



# Oregon


Theodore R. Kulongoski, Governor

**Department of Transportation**  
Technical Services  
Roadway Engineering Section  
355 Capitol Street NE, Room 222  
Salem, OR 97301-3871  
Telephone 503-986-3714  
FAX 503-986-3749

**DATE:** April 17, 2009

## Addenda No. 4

**TO:** PLAN HOLDERS

**PREPARED BY:**  P.E.  
Gabriel E. Crop

**APPROVED BY:**  P.E.  
Kevin M. Thelin

**SUBJECT:** I-5: Tualatin River – Willamette River Bridge Sec.  
Pacific Highway  
Multnomah, Washington & Clackamas Counties County  
Grading, Drainage, Structures, Paving, Signing & Signals Project  
(Bids to be opened and read April 23, 2009)

### The following changes are made to the Project Special Provisions:

1. Subsection 00344.47 Test Section - The following sentences are added after the sentence that begins "Perform two test sections":

For the alluvial silt test section, add 6% cement to the soil by dry unit weight of the soil.  
For the clayey silt, add 7% cement to the soil by dry unit weight of the soil.

2. Subsection 00344.48 Protective Aggregate Layer - This entire subsection is deleted.
3. Subsection 00344.90 Payment - This entire subsection is deleted.
4. Subsection 00540.54 Crack Inspection and Deck Sealing - The following sentences are added at the end of this subsection:

Use only QPL listed methacrylate or epoxy products approved for deck sealing applications. Follow manufacturer's specifications and limit application of the sealer to when the bridge deck and substrate temperature range is between 40 degrees F and 60 degrees F.

I-5: Tualatin River – Willamette River Bridge Sec.  
Pacific Highway  
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Addenda No. 4

5. In Section 00996, Subsection 00589.80 Measurement - The title of this subsection is replaced with the following title:

