GENERAL NOTES

General Notes:

1. Installation methods shall comply with NFPA # 502 as amended by the contract documents.
2. All materials shall be UL Listed, Factory Mutual Approved, or as specified within the contract documents.
3. All couplings shall be furnished by a single manufacturer - Gruvlok.
4. Grooved Flange Adapters components shall be furnished by the same manufacturer as the grooved end fittings - Gruvlok.
5. Fire suppression header piping shall be braced laterally and longitudinally at each diaphragm.
6. Flexible Grooved Joint couplings shall be used at every joint between piers to allow for expansion and contraction. Pipe shall be deflected as necessary to maintain design pipe centerline.

EQUIPMENT

Pipe:
JOL ASTM A 53, Grade B, seamless, Schedule 40, Steel, Pipe: hot dip galvanized after fabrication
XGSL ASTM A 53, Grade B, seamless, Schedule 40, Steel, Pipe: hot dip galvanized after fabrication
Jiangyin Yueyuechao ASTM A 53, Grade B, seamless, Schedule 40, Steel, Pipe: hot dip galvanized after fabrication

Fittings: (all components will have a galvanized finish)

Gruvlok	7012	Groove Flange
Gruvlok	7001	Flexible Coupling
Gruvlok	7401	Rigid Coupling
Gruvlok		Standard Series Fittings
Smith Cooper		Flange Fittings

Hangers: (all components will have a galvanized finish)

Tolco	1	Clevis Hanger
Tolco	4A	Pipe Clamp - Sway Bracing
Tolco	4L	Longitudinal In-Line Sway Frace Attachment
Tolco	909	Sway Brace Attachment
Tolco	910	Sway Brace Attachment
Tolco	981	Sway Brace Attachment
Tolco	985	Sway Brace Attachment
Tolco	986	Sway Brace Attachment
Tolco	1001	Sway Brace Attachment
Anvil	282	Universal Concrete Anchor
Anvil	146	All Thread Rod
Hilti	KB3	Kwikbolt III Expansion Anchor

Valves:

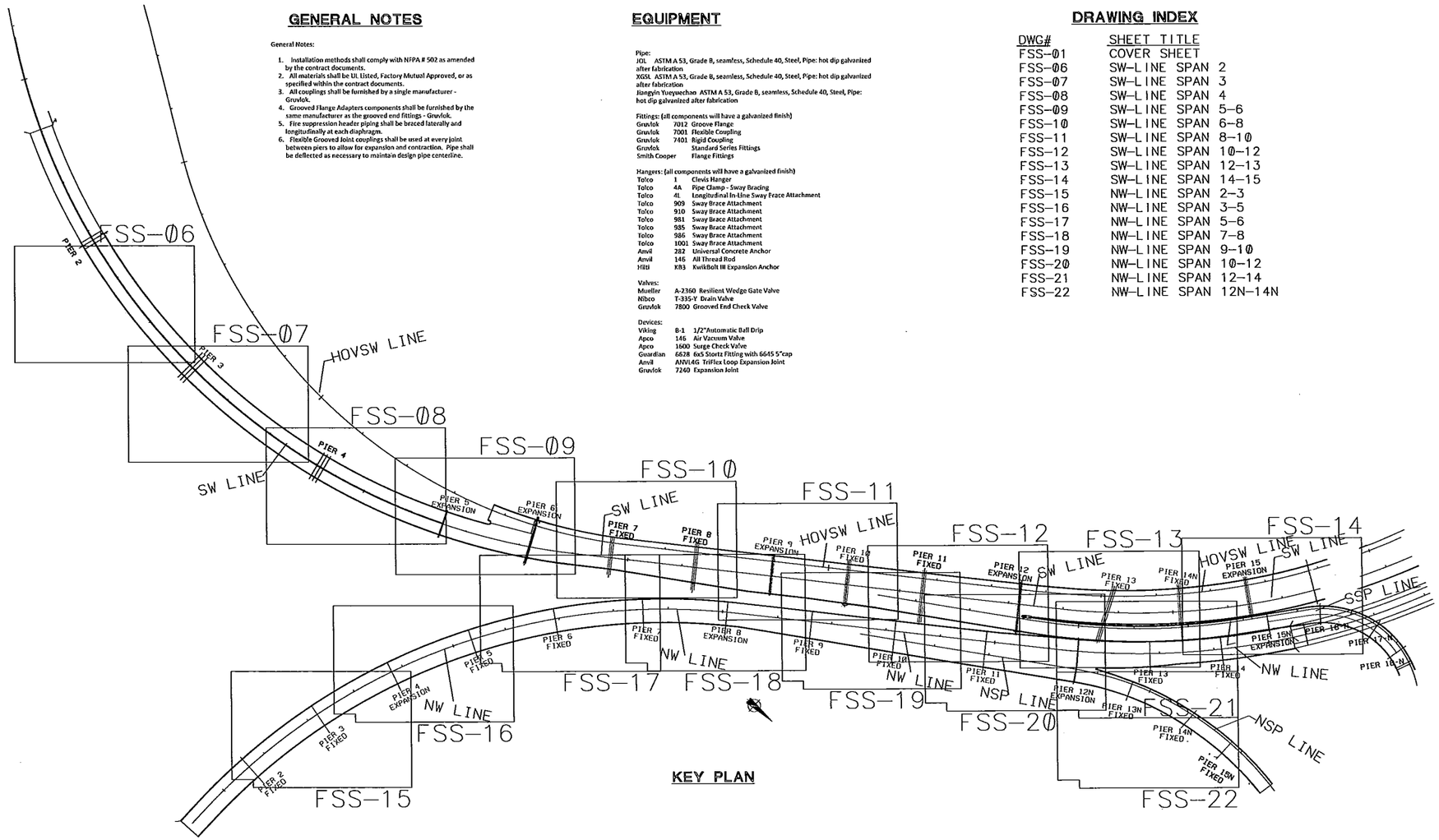
Mueller	A-2360	Resilient Wedge Gate Valve
Nibco	T-335-Y	Drain Valve
Gruvlok	7800	Grooved End Check Valve

Devices:

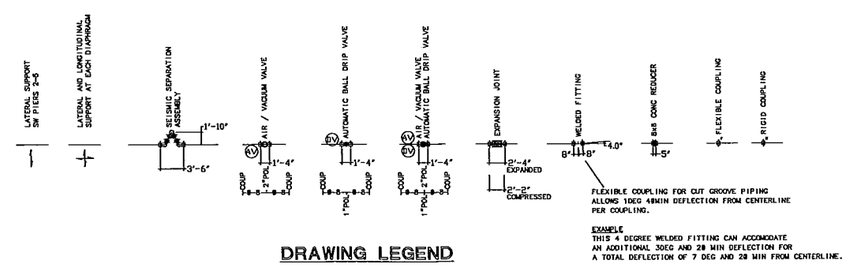
Viking	B-1	1/2"Automatic Ball Drip
Apco	145	Air Vacuum Valve
Apco	1600	Surge Check Valve
Guardian	6528	6x5 Stortz Fitting with 6645 5"cap
Anvil	ANVL4G	TriFlex Loop Expansion Joint
Gruvlok	7240	Expansion Joint

DRAWING INDEX

DWG#	SHEET TITLE
FSS-01	COVER SHEET
FSS-06	SW-LINE SPAN 2
FSS-07	SW-LINE SPAN 3
FSS-08	SW-LINE SPAN 4
FSS-09	SW-LINE SPAN 5-6
FSS-10	SW-LINE SPAN 6-8
FSS-11	SW-LINE SPAN 8-10
FSS-12	SW-LINE SPAN 10-12
FSS-13	SW-LINE SPAN 12-13
FSS-14	SW-LINE SPAN 14-15
FSS-15	NW-LINE SPAN 2-3
FSS-16	NW-LINE SPAN 3-5
FSS-17	NW-LINE SPAN 5-6
FSS-18	NW-LINE SPAN 7-8
FSS-19	NW-LINE SPAN 9-10
FSS-20	NW-LINE SPAN 10-12
FSS-21	NW-LINE SPAN 12-14
FSS-22	NW-LINE SPAN 12N-14N



