



Department of Land Use and Transportation
 Operations and Maintenance Division
 1400 SW Walnut Street, MS 51
 Hillsboro, OR 97123
 Phone: 503-846-7623 / Fax: 503-846-7620

Inspection Request Line (IVR)
Codes: 950 Operations Interim, 951 Operations Final
IVR: 503-846-3699
Online: <http://washcooraca.com>

Permit 240405

Right-of-Way Utility	Issued
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Description:
 Stafford Rd - Utility M2764844 - KEM
 This project is relating to the Rosemont-Wilsonville 115 kV transmission line reconductor, and is associated with the larger Tonquin reliability project. The six poles in question will be replaced and reconducted to support the updated conductor. We will be replacing poles, installing a pole and aerial work. Construction slated to begin 05/2025 and end 12/2025. We will be Replacing 11 poles, installing 1 new pole and aerial work. Repair/Replace/Modify

Street/Road Information	Key Dates
Site Address: 25935 SW STAFFORD RD	Accepted Date: 03/11/2024
Location: Stafford Rd - Utility	Issued Date: 03/14/2024
Nearest Cross Street:	Proposed Start: 05/01/2025
Parcel:	Estimated Completion: 12/31/2025
Subdivision:	Expiration Date: 03/14/2025

Applicant: Contractor Coordination 10800 SW Avery st Tualatin OR 97062 5037365515 Contractorcoord@pgn.com	Contractor: Henkels & McCoy West, LLC 2840 FISCUS STREET Pomona CA 91766
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Special Conditions

1. Please call the inspection request line for start work, sidewalk and curb form inspection, and any other questions you might have regarding this permit. If work is interrupted and restarted call the inspection request line for start.
2. The authorized lane restrictions under this permit are from 9:00AM to 3:30PM.
3. Any damage to the asphalt road surface is to be repaired with an approved asphaltic material. If steel plates are needed, please apply for a steel plate permit at washcooraca.com.
4. This permit is for Washington County Right-of-Way only, other permits may be required.
5. No cuts in roadway without prior approval.
6. Traffic control must address bike lane if affected.
7. Traffic control must be adjusted to meet conditions in field.
8. ALL VEHICLES, MATERIALS, AND EQUIPMENT MUST BE REMOVED FROM RIGHT OF WAY AT END OF EACH DAY
9. Pole (s) must be a minimum of 2' from F.O.C / EOP
10. Pole (s) must be a minimum of 6" from edge of sidewalk

11. Sidewalks must maintain 5' in width
12. Bonding straps to steel poles shall not be placed sidewalk side of pole
13. New Pole (S) cannot be closer to edge of road than existing

Important Notice

- A) This permit is only valid when issued with the approved plans, the attached General Conditions, the above Special Conditions, and any other specified attachments or requirements.
- B) Additional fees may be required if there is a substantial change in the scope of work requiring further review by Washington County or if more than three site visits are needed for inspection purposes.
- C) If this permit expires without an approved final inspection or if the requirements of this permit have not been met to the satisfaction of Washington County, a notice may be placed in the property record related to the permit status which could delay the issuance or closure of other permits.
- D) Failure to comply with the terms and conditions of this permit may result in a code violation citation or other legal action necessary to enforce the terms of the permit.



GENERAL CONDITIONS
For Permits To Work in Washington County Right-of-Way

1. Comply with these General Conditions unless otherwise allowed, in writing, or modified by the Special Conditions or Special Provisions contained within this permit.
2. This permit does not authorize any activity on privately owned property or public rights-of-way not under the control and jurisdiction of Washington County.
3. Failure to comply with any term or condition of this permit shall be cause for the County to revoke, annul, terminate, suspend, revise or amend this permit or issue code violation citation or take any legal action necessary to correct the violation. All costs associated with work stoppage or revocation as provided herein are the responsibility of the Permittee.
4. Follow the direction of Washington County if actual site conditions warrant the need to modify any previously approved construction, traffic control, or erosion control plan. Washington County reserves the right to make changes to the permit and approved supplementary documents including any and all plans at any given time. If submitted plans were prepared by an engineer, submit as built plans to Washington County at project completion.
5. Obtain County approval prior to modifying the scope of the permitted work.
6. Communicate and coordinate, as needed, with adjacent residents, businesses, and other service providers (i.e. utilities, transit providers, garbage haulers, etc.) that may be impacted by the work associated with this permit.
7. Comply with all applicable city, county, state and federal laws and regulations associated with the performance of the work authorized by this permit. Laws and regulations listed in these General Conditions or the Special Provisions are for courtesy purposes only. These listings are not intended to be comprehensive. It is the responsibility of the Permittee and those performing the work to be knowledgeable about all applicable laws and regulations.
8. Washington County has the authority to designate the location where lines, fixtures and facilities may be located, and subject to ORS 758.025 may order the location of any such line, fixture or facility to be changed when deemed expedient by the County. Any line, fixture or facility erected or remaining in a different location upon such road than that designated in any order of the County is a public nuisance and may be abated accordingly.
9. Obtain any other permits, licenses, or authorizations required by other utilities, public agencies, or organizations for performing work authorized under this permit.
10. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0100. You may obtain copies of the rules by calling the center. The telephone number for the Oregon Utility Notification Center is (503) 232-1987, (800) 332-2344, or 811. You can also visit www.digsafelyoregon.com for more information. The Oregon Utility Notification Center One Call locates telephone number in the greater Portland Metropolitan area is (503) 246-6699.
11. Permittee shall contact the County, using one of the *Contact Options* below, at least one (1) business day prior to the following milestones:
 - a) Start of construction – For notification purposes only. Formal inspection not required to commence construction. Indicate that inspection request is for start of construction.
 - b) Concrete form inspection – Concrete shall not be placed until forms have passed formal inspection.
 - c) Pre-paving inspection – Paving shall not be performed until site has passed formal inspection.
 - d) A break in construction greater than three (3) days (excluding holidays and weekend) – For notification purposes only.
 - e) Completion of construction – Use "Final" inspection code to request inspection after all permitted work is complete.

