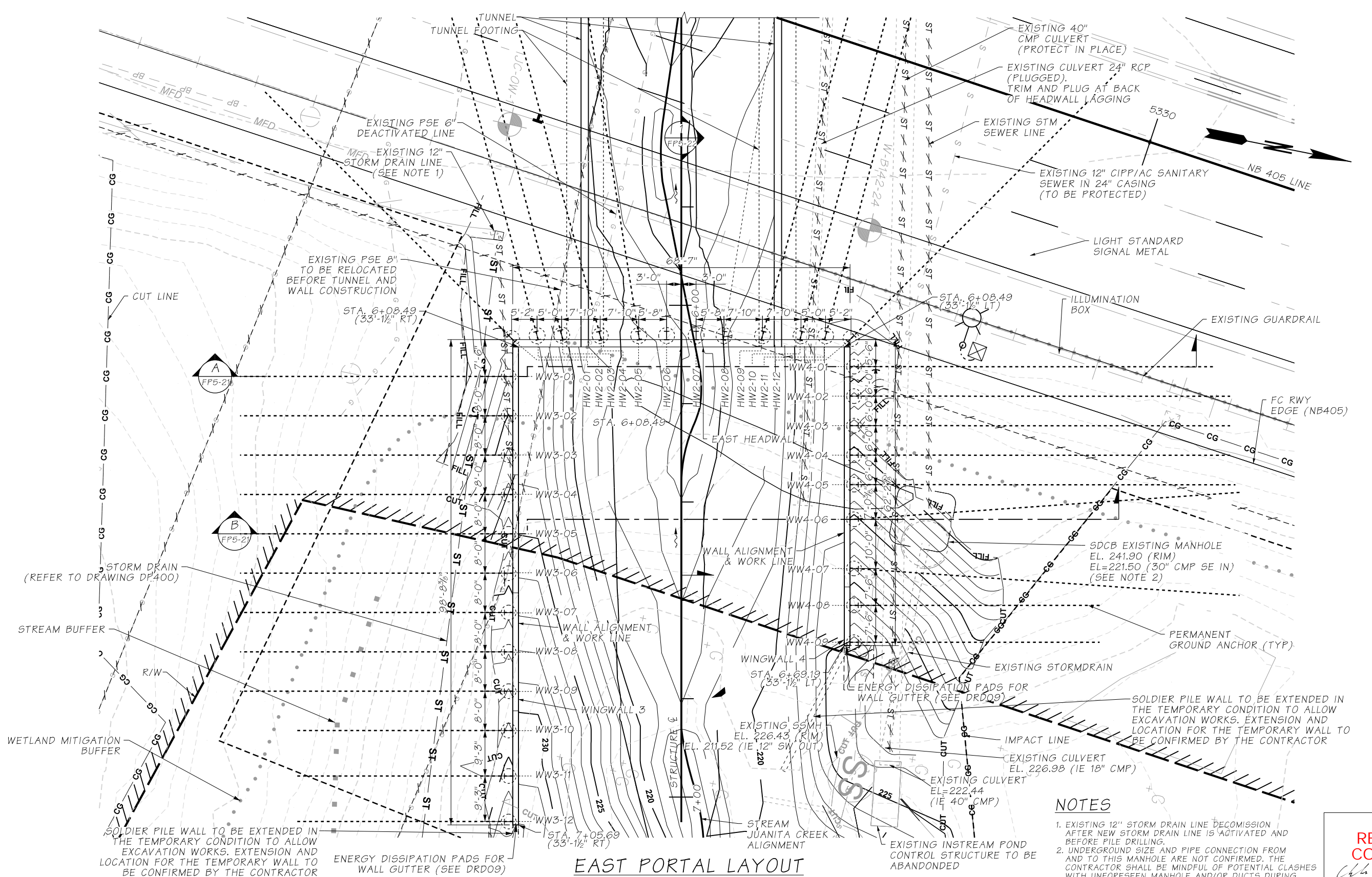


C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61



**EAST PORTAL LAYOUT**

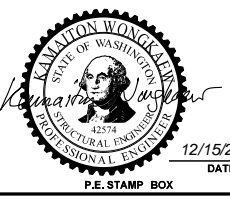
**NOTES**

- EXISTING 12" STORM DRAIN LINE DECOMMISSION AFTER NEW STORM DRAIN LINE IS ACTIVATED AND BEFORE PILE DRILLING.
- UNDERGROUND SIZE AND PIPE CONNECTION FROM AND TO THIS MANHOLE ARE NOT CONFIRMED. THE CONTRACTOR SHALL BE MINDFUL OF POTENTIAL CLASHES WITH UNFORESEEN MANHOLE AND/OR DUCTS DURING ANCHORS INSTALLATION.

**RELEASED FOR CONSTRUCTION**  
*Ch E. B...* 12/23/2025

SR FILE NO. SHEET

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DESIGNED BY	I RIVERO		
ENTERED BY	S SANCHEZ		
CHECKED BY	D SANTOS		
PROJ. ENGR.	J SLAVICEK		
REGIONAL ADM.	L HODGSON		
REV 0 DESIGN PACKAGE #8	12/12/2025	MW	9727
REVISION	DATE	BY	
REGION NO.	STATE	FED.AID PROJ.NO.	
10	WASH		
JOB NUMBER		LOCATION NO.	
22AB17		XL5446	
CONTRACT NO.			

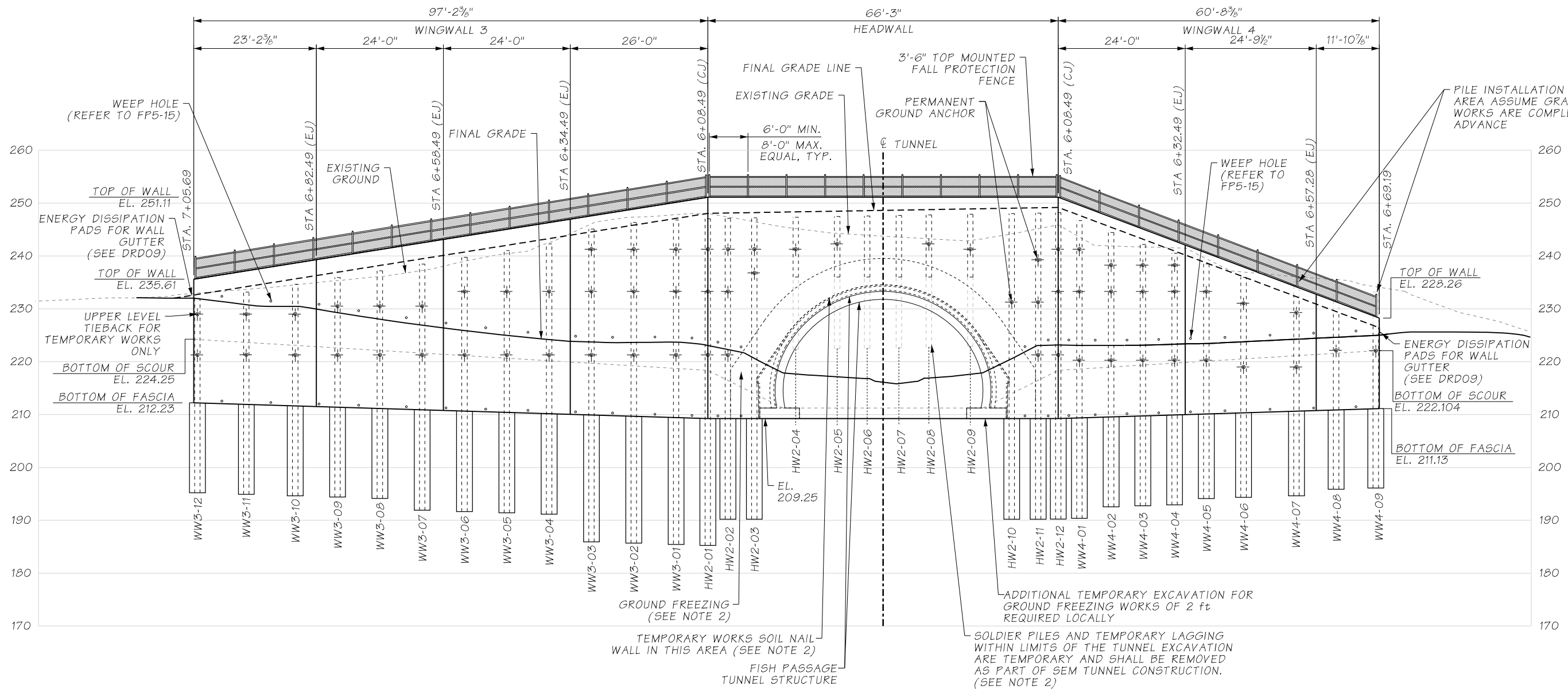


**I-405**  
**BRICKYARD TO SR527**  
**IMPROVEMENT PROJECT**

**JUANITA CREEK (MP 21.94)**  
**FISH PASSAGE STRUCTURE NO. 405/61**  
**EAST PORTAL WALL LAYOUT**

PLAN REF NO  
**FP5-17**

SHEET  
 XX  
 OF  
 SHEETS



ELEVATION -EAST PORTAL

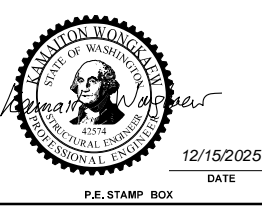
NOTES

- UNLESS OTHERWISE NOTED, THE SOLDIER PILES, TIEBACKS, AND REINFORCED CONCRETE FASCIA WALL SHOWN ON THIS SHEET REPRESENT THE PERMANENT (FINAL) CONDITION.
- REFER TO PLANS PREPARED BY BRIERLEY ASSOCIATES FOR THE SEM TUNNEL, SOE, AND ADDITIONAL REQUIREMENTS FOR THE TEMPORARY WORKS.