KEY PLAN



DRAWING LEGEND

CONTACT INFO

FIRESHIELD
253-851-0030
Fax: 253-851-9782
P.O. BOX 2389
Gig Harbor, WA 98335
www.fireshieldinc.com

PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG			
SUPERVISOR:				
DESIGNED BY:				
CHECKED BY:				
DETAILED BY: MOREN				
BRIDGE PROJ ENGR:				
PRELIM PLAN BY:				
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER 07C546				

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

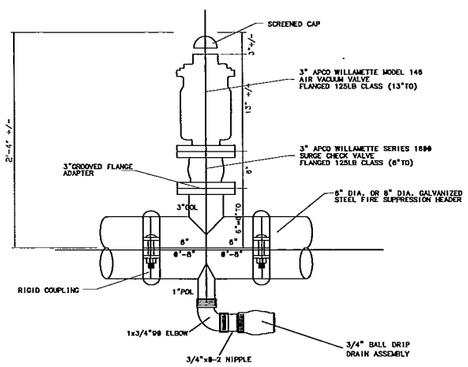
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY COVER SHEET

FIRE SUPPRESSION SYSTEM DETAILED PLAN

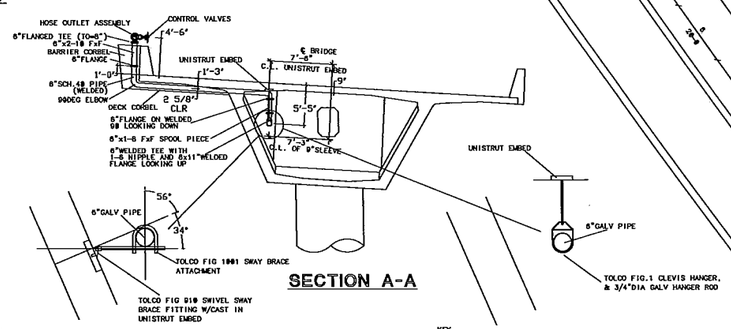
BRIDGE SHEET NO. FSS-01

SHEET OF SHEETS



AIR/VACUUM VALVE ASSEMBLY

PER WSDOT RF1#216 W/DRAIN



SECTION A-A

KEY
FSS HEADER

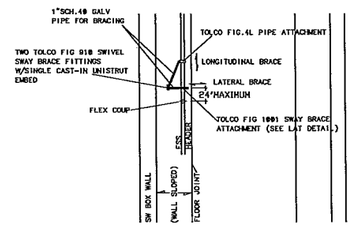
LATERAL SUPPORT DETAIL

LATERAL BRACES TO BE INSTALLED WITHIN 24" OF EVERY OTHER COUPLING BETWEEN SW PIERS 2 AND 5

KEY
FSS HEADER