Contact Options:

- 1) Phone: (503) 846-3699
- 2) Online: <http://washcooraca.com>

Be prepared to have your permit number and inspection code available for entry into the automated system(s).

12. Thirty (30) days prior to the expiration of the permit the Permittee shall contact the County at 503-846-7623 and provide an update and status of the permitted work, if the work has not been completed. If the work will not be completed prior to permit expiration, the Permittee shall request an extension for the permit or risk having to re-apply for a new permit with new fees and requirements associated with the work.
13. Construct the permitted activity with materials, equipment, labor, and workmanship to meet or exceed the relevant specifications established in the Washington County *Road Design and Construction Standards* (Ordinance #738 as adopted January 27, 2011), the 2018 Oregon Standard Specifications for Construction, and any special conditions or provisions established by this permit. Ensure quality control is maintained for all work performed and correct any work that does not meet the minimum standards and specifications.



GENERAL CONDITIONS
For Permits To Work in Washington County Right-of-Way

14. Establish and maintain work zone traffic control in compliance with the *Oregon Temporary Traffic Control Handbook for Operations of Three Days or Less* (December 2011) any time vehicle or pedestrian traffic is influenced by the work. For work requiring devices in place longer than three (3) days, a site specific traffic control plan based on the principles in Part 6 of the MUTCD, the Oregon Supplement and ODOT's 2015 Standard Drawings TM800 – TM871, is required. All traffic control devices shall meet or exceed the NCHRP 350 requirements for crashworthiness. Completed signal shut down requests must be received by the County a minimum of 3 working days prior to any proposed signal shut down.
15. Accommodate all road users at all times including motorists, bicyclists, pedestrians, and those with disabilities or impairments. Install and maintain additional temporary signing and traffic control devices for the control of non-motorized vehicles and pedestrians where a reasonable volume of these users are expected and where work is expected to last longer than one hour. Maintain safe accessibility or provide suitable alternate routes in, through, or around work areas.
16. Limit work & activity (construction, restoration, erosion control, etc) to no more than 1,000 lineal feet at any one time.
17. Impact no more than one consecutive intersection at a time.
18. Do not store or park any equipment, vehicles, or materials in the right-of-way overnight unless approved by Washington County.
19. Utilize construction materials and methods to maintain at least one travel lane at all times. Adjust work zone to ensure no vehicles are stopped, held or restricted for more than fifteen (15) minutes. Lane restrictions may be allowed in accordance with an approved traffic control plan and according to the following table:

Functional Classification	Monday – Friday (weekend work requires prior approval) No lane restriction allowed during the times below		Weekday preceding a holiday Latest End Time
	AM	PM	
Arterial	6:30 – 9:00	3:30 – 6:30	12:00 p.m.
Collector/Neighborhood Route	7:00 – 8:30	4:00 – 6:00	
Local	7:00 – 8:00	5:00 – 6:00	

Night work is allowed if a noise variance is obtained per general condition 28

20. Suspend work on the following holidays: **New Year's Day** (Jan 1), **Martin Luther King Day** (3rd Mon in Jan), **President's Day** (3rd Mon in Feb), **Memorial Day** (last Monday in May), **Independence Day** (Jul 4), **Juneteenth Day** (June 19th), **Labor Day** (1st Monday in Sept), **Veteran's Day** (Nov 11) **Thanksgiving** (4th Thursday & 4th Friday in Nov), **Christmas Day** (Dec 25).
 When a holiday falls on a Saturday, the observed holiday is the preceding Friday.
 When a holiday falls on a Sunday, the observed holiday is the following Monday.
21. Comply with Washington County's *Best Management Practices for Routine Road Maintenance* (December 2010) as well as Clean Water Services' *Erosion Prevention and Sediment Control Standards* and the appropriate best management practices outlined in Clean Water Services' *Design and Construction Standards*.

 Ensure all equipment is clean and leak free with sufficient and appropriate spill prevention and clean up materials on site and the personnel involved with the permitted activity are familiar with and proficient in the use of these materials. When not being actively used for the permitted activity, remove construction equipment from the right-of-way. Do not park, re-fuel, or service equipment or store hazardous materials directly over or uphill from catch basins, drainage inlets, or manholes or within 150 feet of any wetland, waterway, or resource water. When reasonably available, re-fuel over an impervious surface and use absorbent pads to collect spilled fuel.