RELEASED FOR CONSTRUCTION  
*Ch E. B...* 12/23/2025

SR FILE NO. SHEET

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DESIGNED BY	I RIVERO		
ENTERED BY	S SANCHEZ		
CHECKED BY	D SANTOS		
PROJ. ENGR.	J SLAVICEK	REV 0 DESIGN PACKAGE #8	12/12/2025 MW
REGIONAL ADM.	IL HODGSON	REVISION	DATE BY
REGION NO.	10	STATE	WASH
JOB NUMBER	22AB17		
CONTRACT NO.	9727		
FED.AID PROJ.NO.			
LOCATION NO.	XL5446		



I-405	
BRICKYARD TO SR527 IMPROVEMENT PROJECT	
JUANITA CREEK (MP 21.94) FISH PASSAGE STRUCTURE NO. 405/61 EAST PORTAL WALL ELEVATION VIEW	
PLAN REF NO	FP5-18
SHEET XX OF SHEETS	

C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61

SOLDIER PILE SCHEDULE

PILE NO.	STA.	OFFSET (FT)	DRILL HOLE SIZE (FT)	P.G.A ARANGEMENT TYPE	SOLDIER PILE SECTION	HOR. SKEW (°)	TOP OF SOLDIER PILE ELEVATION (FT)	(H) (FT)(1)	(D) (FT)(1)	TOTAL PILE LENGTH (FT)
HW2-01	6+06.78	34.50' Rt.	3'-3"	HW-A	W21X201	45	248.18	37'-10"	24'-0"	62'-11"
HW2-02	6+06.19	29.33' Rt.	3'-3"	HW-B	W21X101	15	248.18	37'-10"	19'-0"	57'-11"
HW2-03	6+06.08	24.33' Rt.	3'-3"	HW-C	W24X229	15	248.18	38'-0"	19'-0"	57'-11"
HW2-04	6+06.20	16.15' Rt.	3'-3"	HW-D	W21X201	15	248.18	-	-	25'-0" (2)
HW2-05	6+06.17	8.67' Rt.	3'-3"	HW-E	W21X101	9	248.18	-	-	25'-0" (2)
HW2-06	6+06.16	3.00' Rt.	3'-3"	-	W21X101	-	248.18	-	-	25'-0" (2)
HW2-07	6+06.16	3.00' Lt.	3'-3"	-	W21X101	-	248.18	-	-	25'-0" (2)
HW2-08	6+06.17	8.67' Lt.	3'-3"	HW-F	W21X101	-9	248.18	-	-	25'-0" (2)
HW2-09	6+06.20	16.15' Lt.	3'-3"	HW-G	W21X201	-15	248.18	-	-	25'-0" (2)
HW2-10	6+06.20	24.33' Lt.	3'-3"	HW-H	W21X201	-15	248.18	38'-10"	19'-0"	57'-11"
HW2-11	6+06.19	29.33' Lt.	3'-3"	HW-I	W21X101	-15	248.18	38'-10"	19'-0"	57'-11"
HW2-12	6+06.78	34.50' Lt.	3'-3"	HW-J	W21X201	-45	248.18	38'-11"	19'-0"	57'-11"
WW3-01	6+14.49	35.12' Rt.	3'-3"	A	W21X101	-	247.41	37'-5"	24'-0"	61'-5"
WW3-02	6+22.49	35.12' Rt.	3'-3"	A	W21X101	-	246.26	36'-8"	24'-0"	60'-8"
WW3-03	6+30.49	35.12' Rt.	3'-3"	A	W21X101	-	245.10	35'-2"	24'-0"	59'-2"
WW3-04	6+38.49	35.12' Rt.	3'-3"	B1	W21X101	-	243.94	32'-1"	19'-0"	51'-1"
WW3-05	6+46.49	35.12' Rt.	3'-3"	B1	W21X101	-	242.79	30'-7"	19'-0"	49'-7"
WW3-06	6+54.49	35.12' Rt.	3'-3"	B1	W21X101	-	241.63	29'-1"	19'-0"	48'-1"
WW3-07	6+62.49	35.12' Rt.	3'-3"	B2	W21X101	-	240.47	27'-7"	19'-0"	46'-7"
WW3-08	6+70.49	35.12' Rt.	3'-3"	B2	W21X101	-	239.32	26'-1"	17'-0"	43'-1"
WW3-09	6+78.49	35.12' Rt.	3'-3"	B2	W21X101	-	238.16	24'-6"	17'-0"	41'-6"
WW3-10	6+86.49	35.12' Rt.	3'-3"	C	W21X101	-	237.00	23'-0"	17'-0"	40'-0"
WW3-11	6+95.74	35.12' Rt.	3'-3"	C	W21X101	-	235.67	21'-3"	17'-0"	38'-3"
WW3-12	7+04.99	35.12' Rt.	3'-3"	C	W21X101	-	234.33	19'-9"	17'-0"	36'-9"
WW4-01	6+12.49	35.12' Lt.	3'-3"	D	W21X101	-	246.68	37'-4"	19'-0"	56'-4"
WW4-02	6+18.49	35.12' Lt.	3'-3"	E	W21X101	-	244.43	34'-10"	17'-0"	51'-10"
WW4-03	6+24.49	35.12' Lt.	3'-3"	E	W21X101	-	242.18	32'-5"	17'-0"	49'-5"
WW4-04	6+30.49	35.12' Lt.	3'-3"	E	W21X101	-	240.54	30'-7"	17'-0"	47'-7"
WW4-05	6+36.49	35.12' Lt.	3'-3"	F	W21X101	-	238.50	28'-5"	16'-0"	44'-5"
WW4-06	6+43.52	35.12' Lt.	3'-3"	G	W21X101	4	235.97	25'-8"	16'-0"	41'-8"
WW4-07	6+53.52	35.12' Lt.	3'-3"	H	W21X101	-4	235.16	24'-6"	16'-0"	40'-6"
WW4-08	6+61.02	35.12' Lt.	3'-3"	I	W21X101	-	234.70	23'-8"	15'-0"	38'-8"
WW4-09	6+68.52	35.12' Lt.	3'-3"	I	W21X101	-	233.18	22'-1"	15'-0"	37'-1"

TIEBACK ANCHORS SCHEDULE

TYPE	LEVEL	ROW ELEVATION	INCLINATION VER. ANGLE (°)	INCLINATION HOR. ANGLE (°)	UNBONDED LENGTH (ft)	BONDED LENGTH (ft) (3)	FACTORED DESIGN LOAD (kips)	NUMBER OF STRANDS (4)	LOCKOFF LOAD (kips)
HW-A	1	241.28	30	45	52	31	102	4	80
	2	233.28	30	45	44	20	171	6	120
	3	221.28	30	45	31	31	213	7	140
HW-B	1	241.28	25	15	52	31	102	4	75
	2	233.28	25	15	44	18	112	4	85
	3	221.28	30	15	31	33	227	7	170
HW-C	1	241.28	25	15	52	33	139	5	120
	2	236.78	25	15	48	32	196	7	150
HW-D	1	241.28	20	15	54	35	161	7	150
HW-E	1	242.28	7	9	79	37	154	5	150
HW-F	1	242.28	7	9	79	38	154	5	150
HW-G	1	241.28	20	15	54	36	162	5	150
HW-H	1	231.28	30	15	41	38	269	8	170
HW-I	1	239.28	25	15	50	31	120	5	100
	2	231.28	25	15	42	20	170	6	150
	3	221.28	30	15	31	26	183	6	150
HW-J	1	241.28	15	45	50	31	129	5	100
	2	233.28	15	45	42	18	120	5	90
	3	221.28	40	45	31	25	175	6	123
A	1	241.28	30	-	47	17	90	3	60
	2	233.28	30	-	41	26	130	4	80
	3	221.28	30	-	32	24	119	4	70
B1	1	233.28	30	-	36	28	144	4	90
	2	221.28	30	-	27	27	139	4	90
B2	1	230.50	30	-	36	28	144	4	90
	2	221.28	30	-	27	27	139	4	90
C	1	229.00	30	-	31	20	94	3	60
	2	221.28	30	-	24	21	106	3	70
D	1	241.28	15	-	46	31	82	3	50
	2	233.28	15	-	42	29	112	3	70
	3	220.28	15	-	27	42	182	5	110
E	1	238.28	15	-	44	36	95	3	60
	2	233.28	15	-	40	37	97	3	60
	3	220.28	15	-	35	34	174	5	110
F	1	233.28	15	-	38	43	112	3	70
	2	220.28	15	-	34	31	174	5	105
G	1	231.05	15	4	38	44	115	3	70
	2	219.00	15	4	20	33	168	5	100
H	1	229.30	15	4	38	44	115	3	70
	2	219.00	15	4	20	33	168	5	100
I	1	222.10	25	-	26	30	151	4	90

