

In areas receiving automatic irrigation, seeding may occur between May 15 and September 1. Actual planting shall be performed only when weather and soil conditions are suitable and in accordance with locally accepted practice and/or approved by the Engineer.

8-02.4 Measurement
(April 4, 2016 Lacey GSP)

Supplement this section with the following:

Topsoil, compost and mulch will be measured by the cubic yard.

Tree stakes, fertilizer, headers, planting area preparation, planting area weed control, and tree protection will be incidental to the "unit costs" of plantings as specified.

The measurements for each plant will be made for the size and type of plant shown in the plans.

"Pond Liner" shall be measured per cubic yard.

8-02.5 Payment
(October 16, 2016 Lacey GSP)

Supplement this section with the following:

The following bid items shall be full pay for furnishing all labor, materials, tools and equipment, necessary to scarify the subgrade, install, rake, remove debris such as rocks and organic material and shape the material as shown in the plans:

"Topsoil Type A", per cubic yard,
"Bark or Wood Chip Mulch" per cubic yard.

The unit contract price per acre for "Seeding, Fertilizing, and Mulching", shall be full compensation for all labor, material, tools and equipment necessary to place, protect, irrigate and maintain all items as specified.

The Contractor shall receive payment of 60 percent of the unit contract price, per acre, upon the completion of the initial hydroseeding. Payment shall be increased to 100 percent of the unit contract price, per acre, upon the point where the first mowing is required, as determined by the Engineer. All partial payments shall be limited to the actual area of weed free healthy vigorous growth.

Partial payments shall not constitute acceptance of the area, nor shall the ownership or title transfer to the Contracting Agency. Areas found not acceptable at any stage shall be rejected and replaced at the Contractor's expense. Previous partial payments made for areas rejected will be deducted from future payments due the Contractor.

8-05 LAWN AND LANDSCAPE RESTORATION
(October 16, 2014 Lacey GSP)

Add the following new section:

8-05.1 Description

The Contractor shall take every precaution to preserve and protect existing lawn and landscape areas. Only those landscaped areas necessary for construction shall be disturbed. All lawn areas and landscaping damaged or removed shall be repaired as directed by the Engineer. Lawn areas damaged or removed shall be restored with sod as directed by the Engineer.

8-05.3 Construction Requirements

The Contractor shall repair any vegetation, fencing, culverts, ditch sections, or any other objects or structures that are not covered by a specific bid item. Restoration shall return anything damaged by construction to their original condition or to a condition superior to the original condition. The Contractor shall be responsible to evaluate the site prior to bidding this project to determine the areas to be affected by the particular construction method or machinery proposed to be used.

8-05.4 Measurement

No unit of measure shall apply to the lump sum price for Lawn and Landscape Restoration.

8-05.5 Payment

“Lawn and Landscape Restoration”, lump sum.

The lump sum contract price for “Lawn and Landscape Restoration” shall be full pay for all labor, materials, and equipment to restore the project site to condition equal to, or superior to the original condition.

If no bid item for “Lawn and Landscape Restoration” is included, any work described in this section shall be incidental to the project.

8-13 MONUMENT CASES

8-13.3(3)C Surface Monument

[\(November 26, 2023 Lacey GSP\)](#)

Add the following new section:

The Contractor shall construct and install cast-in-place surface monuments as shown in the Plans and as staked by the Engineer. The Contractor shall request monument caps 5 working days in advance of monument installation work.

The concrete shall be placed on undisturbed earth, or firm and unyielding foundation. The monument shall be constructed following the completion of all asphalt paving. The Engineer will punch the bronze plug marker upon completion of the installation. The Contractor shall notify the Engineer 72 hours prior to installation, so the Engineer can aid in the placement of the marker cap.

8-13.4 Measurement

[\(November 26, 2023 Lacey GSP\)](#)

Supplement this section with the following:

“Surface Monument” will be measured per each location called out in the plans.

8-13.5 Payment

(November 26, 2023 Lacey GSP)

Modify this section with the following:

“Surface Monument”, per each shall be full compensation for all labor, equipment, tools, and materials required to complete the work as specified.

8-21 PERMANENT SIGNING

8-21 Permanent Signing

(January 4, 2016 Lacey GSP)

Delete this section and replace with the following:

All permanent sign posts and signs shall be installed by others, with the exception of signs installed on the traffic signal system. The Contractor shall request signs a minimum of 8 weeks prior to needing the signs for traffic control.

If a sign post is to be installed in concrete, the Contractor shall install a breakaway sleeve in the concrete as shown on the plans and as directed by the Engineer. The sleeves shall be supplied by the Contracting Agency and shall be level with the existing area and cleared of debris. All signing shall be erected on a 2-3/8 inch OD round galvanized steel sign post. Installation of sleeves shall be incidental to the concrete in which it is installed.

8-22 PAVEMENT MARKING

8-22.2 Material

(October 16, 2016 Lacey GSP)

Modify this section with the following:

Material for all plastic lines shall be Type A – Liquid hot applied thermoplastic at 120 mil thickness.

Material used for all plastic stop lines, plastic yield line, plastic entry line, plastic crosswalk lines, circulating lane line, plastic traffic arrows, plastic traffic letters, plastic legends, plastic symbols, and all plastic lines within the circulating lanes of the roundabout shall be Type B – Pre-formed fused thermoplastic at 120 mil thickness.

8-22.3 Construction Requirements

(February 14, 2023 Lacey GSP)

Supplement this section with the following:

Stop Line shall be a solid white line 24 inches wide or as shown in the plans.

Yield Line symbol (Sharks Teeth) shall be a triangle 24 inches wide and 36 inches tall or as shown in the plans.

Entry Lane Line shall be used to supplement the Yield Line Symbol for roundabouts on each approach. Entry Lane Line shall be a 24 inch wide dashed line with a 3 foot solid line and a 4 foot gap. The Entry Lane Line will be considered a Crosswalk Line.

Circulating Lane Line is the wide lane line within the crosswalks of the circulating portion of the roundabout. Where the plans identify a dashed circulating lane line this shall be an 8 inch wide dashed line with a 3 foot solid line and a 4 foot gap. The Circulating Lane Line will be considered a Wide Lane Line.

The roundabout symbol identified with the traffic arrow shall be considered part of the Traffic Arrow.

Crosswalk Line is a series of solid white lines, 24 inches, and a minimum of 6 feet long or as shown in the plans. All Crosswalk lines shall be parallel to the direction of travel conforming to details in the plans and Standard Plans.

Bicycle Legend is the bike lane grouping of the 2 by 4 foot BSF bicycle symbol and the 6 foot bicycle lane arrow.

Buffered Bike Lane consists of two solid white lines, 4 inches wide, separated by an 8 inch gap.

Parking Delineation Symbols shall be a 4 inch cross or tee.

Pavement must be dry prior to placing preformed thermoplastic pavement marking material. Preformed thermoplastic cannot be applied to a wet or damp surface or during precipitation. Once precipitation has stopped, the preformed thermoplastic can be applied to bituminous asphalt if the road surface has been dried thoroughly with all moisture removed.

Before preformed thermoplastic is placed, test the pavement to determine if moisture is present using a propane fueled heat gun. The moisture test must be observed by the Engineer before work begins. If moisture is present use a propane fueled heat gun to remove the moisture by passing heat over the area continuously. If the area is able to be dried and no moisture remains proceed with the application. If the area is unable to be dried, do not apply the material at that time. Any material installed that does not comply with this specification will be considered defective and no payment will be made.

8-22.4 Measurement **(February 14, 2023 Lacey GSP)**

Modify this section with the following:

The measurement for the following items shall be as follows:

“Plastic Crosswalk Line”, per linear foot.

“Plastic Bicycle Legend”, per each, shall be the combination of the bicycle symbol and arrow. If only one of the two symbols is used, it will be measured as a Plastic Bicycle Legend.

No unit of measure shall apply to the lump sum price for “Remove Pavement Marking”.

8-22.5 Payment **(January 4, 2016 Lacey GSP)**

Supplement this section with the following items:

“Plastic Crosswalk Line”, per linear foot.

“Plastic Bicycle Legend”, per each.

8-50 MISCELLANEOUS

Add the following new sections:

8-50.2 PROJECT CLOSEOUT

[\(April 2, 2018 Lacey GSP\)](#)

Description

This work shall consist of completing all miscellaneous items of work in accordance with the Plans and these Specifications that are required to achieve Completion and Final Acceptance, as identified by the Engineer and the Contracting Agency. This work may include but is not limited to punch list items, record drawings, O&M Manuals, training, material acceptance documents, copies of the approved “Affidavit of Prevailing Wages Paid” for the Contractor and all Subcontractors, and any other work required in these Plans and Specifications that has not been completed.

Measurement

No unit of measurement shall apply to the lump sum price for “Project Closeout”.

Payment

“Project Closeout”, lump sum.

The unit contract price per lump sum for “Project Closeout” includes all compensation for all costs of completing the miscellaneous items of work identified by the Contracting Agency prior to final acceptance of the Project. A fixed lump sum price has been included in the Proposal for this work. Any additional costs anticipated or incurred by the Contractor for the work shall be included in the various lump sum and unit price bid items as found in the Proposal. Neither partial payment, nor additional compensation shall be allowed

9-03 AGGREGATES

9-03.21 Recycled Materials

[\(April 30, 2015 Lacey\)](#)

Section 9-03.21 is supplemented with the following:

Recycled materials will not be used unless approved by the Engineer.

9-14 EROSION CONTROL AND ROADSIDE PLANTING

9-14.2(1) Topsoil Type A

[\(March 3, 2022 Lacey GSP\)](#)

Supplement this section with the following:

Topsoil Type A shall be composed of a three way winter mix consisting of 2 parts soil, 2 parts compost, 3 parts sand.

Soil shall be classified as gravelly sand, well-graded sand, poorly graded sand, or silty sand.

Compost shall be a weed free well decomposed, humus-like material derived from the decomposition of grass clippings, leaves, branches, wood, and other organic materials. Compost shall be produced at a permitted solid waste composting facility. Composts containing shavings, cedar sawdust, or straw will not be permitted.

The Contractor shall give priority to purchasing compost products from companies that produce compost products locally, are certified by a nationally recognized organization, and produce compost products that are derived from municipal solid waste compost programs and meet quality standards comparable to standards adopted by the department of transportation or adopted by rule by the department of ecology.

Sand shall consist of 100 percent passing the 3/8 inch sieve, minimum 95 percent passing the #4 sieve, and maximum of 5 percent passing the #100 sieve.

Topsoil shall meet the following requirements:

Screen Size (approximate particle size)	5/8" maximum
Maturity measure (C:N ratio)	30:1
Total Nitrogen	0.5% minimum
PH range	5.5-8.0
Foreign matter by dry weight	1% maximum

The Contractor shall provide a sample of the topsoil and a laboratory analysis with recommendations from the laboratory for desired additives for the Engineers approval. The Contractor shall incorporate any additives recommended by the laboratory.

9-14.3 Seed
[\(November 20, 2020 Lacey\)](#)

Supplement this section with the following:

There shall be several types of mixes used on this project. The list of approved seed varieties are specifically identified list below. They shall be applied at the given rates. Source identified seed shall be fourth generation or earlier. Non-Source Identified seed shall meet or exceed Washington State Department of Agriculture Certified Seed Standards. Seeds shall be certified "Weed Free", indicating there are no noxious or nuisance weeds in the seed.

Lawn Mix - shall be applied at 200 pounds per acre and the maximum weed seed shall be no more than 0.5%. Grass seed of the following composition, proportion, and quality shall be applied as follows:

Kind and Variety of Seed	Percent By Weight	Minimum Pure Seed	Minimum Germination
Equal Mix 3-Perennial Ryegrasses	60%	98%	90%
One Chewing Fine Fescue	20%	98%	90%
One Creeping Red Fescue	20%	98%	90%

Approved Seed Type:

Perennial Ryegrasses

Fiesta 4	Manhattan 5	Grand Slam GLD	Karma
SR 4650	Karma	Banfield	Sideways
Thrive	Wicked	Pavilion	Dasher 3
Tetradark			

Creeping Red Fescue

Salsa

Cindy

Jasper

Salem

Chewing Fescue

Tiffany

Shadow II

Treasure E

Longfellow

Weekend

Tamara

Enjoy

Victory

9-14.5(3) Bark or Wood Chip Mulch**(November 20, 2020 Lacey GSP)**

Supplement this section with the following:

Bark mulch shall be a pathogen-free medium-grind Hemlock or Douglas Fir bark mulch. The Contractor shall submit a sample to the Engineer for approval prior to use.

9-21 RAISED PAVEMENT MARKING**9-21.1 Raised Pavement Markers Type 1****(March 3, 2022 Lacey GSP)**

Modify this section with the following:

Markers Type 1 shall be thermoplastic markers. Only the models and manufacturers identified in the Qualified Products List (QPL) will be accepted.

9-21.2 Raised Pavement Markers Type 2**(March 3, 2022 Lacey GSP)**

Supplement this section with the following:

Markers Type 2 shall have an abrasion resistant coating. Only the models and manufacturers identified in the Qualified Products List (QPL) will be accepted.

E
PREVAILING
WAGES

PREVAILING WAGE RATES

The following wage rates are in effect for this project.

**State of Washington
Department of Labor and Industries
Washington State Prevailing Wage Rates For Public Works Contracts**

Thurston County Rates For All Trades

**Effective: JULY 25th, 2024 including any correction notices issued
by Labor and Industries prior to bid.**

Wage Rates and the Benefit Code Key may be found at:

<https://secure.lni.wa.gov/wagelookup/>


Supplemental to State Wage Rates may be found at:

<http://www.wsdot.wa.gov/Design/ProjectDev/WageRates/default.htm>

A copy is also available for viewing at the City of Lacey Public Works Engineering office located at 420 College St SE, Lacey, WA 98503. If requested, a hard copy will be mailed to you.