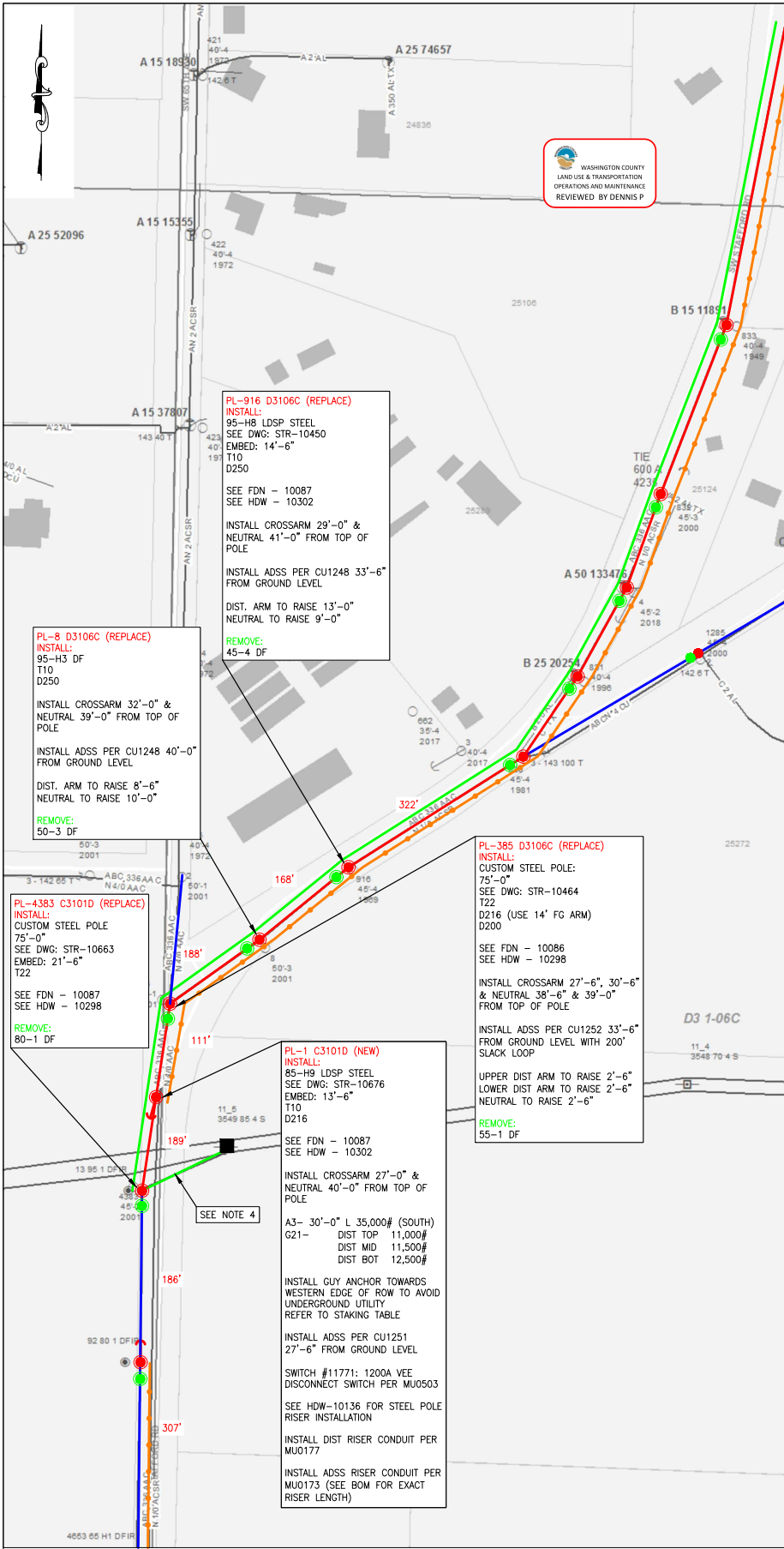
 Install and maintain appropriate erosion and sediment control devices, in accordance with an approved Erosion and Sediment Control Plan (ESCP) to ensure that all catch basins, drainage inlets, manholes, wetlands, waterways, and resource waters are sufficiently protected from erosion and sediment. In the absence of a formal ESCP, comply with Clean Water Services' *Erosion Prevention and Sediment Control Standards*.
22. Preserve and protect all public and private infrastructure ensuring that these facilities continue to properly function during the course of the permitted activity, including, but not limited to, underground storm drainage systems, open drainage systems, culverts, roof drains, field inlets and drains, irrigation systems, traffic control devices, and illumination.
23. Restore all existing public infrastructure, affected by the permit activity, to original or better condition. Restoration includes, but is not limited to, the road surface, base and subgrade, pavement markings, drainage facilities, signs, safety appurtenances, bicycle and pedestrian facilities, vegetation or landscaping and any other feature affected by the activity. Restoration of the right-of-way shall be completed in a timely manner and to the County's satisfaction.
24. Re-establish surfaces to their pre-existing grade at the end of each work day. For Asphaltic surfaces or Portland cement concrete, interim re-establishment shall be with either hot mix or cold mix asphaltic concrete and shall be in place for no longer than fourteen (14) calendar days. Beyond fourteen (14) calendar days, permanent right-of-way restoration shall be used unless



GENERAL CONDITIONS

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25. Installation of underground utilities or any other buried appurtenance shall be at least thirty (30) inches below grade. All mechanically extracted, cylindrical cores, up to 8" diameter, taken from the paved section of roadway shall be restored according to the County's "Core Hole" Detail.
26. Concrete panels shall not be cut without express written permission from Washington County. If concrete panels, curbs, sidewalks or driveways are disturbed or damaged, replacement of full panels, to the nearest cold joint, shall be required. Prior to pouring concrete. Permittee shall submit concrete mix design for review and approval by Washington County and arrange for a form inspection.
27. Preserve and protect survey monuments, public land corners and any accessory associated with these features. If interference, removal, or destruction is necessary, comply with ORS 209.140 through ORS 209.155. Additionally, utility infrastructure may not be placed within one foot of a survey monument location noted on a subdivision or partition plat, in accordance with ORS 92.044. The Washington County Surveyor can be reached at (503) 846-8723.
28. Comply with Washington County's Noise Control Ordinance established in Chapter 8.24 of the County's *Code of Ordinances*. Acquire a variance to the noise ordinance, when needed.
29. Interaction with the County, other agencies, service providers and the public shall be in a professional, courteous and timely manner.
30. Maintain a complete set of the permit, approved plans, traffic control plans, erosion control plans, and any conditions or special provisions at the job site and have them available for review, upon request.
31. Grant the County immediate access to the permitted work area. The Permittee shall appoint and assign a foreman or competent person that shall be available as the County's point of contact while work is being performed. If this foreman or competent person is unavailable while work is being performed, the Permittee shall provide the County with an alternate. The County reserves the right to enter the work area covered under this permit for any reason.
32. Permits are valid for one year from date of issuance and all work must be completed in that time period. Expired permits, without an approved final inspection, may have a notice placed in their property record related to the permit status.
33. If the requirements for this permit have not been met, there may be a denial or delay with the issuance of other permits.
34. Guarantee all permitted work for a minimum of one year from date of completion. County may require a cash deposit during the guarantee period depending on the type of work. In the event that the Permittee fails to perform warranty work in a timely manner to the satisfaction of Washington County, the deficient work may be corrected, mitigated, or abated by the County. Permittee shall be responsible for all expenses associated with work done by the County to correct, mitigate, or abate a deficiency.
35. Additional fees may be required if there is a substantial change in the scope of work which requires further review by Washington County or if more than three site visits are needed for inspection purposes. Additional inspection fees will be charged in accordance with the adopted fee schedule.
36. Include the permit number in all written and verbal correspondence with the County.
37. Comply with the Right-of-Way Permit Insurance Requirements (i.e. Tier 1, Tier 2, or Tier 3) determined for this permit.
38. Utility owned assets placed in the right-of-way shall be kept clear of vegetation by the utility owner in such a manner that the asset is clearly visible year around. This does not apply to aerial or subsurface assets.