**00996.80 Measurement**

**The following changes are made to the Project Plans:**

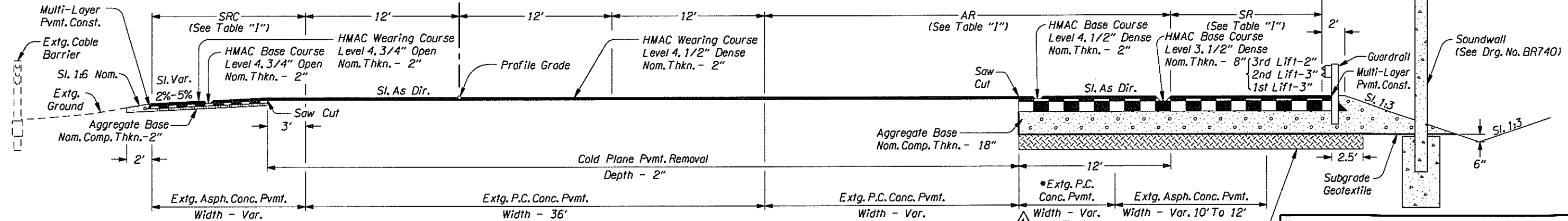
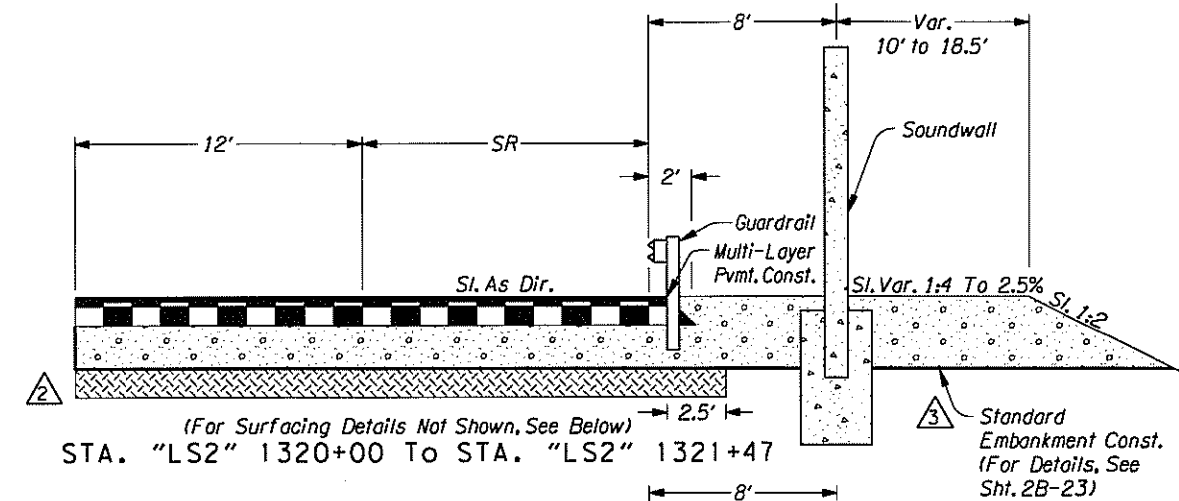
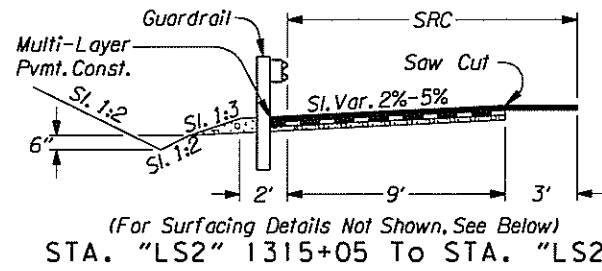
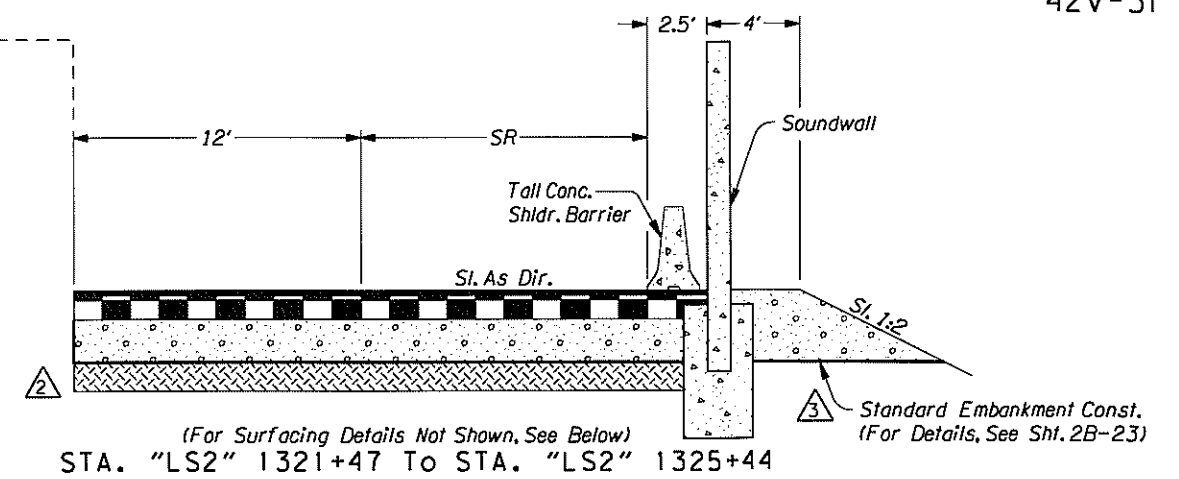
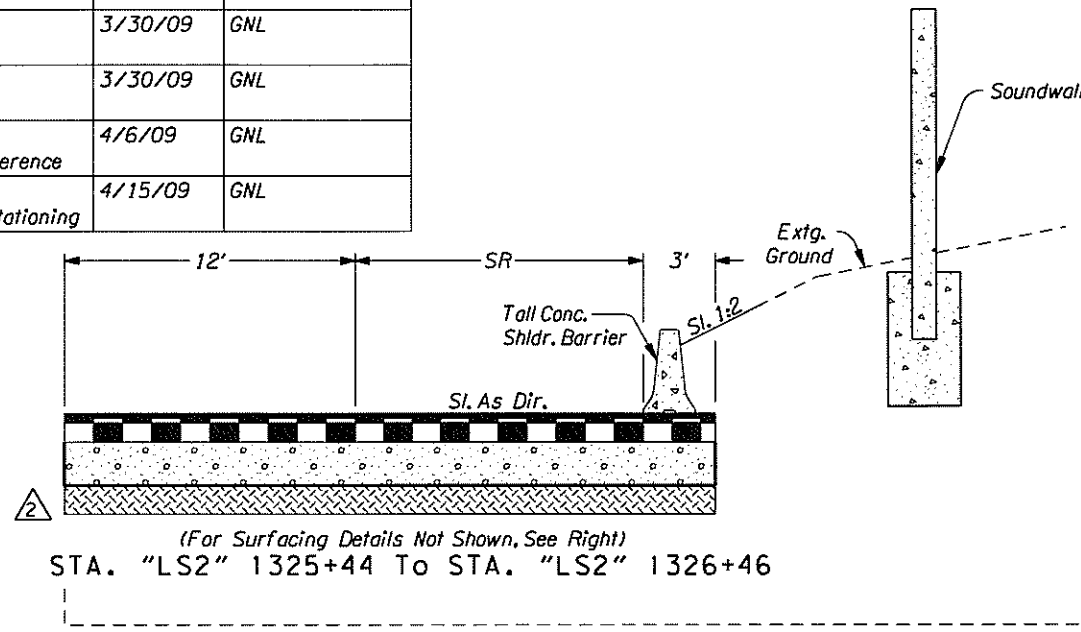
1. Plan sheets 2A-8, 2A-9, 2B, 10, 29 and 29A are replaced with revised plan sheets 2A-8, 2A-9, 2B, 10, 29 and 29A.

These changes will be included in the Contract for this Project. It is understood that your Bid will be submitted accordingly.

KMT:gec

Attachments: Revised Plan Sheets

Rev. No.	Description	Date	Engineer
1	Addenda #1 - Added Saw Cut Note	3/30/09	GNL
2	Addenda #1 - Added Cement Treated Subgrade	3/30/09	GNL
3	Addenda #2 - Adjusted Agg. Base & Added Detail Reference	4/6/09	GNL
4	Addenda #4 - Adjusted Extg. Pgmt. Dimensions And Stationing	4/15/09	GNL

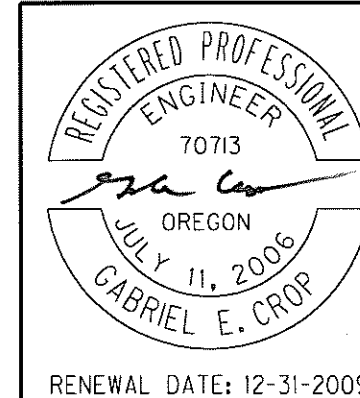


△ STA. \*"LS2" 1315+05 To STA. "LS2" 1323+95  
 "LS2" 1323+95 To "LS2" 1326+46

TABLE "I"