F

COL RAM FORMS

PROJECT:		SUBMITTAL NO.		
LACEY CONTRACT NO. PW___-20___		Date sent to City:		
Request for Approval of Material, Product or Shop Drawing				
Contractor:		Subcontractor:		
No. of Pages	Item: Material, Product or Shop Drawing	Specification Reference		
<input type="checkbox"/> This item is as specified		OR	<input type="checkbox"/> This item is a substitution/or equal Material/Product Substitution Request shall be submitted	
<input type="checkbox"/> Supplier/Subcontractor certifies material/product conforms to contract.				
Review Priority:		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
			Requested Due Date:	
Notes to Engineer:				


City of Lacey Engineer:		Date Approved by City:	
<input type="checkbox"/> Rejected	New Submittal Required.		
<input type="checkbox"/> Revise and Resubmit	See Engineer's comments.		
<input type="checkbox"/> Conditionally Approved	See items included in Engineer's comments.		
<input type="checkbox"/> Conditionally Approved	No exceptions noted.		
Review of the materials, products or plans do not relieve the contractor from compliance with requirements of the contract documents and does not necessarily constitute acceptance for materials, products or plans to be incorporated in the work. This review is for general conformance of the project's conceptual design and general compliance with the project's plans and specifications.			
Date City Transmitted to Contractor:		Date Contractor Transmitted to Subcontractor/Supplier:	

Date Received by
City of Lacey:

Reviewed by:
(Name/Company)

Engineer's Comments:

1.

PROJECT: <i>A</i>		SUBMITTAL NO. <i>C</i>	
LACEY CONTRACT NO. PW ___-20___ <i>B</i>			
Request for Approval of Material, Product or Shop Drawing			
Contractor: <i>D</i>		Subcontractor: <i>E</i>	
No. of Pages	Item: Material, Product or Shop Drawing	Specification Reference	
<i>F</i>	<i>G</i>	<i>H</i>	
<input type="checkbox"/> This item is as specified <i>I1</i> OR <input type="checkbox"/> This item is a substitution/or equal Material/Product Substitution Request shall be submitted <i>I2</i>			
<input type="checkbox"/> Supplier/Subcontractor certifies material/product conforms to contract.			
Review Priority: <input type="checkbox"/> 1 <i>K</i> <input type="checkbox"/> 2 <input type="checkbox"/> 3		Requested Due Date: <i>L</i>	
Notes to Engineer: <i>M</i>			

Section 1

City of Lacey Engineer: <i>R</i>		Date City Transmitted to Contractor: <i>S</i>	
<input type="checkbox"/> Rejected	New Submittal Required.		
<input type="checkbox"/> Revise and Resubmit	See Engineer's comments.		
<input type="checkbox"/> Conditionally Approved	See items included in Engineer's comments. <i>Q</i>		
<input type="checkbox"/> Conditionally Approved	No exceptions noted.		
Review of the materials, products or plans do not relieve the contractor from compliance with requirements of the contract documents and does not necessarily constitute acceptance for materials, products or plans to be incorporated in the work. This review is for general conformance of the project's conceptual design and general compliance with the project's plans and specifications.			
Date Received by Contractor: <i>T</i>		Date Returned to Subcontractor/Supplier: <i>U</i>	

Section 3

Date Received by City of Lacey:	<i>N</i>	Reviewed by: (Name/Company)	<i>@</i>
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Engineer's Comments:

1. *P*

**S
e
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2**

Section 1

The **Project Manager** shall fill in items **A** and **B**. The “Request for Approval of Material, Products or Shop Drawing” form shall be included in the specifications.

- A** Project Manager enters in the project title that matches the plans and specifications.
- B** Project Manager enters in PW project number that matches the plans and specifications.

The **Contractor** shall fill out the “Request for Approval of Material, Product or Shop Drawing” form for all materials or products that will be installed and Shop Drawing that will be used in the project. The form and the submittal shall be sent in the same e-mail. Submittals that exceed 10 MB shall either be provided on a CD, a flash drive or an internet link.

The products and materials that are specific to the project shall be circled or highlighted. If a submittal includes products or materials that are not project specific then these items shall be crossed out. Project Submittals that exceed 10 pages shall be submitted in Adobe Acrobat format and include a table of contents. Submittals that are not submitted in this format may be rejected outright and the contractor will be required to resubmit in the correct format.

The contractor shall enter in items **C, D, E, F, G, H, I, J, K, L**, and **M**.

C Contractor enters in the submittal number. The first “Request for Approval of Material, Product or Shop Drawing” submittal number shall be 1.0, the second shall be 2.0, the third shall be 3.0, etc.

When a “Request for Approval of Material, Product or Shop Drawing” requires resubmitting, the next submittal shall be the first part of the submittal number and then 0.1. Example: If submittal 9.0 requires resubmitting, then the resubmittal shall be 9.1. If a second resubmittal is required, then the next resubmittal shall be 9.2.

D Contractor shall fill in their name.

E Contractor shall fill in the subcontractor that is requesting approval. If only the General Contractor is requesting approval, then NA (not applicable) shall be entered.

F The number of pages for each specific material, product or shop drawing shall be entered.

G The specific material, product or shop drawing shall be entered. Material or product will be the trade name of the product or the name it is most easily recognized by. Materials or products that are similar (i.e. pipe fittings) can be bundled into one submittal.

H The specification that pertains to the specific material, product or shop drawing shall be entered. This information is critical in comparing the material, product or shop drawing to the specifications. You may also list Plan Sheet number or Special Provision page in this area.

I The Contractor shall check if the items submitted are either specified (I1) or that the submitted item is a substitution or equal (I2). If the product is a substitute or equal, then a Material/Product Substitution Request shall be submitted.

J The Contractor shall check that supplier and/or subcontractor certifies the bid item.

K The Contractor shall check if the submittal for approval is a high (1), average (2) or low (3) priority. The City of Lacey will review priority submittals as quickly as possible. Note: The majority of the submittals shall be checked as priority 2 or 3. Priority 1 submittals shall be critical or long lead items.

L A due date can be entered by the contractor. The City of Lacey will endeavor to review and return the request for approval by the requested due date.

M Any additional notes that the Contractor finds would assist the City of Lacey in reviewing the submittal can be entered in here.

Section 2

The **City of Lacey Engineer** shall fill in items **N**, **O** and **P**.

N Enter the date that the City of Lacey received the “Request for Approval of Material, Product or Shop Drawing” from the Contractor.

O Enter the name and company of the person that reviewed the submittal.

P Any comments regarding changes needed, resubmittals requirements, conditional approval, etc. shall be entered.

Section 3

The **City of Lacey Engineer** shall fill in items **Q**, **R**, and **S**.

Q Either “Rejected: New Submittal Required.”, “Review and Resubmit: See Engineer’s comments.”, “Conditionally Approved: See items included in Engineer’s comments:”, or “Conditionally Approved: No exceptions noted” shall be checked”.

R Enter the name of the Engineer sending the submittal back to the Contractor. The Engineering sending the form back may not necessarily be the Engineer completing the review.

S Enter the date that the City of Lacey transmits the “Request for Approval of Material, Product or Shop Drawing” to the Contractor.

The **Contractor** shall enter in items **T** and **U** for their own records. If there is a discrepancy between the **S** “Date City Transmitted to Contractor” and **T**, the Contractor shall notify the City of Lacey within 3 working days.

T Contractor enters the date that they received the completed “Request for Approval of Material or Shop Drawing”.

U Contractor enters the date that that they return the completed “Request for Approval of Material or Shop Drawing” to the Subcontractor/Supplier.

G
TRAFFIC CONTROL
PLANS

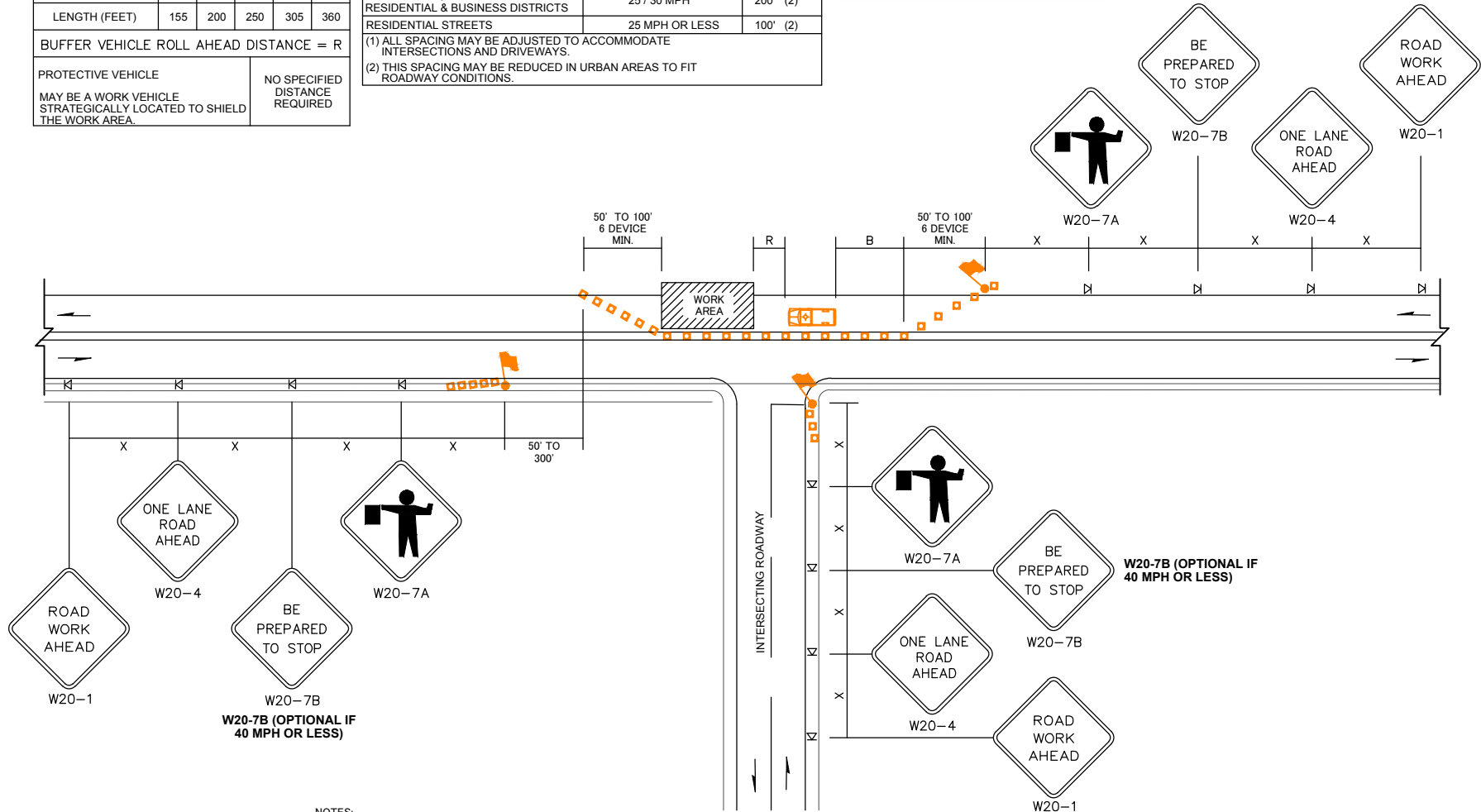
BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (FEET)	155	200	250	305	360
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.			NO SPECIFIED DISTANCE REQUIRED		

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS & COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	10 TO 20	60
25/30	10 TO 20	40

W20-7B (OPTIONAL IF 40 MPH OR LESS)



NOTES:

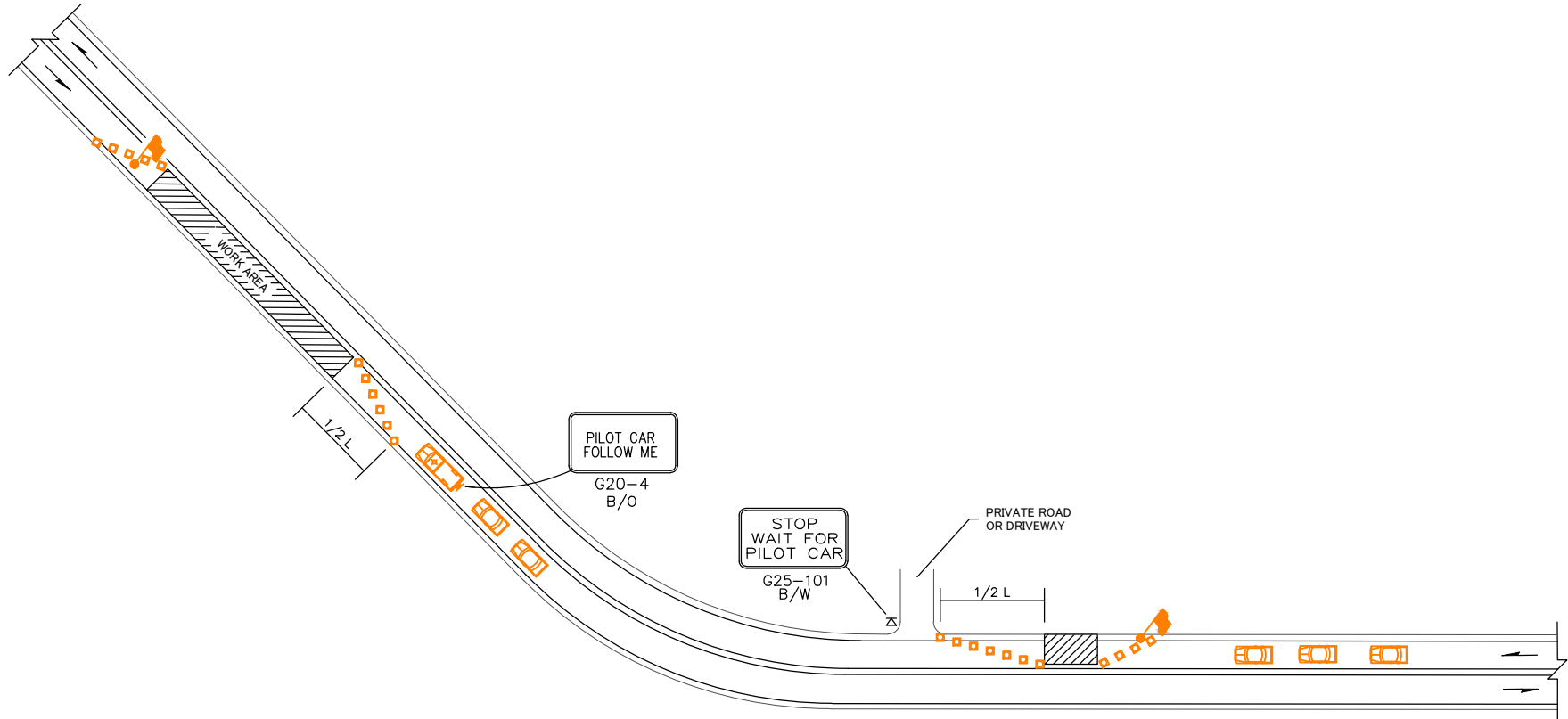
1. ALL SIGNS ARE BLACK ON ORANGE.
2. EXTENDING THE CHANNELIZING DEVICE TAPER ACROSS SHOULDER IS RECOMMENDED.
3. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS. SEE THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
4. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
5. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