OVERHEAD LEGEND:

- **INSTALL FACILITIES**
- **REMOVE FACILITIES**
- **TRANSFER / MODIFY FACILITIES**

POLES:

HT-CL
POLE CLASS (1, 2, 3, 4, H1, H2, S)
POLE HEIGHT (FEET)

ANCHORS:

A (LEAD)	10" SGL HELIX	10" TRIPLE HELIX	14" SGL H/T	10" EXPANDING	28" PLATE
	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)
ANCHOR CODE	A1	A3	A5	A7	A8

GUYING:

G (POS.-LBS.)	1/4" O.H.	3/8" O.H.	1/2" O.H.	3/4" O.H.	1" D.G.	1 1/2" D.G.
	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)
1 GUY	G1	G4	G7	G10	G16	G19
2 GUYS	G2	G5	G8	G11	G17	G20
3 GUYS	G3	G6	G9	G12	G18	G21

FRAMING: TRANSMISSION & DISTRIBUTION (SEE COMMENTS BELOW)

- T10** — FRAME TRANSMISSION — STD LC10754 APS FRAMING POLY INSULATORS WMS MU 1013
- T22** — FRAME TRANSMISSION — STD LC10755 DVS FRAMING WITH POLYMER INSULATORS WMS MU 1016
- D216** — FRAME DISTRIBUTION — LC10722 WMS MU 0216, (3PH 10FT UNDERBUILD SGL. DE. FIBERGLASS)
- D200** — FRAME DISTRIBUTION — LC10727, WMS MU 0200 (3PH 10FT UNDERBUILD SGL FIBERGLASS, TANG, POST)
- D250** — FRAME DISTRIBUTION — LC10711, MU 0250 (3PH 8FT FG, ALLEY, TANG)
- CU1248** — FRAME COMMUNICATION — ADSS FIBER OPTIC CABLE — LC11410; ANGLE SUSPENSION UNIT
- CU1251** — FRAME COMMUNICATION — ADSS FIBER OPTIC CABLE — LC11410; SINGLE DEAD END
- CU1252** — FRAME COMMUNICATION — ADSS FIBER OPTIC CABLE — LC11410; DOUBLE DEAD END
- MU0177** — DUCT ASSEMBLY — LC20010; 4'X50' ABOVEGROUND DUCT RISER ASSEMBLY
- MU0173** — DUCT ASSEMBLY — LC20010; 4'X30' ABOVEGROUND DUCT RISER ASSEMBLY

NOTES:

1. IT IS ASSUMED THE UNDERGROUND SERVICE DROPS ARE DIRECT BURIED CABLE. THERE IS A POSSIBILITY OF CABLE REPLACEMENT, OR AN IN GROUND SPLICE WILL NEED TO BE INSTALLED. THESE ISSUES WILL BE DEALT WITH ON A CASE BY CASE BASIS ON THE RECOMMENDATION OF PGE ENGINEERING.
2. THE FIRST STRUCTURE ADJACENT TO THE MAINLINE ON ALL OVERHEAD TAPS MAY REQUIRE ADDITIONAL WORK. THESE ISSUES WILL BE DEALT WITH ON A CASE BY CASE BASIS ON THE RECOMMENDATION OF PGE ENGINEERING.
3. CONTRACTOR SHALL PERFORM FULL UTILITY LOCATES PRIOR TO ANY EXCAVATION WORK, IN ACCORDANCE TO OREGON STATUTE.
4. CONTRACTOR TO REMOVE SPAN FROM PL-4383 TO LATTICE TOWER 11_5.

ADA NOTES:

1. A THRU-WAY CLEARANCE OF 48.0" IS TO BE MAINTAINED WITHIN SIDEWALKS FOR ALL NEW/REPLACEMENT POLES. IF 48.0" IS NOT OBTAINABLE THE SIDEWALK MUST BE EXTENDED TO ABIDE ALL ADA REGULATIONS.
2. WHEN REPLACING AND INSTALLING STRUCTURES WITHIN A PEDESTRIAN SIDEWALK RAMP, THE RAMP MUST BE REPLACED/REPAIRED AND ABIDE BY ALL ADA REGULATIONS.
3. WHEN REPLACING AND INSTALLING STRUCTURES WITHIN A PEDESTRIAN DRIVEWAY, THE DRIVEWAY MUST BE REPLACED/REPAIRED AND ABIDE BY ALL ADA REGULATIONS.
4. WHEN REPLACING AND INSTALLING STRUCTURES CONTAINING A CONDUIT RISER, THE CONDUIT MUST BE REPLACED/RECONFIGURED AND ABIDE BY ALL ADA REGULATIONS.

PL-916 D3106C (REPLACE)
INSTALL:
 95-H8 LDSP STEEL
 SEE DWG: STR-10450
 EMBED: 14'-6"
 T10
 D250
 SEE FDN - 10087
 SEE HDW - 10302
 INSTALL CROSSARM 29'-0" & NEUTRAL 41'-0" FROM TOP OF POLE
 INSTALL ADSS PER CU1248 33'-6" FROM GROUND LEVEL
 DIST. ARM TO RAISE 13'-0" NEUTRAL TO RAISE 9'-0"

PL-8 D3106C (REPLACE)
INSTALL:
 95-H3 DF
 T10
 D250
 INSTALL CROSSARM 32'-0" & NEUTRAL 39'-0" FROM TOP OF POLE
 INSTALL ADSS PER CU1248 40'-0" FROM GROUND LEVEL
 DIST. ARM TO RAISE 8'-6" NEUTRAL TO RAISE 10'-0"