VERTICAL SUPPORT DETAIL

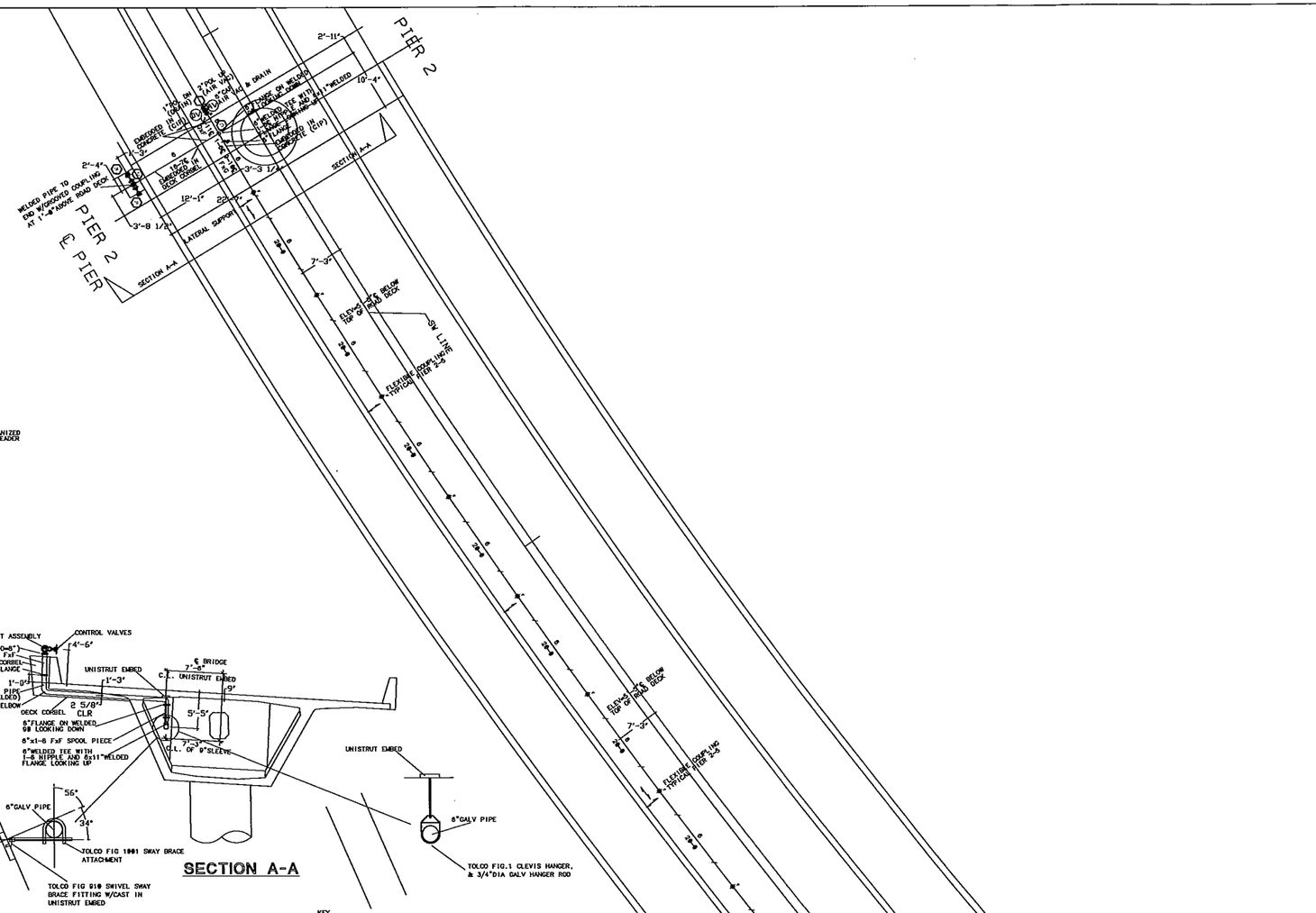
EVERY 10'-0" BETWEEN PIERS 2-5



KEY
FSS HEADER

LONGITUDINAL SUPPORT DETAIL

LOCATED AT EVERY 3RD LATERAL SUPPORT FOR 8"DIA FSS PIPE
LOCATED AT EVERY 2ND LATERAL SUPPORT FOR 8"DIA FSS PIPE



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

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DETAILED BY: MOREN									
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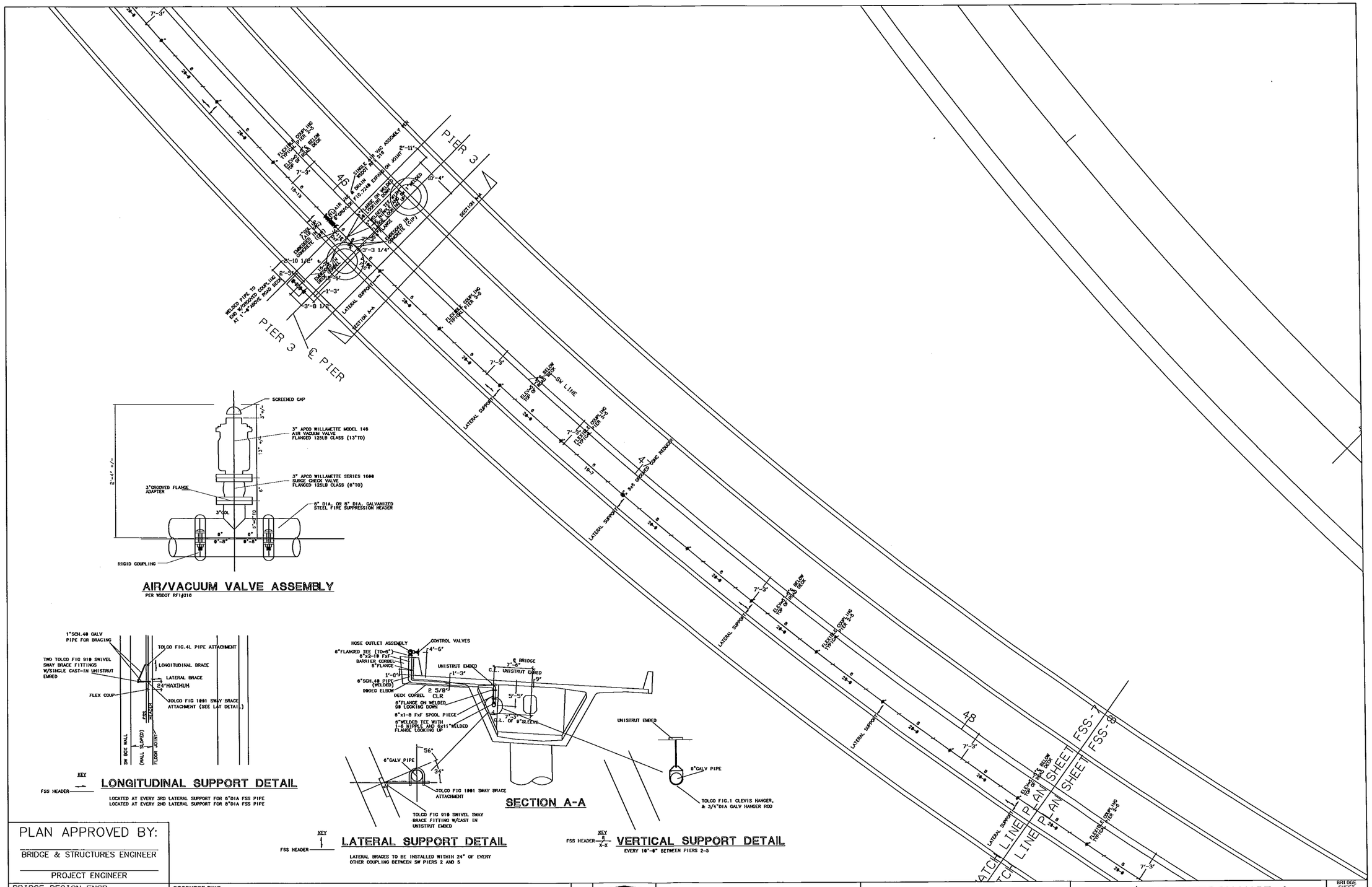
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY SW LINE PIER/SPAN 2

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-06

SHEET OF SHEETS



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BRIDGE & STRUCTURES ENGINEER

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BRIDGE AND STRUCTURES OFFICE

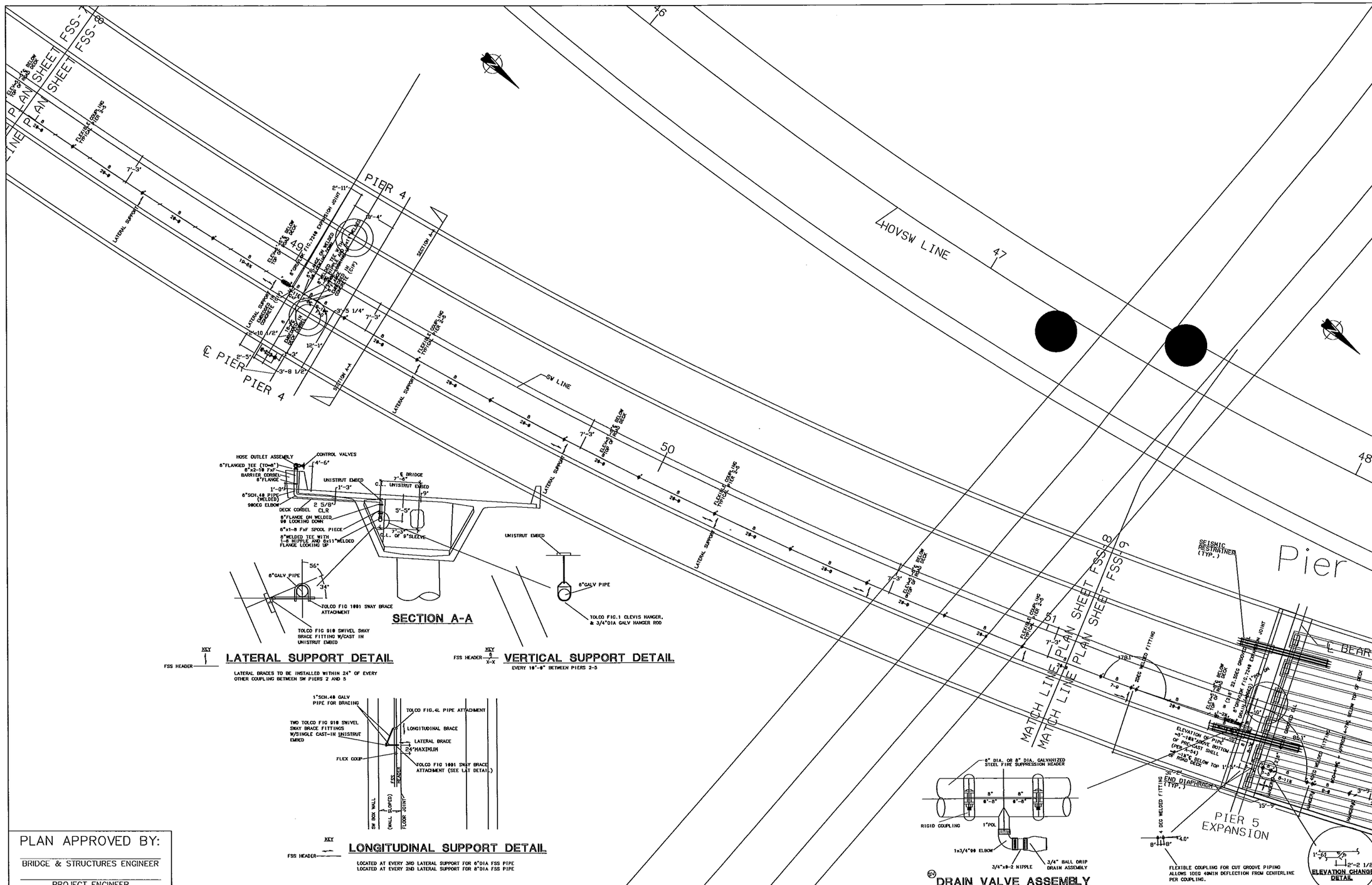
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY SW LINE PIER/SPAN 3