- LEGEND**
- FLAGGING STATION
 - TEMPORARY SIGN LOCATION
 - CHANNELIZING DEVICES
 - PROTECTIVE VEHICLE




**ONE-LANE TWO-WAY
TRAFFIC CONTROL WITH FLAGGERS
TC-1**

MINIMUM TAPER LENGTH = L (feet)				
LANE WIDTH (feet)	DESIGN SPEED (MPH)			
	25	30	35	40
10	105	150	205	270
11	115	165	225	295
12	125	180	245	320

CHANNELIZATION DEVICE SPACING (feet)		
DESIGN SPEED (MPH)	TAPER	TANGENT
	35/45	30
25/30	20	40



LEGEND

-  FLAGGING STATION
-  TEMPORARY SIGN LOCATION
-  CHANNELIZING DEVICES
-  PILOT VEHICLE
-  MOTORIST VEHICLE

NOTES:

1. REFER TO SHEET TC1 FOR ADDITIONAL SIGNING AND FLAGGING DETAILS NOT SHOWN.
2. CHANNELIZING DEVICES ARE RECOMMENDED ALONG CENTERLINE TO SEPARATE TRAFFIC FROM WORK OPERATION. DEVICES ARE REQUIRED AT TAPERS TO SHIFT TRAFFIC MOVEMENT BETWEEN LANES AND TO PROTECT FLAGGING STATIONS.
3. SIGN G25-101 IS RECOMMENDED FOR NON-STOP SIGN CONTROLLED APPROACHES SUCH AS PRIVATE ROADS AND DRIVEWAYS. THIS SIGN IS NOT REQUIRED TO BE ALUMINUM SUBSTRATE AND CAN BE MADE OF ALTERNATIVE MATERIALS.
4. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

PILOT CAR OPERATION
TC-2

MINIMUM LANE CLOSURE TAPER LENGTH = L (feet)					
LANE WIDTH (feet)	DESIGN SPEED (MPH)				
	25	30	35	40	45
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245	320	540

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)					
SHOULDER WIDTH (feet)	DESIGN SPEED (MPH)				
	25	30	35	40	45
8'	40	40	60	90	120
10'	40	60	90	90	150

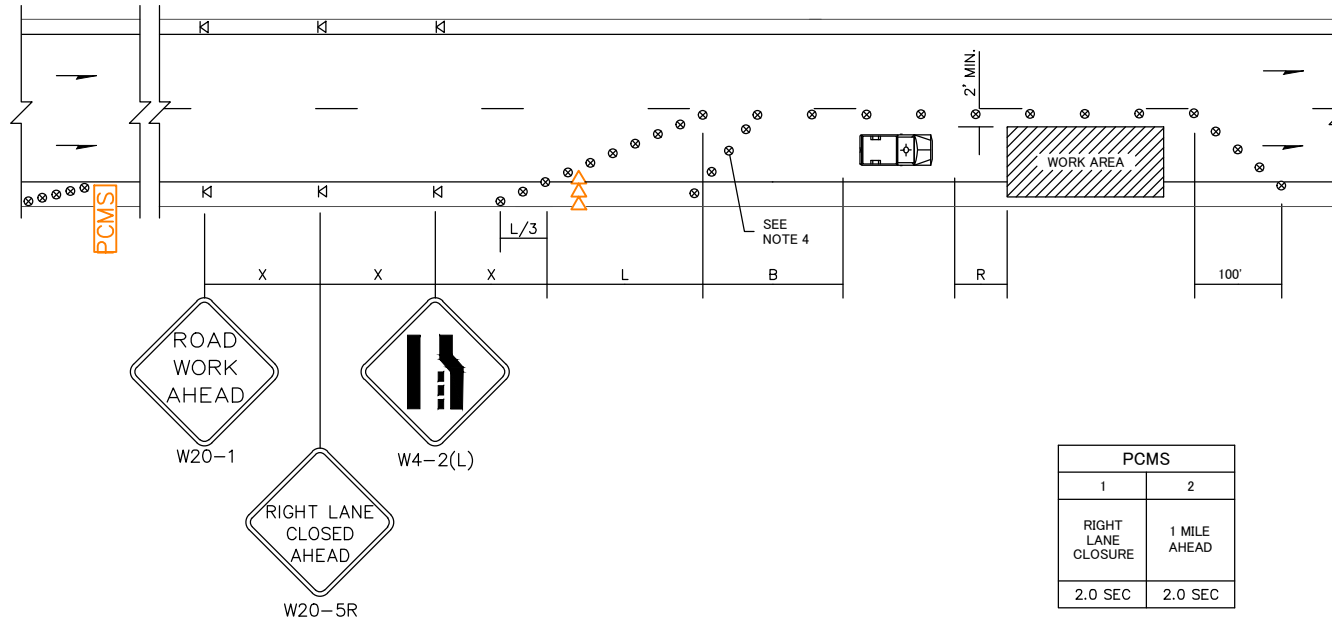
USE A MINIMUM 3 DEVICES TAPER FOR SHOULDER LESS THEN 8'.

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS & COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

CHANNELIZATION DEVICE SPACING (feet)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40

BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
	25	30	35	40	45
LENGTH (feet)	155	200	250	305	360



PCMS	
1	2
RIGHT LANE CLOSURE	1 MILE AHEAD
2.0 SEC	2.0 SEC

FIELD LOCATE 1 MILE IN ADVANCE OF LANE CLOSURE SIGNING.

NOTES:

- SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
- EXTEND DEVICE TAPER AT L/3 ACROSS SHOULDER.
- DEVICES SHALL NOT ENCR OACH INTO THE ADJACENT LANE.
- USE TRANSVERSE DEVICES IN CLOSED LANE EVERY 1000' (FT) (RECOMMENDED).
- DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT).
- ALL SIGNS ARE BLACK ON ORANGE.
- REFER TO THE MUTCD FOR SIGN DIMENSIONS.

LEGEND

- TEMPORARY SIGN LOCATION
- TRAFFIC SAFETY DRUM
- SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE
- PORTABLE CHANGEABLE MESSAGE SIGN

**SINGLE-LANE CLOSURE
FOR MULTI-LANE ROADWAYS
TC-3**

MINIMUM LANE CLOSURE TAPER LENGTH = L (feet)					
LANE WIDTH (feet)	DESIGN SPEED (MPH)				
	25	30	35	40	45
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245	320	540

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)					
SHOULDER WIDTH (feet)	DESIGN SPEED (MPH)				
	25	30	35	40	45
8'	40	40	60	90	120
10'	40	60	90	90	150

USE A MINIMUM 3 DEVICES TAPER FOR SHOULDER LESS THEN 8'.

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS & COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
 (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

CHANNELIZATION DEVICE SPACING (feet)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40

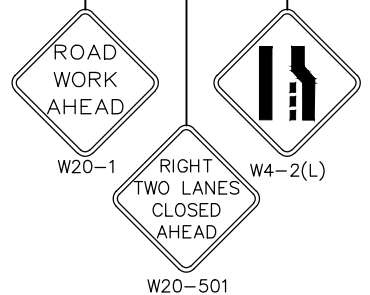
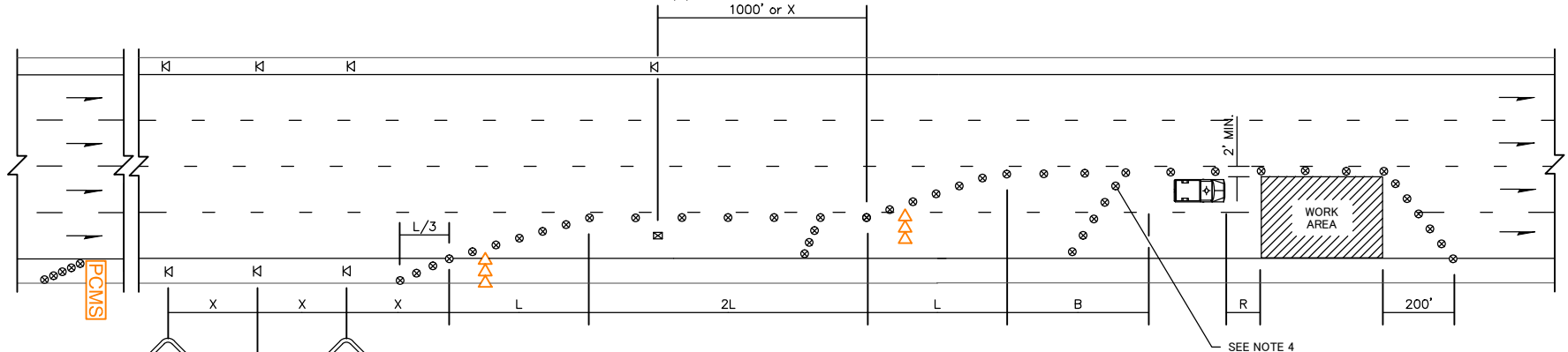
BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (feet)	155	200	250	305	360

PCMS	
1	2
2 LANES CLOSED AHEAD	WATCH FOR SLOW TRAFFIC
2.0 SEC	2.0 SEC

FIELD LOCATE 1 MILE IN ADVANCE OF LANE CLOSURE SIGNING.



W4-2(L)



NOTES:

- SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
- EXTEND DEVICE TAPER AT L/3 ACROSS SHOULDER.
- DEVICES SHALL NOT ENCR OACH INTO THE ADJACENT LANES.
- USE TRANSVERSE DEVICES IN CLOSED LANE EVERY 1000' (FT) (RECOMMENDED).
- DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT).
- ALL SIGNS ARE BLACK ON ORANGE.
- REFER TO THE MUTCD FOR SIGN DIMENSIONS.

- LEGEND**
- ⊗ TRAFFIC SAFETY DRUM
 - ⊠ TEMPORARY SIGN LOCATION
 - ⇨ SEQUENTIAL ARROW SIGN
 - 🚗 PROTECTIVE VEHICLE
 - PCMS PORTABLE CHANGEABLE MESSAGE SIGN
 - ⊠ TEMPORARY SIGN LOCATION (5' (FT) MOUNTING HEIGHT)

DOUBLE-LANE CLOSURE FOR MULTI-LANE ROADWAYS

TC-4

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	35 / 40 MPH	350'
URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

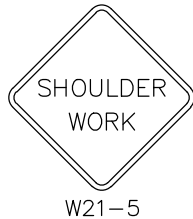
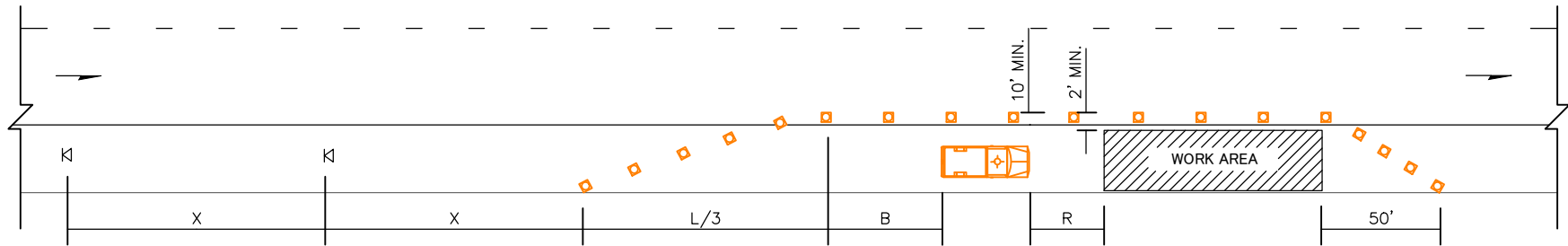
MINIMUM SHOULDER TAPER LENGTH = L/3 (FEET)

SHOULDER WIDTH (feet)	DESIGN SPEED MPH				
	25	30	35	40	45
8'	40	40	60	90	120
10'	40	60	90	90	150

USE A 3 DEVICES TAPER FOR SHOULDERS LESS THEN 8'

CHANNELIZATION DEVICE SPACING (FEET)

DESIGN SPEED MPH	TAPER	TANGENT
35/40	30	60
25/30	20	40



BUFFER DATA

LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (FEET)	155	200	250	305	360

BUFFER VEHICLE ROLL AHEAD DISTANCE = R

PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.	NO SPECIFIED DISTANCE REQUIRED
--	--------------------------------

LEGEND

- K TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE

NOTES:

1. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT).
2. ALL SIGNS ARE BLACK ON ORANGE.
3. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

**SHOULDER CLOSURE – LOW SPEED
(40 MPH OR LESS)
TC-5**

MINIMUM SHOULDER TAPER LENGTH = $L/3$ (feet)

SHOULDER WIDTH (feet)	DESIGN SPEED					
	25	30	35	40	45	50
8'	-	-	-	-	120	130
10'	-	-	-	-	150	170

USE A MINIMUM 3 DEVICES TAPER FOR SHOULDER LESS THEN 8'.