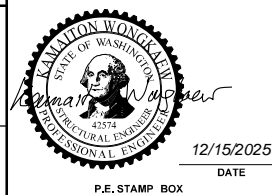
- (1) DIMENSIONS "H" AND "D" REFER TO DESIGN HEIGHT AND EMBEDMENT DEPTH, RESPECTIVELY, REFER TO SHEET FP5-13.
- (2) PILE TOE ELEVATION TO BE CUT DURING CONSTRUCTION TO ALLOW FOR THE OTHER WORKS. PILE TO BE CUT AT EL. 236 FT.
- (3) BONDED LENGTH ARE PRELIMINARY, USING A 6" DIAMETER BOND IN WINGWALLS AND 7" DIAMETER BOND IN HEADWALL TIEBACKS, AND BASED ON AVAILABLE INFORMATION. THE GROUND ANCHORS CONTRACTOR IS TO PROVIDE THE FINAL BONDED LENGTH AND BOND DIAMETER AS PER WSDOT GDM 15-5.2.3.
- (4) STRANDS OF GRADE 270 KSI, 0.6-INCH DIAMETER.
- (5) TESTING REQUIREMENTS:
  - VERIFICATION TESTING (ON SACRIFICIAL GROUND ANCHORS):
    - 1 ANCHOR AT LEVEL AND INCLINATION OF UPPER LEVEL FROM HW-E / HW-F INTO ESU 1B
    - 2 ANCHORS AT LEVEL AND INCLINATION OF LOWER LEVEL FROM HW-B/HW-I INTO ESU 6B.

- PERFORMANCE TESTING:
  - 3 ANCHORS PER WALL (TOTAL OF 9 TESTED ANCHORS) LOCATED ON ELEVATIONS BETWEEN EL. 241.28 AND 238.28 FT.
  - 3 ANCHORS PER WALL (TOTAL OF 9 TESTED ANCHORS) LOCATED ON ELEVATIONS BETWEEN EL. 233.28 AND 229.30 FT.
  - 3 ANCHORS PER WALL (TOTAL OF 9 TESTED ANCHORS) LOCATED ON ELEVATIONS BETWEEN EL. 222 AND 219 FT.
- REMAINDER OF PRODUCTION ANCHORS TO BE PROOF-TESTED IN ACCORDANCE WITH WSDOT GDM 15-5.2.3.

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 12/23/2025

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DESIGNED BY	I RIVERO		
ENTERED BY	S SANCHEZ		
CHECKED BY	D SANTOS		
PROJ. ENGR.	J SLAVICEK	REV 0 DESIGN PACKAGE #8	12/12/2025
REGIONAL ADM.	L HODGSON	REVISION	DATE BY
REGION NO.	10	STATE	WASH
FED.AID PROJ.NO.			
JOB NUMBER	22AB17		
CONTRACT NO.	9727		
LOCATION NO.	XL5446		



**I-405**  
**BRICKYARD TO SR527**  
**IMPROVEMENT PROJECT**  
**JUANITA CREEK (MP 21.94)**  
**FISH PASSAGE STRUCTURE NO. 405/61**  
**EAST PORTAL WALL. PILE SCHEDULE**

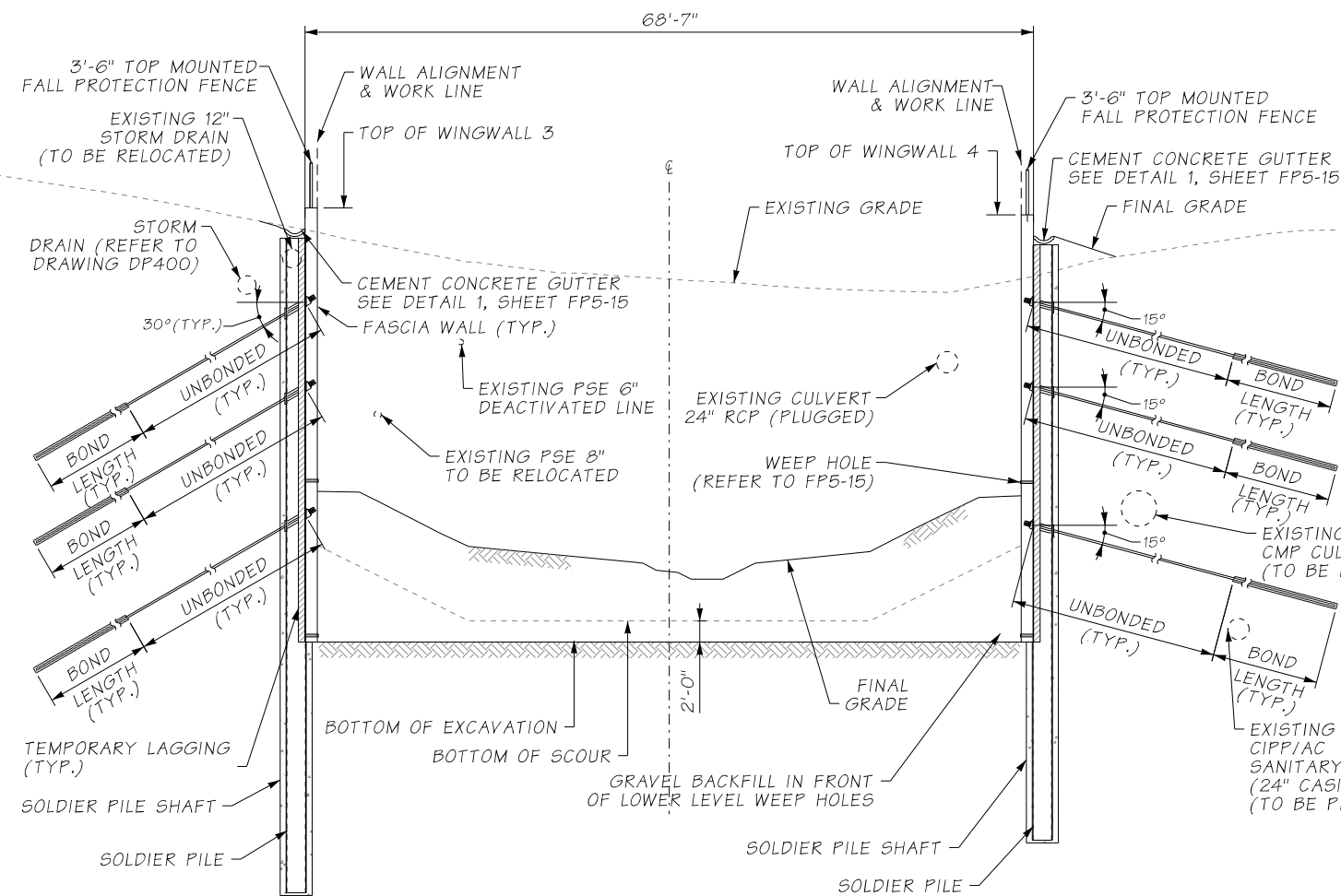
PLAN REF NO  
**FP5-19**

SHEET  
**XX**  
 OF  
 SHEETS

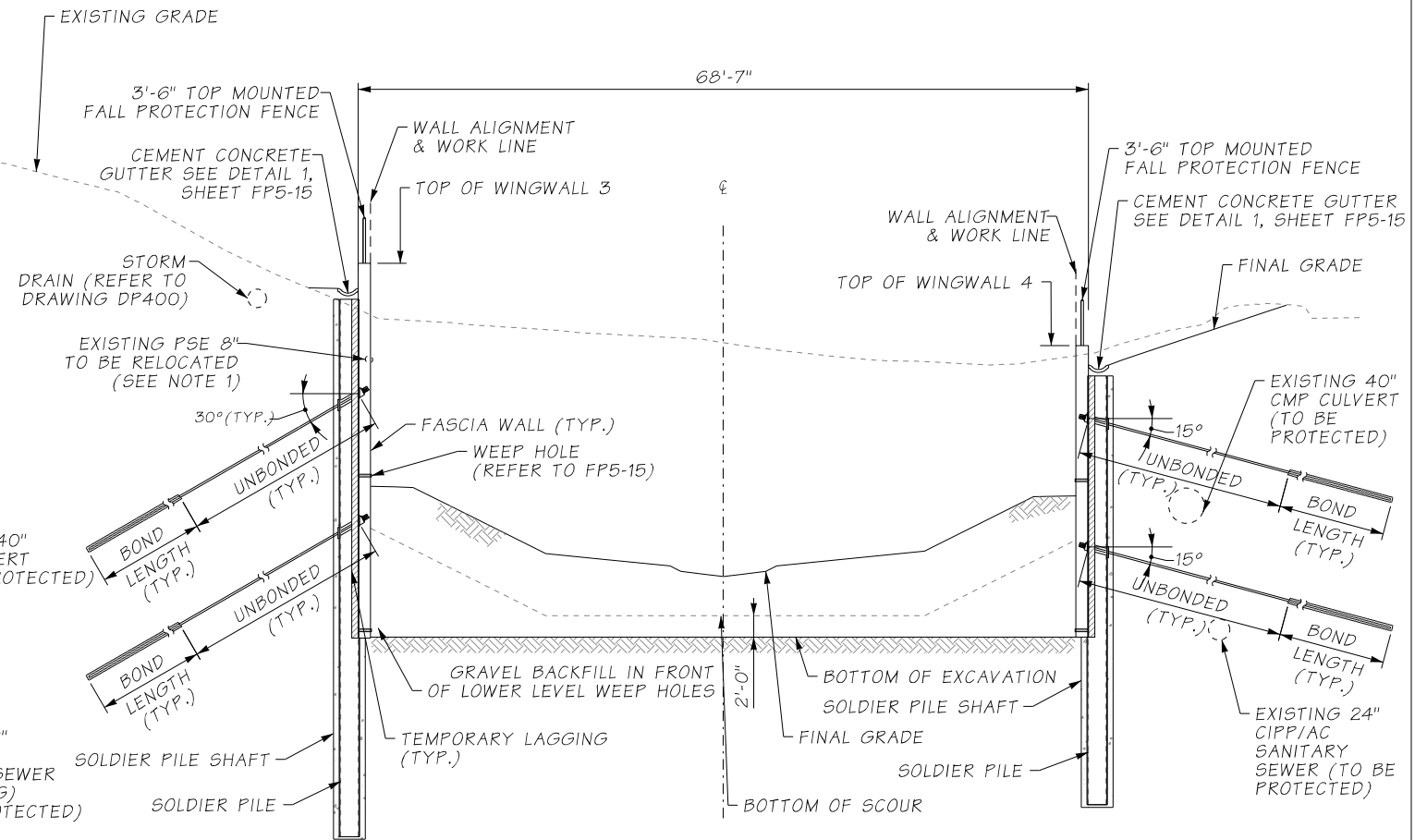
C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61