PL-4383 C3101D (REPLACE)
INSTALL:
 CUSTOM STEEL POLE
 75'-0"
 SEE DWG: STR-10663
 EMBED: 21'-6"
 T22
 SEE FDN - 10087
 SEE HDW - 10298

PL-1 C3101D (NEW)
INSTALL:
 85-H9 LDSP STEEL
 SEE DWG: STR-10676
 EMBED: 13'-6"
 T10
 D216
 SEE FDN - 10087
 SEE HDW - 10302
 INSTALL CROSSARM 27'-0" & NEUTRAL 40'-0" FROM TOP OF POLE
 A3- 30'-0" L 35,000# (SOUTH)
 G21- DIST TOP 11,000#
 DIST MID 11,500#
 DIST BOT 12,500#
 INSTALL GUY ANCHOR TOWARDS WESTERN EDGE OF ROW TO AVOID UNDERGROUND UTILITY REFER TO STAKING TABLE
 INSTALL ADSS PER CU1251 27'-6" FROM GROUND LEVEL
 SWITCH #11771: 1200A VEE DISCONNECT SWITCH PER MU0503
 SEE HDW-10136 FOR STEEL POLE RISER INSTALLATION
 INSTALL DIST RISER CONDUIT PER MU0177
 INSTALL ADSS RISER CONDUIT PER MU0173 (SEE BOM FOR EXACT RISER LENGTH)

PL-385 D3106C (REPLACE)
INSTALL:
 CUSTOM STEEL POLE
 75'-0"
 SEE DWG: STR-10464
 T22
 D216 (USE 14' FG ARM)
 D200
 SEE FDN - 10086
 SEE HDW - 10298
 INSTALL CROSSARM 27'-6", 30'-6" & NEUTRAL 38'-6" & 39'-0" FROM TOP OF POLE
 INSTALL ADSS PER CU1252 33'-6" FROM GROUND LEVEL WITH 200' SLACK LOOP
 UPPER DIST ARM TO RAISE 2'-6" LOWER DIST ARM TO RAISE 2'-6" NEUTRAL TO RAISE 2'-6"

CONDUCTORS:

- INSTALL 795 KCMIL ACSS "DRAKE" (TRANSMISSION)
- INSTALL 795 KCMIL AAC "ARBUS" (DISTRIBUTION)
- INSTALL 4/0 AAC "OXLIP" (NEUTRAL)
- INSTALL OFS-AT-3BE17DT-144-TPDE ACSS FIBER OPTIC CABLE (COMMUNICATION)
- TRANSFER DISTRIBUTION & NEUTRAL CONDUCTOR (VARIOUS SIZES)
- REMOVE 795 KCMIL AAC "ARBUS" (TRANSMISSION)
- REMOVE 336.4 KCMIL AAC "TULIP" (DISTRIBUTION)
- REMOVE 1/0 ACSR "RAVEN" (NEUTRAL)

CALL 811 BEFORE YOU DIG
 OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OUR 800-201-0010 THROUGH 800-201-0000. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE OREGON UTILITY NOTIFICATION CENTER ADMINISTRATION @ (503) 232-1987.
TO REQUEST UTILITY LOCATES CALL THE OREGON UTILITY NOTIFICATION CENTER @ 811 AT LEAST 2 BUSINESS DAYS PRIOR TO EXCAVATION.

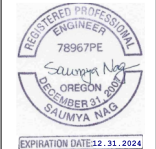


BLACK & VEATCH
 ANY DEVIATION FROM THIS DESIGN MUST BE APPROVED BY PGE PROJECT MANAGER

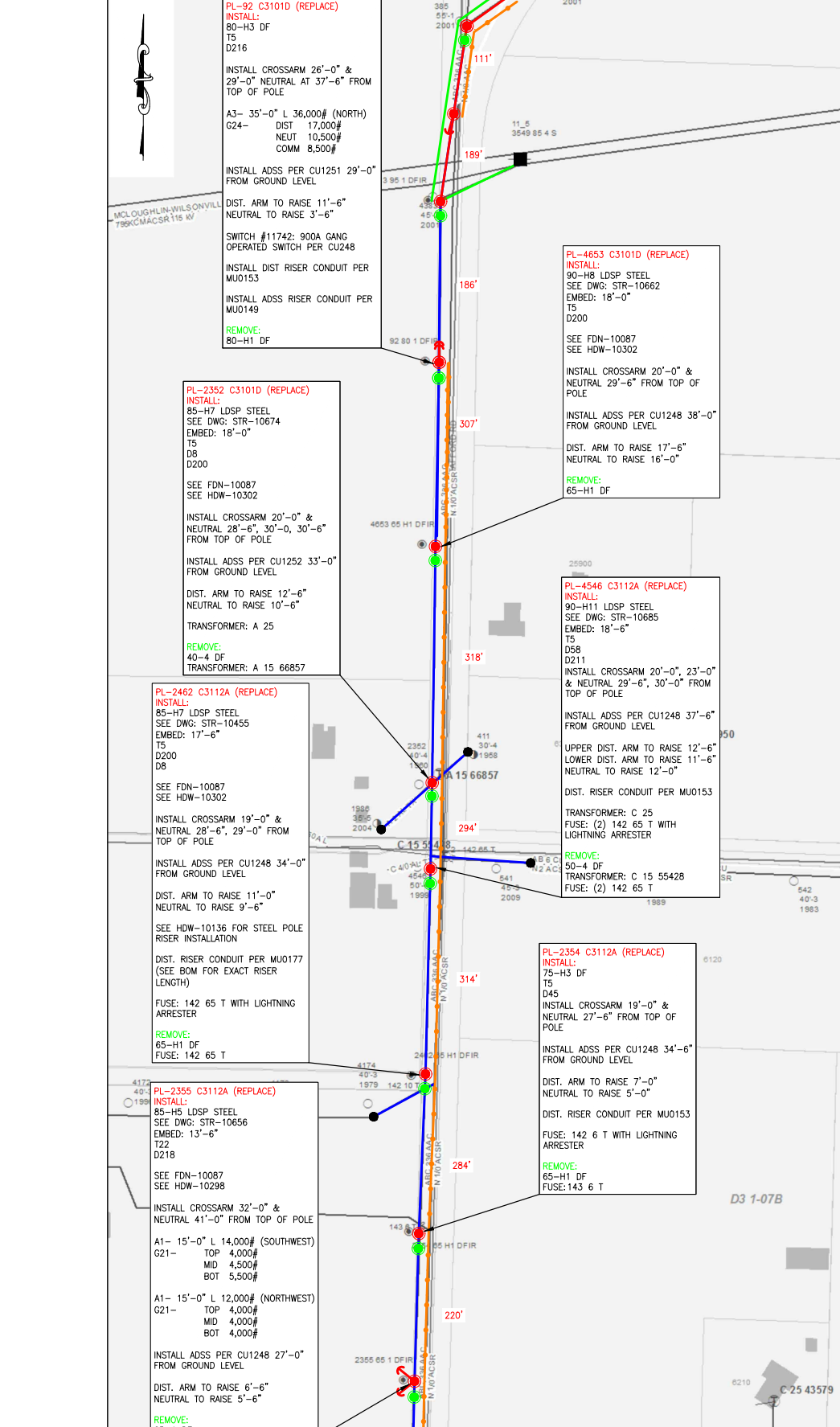
NO.	DATE	REVISION AND RECORD OF ISSUE	DWN	DES	CHK
2	06/16/23	UPDATED FRAMING	LSH	DKB	SN
1	05/25/23	UPDATED STRUCTURE COMMENTS	LSH	DKB	SN
0	04/24/23	ISSUE FOR CONSTRUCTION	LSH	DKB	SN