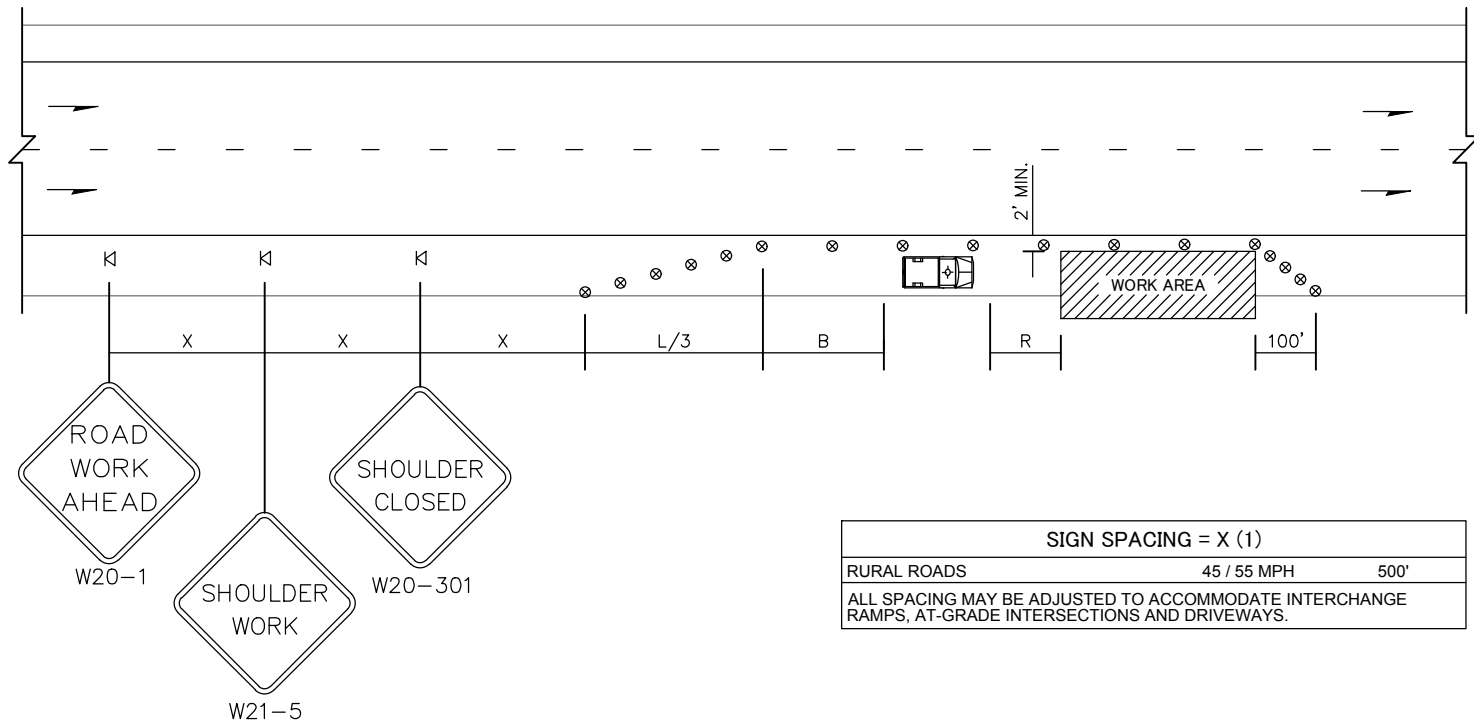
CHANNELIZATION DEVICE SPACING (feet)

MPH	TAPER	TANGENT
50/70	40	80
35/45	30	60

BUFFER DATA

LONGITUDINAL BUFFER SPACE = B

DESIGN SPEED (MPH)	25	30	35	40	45	50
LENGTH (feet)	-	-	-	-	360	425




SIGN SPACING = X (1)

RURAL ROADS	45 / 55 MPH	500'
-------------	-------------	------

ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

LEGEND

- K TEMPORARY SIGN LOCATION
- ⊗ TRAFFIC SAFETY DRUM
-  PROTECTIVE VEHICLE

NOTES:

1. NO ENCROACHMENT IN TRAVELED LANE. IF ENCROACHMENT IS NECESSARY, LANE SHALL BE CLOSED.
2. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHALL BE 20' (FT) O.C.
3. ALL SIGNS ARE BLACK ON ORANGE.
4. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

SHOULDER CLOSURE – HIGH SPEED
TC-6

MINIMUM TAPER LENGTH = L (FEET)					
LANE WIDTH (FEET)	DESIGN SPEED (MPH)				
	25	30	35	40	45
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245	320	540

BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (feet)	155	200	250	305	360
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.			NO SPECIFIED DISTANCE REQUIRED		

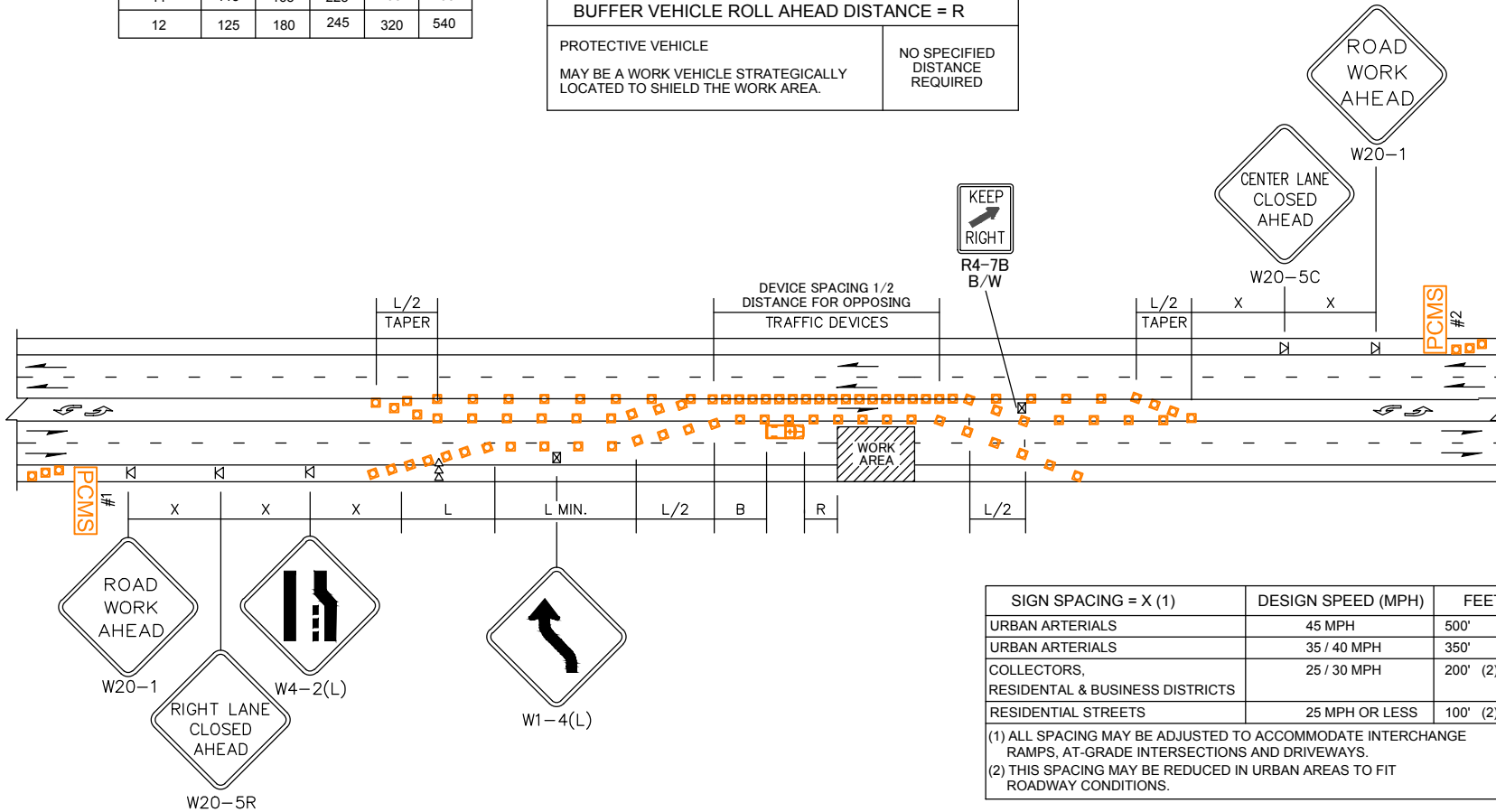
CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40

PCMS #1	
1	2
RIGHT LANE CLOSURE	1 MILE AHEAD
2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS.

PCMS #2	
1	2
CENTER LANE CLOSED	NNO LEFT TURNING
2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS.



LEGEND

- ⊓ TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- ⇨⇨ SEQUENTIAL ARROW SIGN
- ▣ PROTECTIVE VEHICLE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- ⊓ TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

NOTES:

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
2. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
3. FOR POSTED SPEED LIMITS OF 30 MPH OR LESS, USE SIGN W1-3 IN LIEU OF SIGN W1-4.
4. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.
5. REFER THE MUTCD FOR SIGN DIMENSIONS.

RIGHT LANE CLOSURE WITH SHIFT
5 LANE ROADWAY
TC-10

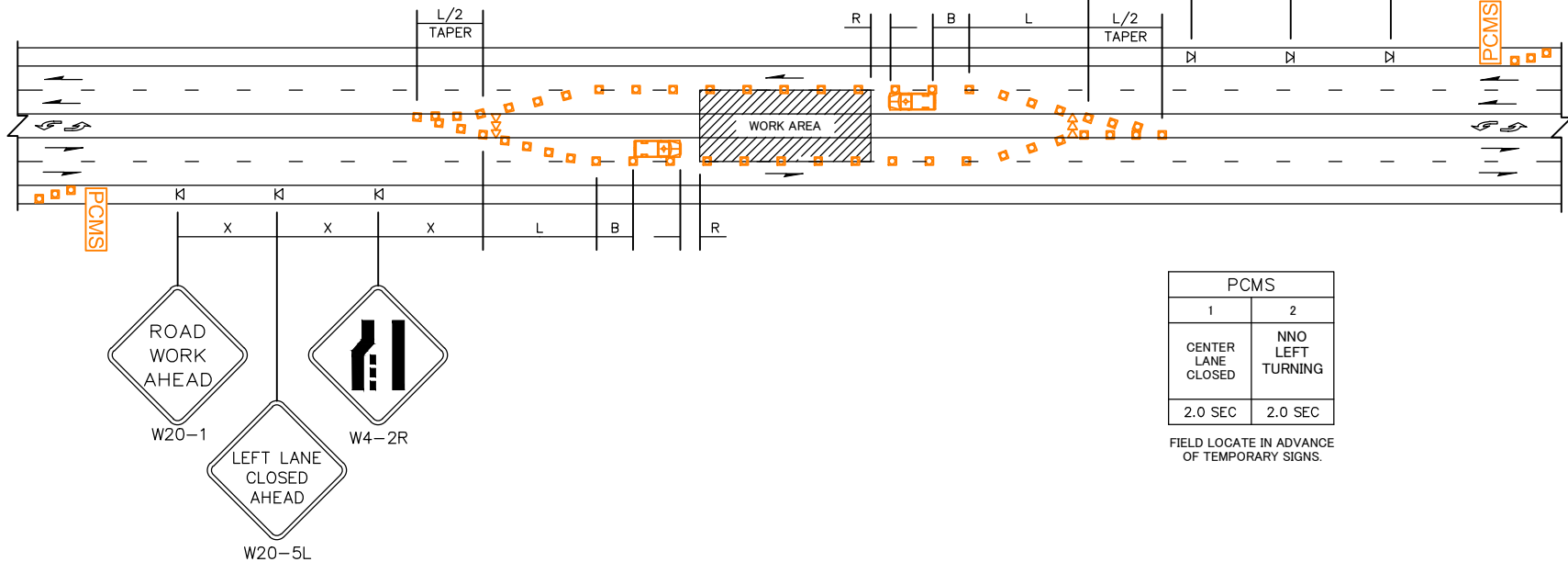
BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (FEET)	155	200	250	305	360
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.			NO SPECIFIED DISTANCE REQUIRED		

MINIMUM TAPER LENGTH = L (FEET)					
LANE WIDTH (FEET)	DESIGN SPEED (MPH)				
		25	30	35	40
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245	320	540

CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS & COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



PCMS	
1	2
CENTER LANE CLOSED	NNO LEFT TURNING
2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS.