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-07

SHEET OF SHEETS



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

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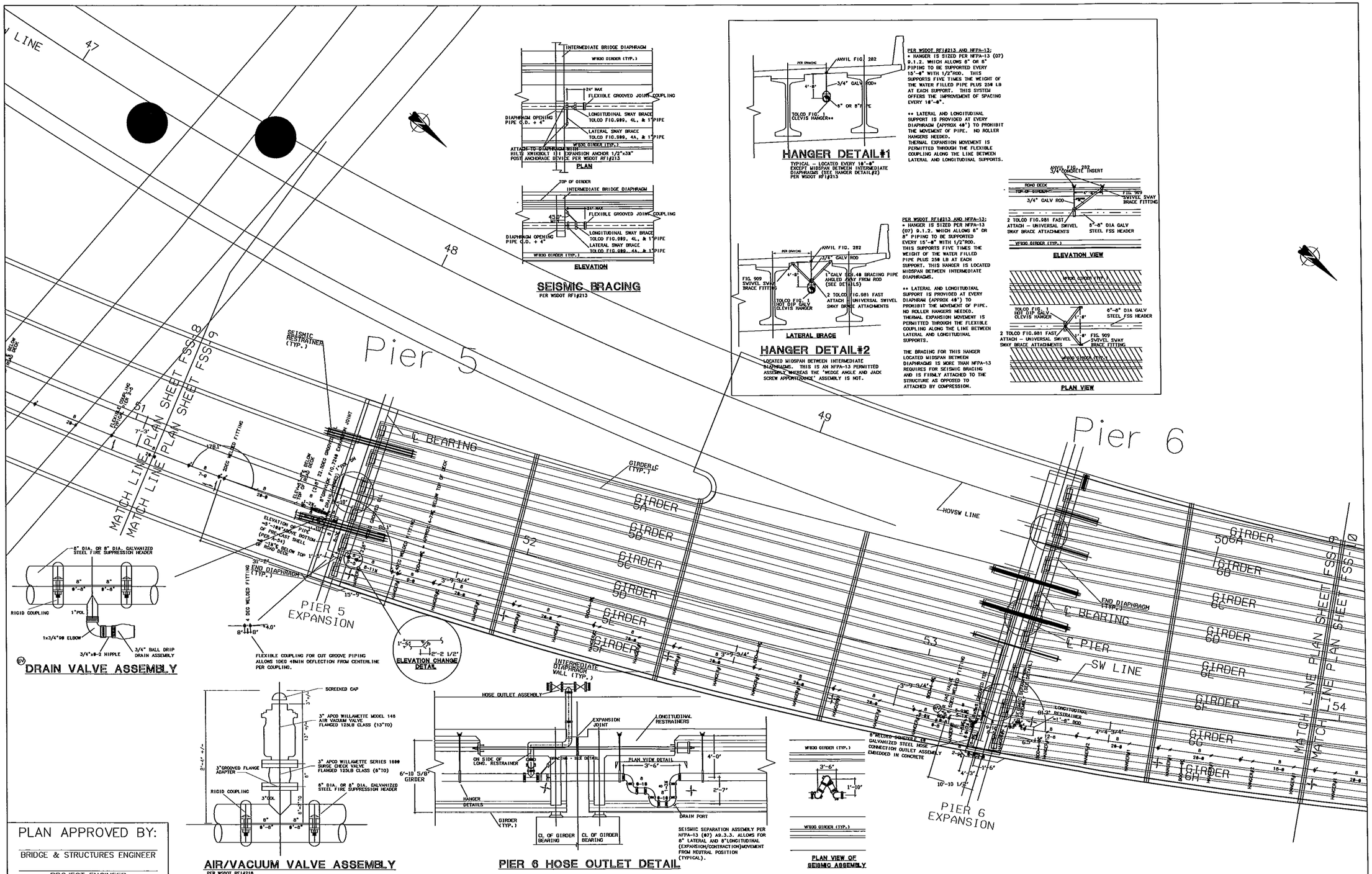
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY SW LINE PIER/SPAN 4

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-08

SHEET OF SHEETS



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG			
SUPERVISOR:				
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DETAILED BY: MOREN				
BRIDGE PROJ ENGR:				
PRELIM PLAN BY:				
ARCHICTECT/SPECIALIST:	DATE	REVISION	BY	APPD

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
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BRIDGE AND STRUCTURES OFFICE

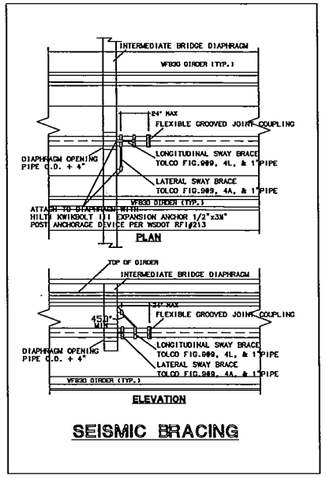
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY
SW LINE PIER/SPAN 5&6

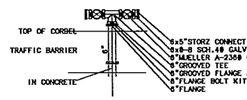
FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-09

SHEET OF SHEETS

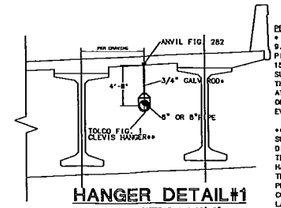


SEISMIC BRACING



HOSE STATION DETAIL

TYPICAL PIER

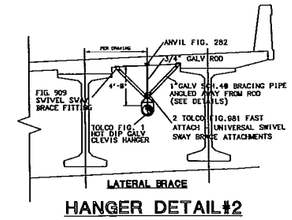


HANGER DETAIL#1

TYPICAL – LOCATED EVERY 18'-8" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

PER WSDOT RF1#213 AND NFPA-13;
+ HANGER IS SIZED PER NFPA-13 (D7) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 18'-0".

++ LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 48') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED. THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.



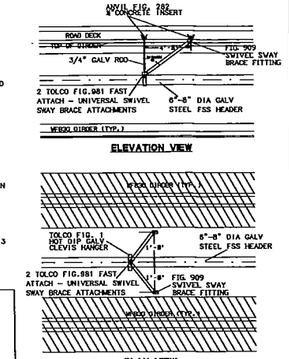
HANGER DETAIL#2

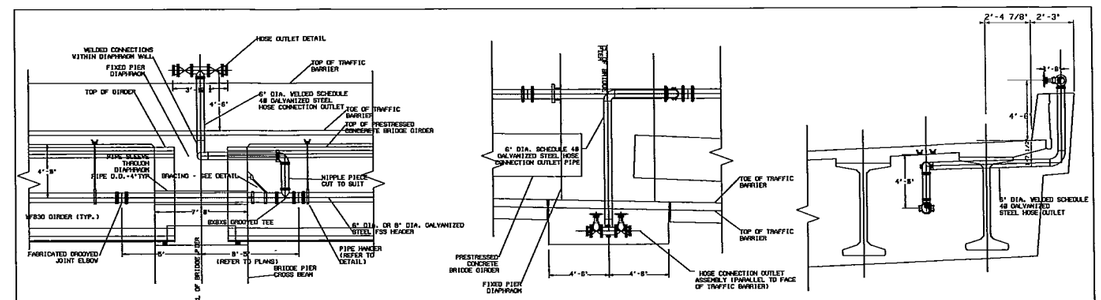
LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE 'WEDGE ANGLE AND JACK SCREW APPURTENANCE' ASSEMBLY IS NOT.