**NOTES**

1. EXISTING UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE DECOMMISSIONED. THOSE THAT INTERSECT WITH THE WALL SHALL BE REMOVED TO THE BACK OF THE LAGGING AND PLUGGED.



SECTION A  
FP5-17

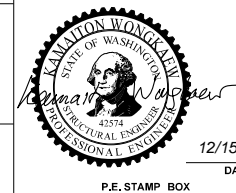


SECTION B  
FP5-17

**RELEASED FOR CONSTRUCTION**  
*Ch. E. B...* 12/23/2025

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ENTERED BY	S SANCHEZ			9727	XL5446	
CHECKED BY	D SANTOS					
PROJ. ENGR.	J SLAVICEK	REV 0 DESIGN PACKAGE #8	12/12/2025	MW		
REGIONAL ADM.	IL HODGSON	REVISION	DATE	BY		



**AECOM**



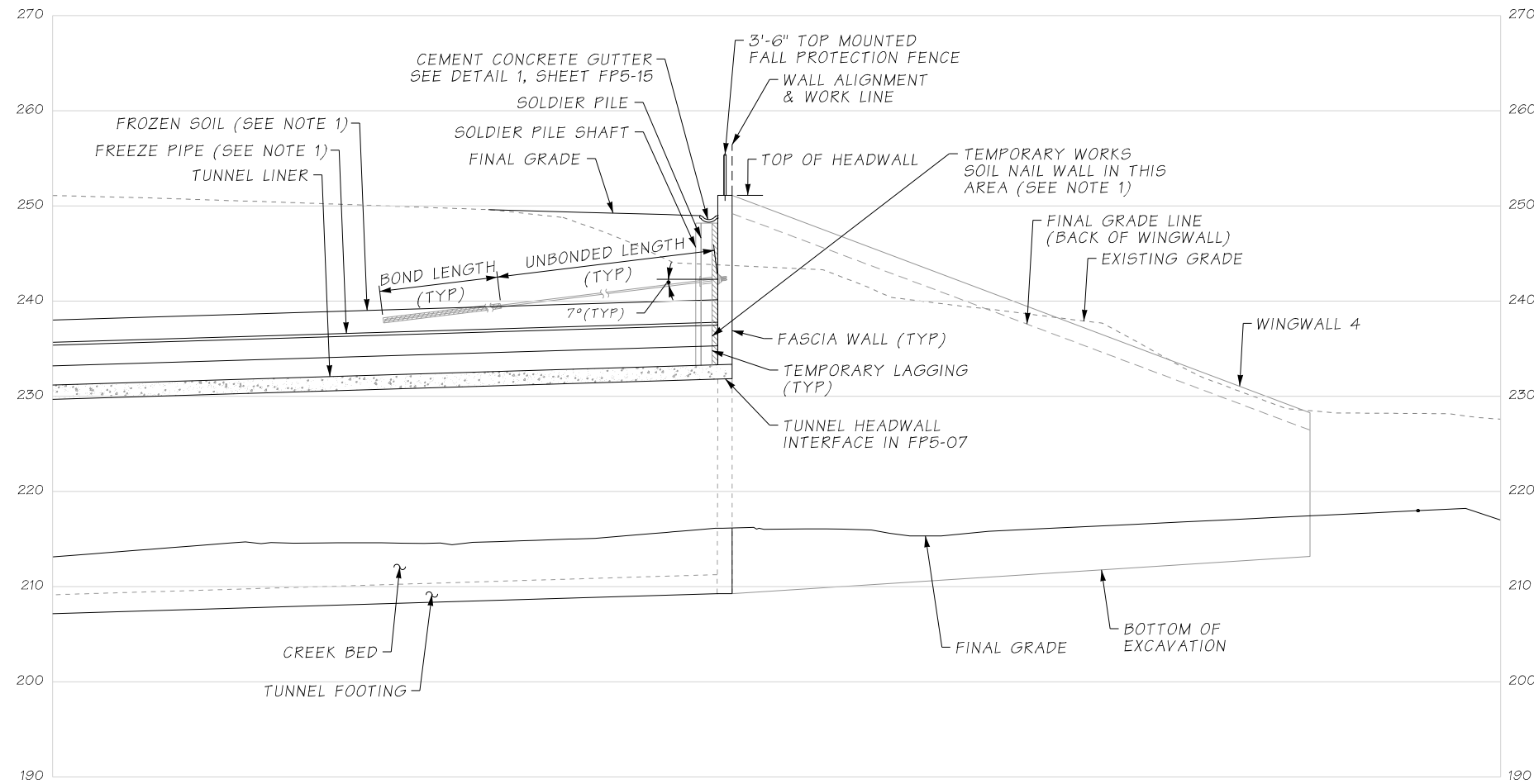
**I-405**  
**BRICKYARD TO SR527**  
**IMPROVEMENT PROJECT**  
**JUANITA CREEK (MP 21.94)**  
**FISH PASSAGE STRUCTURE NO. 405/61**  
**EAST PORTAL WALL. TYPICAL SECTIONS**

PLAN REF NO  
**FP5-21**  
 SHEET  
 XX  
 OF  
 SHEETS

C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61

**NOTES**

1. REFER TO PLANS PREPARED BY BRIERLEY ASSOCIATES FOR THE SEM TUNNEL, SOE, AND ADDITIONAL REQUIREMENTS FOR THE TEMPORARY WORKS.
2. TIEBACKS SHOWN IN THIS SECTION ONLY APPEAR TO CLASH WITH THE TUNNEL LINER DUE TO PROJECTION; THEY ARE DESIGNED CLEAR OF THE LINER AND GROUND FREEZING ARCH.

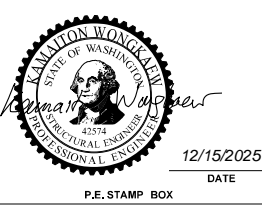


SECTION 1  
FP5-17

RELEASED FOR CONSTRUCTION  
*W. E. B...* 12/23/2025

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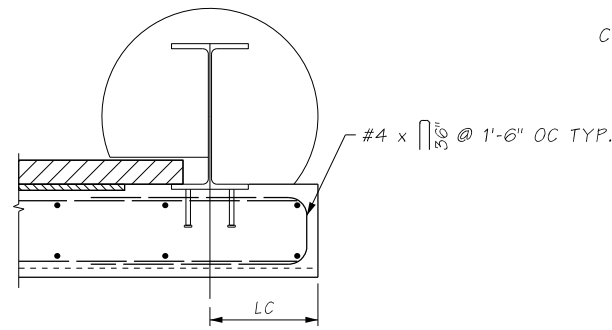
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DESIGNED BY	I RIVERO		
ENTERED BY	S SANCHEZ		
CHECKED BY	D SANTOS		
PROJ. ENGR.	J SLAVICEK	REV 0 DESIGN PACKAGE #8	12/12/2025 MW
REGIONAL ADM.	IL HODGSON	REVISION	DATE BY
REGION NO.	10	STATE	WASH
FED.AID PROJ.NO.			
JOB NUMBER	22AB17		
CONTRACT NO.	9727	LOCATION NO.	XL5446



I-405  
 BRICKYARD TO SR527  
 IMPROVEMENT PROJECT  
 JUANITA CREEK (MP 21.94)  
 FISH PASSAGE STRUCTURE NO. 405/61  
 EAST PORTAL WALL. TYPICAL SECTIONS