LEGEND

- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE
- PORTABLE CHANGEABLE MESSAGE SIGN

NOTES

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
2. ALL SIGNS ARE BLACK ON ORANGE.
3. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

**LEFT LANE AND CENTER TURN LANE
CLOSURE - 5 LANE ROADWAY
TC-11**

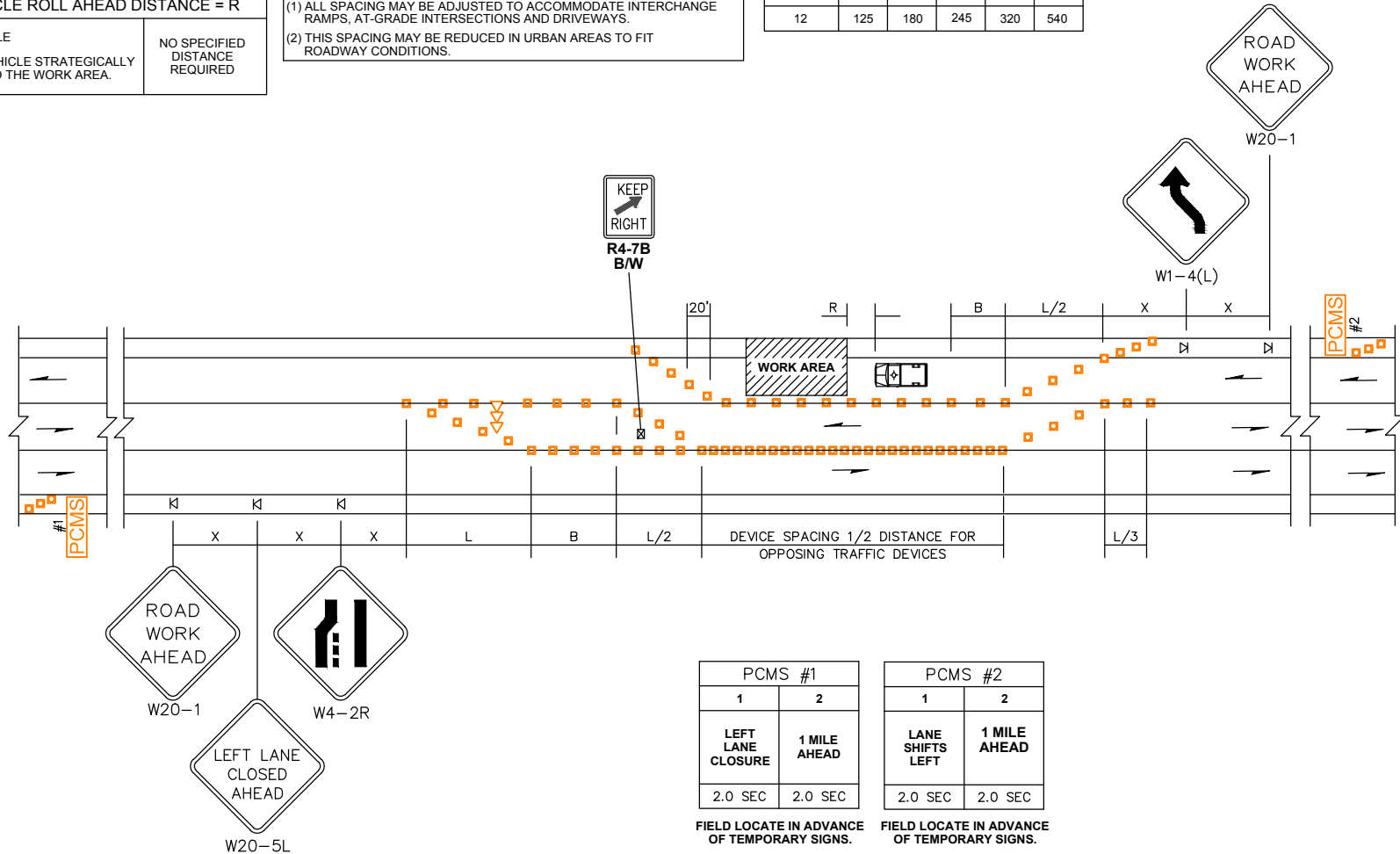
BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (FEET)	155	200	250	305	360
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.			NO SPECIFIED DISTANCE REQUIRED		

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS & COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM TAPER LENGTH = L (FEET)					
LANE WIDTH (FEET)	DESIGN SPEED (MPH)				
	25	30	35	40	45
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245 <td 320	540	

CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40



PCMS #1		PCMS #2	
1	2	1	2
LEFT LANE CLOSURE	1 MILE AHEAD	LANE SHIFTS LEFT	1 MILE AHEAD
2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS.

LEGEND

- K TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- ➡➡ SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- ⊠ TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

NOTES

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
2. FOR SPEED LIMIT OF 30 MPH OR LESS, USE SIGN W1-3 IN LIEU OF SIGN W1-4.
3. RECOMMENDED EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
4. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.
5. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

**LANE SHIFT
THREE LANE ROADWAY
TC-12**

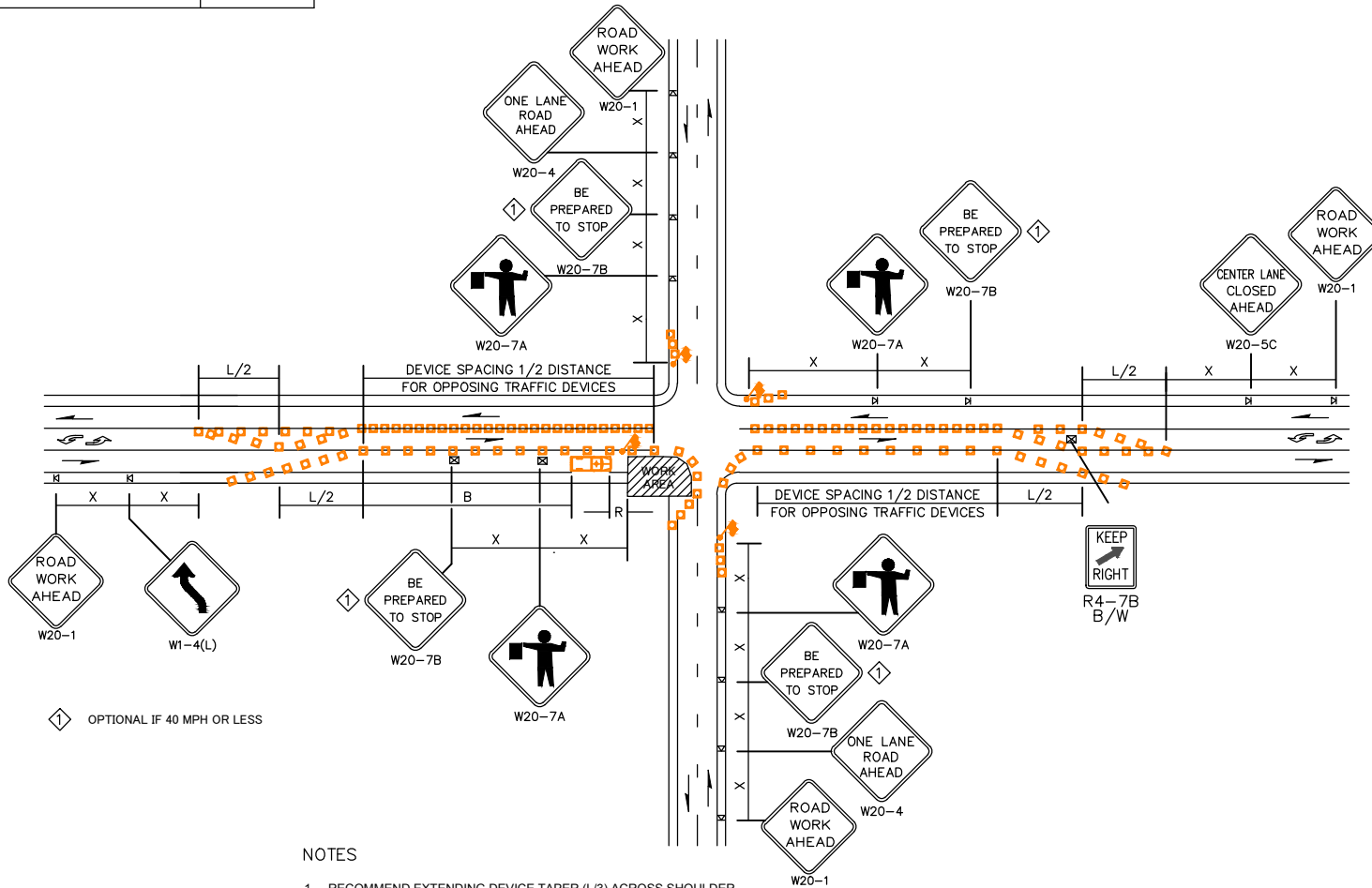
BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (FEET)	155	200	250	305	360
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.			NO SPECIFIED DISTANCE REQUIRED		

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS, COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	35 / 40 MPH	350'
RESIDENTIAL STREETS	25 / 30 MPH	200' (2)
	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

LANE WIDTH (FEET)	MINIMUM TAPER LENGTH = L (FEET)				
	DESIGN SPEED (MPH)				
	25	30	35	40	45
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245	320	540

CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40



NOTES

- RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
- IF A SIGNAL IS PRESENT, IT SHALL BE SET TO "RED FLASH MODE" OR TURNED OFF DURING FLAGGING OPERATIONS AND A UNIFORMED POLICE OFFICER IS REQUIRED.
- FOR SPEED LIMIT OF 30 MPH OR LESS USE SIGN W1-3 IN LIEU OF SIGN W1-4.
- MAINTAIN A MINIMUM OF ONE ACCESS POINT FOR EACH BUSINESS WITHIN WORK AREA LIMITS.
- ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.
- REFER TO THE MUTCD FOR SIGN DIMENSIONS.

LEGEND

- FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE - RECOMMENDED
- TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

**INTERSECTION LANE CLOSURE
THREE LANE ROADWAY
TC-14**

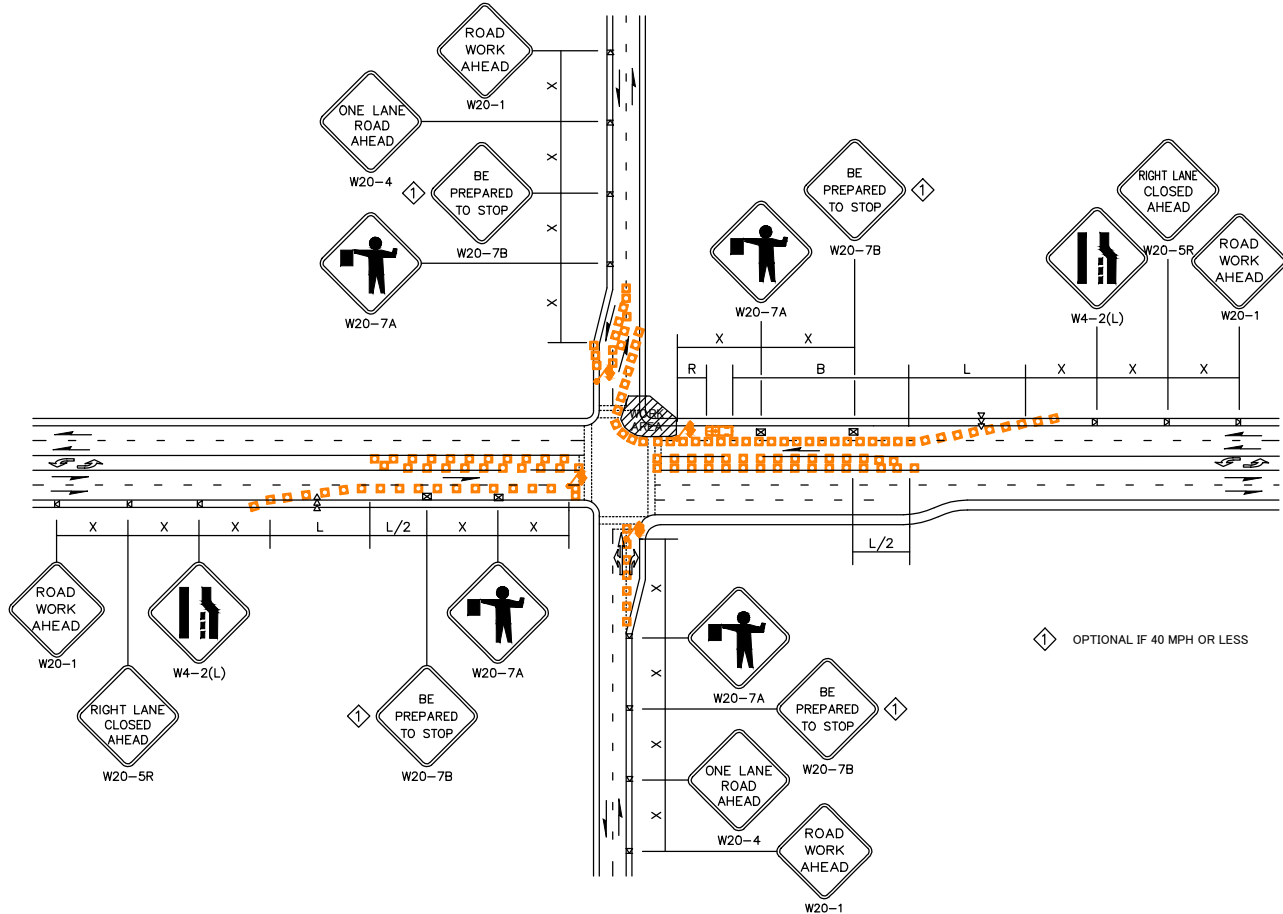
BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (feet)	155	200	250	305	360
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.			NO SPECIFIED DISTANCE REQUIRED		

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS & COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM TAPER LENGTH = L (FEET)					
LANE WIDTH (FEET)	DESIGN SPEED (MPH)				
	25	30	35	40	45
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245	320	540

CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40



OPTIONAL IF 40 MPH OR LESS

LEGEND

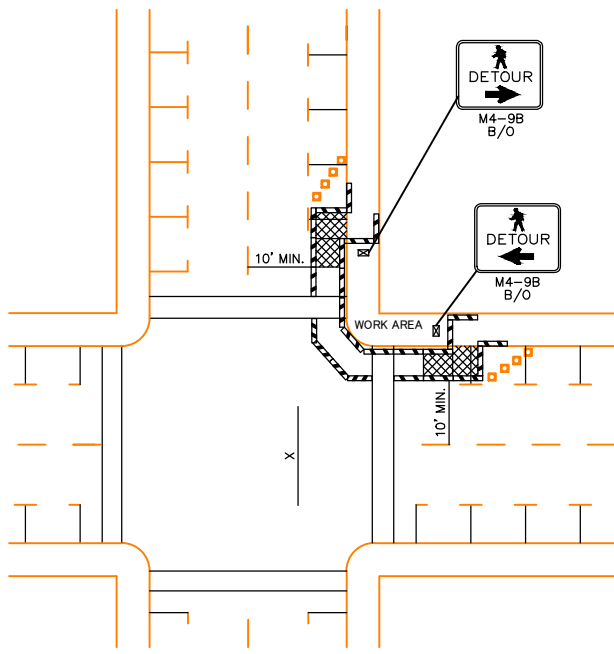
- FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE - RECOMMENDED
- TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