PER WSDOT RF1#213 AND NFPA-13;
+ HANGER IS SIZED PER NFPA-13 (D7) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

++ LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 48') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED. THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

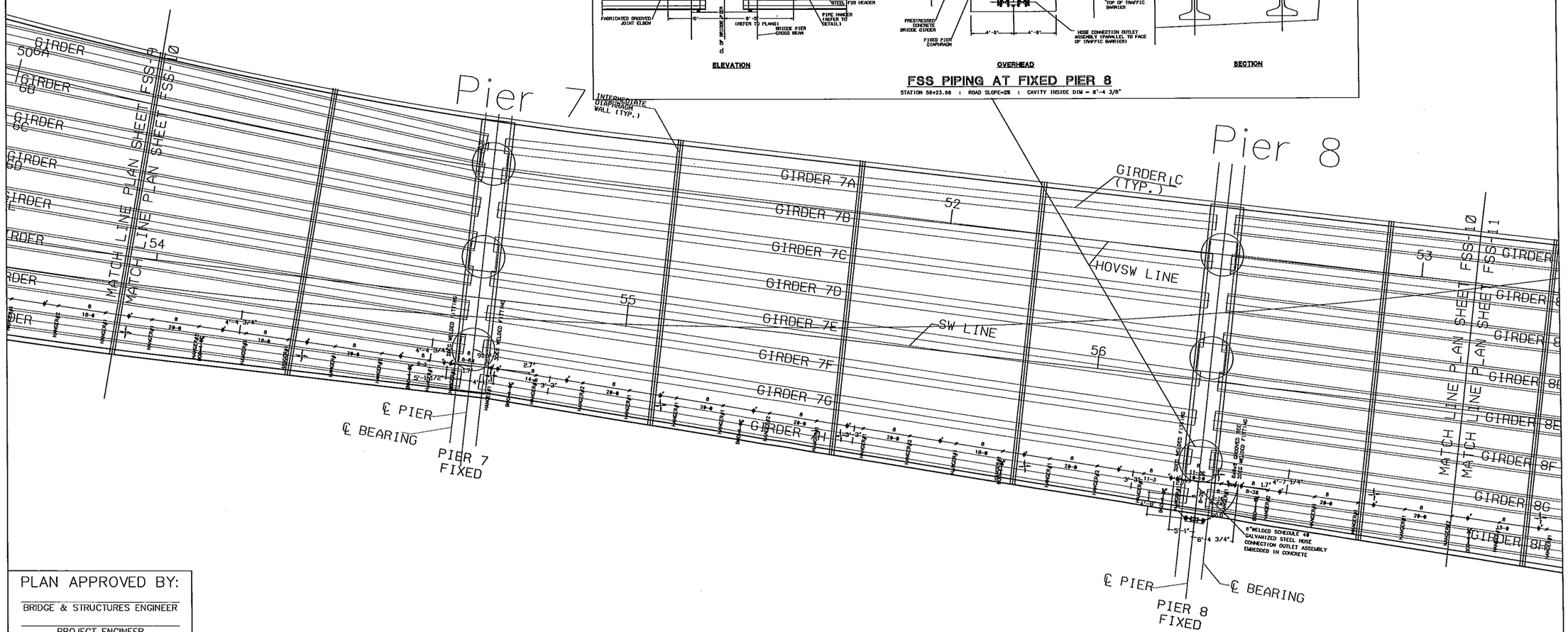
THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FINALY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.





FSS PIPING AT FIXED PIER 8

STATION 56+23.88 : ROAD SLOPE=2% : CAVITY INSIDE DIM = 8'-4 3/8"



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG			
SUPERVISOR:				
DESIGNED BY:				
CHECKED BY:				
DETAILED BY: MOREN				
BRIDGE PROJ ENGR:				
PRELIM PLAN BY:				
ARCHICTECT/SPECIALIST:	DATE	REVISION	BY	APPD

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER 07C546				

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

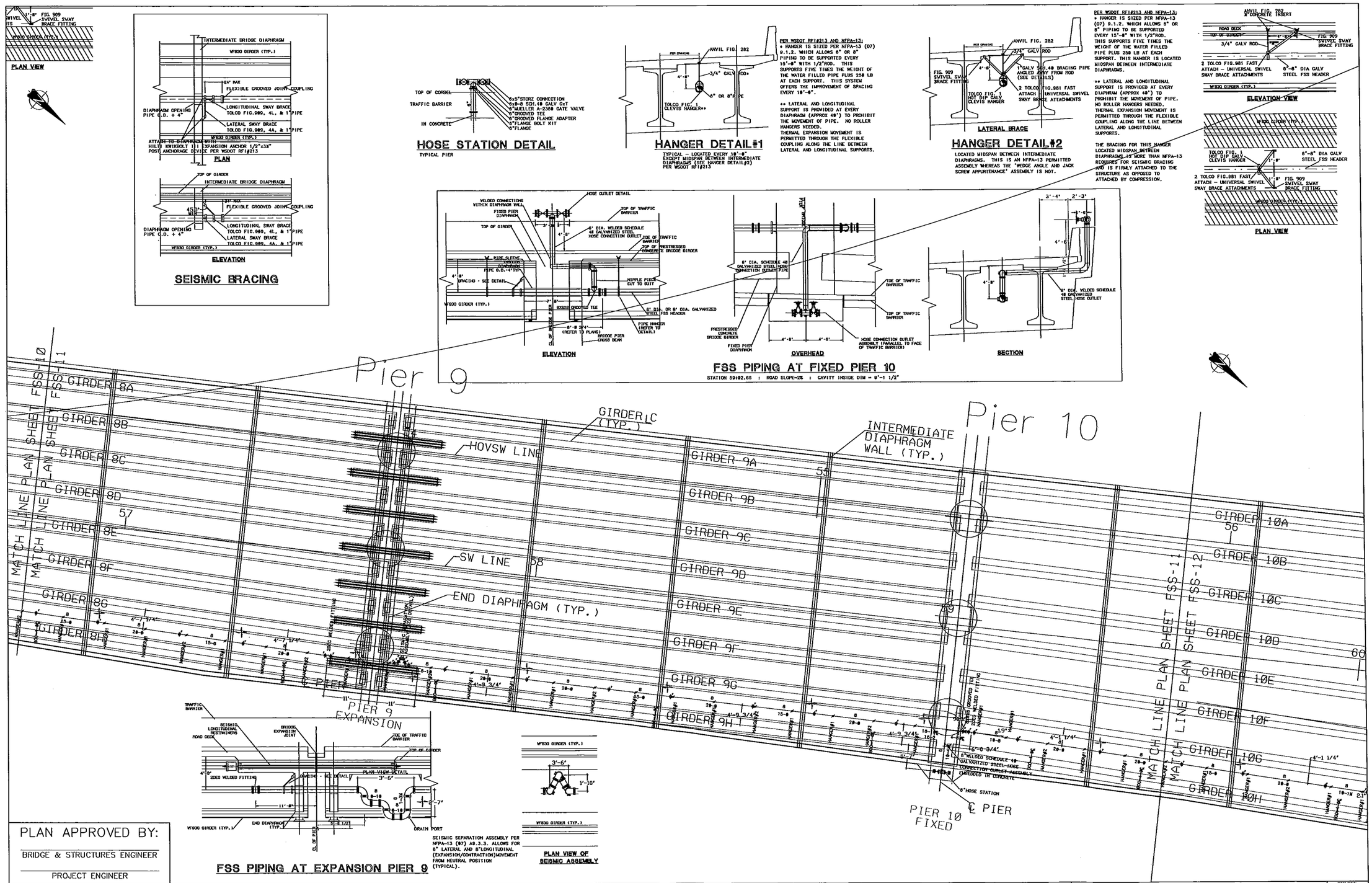
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY SW LINE PIER/SPAN 6-8

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-10

SHEET OF SHEETS



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
SUPERVISOR:					10	WASH			
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BRIDGE PROJ ENGR:									
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FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