P1



PGE CONSTRUCTION DRAWING
AS-BUILT VERIFICATION & NESC VIOLATIONS CORRECTED
 This document accurately represents FIELD CONDITIONS.
 Foreman: _____ Date: _____
 General Foreman: _____ Date: _____
 (Signature only required for field construction changes.)
 SDPMENG REVIEW: _____ ASBUILT BY DESIGNER
 DATE: 04/04/23 SCALE: NTS ACCOUNT: N/A PWR: 1000010702 JOB NO: M2764844
 DRAWING NO: EXH-10242
 TITLE: OVERHEAD JOB SKETCH
 GROUP: ROSEMONT-WILSONVILLE 115 KV TRANSMISSION LINE
 LOCATION: VARIOUS
 REVISION: 115 KV TRANSMISSION LINE WITH 12.5 KV UNDERBUILD JOB SKETCH
 DESIGNED: CLACKAMAS VARIOUS
 CHECKED: VARIOUS
 DRAWN BY: ERIN BONSAAL
 PROJECT: 16293443-4482 DRAWN BY: M2764844
 DATE: 22X34
 © PORTLAND GENERAL ELECTRIC CO. - ALL RIGHTS RESERVED



OVERHEAD LEGEND:

- INSTALL FACILITIES
- REMOVE FACILITIES
- TRANSFER / MODIFY FACILITIES

POLES:

HT-CL POLE CLASS (1, 2, 3, 4, H1, H2, S)
 POLE HEIGHT (FEET)

ANCHORS:

ANCHOR CODE	10" SGL HELIX	10" TRIPLE HELIX	14" SGL H/T	10" EXPANDING	28" PLATE
A (LEAD) (LBS)					
ANCHOR CODE	A1	A3	A5	A7	A8

GUYING:

G (POS.-LBS.)	1/8" O.H.	3/8" O.H.	1/2" O.H.	3/4" O.H.	1" O.H.	1 1/4" D.G.	1 1/2" D.G.
1 GUY	G1	G4	G7	G10	G16	G19	G22
2 GUYS	G2	G5	G8	G11	G17	G20	G23
3 GUYS	G3	G6	G9	G12	G18	G21	G24

- FRAMING: TRANSMISSION & DISTRIBUTION (SEE COMMENTS BELOW)**
- T5** — FRAME TRANSMISSION — STD LC10754 THS FRAMING POLY INSULATOR WMS MU 1013
 - T22** — FRAME TRANSMISSION — STD LC10755 DVS FRAMING POLY INSULATORS WMS MU 1016
 - D8** — FRAME DISTRIBUTION — LC10710, WMS MU 0008, (1 PH SGL DE, POLY.)
 - D45** — FRAMING DISTRIBUTION — LC10727, WMS MU 0045 (3PH 8FT UNDERBUILD SGL HVY, TANG, POST)
 - D58** — FRAME DISTRIBUTION — LC10727, MU 0058 (3PH 10FT UNDERBUILD SGL LT, TANG, POST)
 - D200** — FRAME DISTRIBUTION — LC10727, WMS MU 0200 (3PH 10FT UNDERBUILD SGL FIBERGLASS, TANG, POST)
 - D211** — FRAME DISTRIBUTION — LC10721, MU 0211 (2PH 8FT UNDERBUILD SGL DE FIBERGLASS)
 - D216** — FRAME DISTRIBUTION — LC10722 WMS MU 0216, (3PH 10FT UNDERBUILD SGL DE FIBERGLASS)
 - D218** — FRAME DISTRIBUTION — LC10722 MU 0217, (3PH 10FT UNDERBUILD SGL DBL DE FIBERGLASS)
 - CU1248** — FRAME COMMUNICATION — ADSS FIBER OPTIC CABLE — LC11410; ANGLE SUSPENSION UNIT
 - CU1251** — FRAME COMMUNICATION — ADSS FIBER OPTIC CABLE — LC11410; SINGLE DEAD END
 - CU1252** — ADSS FIBER OPTIC CABLE — LC11410; DOUBLE DEAD END
 - MU0153** — DUCT ASSEMBLY — LC20010; 4'X50" ABOVEGROUND DUCT RISER ASSEMBLY WITH STANDOFF BRACKETS
 - MU0177** — DUCT ASSEMBLY — LC20010; 4'X50" ABOVEGROUND DUCT RISER ASSEMBLY
 - MU0149** — DUCT ASSEMBLY — LC20010; 4'X30" ABOVEGROUND DUCT RISER ASSEMBLY WITH STANDOFF BRACKETS
 - CU248** — FRAME DISTRIBUTION — LC11060 WMS CU 248, 900 A PRE-ASSEMBLED GANG-OPERATED SWITCH