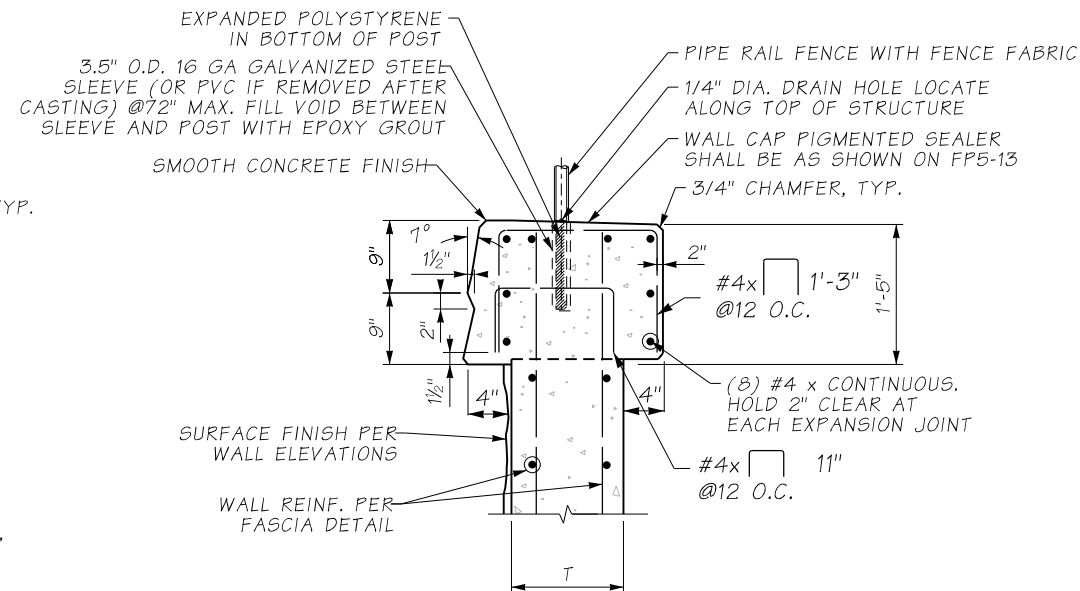
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SHEET XX OF SHEETS	

C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61

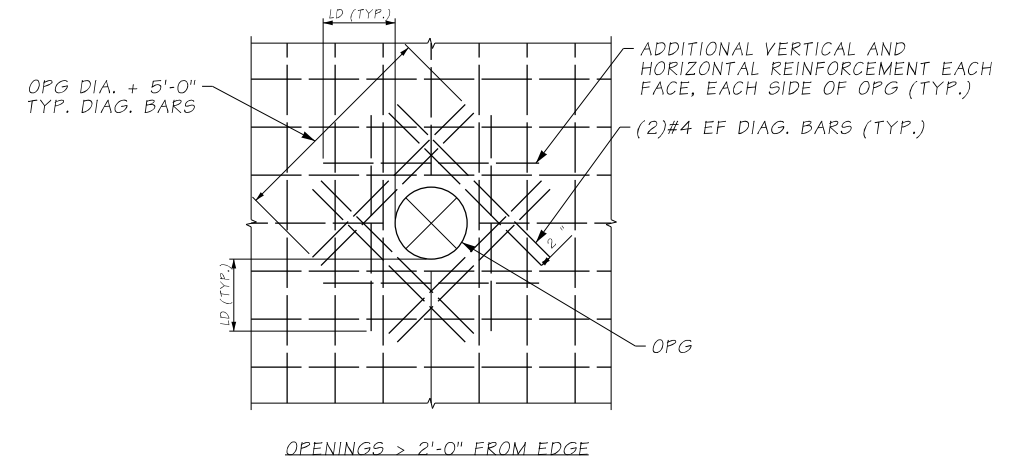


**PLAN - TYPICAL FASCIA END REINFORCEMENT DETAIL**

NOTE:  
DETAIL ALSO APPLIED TO TOP OF WALL WHEN NO CAP IS REQUIRED, (I.E., EAST PORTAL WALLS).  
REFER TO SITE SPECIFIC WALL DRAWINGS FOR DIMENSIONS OF "LC"



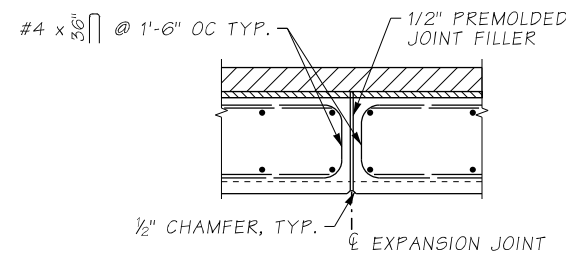
**TYPICAL CIP CAP**



**CONCRETE FASCIA OPENING DETAILS**

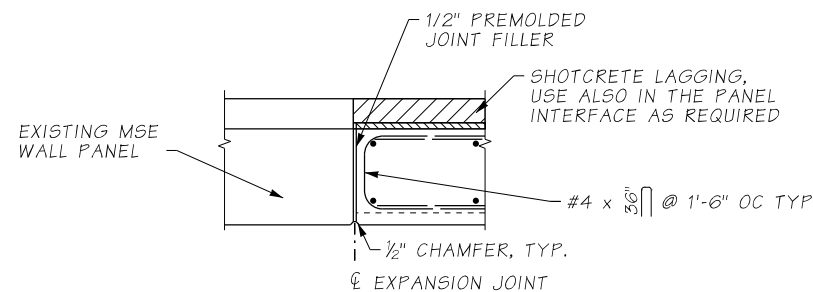
**NOTES:**

1. PROVIDE ADDITIONAL VERTICAL AND HORIZONTAL REINFORCEMENT AREA TO EACH SIDE OF THE OPENING EQUIVALENT TO ONE HALF REINFORCEMENT INTERRUPTED BY THE OPENING.
2. THIS DETAIL SIMILAR FOR SQUARE AND RECTANGULAR OPENINGS.
3. DETAILS APPLY TO OPENINGS WITH A LARGEST DIMENSION GREATER THAN EITHER HORIZONTAL OR VERTICAL BAR SPACING AND LESS THAN 36\"/>

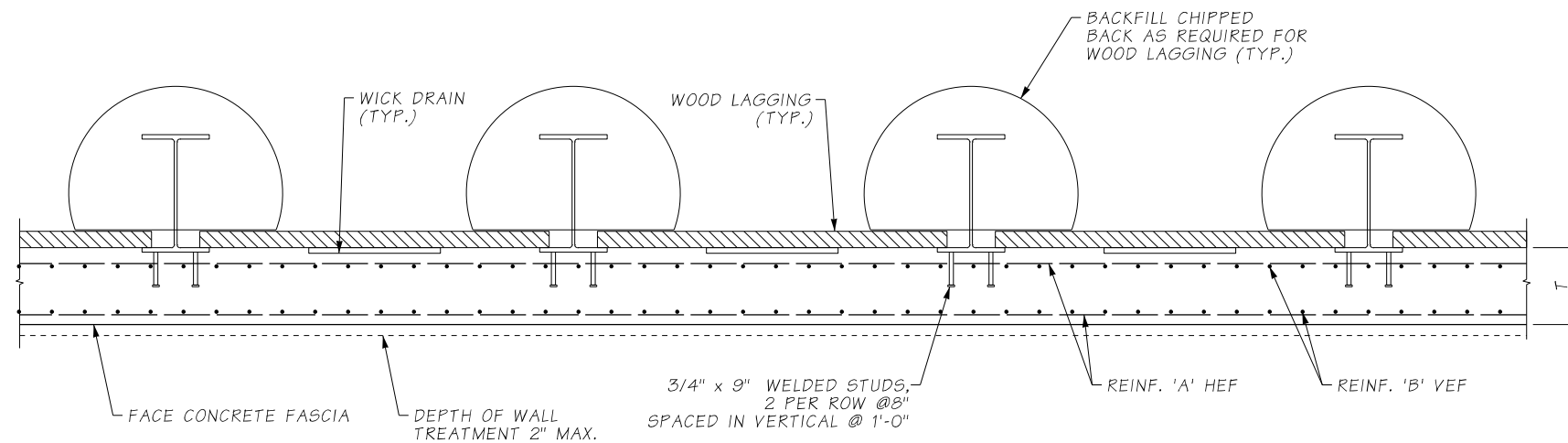


**EXPANSION JOINT DETAIL**

NOTE:  
EXPANSION JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS



**JOINT BETWEEN FASCIA AND MSE WALL PANELS**



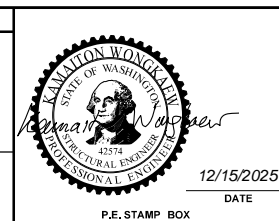
**PLAN TYPICAL DETAIL - WINGWALLS FASCIA**

CONCRETE FASCIA SCHEDULE- WINGWALLS					
LOCATION	WINGWALL	FASCIA THICKNESS (T)		REINFORCEMENT	
		T MIN. (in)	T MAX. (in)	HORIZONTAL 'A'	VERTICAL 'B'
WEST PORTAL	WW1	14	16	#4@9"	#4@9"
	WW2	14	16	#4@9"	#4@9"
EAST PORTAL	WW3	14	16	#4@8"	#4@8"
	WW4	14	16	#4@8"	#4@8"