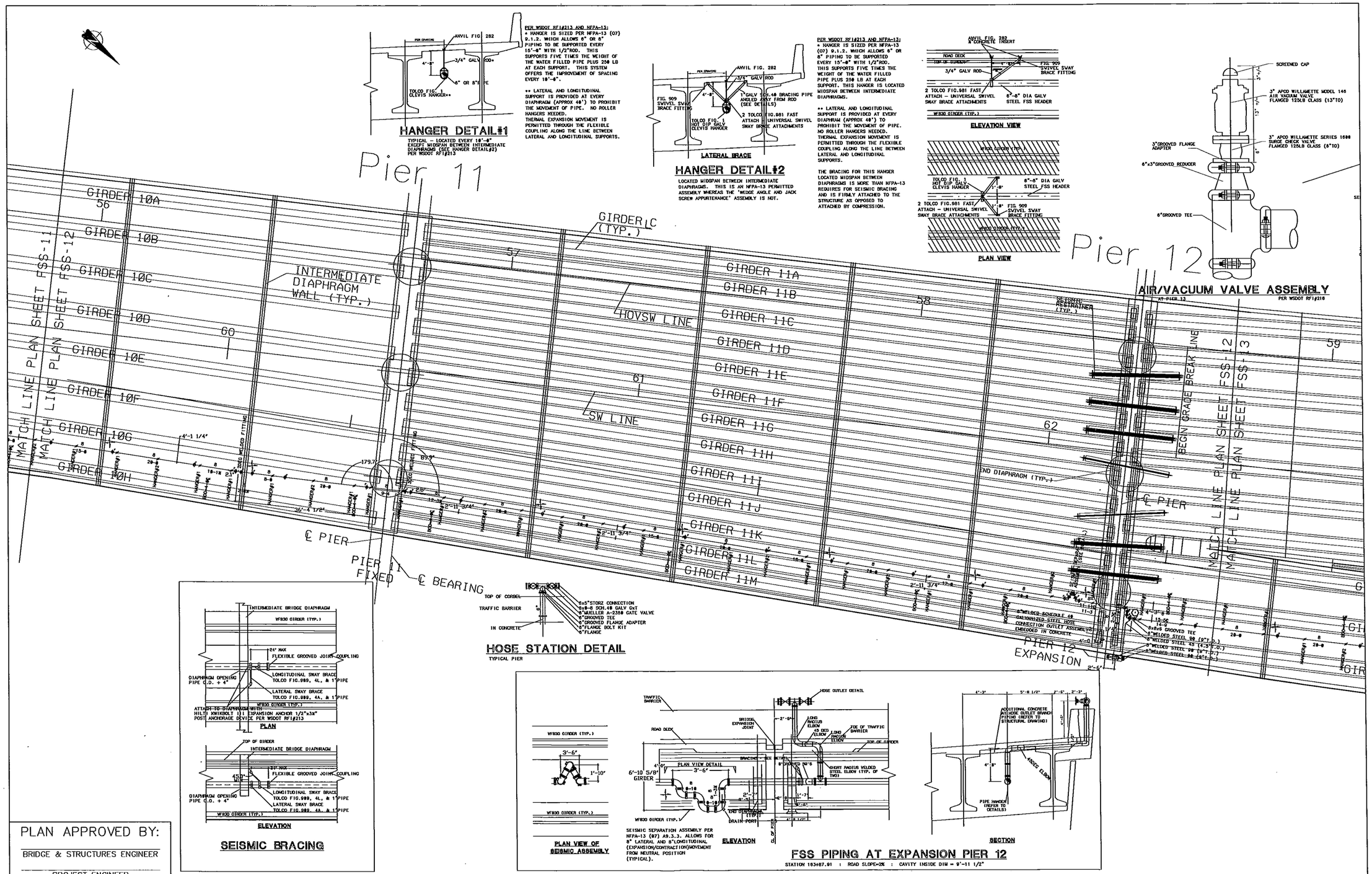
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY SW LINE PIER/SPAN 8-10

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-11

SHEET OF SHEETS



HANGER DETAIL#1

TYPICAL – LOCATED EVERY 18'-4" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-8" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 18'-4".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 48') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE "WEDGE ANGLE AND JACK SCREW APPURTENANCE" ASSEMBLY IS NOT.

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-8" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 48') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.

AIR/VACUUM VALVE ASSEMBLY

AT PIER 13 PER WSDOT RF1#216

SEISMIC BRACING

HOSE STATION DETAIL

TYPICAL PIER

FSS PIPING AT EXPANSION PIER 12

STATION 163487.91 : ROAD SLOPE=2% : CAVITY INSIDE DIM = 9'-11 1/2"

PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG								
SUPERVISOR:									
DESIGNED BY:									
CHECKED BY:									
DETAILED BY: MOREN									
BRIDGE PROJ ENGR:									
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BRIDGE AND STRUCTURES OFFICE

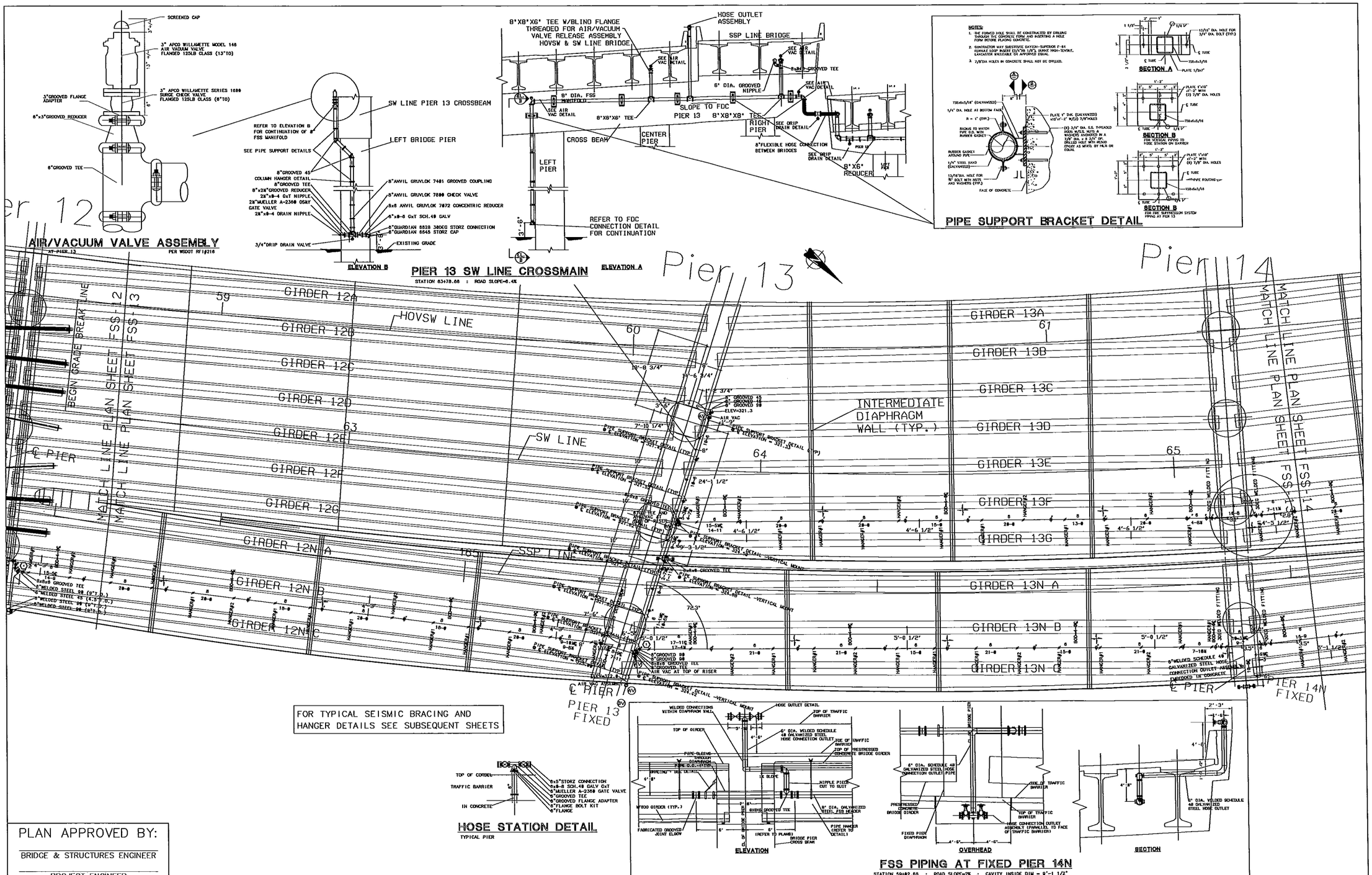
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY SW LINE PIER/SPAN 10-12