STA. TO STA.	SRC	AR	SR
1315+05 1320+05.5	12'	62' to 32'	12'
1320+05.5 1321+45.5	12' to 10'	32' to 26'	12'
1321+45.5 1321+47	10'	26'	12'
1321+47 1321+97	10'	26' to 24'	32' To 30'
1321+97 1325+50	10'	24'	30' To 12'
1325+50 1326+46	10'	24'	12'

- NOTES:
- Side-Slopes Are Shown As Vert. To Horiz.
  - For Standard Superelevation, See Drg. No. RD200.
  - "AL" Dimension Includes Width Of Striped Gore At Ramp Locations.
  - For Compost Amended Vegetated Filter Strip Locations And Details, See General Construction Sheets And Sht. GJ.
  - Saw Cut Full Depth Of Pgmt. For Supplemental As-built Drg. Nos., See Sht. 1A.



OREGON DEPARTMENT OF TRANSPORTATION

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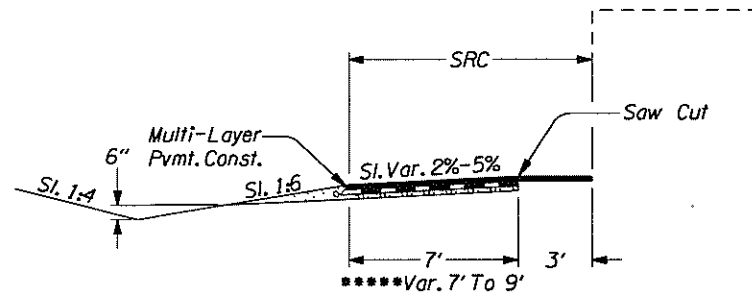
I-5: TUALATIN RIVER - WILLAMETTE RIVER BRIDGE SEC.

PACIFIC HIGHWAY  
 MULTNOMAH, WASHINGTON & CLACKAMAS COUNTIES

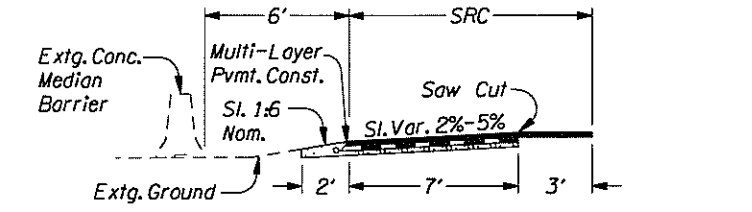
Reviewed By - Gabriel E. Crop  
 Designed By - Gwennyth N. Linscheid  
 Drafted By - Susan K. Wentz

TYPICAL SECTIONS

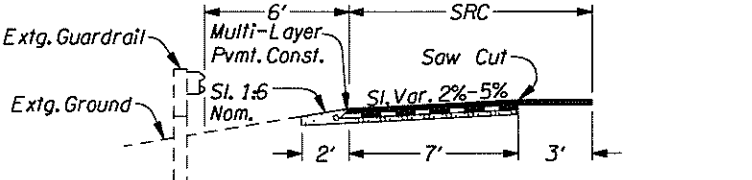
SHEET NO.  
 2A-8



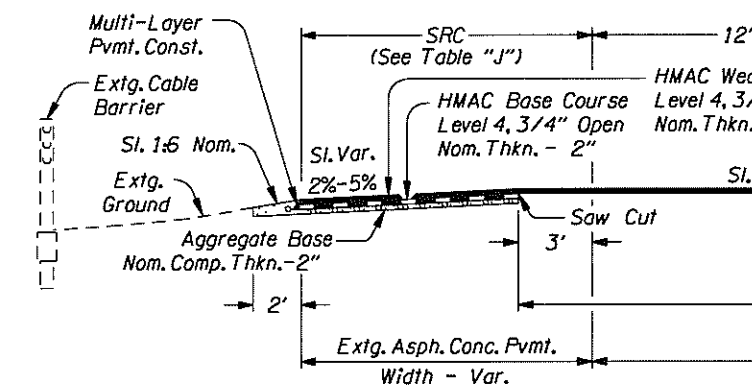
(For Surfacing Details Not Shown, See Below)  
 STA. "LS2" 1385+00 To STA. "LS2" 1387+70  
 \*\*\*\*\*"LS2" 1387+70 To "LS2" 1388+40  
 \*\*\*\*\*"LS2" 1400+95 To "LS2" 1401+58



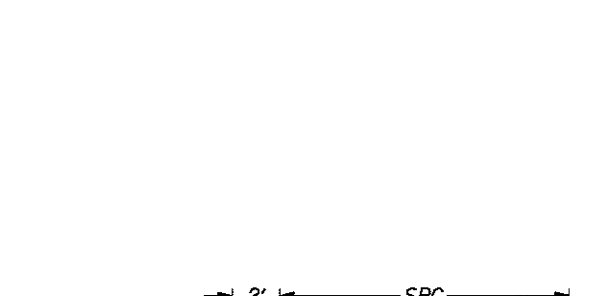
(For Surfacing Details Not Shown, See Below)  
 STA. "LS2" 1349+12 To STA. "LS2" 1350+37