**RELEASED FOR CONSTRUCTION**  
12/23/2025

SR FILE NO. SHEET

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DESIGNED BY	I RIVERO		
ENTERED BY	S SANCHEZ		
CHECKED BY	D SANTOS		
PROJ. ENGR.	J SLAVICEK	REV 0 DESIGN PACKAGE #8	12/12/2025 MW
REGIONAL ADM.	L HODGSON	REVISION	DATE BY
REGION NO.	10	STATE	WASH
JOB NUMBER	22AB17		
CONTRACT NO.	9727		
FED.AID PROJ.NO.			
LOCATION NO.	XL5446		

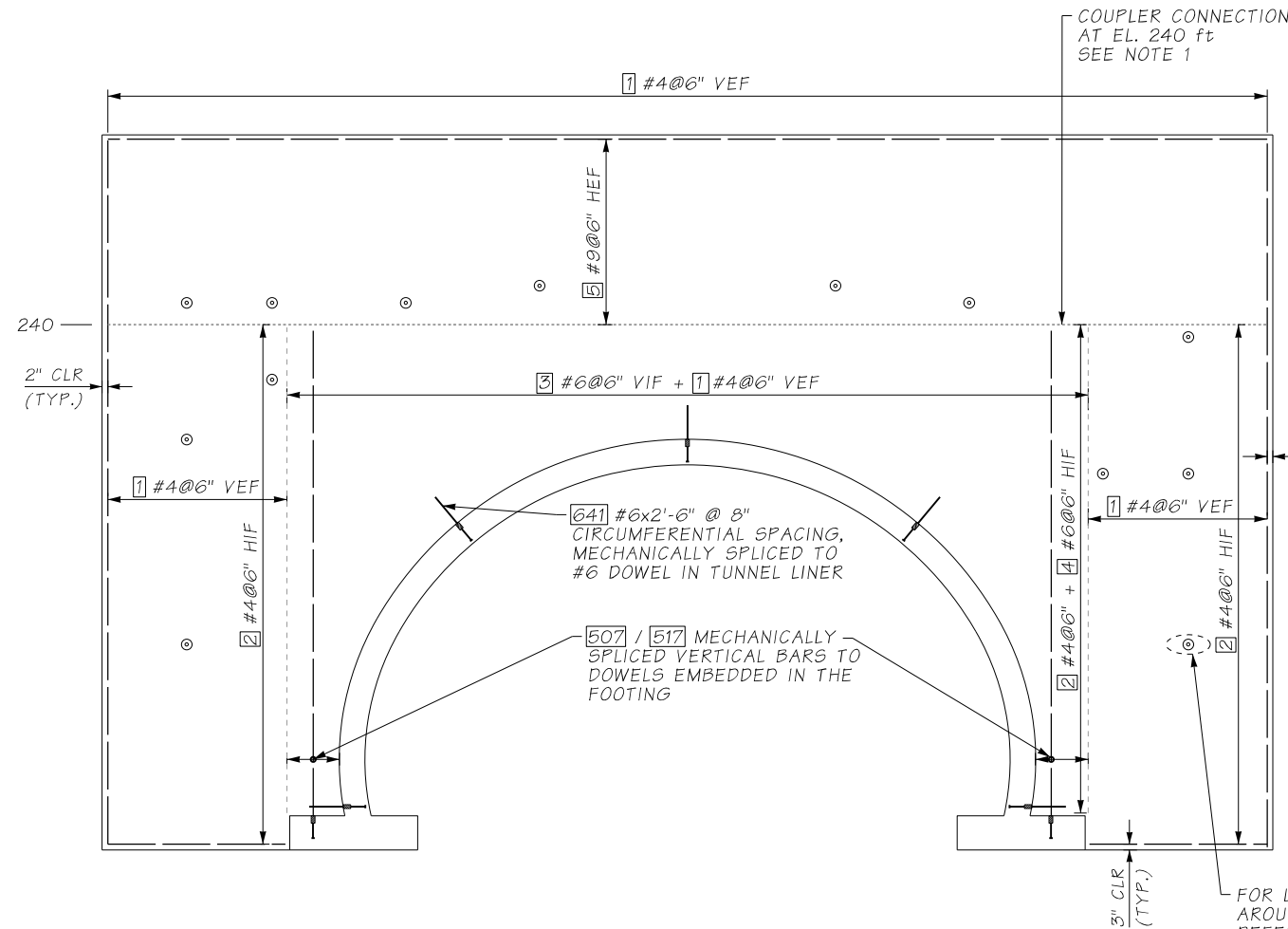


I-405	PLAN REF NO
BRICKYARD TO SR527	FP5-36
IMPROVEMENT PROJECT	SHEET XX OF SHEETS
JUANITA CREEK (MP 21.94)	
FISH PASSAGE STRUCTURE NO. 405/61	
REINFORCEMENT DETAILS	

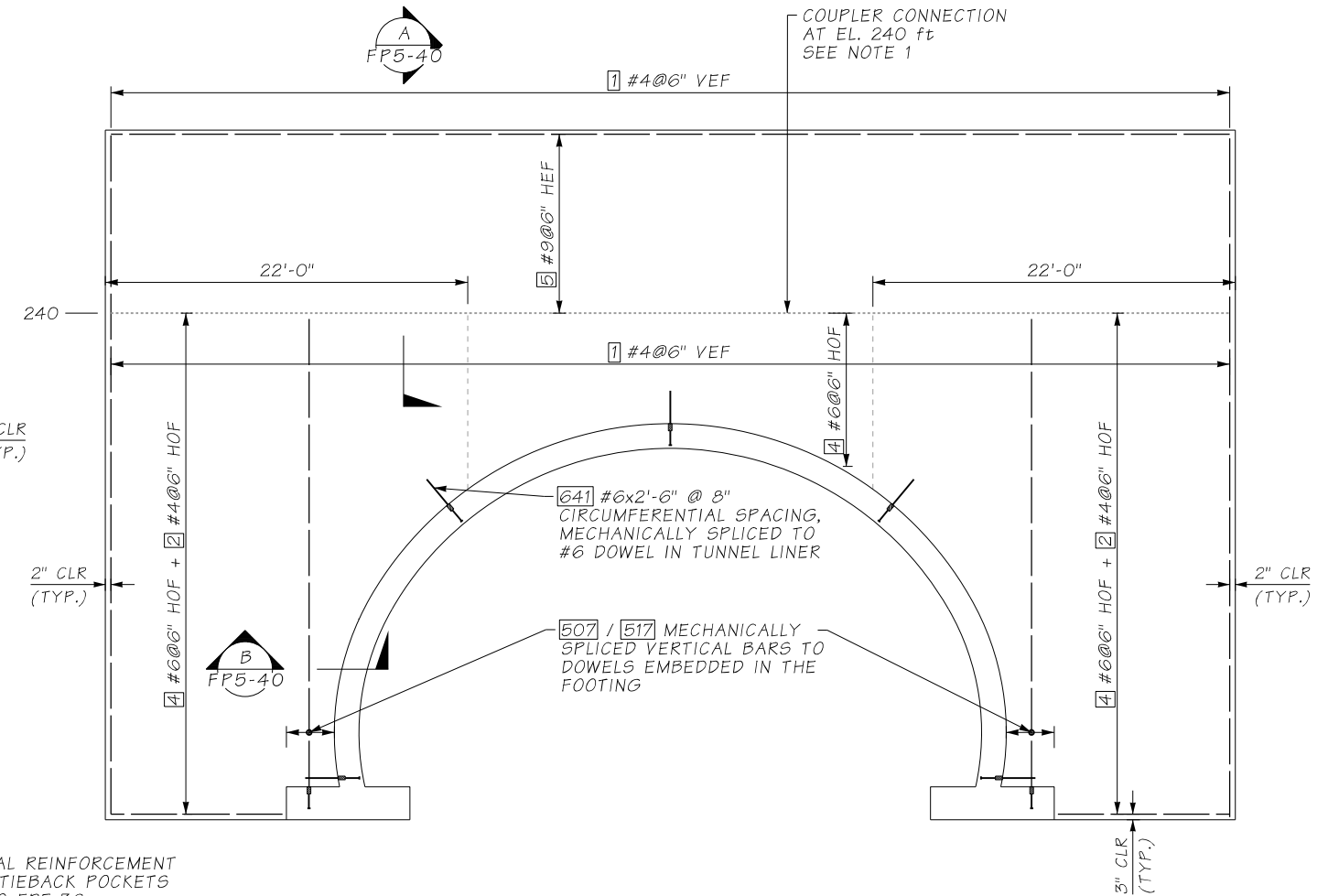
C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61

**NOTES**

1. FOR DETAILS ON REINFORCEMENT BETWEEN EL. 240 ft AND TOP OF THE WALL REFER TO FP5-40. THE VERTICAL REINFORCEMENT **1** ABOVE AND BELOW EL. 240 ft IS PLACED AT DIFFERENT STAGES AND REQUIRES COUPLER CONNECTIONS (OR SIMILAR). REFER TO PLANS PREPARED BY BRIERLEY ASSOCIATES FOR THE HEADWALL CONSTRUCTION SEQUENCE.