- NOTES:**
- IT IS ASSUMED THE UNDERGROUND SERVICE DROPS ARE DIRECT BURIED CABLE. THERE IS A POSSIBILITY OF CABLE REPLACEMENT, OR AN IN GROUND SPlice WILL NEED TO BE INSTALLED. THESE ISSUES WILL BE DEALT WITH ON A CASE BY CASE BASIS ON THE RECOMMENDATION OF PGE ENGINEERING.
 - THE FIRST STRUCTURE ADJACENT TO THE MAINLINE ON ALL OVERHEAD TAPS MAY REQUIRE ADDITIONAL WORK. THESE ISSUES WILL BE DEALT WITH ON A CASE BY CASE BASIS ON THE RECOMMENDATION OF PGE ENGINEERING.
 - CONTRACTOR SHALL PERFORM FULL UTILITY LOCATES PRIOR TO ANY EXCAVATION WORK, IN ACCORDANCE TO OREGON STATUTE.

- ADA NOTES:**
- A THRU-WAY CLEARANCE OF 48.0" IS TO BE MAINTAINED WITHIN SIDEWALKS FOR ALL NEW/REPLACEMENT POLES. IF 48.0" IS NOT OBTAINABLE THE SIDEWALK MUST BE EXTENDED TO ABIDE ALL ADA REGULATIONS.
 - WHEN REPLACING AND INSTALLING STRUCTURES WITHIN A PEDESTRIAN SIDEWALK RAMP, THE RAMP MUST BE REPLACED/REPAIRED AND ABIDE BY ALL ADA REGULATIONS.
 - WHEN REPLACING AND INSTALLING STRUCTURES WITHIN A PEDESTRIAN DRIVEWAY, THE DRIVEWAY MUST BE REPLACED/REPAIRED AND ABIDE BY ALL ADA REGULATIONS.
 - WHEN REPLACING AND INSTALLING STRUCTURES CONTAINING A CONDUIT RISER, THE CONDUIT MUST BE REPLACED/RECONFIGURED AND ABIDE BY ALL ADA REGULATIONS.

- CONDUCTORS:**
- TRANSFER 336.4 KCMIL AAC "TULIP" (DISTRIBUTION)
 - TRANSFER 1/0 KCMIL ACSR "RAVEN" (NEUTRAL)
 - TRANSFER DISTRIBUTION & NEUTRAL CONDUCTOR (VARIOUS SIZES)
 - INSTALL OFS-AT-3BE17DT-144-TPDE ACSS FIBER OPTIC CABLE (COMMUNICATION)

CALL 811 BEFORE YOU DIG

ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OUR 800-201-0010 THROUGH 800-201-0000 YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE OREGON UTILITY NOTIFICATION CENTER ADMINISTRATION @ (503) 232-1987.

TO REQUEST UTILITY LOCATES CALL THE OREGON UTILITY NOTIFICATION CENTER 811 AT LEAST 2 BUSINESS DAYS PRIOR TO EXCAVATION.

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

BLACK & VEATCH

ANY DEVIATION FROM THIS DESIGN MUST BE APPROVED BY PGE PROJECT MANAGER

NO.	DATE	REVISION AND RECORD OF ISSUE	DWN	DES	CHK
2	07/29/23	POLE HEIGHT CHANGE	EDB	EDB	SN
1	05/02/23	UPDATED STRUCTURE COMMENTS	EDB	EDB	SN
0	04/24/23	ISSUE FOR CONSTRUCTION	EDB	EDB	SN

REGISTERED PROFESSIONAL ENGINEER
 78967PE
 SAUMYA NAD
 OREGON REGISTERED PROFESSIONAL ENGINEER
 EXPIRES 12/31/2024

THINK SAFETY FIRST!

P1

AS-BUILT VERIFICATION & NESV VIOLATIONS CORRECTED
 This document accurately represents FIELD CONDITIONS

Foreman: _____ Date: _____
 General Foreman: _____ Date: _____
 (Signature only required for field construction changes.)
 SDPM/ENG REVIEW: _____ ASBUILT BY DESIGNER

DATE: 04/04/23 SCALE: NTS ACCOUNT: N/A PROJ NO: 1000010702 JOB NO: M2764844
 TITLE: OVERHEAD JOB SKETCH DRAWING NO: EXH-10242
 GROUP: ROSEMONT-WILSONVILLE 115 KV TRANSMISSION LINE SIZE: 22X34
 LOCATION: VARIES

PGE

115 KV TRANSMISSION LINE WITH 12.5 KV UNDERBUILD JOB SKETCH
 DATE: VARIES
 DRAWN BY: CLACKMACAS VARIES
 CHECKED BY: ERIN BONNALL
 PROJECT: (503)443-4482
 DRAWN BY: SAUMYA NAD
 DATE: 2/23/24
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Stationary Lane Closure with Flagging Diagram 320