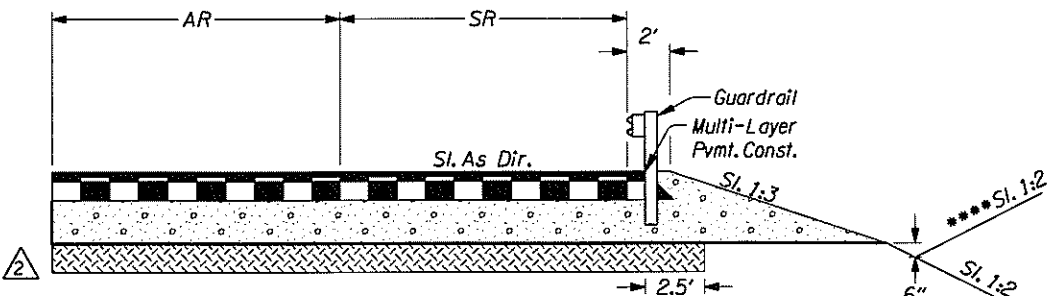
(For Surfacing Details Not Shown, See Below)  
 STA. "LS2" 1348+06.5 To STA. "LS2" 1349+12



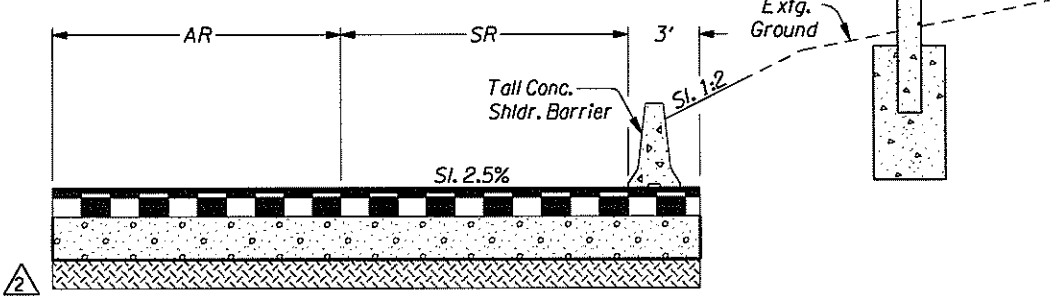
NOTES:  
 1. Side-Slopes Are Shown As Vert. To Horiz.  
 2. For Standard Superelevation, See Drg. No. RD200.  
 3. "AL" Dimension Includes Width Of Striped Gore At Ramp Locations.  
 4. For Compost Amended Vegetated Filter Strip Locations And Details, See General Construction Sheets And Sht. GJ.  
 5. Saw Cut Full Depth Of Pvmt. For Supplemental As-built Drg. Nos., See Sht. 1A.



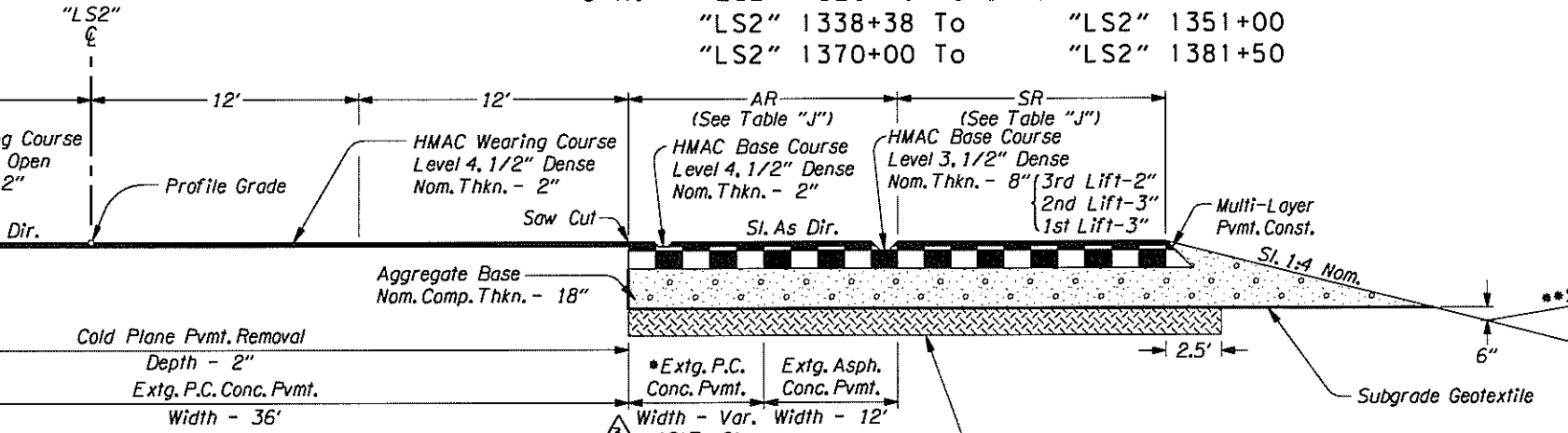
(For Surfacing Details Not Shown, See Below)  
 STA. "LS2" 1388+40 To STA. "LS2" 1400+95



(For Surfacing Details Not Shown, See Below)  
 STA. \*\*\*\*\*"LS2" 1381+50 To STA. "LS2" 1384+50  
 "LS2" 1384+50 To "LS2" 1396+25  
 \*\*\*\*\*"LS2" 1396+25 To "LS2" 1401+58