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-12

SHEET OF SHEETS



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

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BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

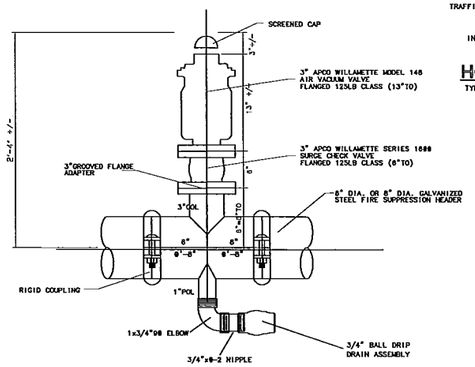
I-5/SR16 INTERCHANGE & WB NALLEY VALLEY

SW+SSP LINE PIER/SPAN 12-13

FIRE SUPPRESSION SYSTEM DETAILED PLAN

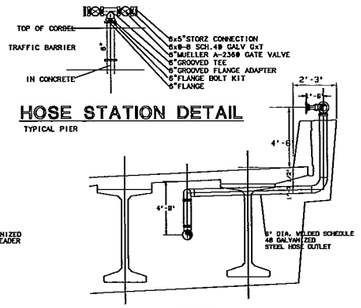
BRIDGE SHEET NO. FSS-13

SHEET OF SHEETS



AIR/VACUUM VALVE ASSEMBLY

PER WSDOT RF1#216 W/DRAIN

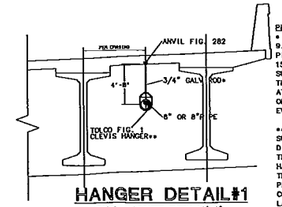


HOSE STATION DETAIL

TYPICAL PIER

FSS PIPING AT EXPANSION PIER 15

STATION 16+14.89 : ROAD SLOPE=6% : CAVITY INSIDE DIM = 9'-7 1/2"

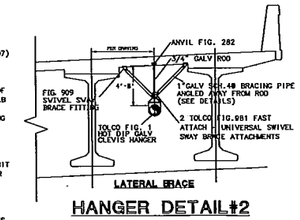


HANGER DETAIL#1

TYPICAL - LOCATED EVERY 10'-8" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 8" OR 8" PIPING TO BE SUPPORTED EVERY 15'-8" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 18'-8".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 48") TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.



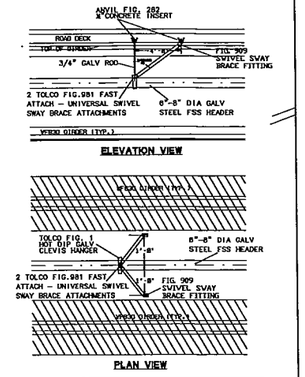
HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE "WEDGE ANGLE AND JACK SCREW APPURTENANCE" ASSEMBLY IS NOT.

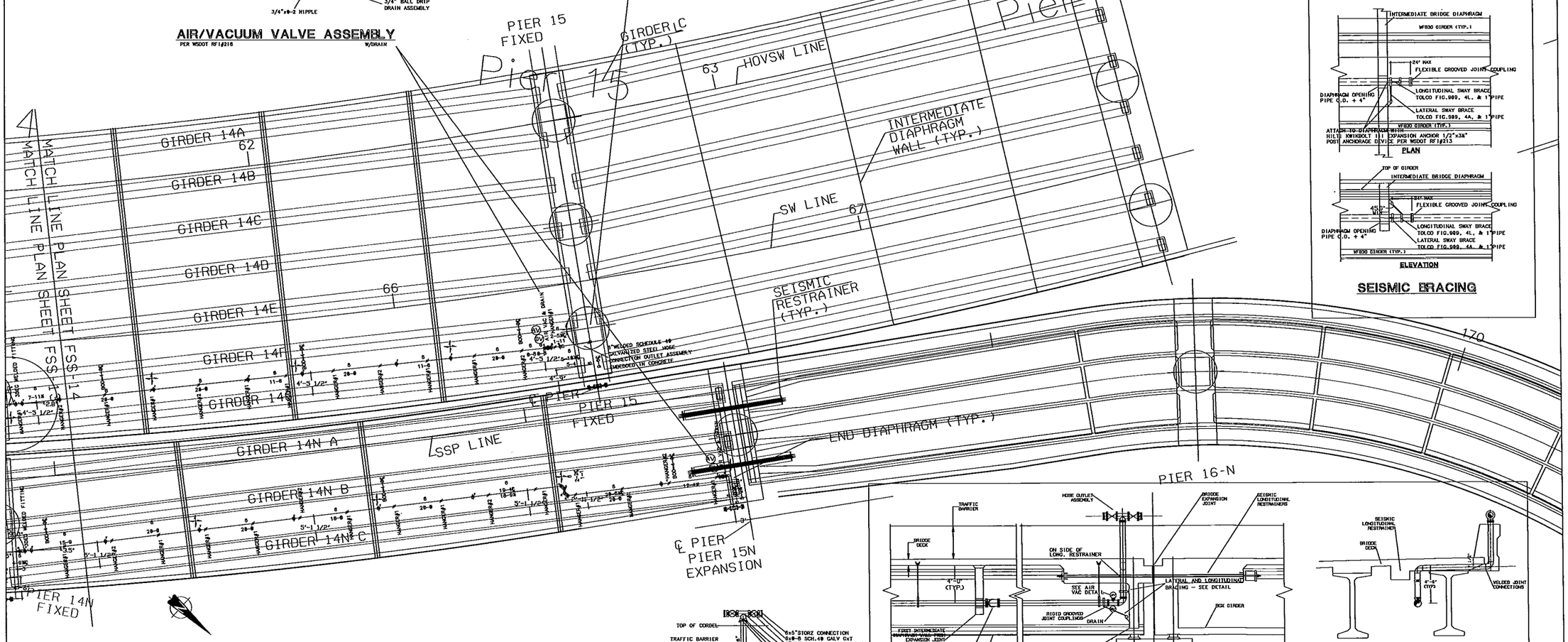
PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 8" OR 8" PIPING TO BE SUPPORTED EVERY 15'-4" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

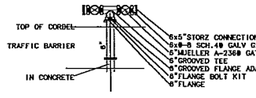
** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 48") TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.