NOTES

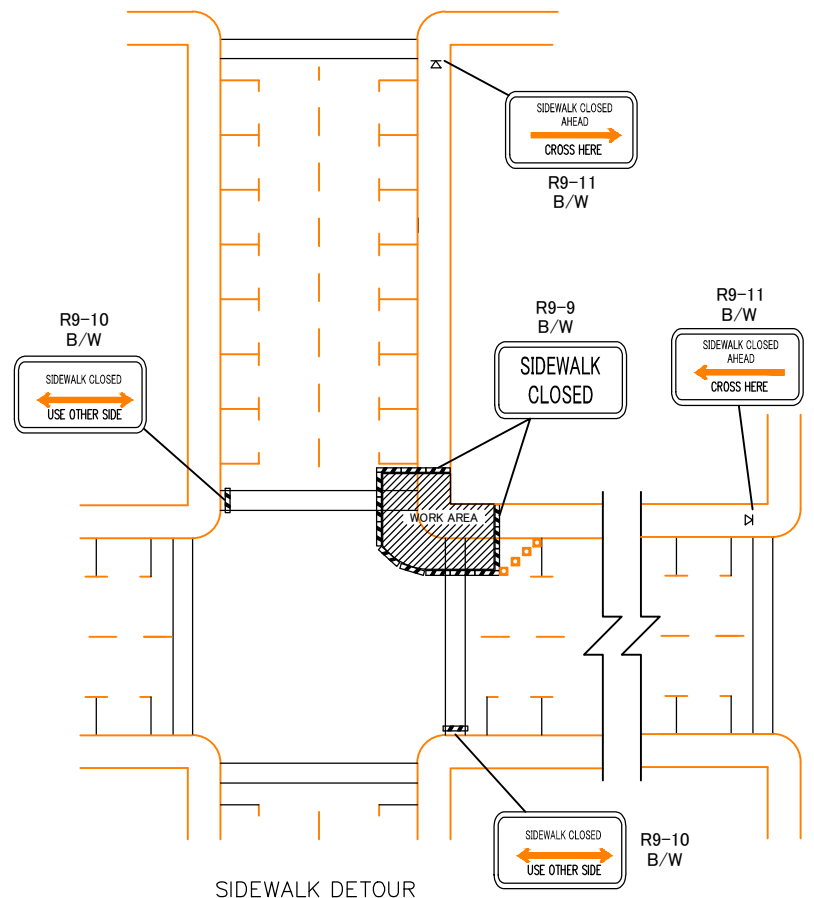
1. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
2. IF A SIGNAL IS PRESENT, IT SHALL BE SET TO "RED FLASH MODE" OR TURNED OFF DURING FLAGGING OPERATIONS AND A UNIFORMED POLICE OFFICER IS REQUIRED.
3. MAINTAIN A MINIMUM OF ONE ACCESS POINT FOR EACH BUSINESS WITHIN WORK AREA LIMITS.
4. ALL SIGNS ARE BLACK ON ORANGE.
5. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

INTERSECTION LANE CLOSURE
FIVE LANE ROADWAY
TC-15

NO PARKING R8-3 R/W
 INSTALL ON TYPE 2 BARRICADES THROUGHOUT THE WORK AREA 24 HOURS PRIOR TO IMPLEMENTING TRAFFIC CONTROL. PRIOR NOTIFICATION OF LOCAL LAW ENFORCEMENT REQUIRED.



SIDEWALK DIVERSION



SIDEWALK DETOUR

LEGEND

- ⊠ TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- ▨ PEDESTRIAN CHANNELIZING DEVICES
- ▩ TEMPORARY PEDESTRIAN RAMP FOR SIDEWALKS

NOTES

1. CONTROLS SHOWN ARE FOR PEDESTRIAN TRAFFIC ONLY.
2. A 60" PATH WIDTH SHOULD BE MAINTAINED (48" IS THE MINIMUM).
3. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING ANY CLOSURES.
4. SEE SHEET TC-52 FOR TEMPORARY PEDESTRIAN RAMP DETAILS.
5. ADA PEDESTRIAN FACILITIES MUST BE MAINTAINED. SEE STANDARD SPECIFICATION 1-10.2(1)B.
6. TEMPORARY PEDESTRIAN PUSH BUTTONS SHALL BE PLACED ON THE DIVERTED PATH WHEN EXISTING BUTTONS ARE NOT ACCESSIBLE TO PEDESTRIANS.
7. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

**INTERSECTION PEDESTRIAN
 TRAFFIC CONTROL
 TC-16**

MINIMUM LANE CLOSURE TAPER LENGTH = L (FEET)					
LANE WIDTH (FEET)	DESIGN SPEED (MPH)				
	25	30	35	40	45
10	105	150	205	270	450
11	115	165	225	295	495
12	125	180	245	320	540

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 / 55 MPH	500'
URBAN ARTERIALS AND COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (1)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (1)

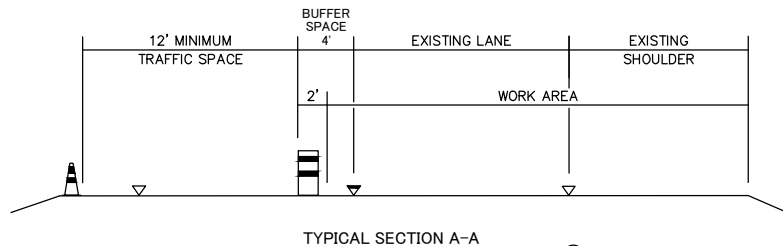
(1) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM SHOULDER TAPER LENGTH = L/3 (FEET)					
SHOULDER WIDTH (FEET)	DESIGN SPEED (MPH)				
	25	30	35	40	45
8'	40	40	60	90	120
10'	40	60	90	90	150

USE A MINIMUM 3 DEVICES TAPER FOR SHOULDER LESS THEN 8'.

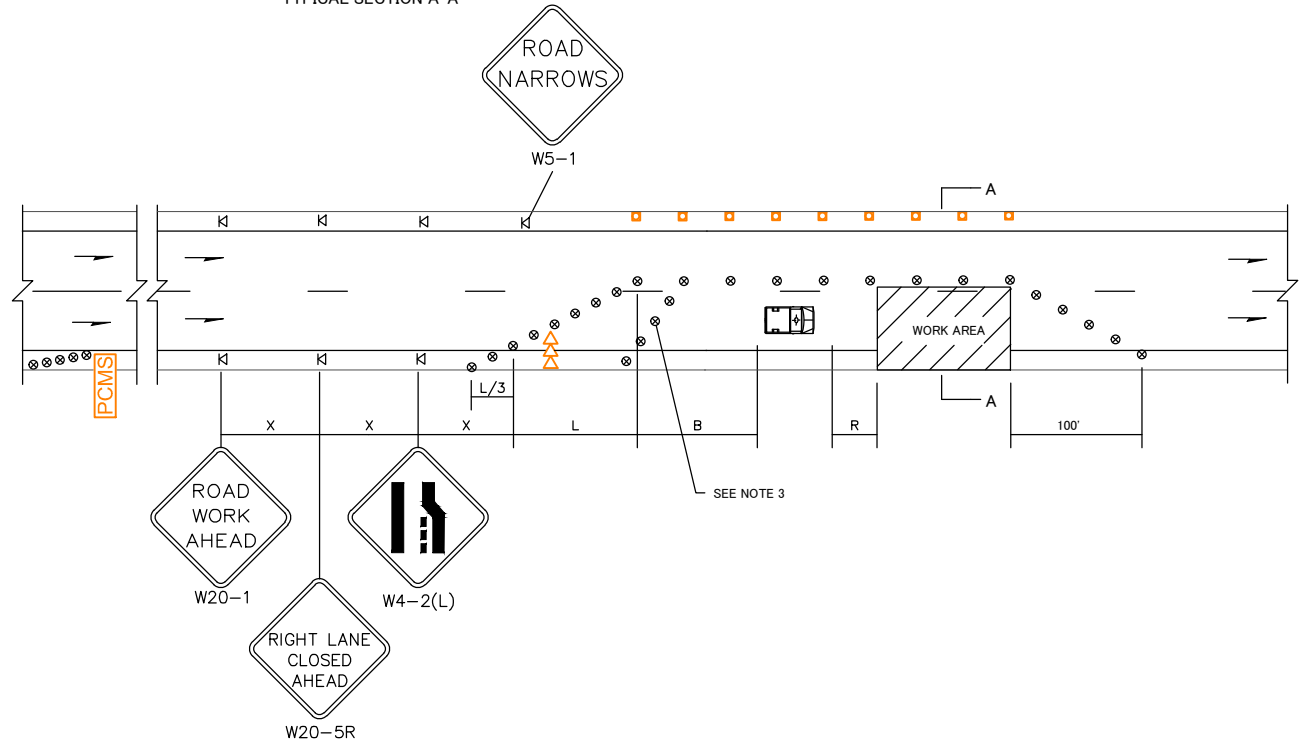
BUFFER DATA					
LONGITUDINAL BUFFER SPACE = B					
DESIGN SPEED (MPH)	25	30	35	40	45
LENGTH (feet)	155	200	250	305	360
BUFFER VEHICLE ROLL AHEAD DISTANCE = R					
PROTECTIVE VEHICLE	NO SPECIFIED DISTANCE REQUIRED				

CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40



PCMS	
1	2
RIGHT LANE CLOSURE	1 MILE AHEAD
2.0 SEC	2.0 SEC

FIELD LOCATE 1 MILE IN ADVANCE OF LANE CLOSURE SIGNING.



LEGEND

- K1 TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- ⊙ TRAFFIC SAFETY DRUM
- ⇨⇨ SEQUENTIAL ARROW SIGN
- ⊠ PROTECTIVE VEHICLE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

NOTES

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
2. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
3. USE TRANSVERSE DEVICES IN CLOSED LANE EVERY 1000' (RECOMMENDED).
4. ALL SIGNS ARE BLACK ON ORANGE.
5. RECOMMEND ADVANCE NOTICE FOR ANY OVER WIDTH LOADS PRIOR TO LANE CLOSURE FOR ALTERNATE ROUTES IF APPLICABLE.
6. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

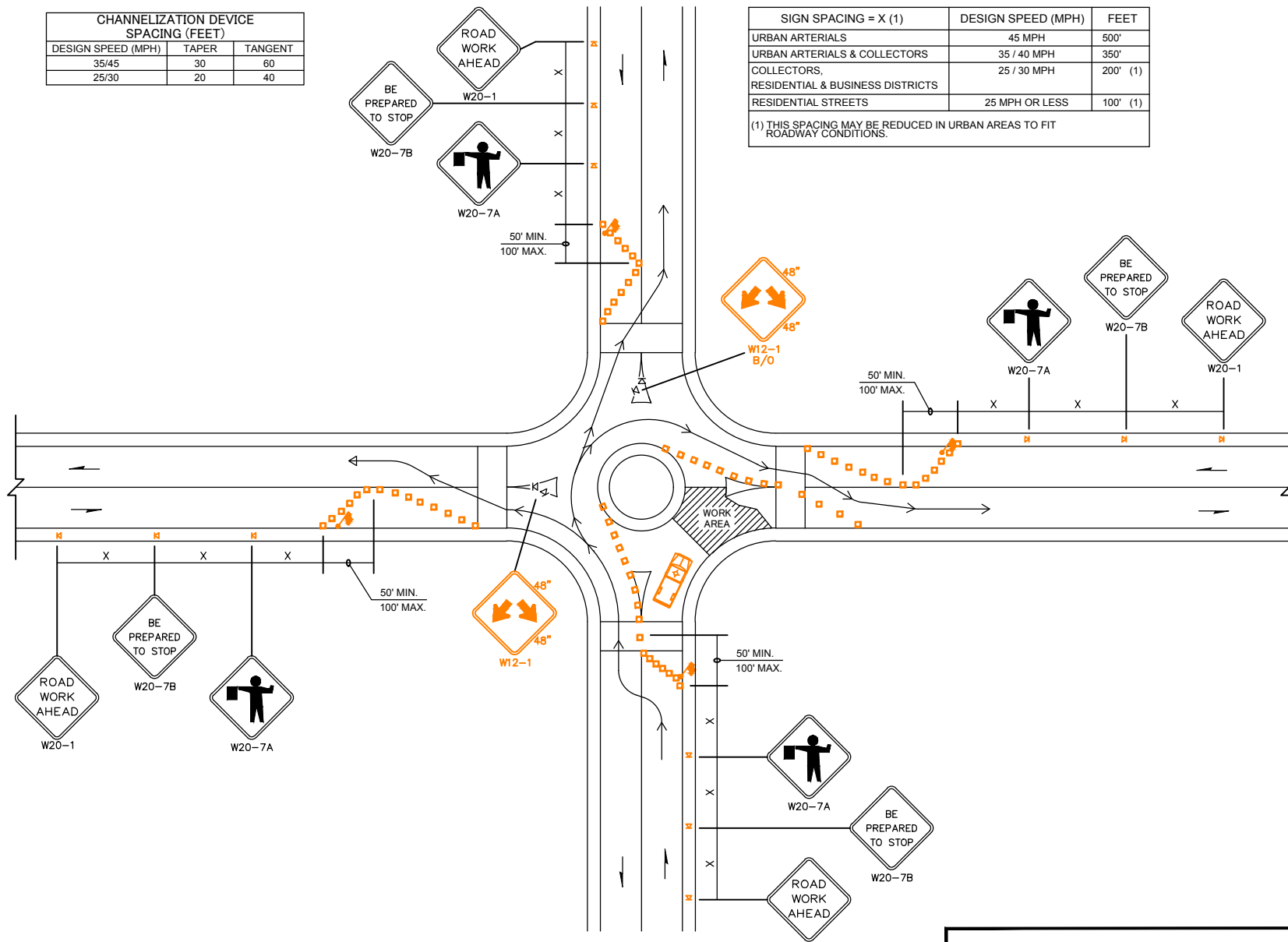
**SINGLE-LANE CLOSURE
WITH SHIFT**

TC-17

CHANNELIZATION DEVICE SPACING (FEET)		
DESIGN SPEED (MPH)	TAPER	TANGENT
35/45	30	60
25/30	20	40

SIGN SPACING = X (1)	DESIGN SPEED (MPH)	FEET
URBAN ARTERIALS	45 MPH	500'
URBAN ARTERIALS & COLLECTORS	35 / 40 MPH	350'
COLLECTORS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (1)
RESIDENTIAL STREETS	25 MPH OR LESS	100' (1)