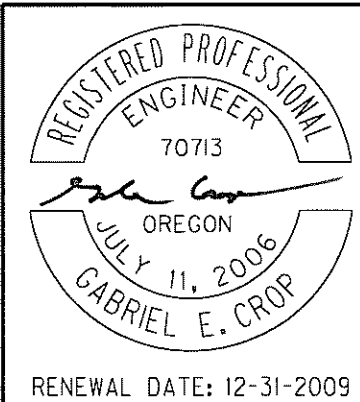
(For Surfacing Details Not Shown, See Below)  
 STA. \*\*\*"LS2" 1326+46 To STA. "LS2" 1338+38  
 "LS2" 1338+38 To "LS2" 1351+00  
 "LS2" 1370+00 To "LS2" 1381+50



STA. \* "LS2" 1326+46 To STA. "LS2" 1330+00  
 "LS2" 1330+00 To "LS2" 1351+00  
 \*\* "LS2" 1351+00 To "LS2" 1355+25  
 "LS2" 1355+25 To "LS2" 1401+58

TABLE "J"

STA. TO STA.	SRC	AR	SR
1326+46 1329+47	10'	24'	12'
1329+47 1332+47	10'	24' to 12'	12'
1332+47 1387+70	10'	12'	12'
1387+70 1388+40	10' to 12'	12'	12'
1388+40 1400+95	12'	12'	12'
1400+95 1401+58	12' to 11'	12'	12'



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**MSA**

**I-5: TUALATIN RIVER - WILLAMETTE RIVER BRIDGE SEC.**

PACIFIC HIGHWAY  
 MULTNOMAH, WASHINGTON & CLACKAMAS COUNTIES

Reviewed By - Gabriel E. Crop  
 Designed By - Gwennyth N. Linscheid  
 Drafted By - Susan K. Wentz

**TYPICAL SECTIONS**

SHEET NO. 2A-9

P O R T L A N D C E M E N T C O N C R E T E P A V E M E N T R E P A I R

42V-31

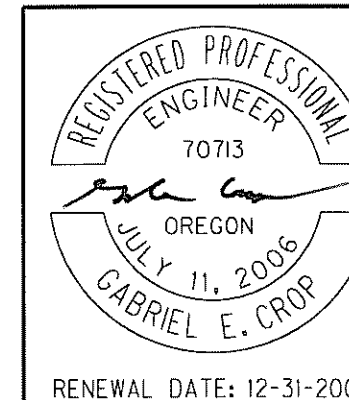
DIRECTION	STATION	Repair Type	Lane	Estimated Length (ft)	Estimated Width (ft)	Area (yd <sup>2</sup> )	Comments	Thkn "T" (inch)	Bar Lap splice (each, see note 3)	Extra for Joint (ft)
SB	"L2" 1085+90	CRCP+HMAC	B&C	10	24	27	Storm Sewer Replacement, Repair With Open Grade AC	8	4	0
SB	"ES1" 1275+40	Spall	A	1	1	0.1	I-5 SB To I-205 NB, Spall Along Skip Stripe Between Lanes	8	0	0
SB	"ES1" 1275+90	Spall	A	1	1	0.1	I-5 SB To I-205 NB, Spall Along Skip Stripe Between Lanes	8	0	0
SB	"ES2" 1295+50	CRCP+Joint	A	6	12	8	I-205 SB To I-5 SB Terminal Expansion Joint	8 To 12	1	12
SB	"ES2" 1297+60	CRCP	B	50	12	67	I-205 SB To I-5 SB, Longitudinal Crack Beginning To Spall	8	2	0
SB	"ES2" 1306+30	CRCP	B	30	12	40	I-205 SB To I-5 SB Longitudinal Crack Beginning To Spall	8	2	0
SB	"ES2" 1315+00	CRCP	Ramp	30	△ 12	△ 40	I-205 SB To I-5 SB At End Of Ramp	8	△ 2	0
SB	"LS2" 1363+66	CRCP	C	30	6	20	I-5 SB Approximately 1366' South of Norwood Road	8	1	0
SB	"LS2" 1512+60	CRCP	C	10	12	14	I-5 SB Approximately 2300' North of Wilsonville Rd. Interchange	8	2	0
SB	"LS2" 1535+30	CRCP+Joint	C	6	12	8	I-5 SB At Wilsonville Rd. Interchange	8 To 12	1	12
SB	"LS2" 1550+35	CRCP	C	180	12	240	I-5 SB South of Wilsonville Rd. Interchange Approximately 1250' South of Bridge End Panel	8	5	0
SB	"LS2" 1558+85	CRCP	C	90	12	120	I-5 SB Approximately 2100' South of Bridge End Panel	8	3	0
SB	"LS2" 1560+35	CRCP	C	12	12	16	I-5 SB South of Wilsonville Rd. Interchange Approximately 2250' South of Bridge End Panel	8	2	0
NB	"EN2" 1295+00	CRCP+Joint	A&B	6	24	16	I-5 NB To I-205 NB Terminal Expansion Joint	8 To 12	2	24
NB	"LN2" 1361+20	CRCP	C	50	6	34	I-5 NB Approximately 1120' South of Norwood Road	8	1	0
NB	"LN2" 1535+16	CRCP+Joint	C	6	12	8	I-5 NB At Wilsonville Interchange	8 To 12	1	12
NB	"LN2" 1556+20	CRCP	C	50	12	67	I-5 NB Approximately 1540' North of Boone Bridge	8	2	0
NB	"LN2" 1571+20	CRCP+Joint	C	6	12	8	I-5 NB, North End of Boone Bridge	8 To 12	1	12

CONCRETE REPAIRS

NOTES:

1. Verify All P.C. Conc. Pvmt. Repair Areas With The Engineer Prior To Saw Cutting. The P.C. Conc. Pvmt. Repair Locations And Quantities Listed In The Table Are Approximate. Additional Repair Areas May Be Identified By The Engineer.
2. For Additional Details See Shts. 2B-2, 2B-3, 2B-5 & 2B-6.
3. One Bar Lap Splice Estimated Per 12 Ft. Wide Connection Per Max. 50 Ft. Long Repair.