**HEADWALL REINFORCEMENT**  
INNER FACE



**HEADWALL REINFORCEMENT**  
OUTER FACE

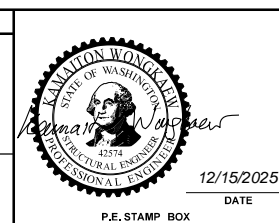
**LEGEND**

- VERTICAL REINFORCEMENT AREA DIVISION
- ..... HORIZONTAL REINFORCEMENT AREA DIVISION

**RELEASED FOR CONSTRUCTION**  
*Ch. E. B...* 12/23/2025

SR FILE NO. SHEET

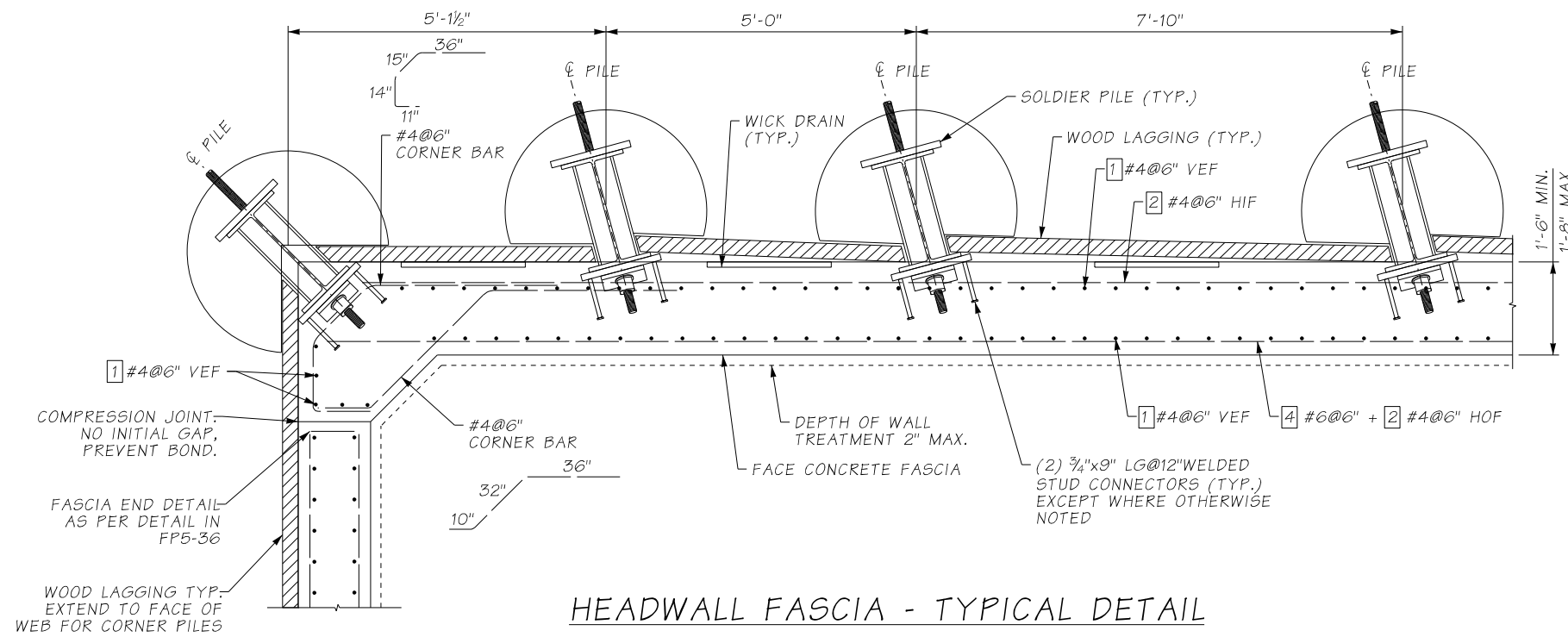
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TIME	5:26:10 PM	REGION NO.	STATE
DATE	12/11/2025	10	WASH
PLOTTED BY	EscribanoRosilloN	JOB NUMBER	22AB17
DESIGNED BY	I RIVERO	CONTRACT NO.	9727
ENTERED BY	S SANCHEZ	LOCATION NO.	XL5446
CHECKED BY	D SANTOS		
PROJ. ENGR.	J SLAVICEK	REV 0 DESIGN PACKAGE #8	12/12/2025 MW
REGIONAL ADM.	L HODGSON	REVISION	DATE BY



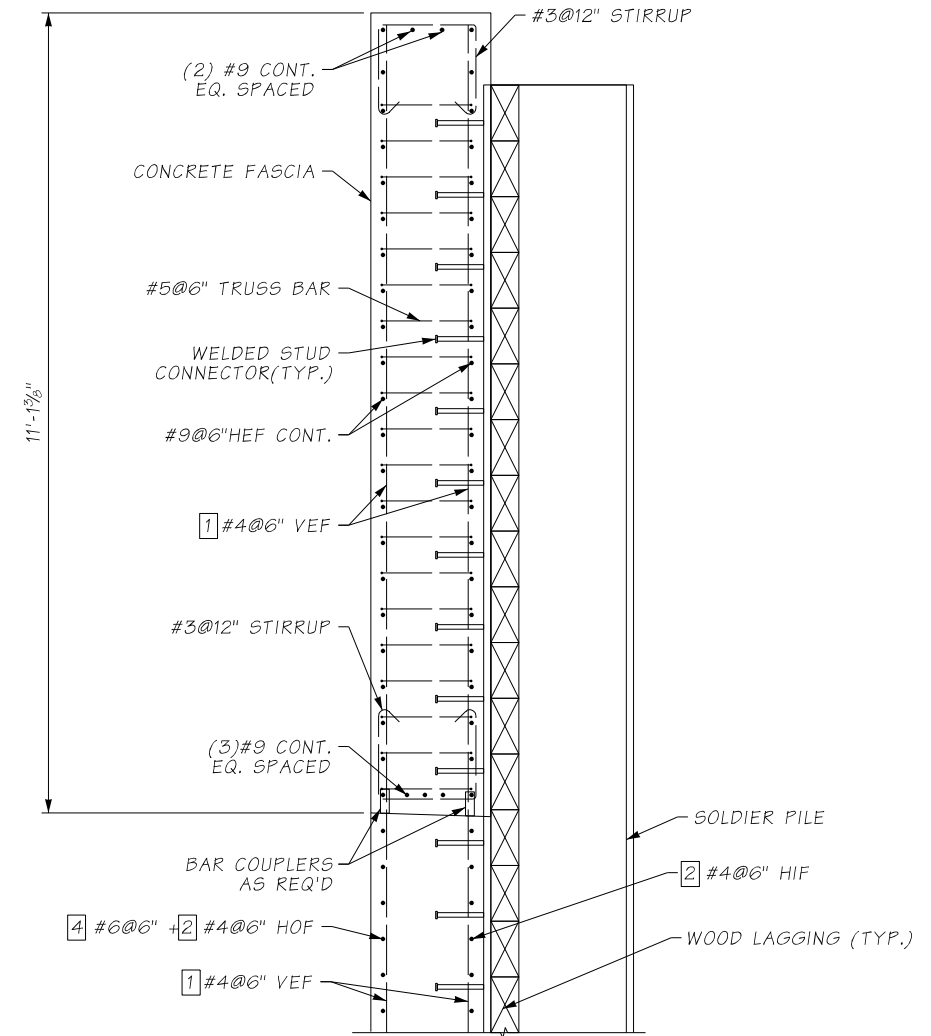
I-405		PLAN REF NO.	FP5-38
BRICKYARD TO SR527		SHEET	XX
IMPROVEMENT PROJECT		OF	
JUANITA CREEK (MP 21.94)		SHEETS	
FISH PASSAGE STRUCTURE NO. 405/61			
EAST HEADWALL REINFORCEMENT			

C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61

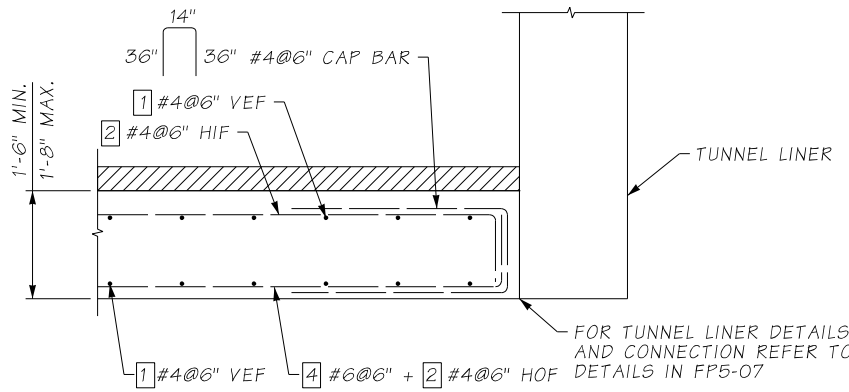
C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61