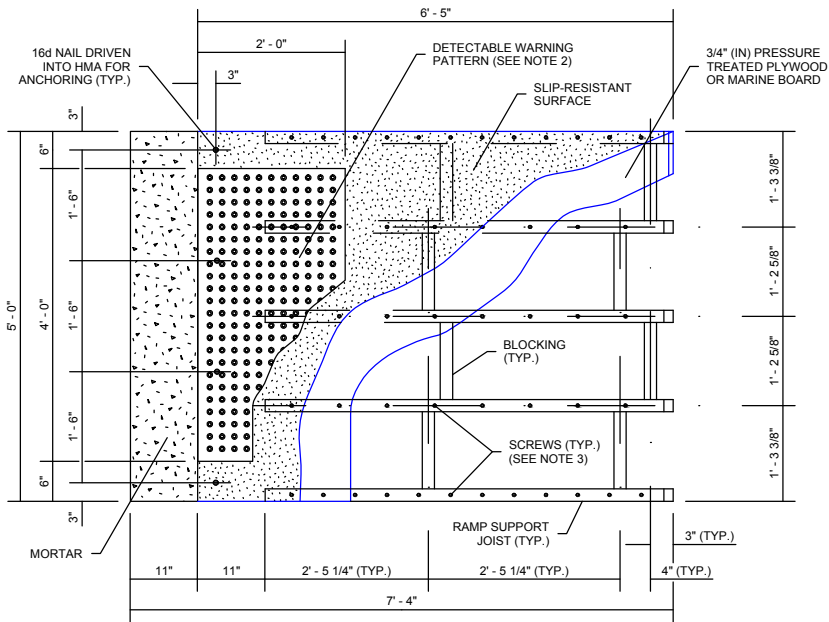
(1) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



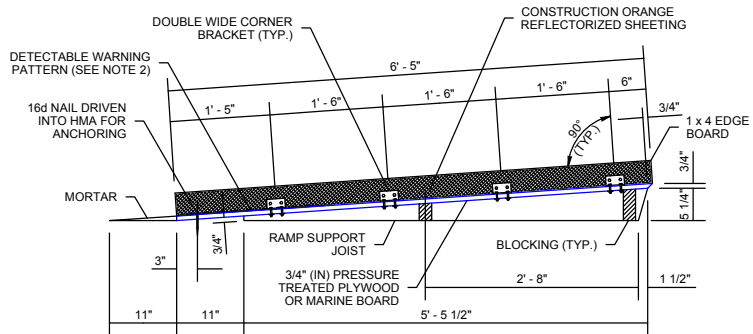
- LEGEND**
- FLAGGING STATION
 - TEMPORARY SIGN LOCATION
 - CHANNELIZING DEVICES
 - PROTECTIVE VEHICLE - RECOMMENDED

- NOTES**
1. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS, SEE STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
 2. PROTECTIVE VEHICLE RECOMMENDED - MAY BE A WORK VEHICLE.
 3. TYPICAL APPLICATION SHOWN, ADJUST FOR SITE CONDITIONS.
 4. REFER TO THE MUTCD FOR SIGN DIMENSIONS.

**TYPICAL ROUNDABOUT
FLAGGING OPERATION
TC-18**



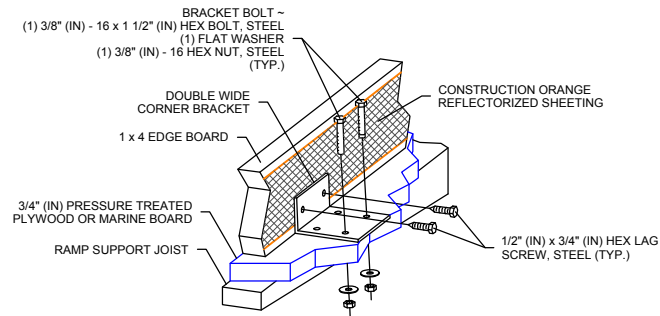
TOP VIEW
RAMP DETAIL



SIDE VIEW
RAMP AND EDGE BOARD

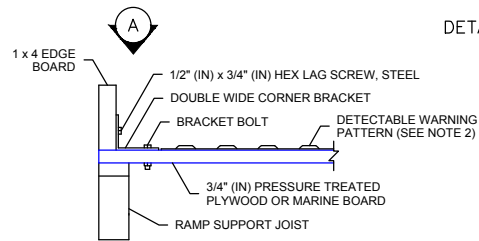
NOTES

1. THIS DESIGN ASSUMES OPTIMAL CONDITIONS AND A STANDARD CURB HEIGHT OF 6" (IN). INSTALLED RAMPS SHALL BE NO STEEPER THAN 12H : 1V, AND SHALL HAVE A CROSS-SLOPE OF 2% OR LESS. USE SHIMS OR GROUT AS REQUIRED TO ADJUST FOR EXISTING CONDITIONS AND TO PREVENT ROCKING. SHIMS SHALL BE NO HIGHER THAN 1" (IN), AND SHALL BE SECURED TO THE RAMP. FOR CURBS SHORTER THAN 6" (IN), INSTALL A RAMP ON THE SIDEWALK, NO STEEPER THAN 12H : 1V, MADE OF GROUT OR AS APPROVED BY THE ENGINEER. ADJUSTMENTS TO THE RAMP DIMENSIONS SHOWN MAY BE REQUIRED TO MATCH EXISTING CONDITIONS.
2. THE DETECTABLE WARNING PATTERN SHALL BE INSTALLED ONLY WHEN THE INTENT IS TO GUIDE PEDESTRIANS DIRECTLY ACROSS THE ROADWAY (CROSSWALK). SEE STANDARD PLAN F-40.10 FOR DETAILS.
3. SCREWS SHALL BE USED TO SECURE THE RAMP SURFACE. SPACING SHALL BE IN ACCORDANCE WITH THE CURRENT BUILDING CODE.
4. USE A SLIP-RESISTANT TREATMENT FOR THE SURFACE OF RAMP.
5. ALL FASTENERS SHALL BE GALVANIZED.
6. DO NOT INSTALL A HAND RAILING IF USING THE EDGE BOARD OPTION.

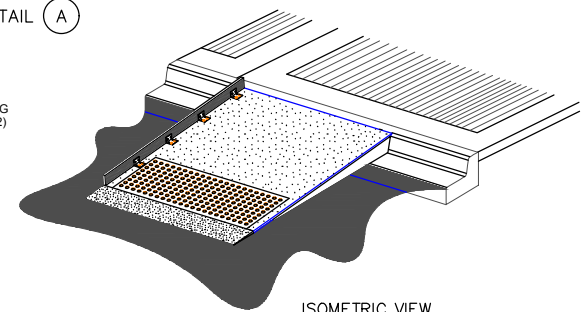


PERSPECTIVE VIEW

DETAIL A

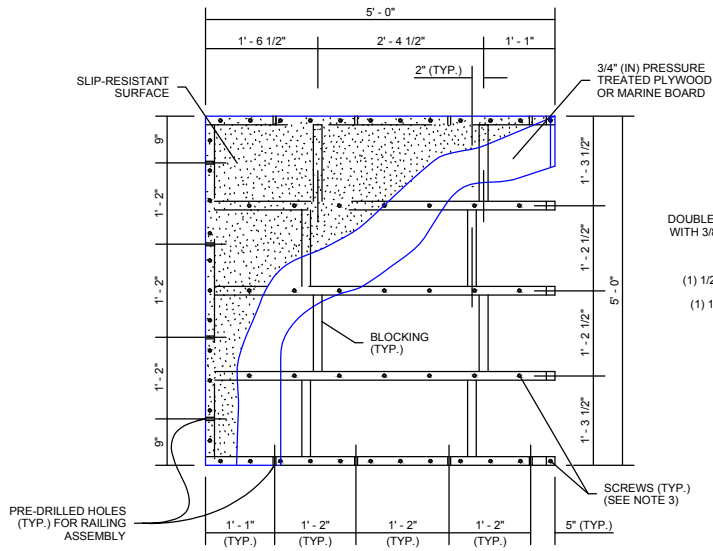


END VIEW
EDGE BOARD
ATTACHMENT DETAIL

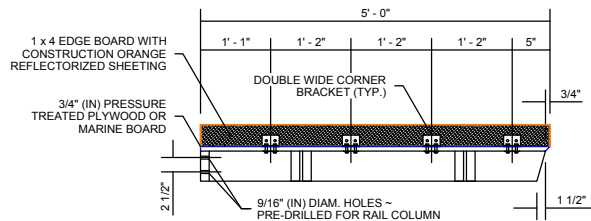


TEMPORARY PEDESTRIAN RAMP
WITH EDGE BOARD

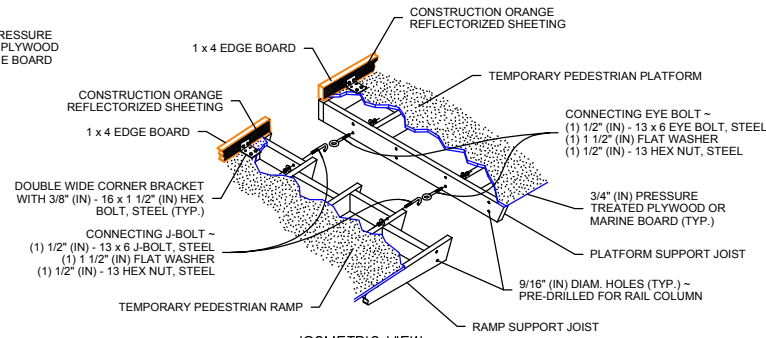
TEMPORARY PEDESTRIAN RAMP
WITH EDGE BOARD
TC-52



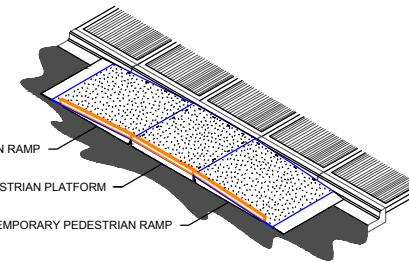
TOP VIEW
PLATFORM DETAIL



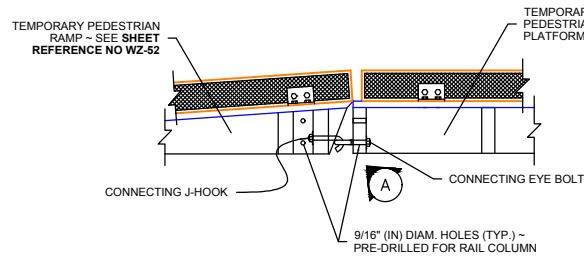
ELEVATION



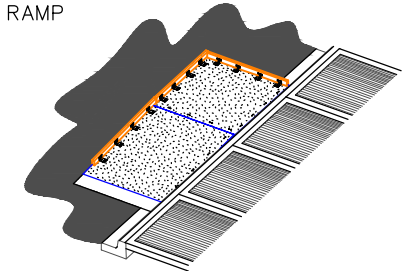
ISOMETRIC VIEW
DETAIL A



ISOMETRIC VIEW
DUAL RAMP



SIDE VIEW
CONNECTION DETAIL



ISOMETRIC VIEW
SINGLE RAMP

NOTES

1. ALL HOLES SHOWN SHALL BE DRILLED TO FACILITATE RE-USE AND FLEXIBLE EXPANSION.
2. SEE SHEET REFERENCE NO. TC-52, FOR TEMPORARY PEDESTRIAN RAMP DETAILS.
3. THIS DESIGN ASSUMES OPTIMAL CONDITIONS AND A STANDARD CURB HEIGHT OF 6" (IN). INSTALLED RAMP SHALL BE NO STEEPER THAN 12H : 1V, AND SHALL HAVE A CROSS-SLOPE OF 2% OR LESS. USE SHIMS OR GROUT AS REQUIRED TO ADJUST FOR EXISTING CONDITIONS AND TO PREVENT ROCKING. SHIMS SHALL BE NO HIGHER THAN 1" (IN), AND SHALL BE SECURED TO THE RAMP AND/OR PLATFORM. FOR CURBS SHORTER THAN 6" (IN), INSTALL A RAMP ON THE SIDEWALK. NO STEEPER THAN 12H : 1V, MADE OF GROUT OR AS APPROVED BY THE ENGINEER. ADJUSTMENTS TO THE PLATFORM DIMENSIONS SHOWN MAY BE REQUIRED TO MATCH EXISTING CONDITIONS.
4. SCREWS SHALL BE USED TO SECURE THE RAMP SURFACE. SPACING SHALL BE IN ACCORDANCE WITH THE CURRENT BUILDING CODE.
5. USE A SLIP-RESISTANT TREATMENT FOR SURFACE OF RAMP.
6. ALL FASTENERS SHALL BE GALVANIZED.

TEMPORARY PEDESTRIAN PLATFORM
WITH EDGE BOARD
TC-53

H
SWPPP

Construction Stormwater Pollution Prevention Plan (CSWPPP)

City of Lacey
420 College Street SE
Lacey, WA 98503

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KEY TERMS

BMPs	best management practices
CESCL	Certified Erosion and Sediment Control Lead
CSWGP	Construction Stormwater General Permit
DOE	Washington State Department of Ecology
LID	low-impact development
SDM	City of Lacey Storm Design Manual
SPCC	Spill Prevention, Control, and Countermeasures
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
TMDL	total maximum daily load

1. CONSTRUCTION STORMWATER POLLUTION PREVENTION ELEMENTS

1.1 Objective of the Stormwater Pollution Prevention Plan

The purpose of a Construction Stormwater Pollution Prevention Plan (SWPPP) is to describe the potential for pollution problems on a construction project. The SWPPP also explains and illustrates the measures to be taken on the construction site to control these problems. This SWPPP is prepared according to the guidance of the City of Lacey 2022 Stormwater Design Manual (SDM) which is based on the 2019 Stormwater Management Manual for Western Washington – Washington State Department of Ecology (DOE) that has been revised for local application. The SDM describes thirteen necessary elements of construction stormwater pollution prevention. These thirteen elements include: preserving vegetation/mark clearing limits, establish construction access, control flow rates, install sediment controls, stabilize soils, protect slopes, protect drain inlets, stabilize channels and outlets, control pollutants, control de-watering, maintain Best Management Practices (BMPs), manage the project, and protect low-impact development BMPs. These elements have been addressed as follows.