Rev. No.	Description	Date	Engineer
△	Addenda #4 - Changed Pvmt. Repair Width	4/15/09	GNL



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**MSA**

**I-5: TUALATIN RIVER - WILLAMETTE RIVER BRIDGE SEC.**

PACIFIC HIGHWAY  
MULTNOMAH, WASHINGTON & CLACKAMAS COUNTIES

Reviewed By - Gabriel E. Crop  
Designed By - Gwentyth N. Linscheid  
Drafted By - Susan K. Wentz

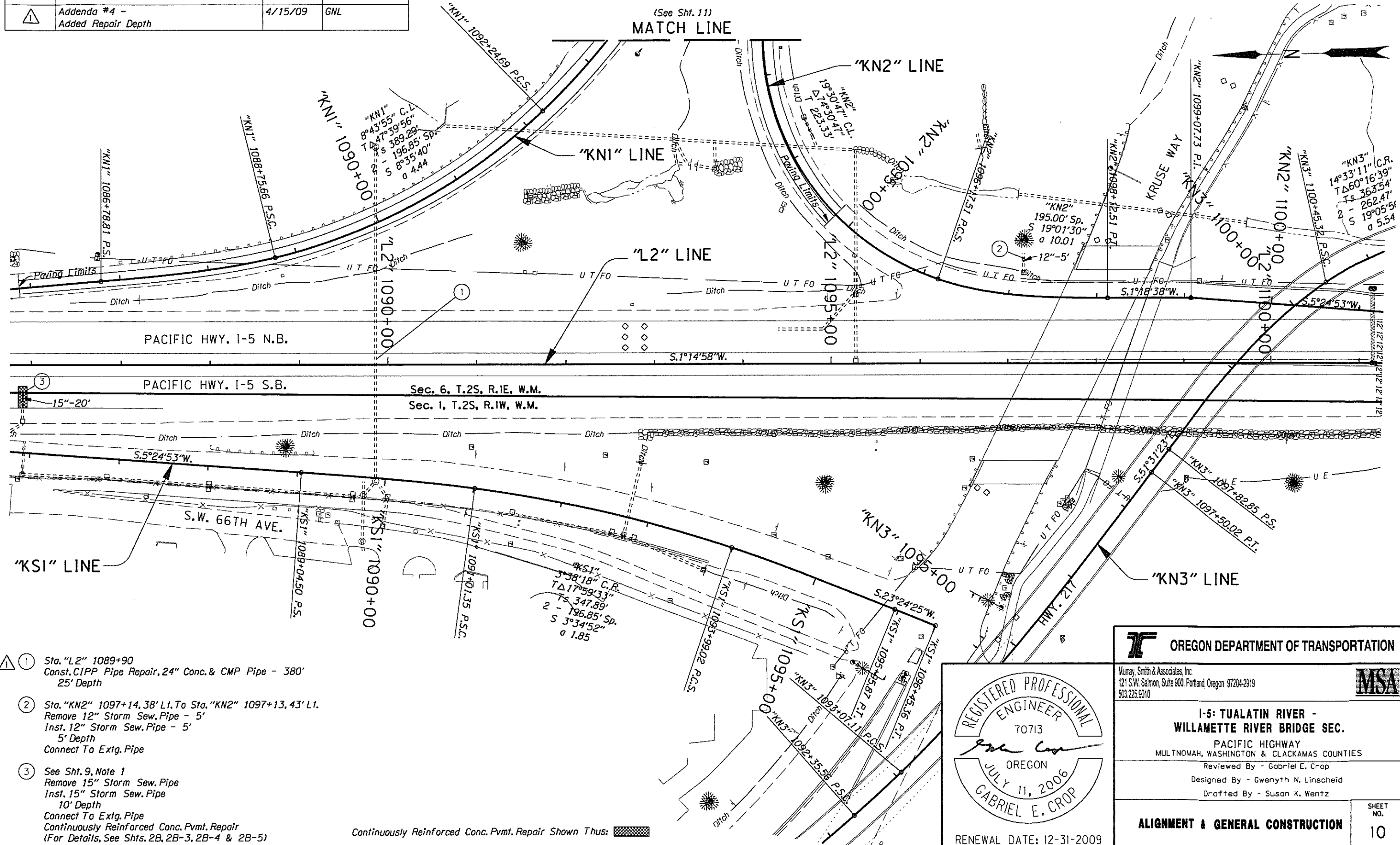
**DETAILS**

SHEET NO. **2B**

S. TIGARD INTERCHANGE

42V-31

Rev. No.	Description	Date	Engineer
1	Addenda #4 - Added Repair Depth	4/15/09	GNL



- ① Sta. "L2" 1089+90  
Const. CIPP Pipe Repair, 24" Conc. & CMP Pipe - 380'  
25' Depth
- ② Sta. "KN2" 1097+14.38' Lt. To Sta. "KN2" 1097+13.43' Lt.  
Remove 12" Storm Sew. Pipe - 5'  
Inst. 12" Storm Sew. Pipe - 5'  
5' Depth  
Connect To Extg. Pipe
- ③ See Sht. 9, Note 1  
Remove 15" Storm Sew. Pipe  
Inst. 15" Storm Sew. Pipe  
10' Depth  
Connect To Extg. Pipe  
Continuously Reinforced Conc. Pvmt. Repair  
(For Details, See Shts. 2B, 2B-3, 2B-4 & 2B-5)