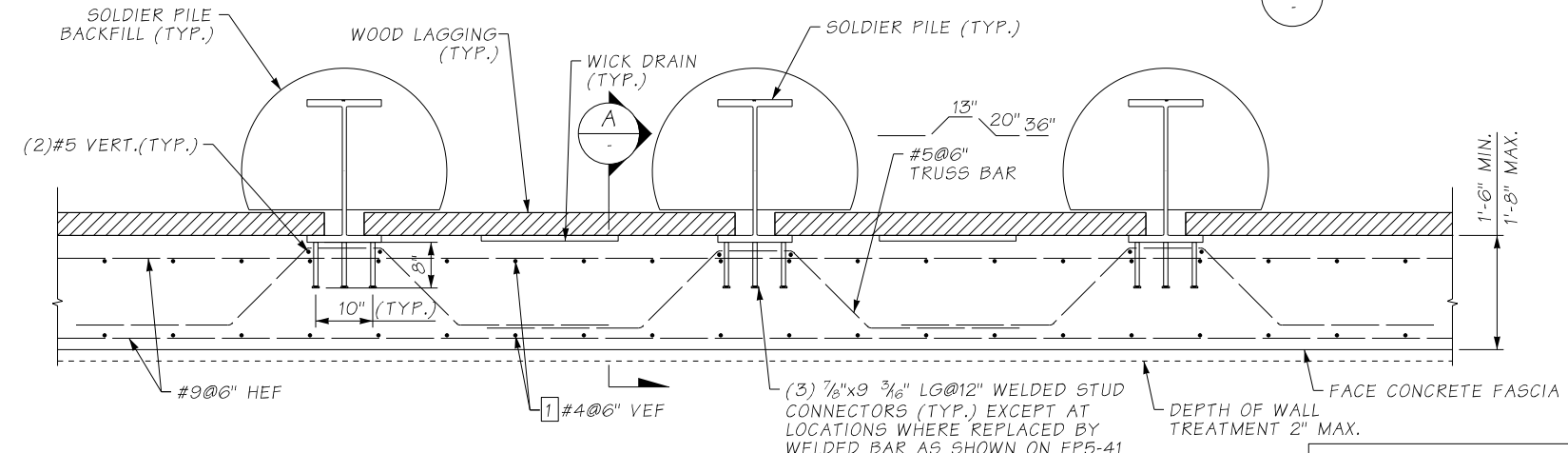
HEADWALL FASCIA - TYPICAL DETAIL



SECTION A



HEADWALL FASCIA TYPICAL END DETAIL AT TUNNEL INTERFACE



HEADWALL FASCIA TYPICAL DETAIL REINFORCED AREA EL. 240 FT TO TOP OF WALL

RELEASED FOR CONSTRUCTION  
 12/23/2025

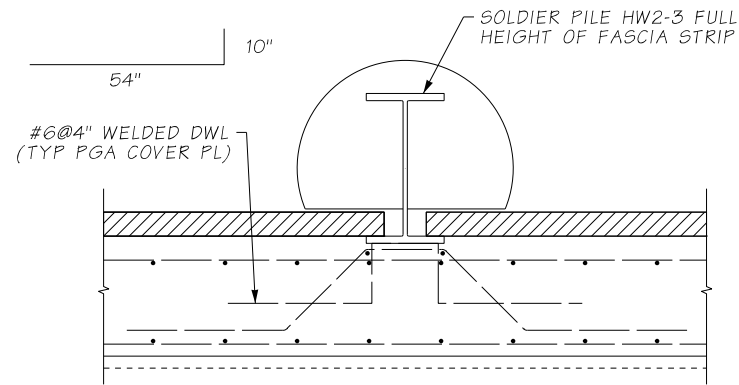
SR FILE NO. SHEET

FILE NAME	c:\pwworking\uswaldms06730\IC9727_DE_FP5_40.dgn			REGION NO.	STATE	FED.AID PROJ.NO.				I-405 BRICKYARD TO SR527 IMPROVEMENT PROJECT	PLAN REF NO.
TIME	5:28:02 PM			10	WASH						FP5-40
DATE	12/11/2025			JOB NUMBER							SHEET
PLOTTED BY	EscribanoRosilloN			CONTRACT NO.							XX
DESIGNED BY	I RIVERO			LOCATION NO.							OF
ENTERED BY	S SANCHEZ			9727							SHEETS
CHECKED BY	D SANTOS										
PROJ. ENGR.	J SLAVICEK			REV 0 DESIGN PACKAGE #8	12/12/2025	MW					
REGIONAL ADM.	L HODGSON			REVISION	DATE	BY					

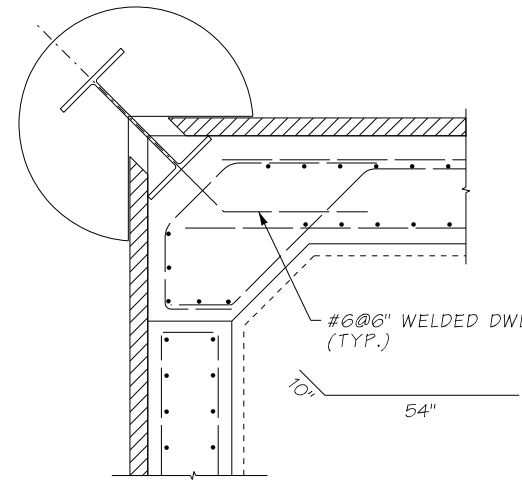
JUANITA CREEK (MP 21.94)  
 FISH PASSAGE STRUCTURE NO. 405/61  
 EAST HEADWALL DETAILS 1 OF 2

**NOTES:**

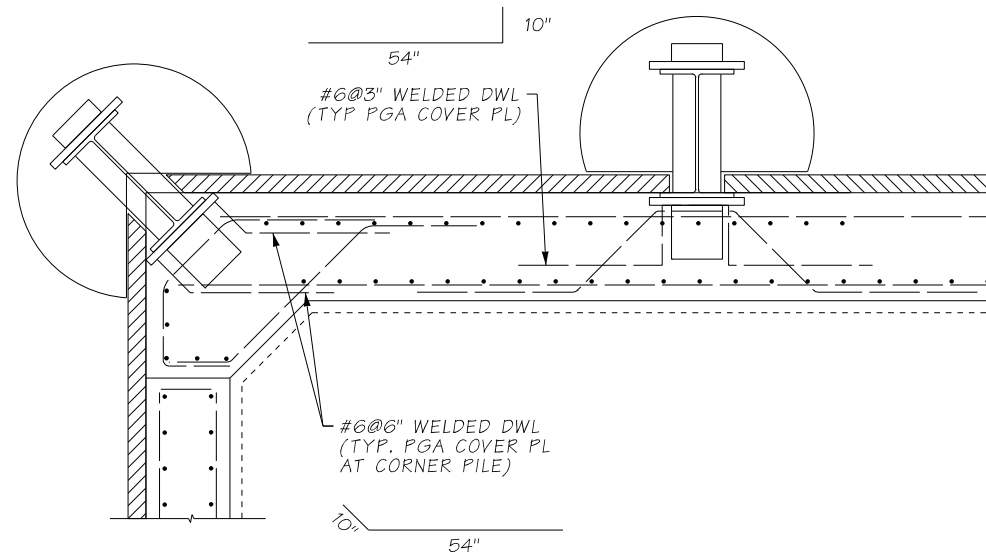
1. WELDING HEADED STUD AND WELDED DOWEL CONNECTORS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH AWS D1.5 UTILIZING STUD WELDING GUN AND ACCESSORIES.
2. DEVELOPMENT LENGTH, LD FOR #6 DEFORMED BARS, PER BDM APPENDIX 5.1-A4 TABLE, SHALL NOT BE LESS THAN 28".



SOLDIER PILE CONNECTION ALONG PILE HW2-03



SOLDIER PILE CONNECTION AT CORNER PILES (HW2-01 AND HW2-12)

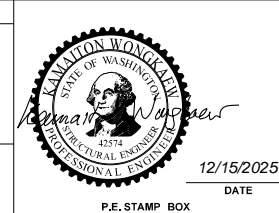


SOLDIER PILE CONNECTION AT PERMANENT GROUND ANCHOR LOCATIONS (2'-0\"/>

**RELEASED FOR CONSTRUCTION**  
*Ch E. B...* 12/23/2025

SR FILE NO. SHEET

FILE NAME	c:\pwworking\uswaldms06730\C9727_DE_FP5_41.dgn		
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DATE	12/11/2025		
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DESIGNED BY	I RIVERO		
ENTERED BY	S SANCHEZ		
CHECKED BY	D SANTOS		
PROJ. ENGR.	J SLAVICEK	REV 0 DESIGN PACKAGE #8	12/12/2025 MW
REGIONAL ADM.	L HODGSON	REVISION	DATE BY
REGION NO.	10	STATE	WASH
FED.AID PROJ.NO.			
JOB NUMBER	22AB17		
CONTRACT NO.	9727	LOCATION NO.	XL5446



I-405	PLAN REF NO
BRICKYARD TO SR527	FP5-41
IMPROVEMENT PROJECT	SHEET XX OF SHEETS
JUANITA CREEK (MP 21.94)	
FISH PASSAGE STRUCTURE NO. 405/61	
EAST HEADWALL DETAILS 2 OF 2	

C.S. 1757 ~ PROJ. NO. 9727 ~ NORTHWEST REGION ~ I-405 MP 21.94 ~ JUANITA CREEK FISH PASSAGE STRUCTURE NO. 405/61