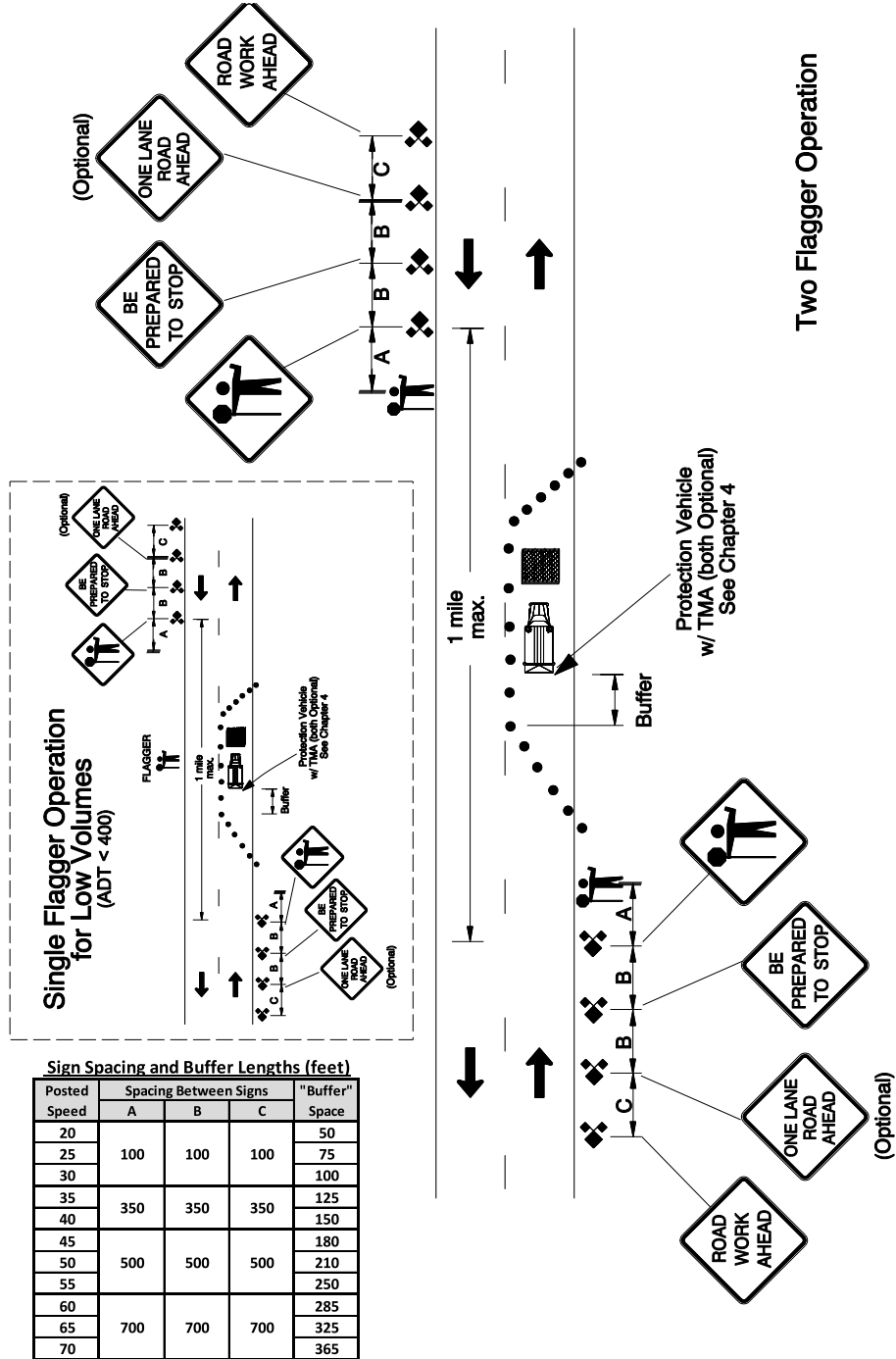
Diagram 320 covers total closure of one lane of a two-lane, two-way roadway. See the detail inset for the layout if using a single flagger to control both directions of traffic on low volume roads (less than 400 ADT) with good sight distance as discussed below.

1. Use truck-mounted flashing warning lights on work and protection vehicles. See Section 4.3 – Lights and Lighted Signs for exceptions.
2. For added visibility, a truck-mounted arrow board or PCMS in caution mode may be used.
3. Flaggers at each approach are required if any of the following conditions exist:
 - a. Night Operations.
 - b. Work space is over 200 feet in length.
 - c. Sight distance is less than 750 feet from each approach through the lane closure.
 - d. Traffic volumes are greater than 400 ADT.
4. The length between the Flagger Ahead signs **shall** not exceed one mile. Use Diagram 340 – Lane Closure with Pilot Car if exceeding one mile.
5. Cones should be used to outline the work space when curves or other roadway alignments prevent clear direction for the motorists to pass the work space safely.
6. Cones along the work space are recommended when posted speeds are 45 mph or greater, when working under heavy traffic or when travel lanes are narrower than 11 feet.
7. Extended queue signing (see Diagram 5-4) should be used when traffic queues extend beyond the initial advance warning sign.
8. When flagging near an intersection, the “Flagger Ahead” (CW23-2) sign should be visible to traffic entering from any side road. Additional advance warning and Flagger Ahead symbol signs may be placed on the side road(s).
9. Sign set-up and flagger placement shown may be used for intermittent full road closures of 20 minutes or less.
10. The “ONE LANE ROAD AHEAD” (W20-4) sign is optional and should be considered on high volume or high speed roads, or when extended queues are expected.

Stationary Lane Closure with Flagging

Diagram 320

2-Lane, 2-Way



Lane Closure at Intersection with Flagging **Diagram 620**

Diagram 620 covers work within an intersection when normal traffic control must be interrupted. Work vehicles may or may not be in the work space.

1. During flagging, traffic signals **shall** be turned off. Contact the road jurisdiction for approval and assistance (see Chapter 3).
2. For multi-lane facilities, traffic approaching the intersection **shall** be reduced to a single lane on each approach. See Chapter 3 for information on flagging through intersections.
3. There should be one flagger for each approach. One flagger may control two adjacent approaches if sight distance, low volumes on side roads, and flagger position allows for safe operation and clear direction to motorists. For low traffic volume intersections (fewer than 400 entering vehicles per day), one flagger may be used.
4. The "ONE LANE ROAD AHEAD" (W20-4) sign is optional and should be considered on high volume or high speed roads, or when extended queues may be expected.

Sign Spacing and Buffer Lengths (feet)

Posted Speed	Spacing Between Signs			"Buffer" Space
	A	B	C	
20	100	100	100	50
25				75
30				100
35	350	350	350	125
40				150
45	500	500	500	180
50				210
55				250
60	700	700	700	285
65				325
70				365

Lane Closure at Intersection with Flagging **Diagram 620**