Continuously Reinforced Conc. Pvmt. Repair Shown Thus:

REGISTERED PROFESSIONAL  
ENGINEER  
70713  
*Gabriel E. Crop*  
OREGON  
JULY 11, 2006  
GABRIEL E. CROP  
RENEWAL DATE: 12-31-2009

**OREGON DEPARTMENT OF TRANSPORTATION**

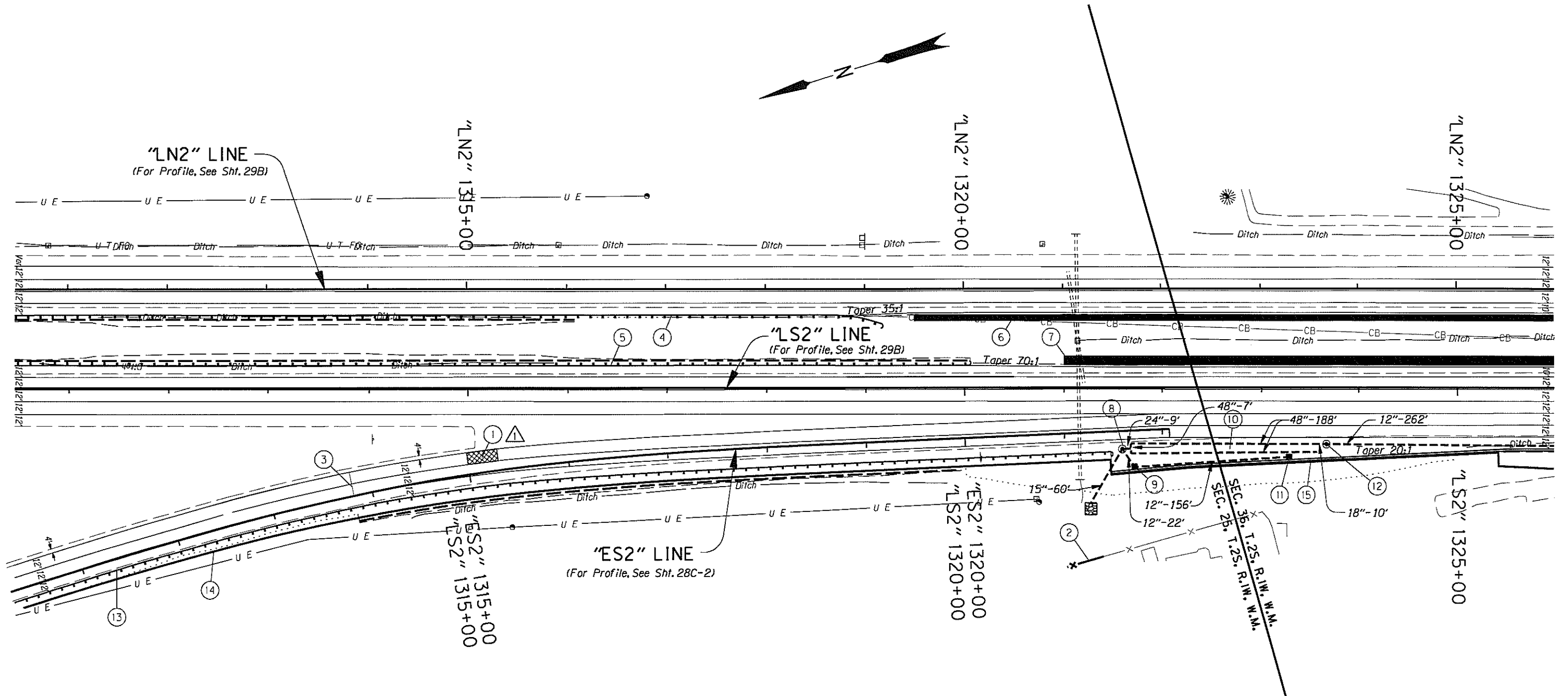
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PACIFIC HIGHWAY  
MULTNOMAH, WASHINGTON & CLACKAMAS COUNTIES  
Reviewed By - Gabriel E. Crop  
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Drafted By - Susan K. Wentz

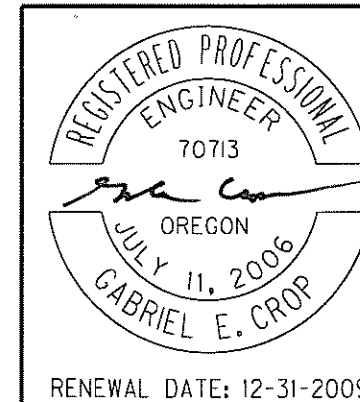
**ALIGNMENT & GENERAL CONSTRUCTION**

SHEET NO. 10



Rev. No.	Description	Date	Engineer
△	Addenda #4 - Changed Pvmf. Repair Width	4/15/09	GNL

Extg. Cable Barrier Shown Thus: —CB—  
 Continuously Reinforced Conc. Pvmf. Repair Shown Thus: [hatched box]  
 Compost Amended Vegetated Filter Strip Shown Thus: [solid black box]



RENEWAL DATE: 12-31-2009

**OREGON DEPARTMENT OF TRANSPORTATION**

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**I-5: TUALATIN RIVER - WILLAMETTE RIVER BRIDGE SEC.**  
 PACIFIC HIGHWAY  
 MULTNOMAH, WASHINGTON & CLACKAMAS COUNTIES