1.2 Summary of Elements

The BMPs listed in this report, or their equivalent, are required. For linear projects such as roadway construction, modifying or adapting a BMP may be necessary to address unique stormwater protection challenges. Any revisions by the contractor to the BMPs listed in the SWPPP shall be approved by the Engineer. Therefore, if the contractor does not require a BMP or needs to modify a BMP, the contractor shall document the reasons and update the SWPPP to match what is being implemented in the field. A copy of the BMPs can be found in Appendix A.

1.3 Element #1: Preserve Vegetation/Mark Clearing Limits

Prior to any land disturbing activities, the construction limits shall be marked prior to any clearing to restrict clearing to the approved limits. Sensitive areas, wetland buffers, and preserved trees/vegetation shall be marked with fencing or staking flags. A high visibility fence shall be installed to delineate the location and control access of each site to be demolished prior to any work in accordance with BMP C103. The Contractor shall use best judgement selecting of the type of fencing (high orange fencing, chain-link with placards, or high visible silt fence) to be utilized based off public access to site location. A silt fence shall be installed separately or in conjunction with the high visibility fence to contain loose sediment associated with project demolition or grading within the project limits in accordance with BMP C233.

The native top soil, natural vegetation, and existing trees shall be retained in an undisturbed state to the maximum extent practicable. If it is not practicable to retain the native top soil in place, it should be stockpiled on-site, covered to prevent erosion, and replaced immediately upon completion of the ground disturbing activities. The Contractor shall determine if construction is not possible due to presence of vegetation/tree, and shall clear, grub, and dispose of accordingly.

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- If the fencing or clearing limits are observed to be damaged or visibility is reduced, it shall be repaired and/or replaced immediately and visibility restored.

1.4 Element #2: Establish Construction Access

Existing asphalt roads and parking lots within in the construction perimeter will be utilized as construction access to the maximum extent feasible. Locations where the existing roads are to be removed or intersections with an existing road not within the construction perimeter a stabilized construction entrance shall be constructed to minimize the tracking of sediment onto any public road. Construction vehicle access and exit shall be limited to one route, if feasible. This stabilized construction entrance shall be constructed in accordance with the requirements of BMP C105.

If sediment is tracked off-site, public roads shall be cleaned thoroughly at the end of each day, or more frequently during wet weather. Sediment shall be removed from roads by shoveling or pickup sweeping and shall be transported to a controlled sediment disposal area. Street washing will be allowed only after sediment is removed.

Should tracking of sediments off-site continue to occur, wheel washes or construction road and parking area stabilization may be needed (BMPs 106 and 107).

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- If sediment or quarry spalls are observed being tracked onto pavement, then alternative measures to keep the street free of sediment shall be used. This may include replacement/cleaning of existing quarry spalls, street sweeping, an increase in the dimensions of the entrance, or the installation of a wheel wash.
- If a wheel wash is installed, the wheel wash should start out the day with fresh water, and the wash water should be changed a minimum once per day. The Contractor shall determine the frequency of changing the wash water.

1.5 Element #3: Control Flow Rates

Permanent and temporary stormwater facilities shall be constructed as one of the first steps of site grading, and will be observed to function properly before constructing site improvements. Stormwater runoff shall be observed during storm events to ensure flow rates are not increased to cause erosion to off-site locations. Temporary interceptor swales are proposed to convey runoff into a temporary sediment pond before discharging and infiltrating on-site or to existing roadside ditches and storm system catch basins. If substantial flow rates are observed, check dams shall be installed to promote ponding and reduce flow rates within the swales. Temporary swales shall be constructed according to BMP C200, and shall be stabilized with temporary vegetation or other channel protection during construction. Temporary sediment ponds shall be constructed according to BMP C241.

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- Immediately remove sediment from within the flow path of the temporary swale following a rainfall event.
- If a temporary sediment pond is utilized, the sediment collected shall be removed from the pond when it reaches 1-foot in depth.
- Any damage to the temporary sediment pond embankments or slopes shall be repaired.

1.6 Element #4: Install Sediment Controls

To minimize the discharge of pollutants offsite, erosion and sediment controls will be installed along site perimeter as needed. Stormwater runoff from disturbed areas shall be routed through an appropriate sediment removal BMP per the Contractor's best judgement prior to runoff discharging off-site or into drain inlets. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must ensure downstream waterways are protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater from the project site. Silt fence barriers shall be constructed in accordance with BMP C233.

In addition to silt fencing, the following BMPs are may be implemented where appropriate:

- BMP C230 – Straw Bale Barrier
- BMP C231 – Brusher Barrier
- BMP C232 – Gravel Filter Berm
- BMP C234 – Vegetated Strip
- BMP C235 – Straw Wattles
- BMP C240 – Sediment Trap
- BMP C241 – Temporary Sediment Pond
- BMP C 251 – Construction Stormwater Filtration

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- Repair any damage immediately.
- Intercept and convey all evident concentrated flows uphill of the silt fence to a sediment pond.
- Remove sediment deposits when the deposit reaches approximately one-third of the height of the silt fence, or install a second silt fence.
- Replace filter fabric that has deteriorated due to ultraviolet breakdown.

1.7 Element #5: Stabilize Soils

All exposed and unworked soils shall be stabilized by application of effective BMPs, which protect the soil from the erosive forces of raindrop impact, flowing water, and from wind erosion. Construction schedule phasing shall be planned to reduce the amount of soil exposed during construction activity.

From October 1 through April 30, no soils shall remain exposed and un-worked for more than 2 days. From May 1 to September 30, no soils shall remain exposed and un-worked for more than 7 days. This condition applies to all soils on-site, whether at final grade or not. Soils to be stabilized at the end of shifts prior to holidays or weekends based on weather forecasts per Contractor's best judgement.

In areas where the soils will remain un-worked for more than 30 days or have reached final grade, seeding and mulching shall be used in accordance with BMPs C120 and C121. If the soil stockpile slope is 2H:1V or greater with at least 10 feet of vertical relief, nets, or blankets shall be used according to BMP C122. Plastic covering shall be used on disturbed areas that require cover less than 30 days per BMP C123. Sod shall be used in accordance with BMP C124 for disturbed areas that require immediate vegetative cover. Dust control shall be used as needed to prevent wind transport of dust from disturbed soil surfaces and in accordance with BMP C140. Contractor to utilize available non-potable water from on-site sources or provide water tanker in order to spray down disturbed soils to minimize dust produced from construction activities.

In addition, the following BMPs may be used to stabilize soils where appropriate:

- BMP C125 – Topsoiling
- BMP C130 – Surface Roughening
- BMP C131 – Gradient Terraces

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- Reseed any seeded areas that fail to establish at least 80 percent cover. If reseeding is ineffective, use an alternative method such as sodding, mulching, or nets/blankets to stabilize soils.
- Reseed and protect by mulch any areas that experience erosion after achieving adequate cover.
- Supply seeded areas with adequate moisture, but do not water to the extent that runoff is generated.
- If the grass is unhealthy, the cause shall be determined and appropriate action taken to reestablish a healthy groundcover. If it is impossible to establish a healthy groundcover due to frequent saturation, instability, or some other cause, the sod shall be removed, the area seeded with an appropriate mix, and protected with a net or blanket.
- Damaged or torn plastic sheets shall be replaced and open seams shall be repaired.
- Respray areas as needed to keep dust to a minimum.

1.8 Element #6: Protect Slopes

Slopes will be stabilized as indicated in Element #5 above. Cut and fill slopes shall be constructed in a manner that will minimize erosion. In addition, the following BMPs may be implemented where appropriate:

- BMP C200 – Interceptor Dike and Swale
- BMP C205 – Subsurface Drains
- BMP C206 – Level Spreader
- BMP C207 – Check Dams

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- BMPs to be inspected after every runoff event to ensure that they are functioning correctly.

1.9 Element #7: Protect Drain Inlets

All storm drain inlets made operable during construction, as well as all existing structures within the project limits, shall be marked and protected so that stormwater runoff shall not enter the conveyance system without first being filtered or treated to remove sediment. Install catch basin sock filters or approved equal as shown on the TESC Plans and in accordance with BMP C220 or WSDOT standard I-40.20-00.

Contractor to prevent sediment and street wash water to enter storm drains without prior and adequate treatment.

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- Inlets to be inspected weekly at a minimum and daily during storm events.
- Inlet protection devices shall be cleaned and removed and replaced when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
- Do not wash sediment into storm drains while cleaning.

1.10 Element #8: Stabilize Channels and Outlets

The temporary drainage swales shall provide stabilization, including armoring material, adequate to prevent erosion of outlets, slopes, and downstream reaches. The Contractor to contact Design Engineer for appropriate dimensions of conveyance channels if utilized.

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- Inspect and repair as needed.
- Install channel lining if erosion is observed.
- Install check dams if concentrated flow rates are observed during and after a runoff event.

1.11 Element #9: Control Pollutants

All pollutants, including waste materials and demolition debris, that occur on-site during construction shall be handled and disposed of in a manner that does not cause contamination of stormwater. Maintenance and repair of heavy equipment and vehicles involving oil changes, hydraulic system drain down, solvent and de-greasing cleaning operations, fuel tank drain down and removal, and other activities which may result in discharge or spillage of pollutants to the ground or into stormwater runoff must be conducted using spill prevention measures, such as drip pans. Emergency repairs may be performed on-site using temporary plastic placed beneath, and if raining, over the vehicle. Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations shall be followed for application rates and procedures.

Two source control BMPs will apply to this project:

- A Spill Prevention Control and Countermeasures Plan (prepared by Contractor)
- Street Sweeping (as needed during construction by Contractor)

Installation Schedule: March/April 2024 or as Contractor sees fit per construction phasing

Inspection and Maintenance Plan:

- Contaminated surfaces shall be cleaned immediately following any discharge or spill incident.
- Source control BMPs shall be utilized to prevent the likelihood of pollutants being introduced on-site.

1.12 Element #10: Control Dewatering

It is not anticipated that dewatering will be required for this project.

1.13 Element #11: Maintain BMPs

All temporary and permanent erosion and sediment control BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function. All maintenance and repair shall be in accordance with BMPs.

Sediment control BMPs shall be inspected weekly or after a runoff-producing storm event during the dry season and daily during the wet season.

All temporary erosion and sediment control BMPs shall be removed within 30 days after final site stabilization is achieved, or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on-site. Disturbed soil areas resulting from removal of BMPs or vegetation shall be permanently stabilized.

1.14 Element #12: Manage the Project

1.14.1 Phasing of Construction

The project shall be phased where feasible in order to prevent, to the maximum extent practicable, the transport of sediment from the site during construction. Revegetation of exposed areas and maintenance of that vegetation shall be an integral part of the clearing activities for each phase. Installation of temporary sediment control devices shall be implemented in accordance with the respective phase of construction activities.

1.14.2 Seasonal Work Limitations

From October 1 through April 30, clearing, grading, and other soil disturbing activities shall only be permitted if silt-laden runoff will be prevented from leaving the construction site.

The following activities are exempt from the seasonal clearing and grading limitations:

- Routine maintenance and necessary repair of erosion and sediment control BMPs;
- Routine maintenance of public facilities or existing utility structures that do not expose the soil or result in the removal of the vegetative cover to the soil; and
- Activities where there is 100 percent infiltration of surface water runoff within the site in approved and installed erosion and sediment control facilities.

1.14.3 Inspection and Monitoring

All BMPs shall be inspected, maintained, and repaired as needed to ensure continued performance of their intended function.

Sampling and analysis of the stormwater discharges from the construction site may be necessary to ensure compliance with standards.

Whenever inspection and/or monitoring reveals that the BMPs identified in the construction SWPPP are inadequate, due to the actual discharge of or potential to discharge a significant amount of any pollutant, the construction SWPPP shall be modified, as appropriate, in a timely manner.

Site inspections shall be conducted by the identified CESCL. The CESCL must be on-site or on-call at all times during the duration of construction activities. The CESCL must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen, and it is upon the CESCL's evaluation of the effectiveness of BMPs to determine if it is necessary to install, maintain, or repair BMPs to improve quality of stormwater discharges.

The CESCL must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. The CESCL may reduce this inspection frequency for temporary stabilized or inactive sites to once every calendar month through the duration of construction activities.

1.14.4 Maintenance of the SWPPP

A copy of this Construction SWPPP must be on-site or within reasonable access to the site.

If there is a change in the design, operation or maintenance at the construction site that could have a significant effect on the discharge of pollutants to the waters of the State, this Construction SWPPP must be modified to meet those changes.

Additionally, the SWPPP must be modified if, during inspections, it is determined that the Construction SWPPP is ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. Additional or modified BMPs will be included to correct problems identified. Revisions to the Construction SWPPP must be made within 7-days following the inspection.

BMPs that apply to the maintenance of the SWPPP include:

- BMP C150: Materials on Hand
- BMP C160: Certified Erosion and Sediment Control Lead
- BMP C162: Scheduling

1.15 Element #13: Protect Low Impact Development (LID) BMPs

The primary purpose of On-Site Stormwater Management is to reduce the disruption of the natural site hydrology through infiltration. BMPs used to meet CR5: On-Site Stormwater Management, also called LID BMPs, are permanent BMPs.

Protection of all LID BMPs will be necessary throughout the duration of the project, and as required per the Contract Agreement.

Protection of the LID BMPs includes, but is not limited to:

- Protection from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the LID BMPs. Restore the BMPs to their functioning condition if they accumulate sediment during construction. Restoring the BMP must include removal of sediment and any sediment-laden Bioretention/Rain Garden soils, and replacing the removed soils with soils meeting the design specification.
- Maintain the infiltration capabilities of LID BMPs by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.
- Keep all heavy equipment off existing soils under LID BMPs that have been excavated to final grade to retain the infiltration rate of the soils.

Additional information is available in the *Low impact Development Technical Guidance Manual for Puget Sound* (Hinman and Wulkan 2012) for more details on protecting LID integrated management practices. This information regarding this manual is for additional information purposes only.

BMPs that may be implemented for protection where appropriate:

- BMP C102: Buffer Zone
- BMP C103: High-Visibility Fence
- BMP C207: Check Dams
- CMP C233: Silt Fence