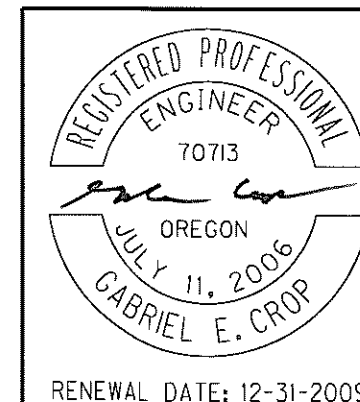
Reviewed By - Gabriel E. Crop  
 Designed By - Gwentyth N. Linscheid  
 Drafted By - Susan K. Wentz

**ALIGNMENT & GENERAL CONSTRUCTION**

SHEET NO. 29

- ① Continuously Reinforced Conc. Pgmt Repair - 40 Sq.Yd.  
(For Details, See Shts. 2B, 2B-3 & 2B-5)
- ② Sta. "ES1" 1321+00 To Sta. "ES1" 1321+40, Rt.  
Remove Extg. Fence - 40'  
Const. Type 2 Fence - 40'  
Connect To Extg. Fence
- ③ Transition From Grind & Inlay To Overlay  
(For Details, See Sht. 2B-7)
- ④ See Sht. 28A, Note 15  
Remove Extg. Guardrail  
Const. Guardrail (Type 2A)  
Const. Guardrail Terminal, Flared  
Flare Rate = 1:15, W=4', E=2'  
Const. Cable Barrier Guardrail Connection  
Option 2A
- ⑤ See Sht. 28A, Note 16  
Remove Extg. Guardrail  
Const. Guardrail (Type 2A)  
Const. Anchor (Type 1 Mod.)  
Inst. End Piece (Type B)  
W=1', E=2'
- ⑥ Sta. "LN2" 1319+50 To Sta. "LN2" 1349+00, Rt.  
Const. Compost Amended Vegetated Filter Strip, 6' Wide  
Filter Strip Exc. - 656 Cu.Yd.  
Topsoil - 492 Cu.Yd.  
Soil Conditioner - 164 Cu.Yd.  
Permanent Seeding - 0.41 Ac.  
(For Details, See Sht. GJ)
- ⑦ Sta. "LS2" 1321+00 To Sta. "LS2" 1332+50, Lt.  
Const. Compost Amended Vegetated Filter Strip, 9' Wide  
Filter Strip Exc. - 384 Cu.Yd.  
Topsoil - 288 Cu.Yd.  
Soil Conditioner - 96 Cu.Yd.  
Permanent Seeding - 0.24 Ac.  
(For Details, See Sht. GJ)
- ⑧ Sta. "LS2" 1321+59 - 62', Rt.  
Const. 72" Flow Control Manhole  
Inst. 15" Sew. Pipe - 60'  
10' Depth  
Const. 12" Sloped End Section  
Const. Paved End Slope  
Const. Riprap Basin  
Loose Riprap (Class 50) - 2 Cu.Yd.  
Const. Culvert Embankment Protection  
Loose Riprap (Class 50) - 2 Cu.Yd.  
(For Details, See Shts. 2B-19 & 2B-21)  
(See Drg. No. RD317)
- ⑨ Sta. "LS2" 1321+72, Rt.  
Const. Type "G-2" Inlet (Against Barrier)  
Inst. 12" Sew. Pipe - 22'  
5' Depth
- ⑩ Sta. "LS2" 1321+68 To Sta. 1323+56  
Inst. Underground Detention Piping  
Inst. 48" Sew. Pipe - 188'  
20' Depth  
Inst. 48" Sew. Pipe - 188'  
20' Depth  
Inst. 48" Sew. Pipe - 7'  
10' Depth  
Inst. 24" Sew. Pipe - 9'  
10' Depth  
(For Details, See Sht. 2B-22)
- ⑪ Sta. "LS2" 1323+28, Rt.  
Const. Type "G-2" Inlet (Against Barrier)  
Inst. 12" Sew. Pipe - 156'  
5' Depth
- ⑫ Sta. "LN2" 1323+66, 57' Rt.  
Const. Pollution Control Manhole  
Inst. 18" Sew. Pipe - 10'  
20' Depth  
(See Drg. No. RD340 & RD356)
- ⑬ See Sht. 27A, Note 27  
Const. Guardrail (Type 2A)  
Const. Anchor (Type 1 Mod.)  
Inst. End Piece (Type B)
- ⑭ See Sht. 28A, Note 24  
Structure No. 21139  
Const. Soundwall  
(For Drg. Nos., See Sht. 1A)
- ⑮ Sta. "LS2" 1321+47 To Sta. "LS2" 1350+97, Rt.  
Const. Tall Conc. Shldr. Barrier - 2950'  
Anchor Barrier  
Flare Rate = 20, W=20', E=0

Rev. No.	Description	Date	Engineer
①	Addenda #1 - Structure Reference	3/30/09	CDA
②	Addenda #4 - Changed Pgmt. Repair Size	4/15/09	GNL



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PACIFIC HIGHWAY MULTNOMAH, WASHINGTON & CLACKAMAS COUNTIES	
Reviewed By - Gabriel E. Crop Designed By - Gwennyth N. Linscheid Drafted By - Susan K. Wentz	
<b>GENERAL CONSTRUCTION</b>	SHEET NO. <b>29A</b>