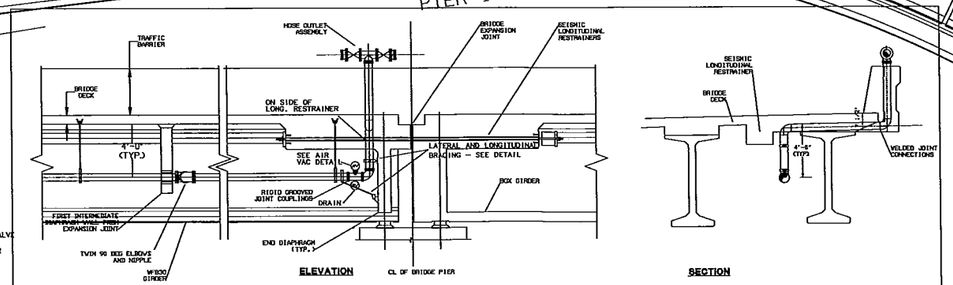
SEISMIC BRACING





HOSE STATION DETAIL

TYPICAL PIER



FSS PIPING AT EXPANSION PIER 15N

STATION 18+43.29 : ROAD SLOPE=-0.5% : CAVITY INSIDE DIM = 18'-2"

PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
SUPERVISOR:					10	WASH			
DESIGNED BY:									
CHECKED BY:					JOB NUMBER 07C546				
DETAILED BY: MOREN									
BRIDGE PROJ ENGR:									
PRELIM PLAN BY:									
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD					

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY
SW+SSP LINE PIER/SPAN 14-15

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-14

SHEET OF SHEETS

FSS PIPING AT FIXED PIER 2

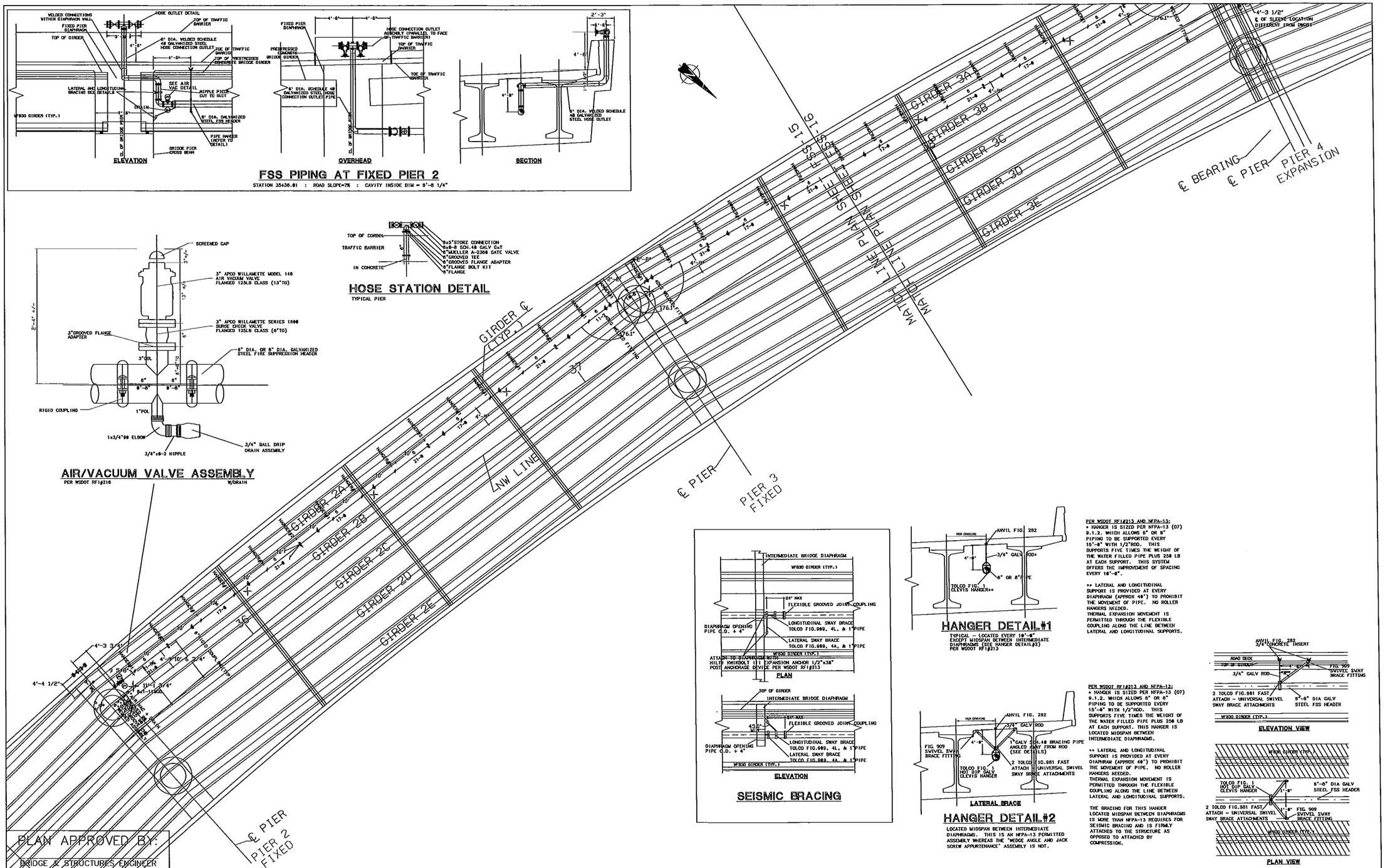
STATION 35+36.01 : ROAD SLOPE=7% : CAVITY INSIDE DIM = 8'-8 1/4"

AIR/VACUUM VALVE ASSEMBLY

PER WSDOT RF1#218 W/DRAIN

HOSE STATION DETAIL

TYPICAL PIER



SEISMIC BRACING

HANGER DETAIL#1

TYPICAL – LOCATED EVERY 10'-8" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 10'-4".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE "WEDGE ANGLE AND JACK SCREW APPURTENANCE" ASSEMBLY IS NOT.

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.

PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG							
SUPERVISOR:								
DESIGNED BY:								
CHECKED BY:								
DETAILED BY: MOREN								
BRIDGE PROJ ENGR:								
PRELIM PLAN BY:								
ARCHICTECT/SPECIALIST:	DATE	REVISION	BY	APPD				

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER 07C546				

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

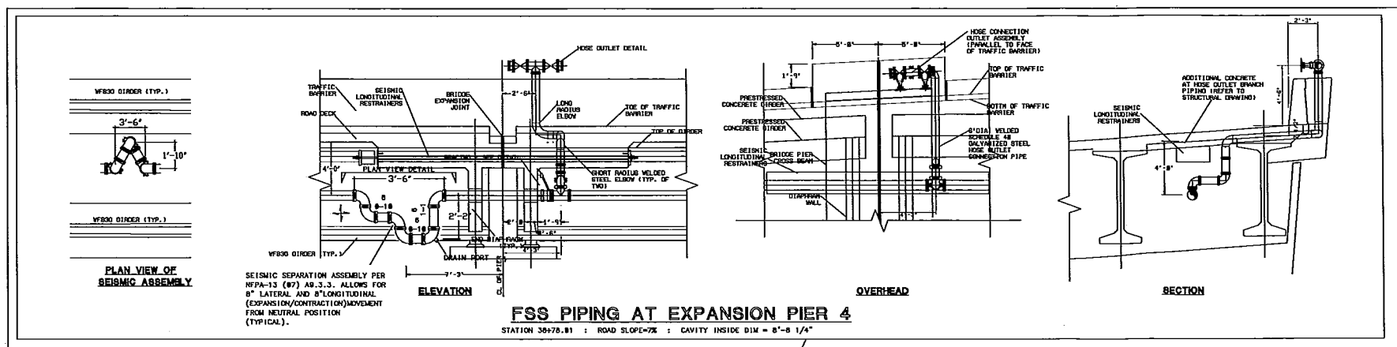
I-5/SR16 INTERCHANGE & WB NALLEY VALLEY

NW LINE PIER/SPAN 2-3

FIRE SUPPRESSION SYSTEM DETAILED PLAN

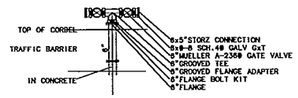
BRIDGE SHEET NO. FSS-15

SHEET OF SHEETS



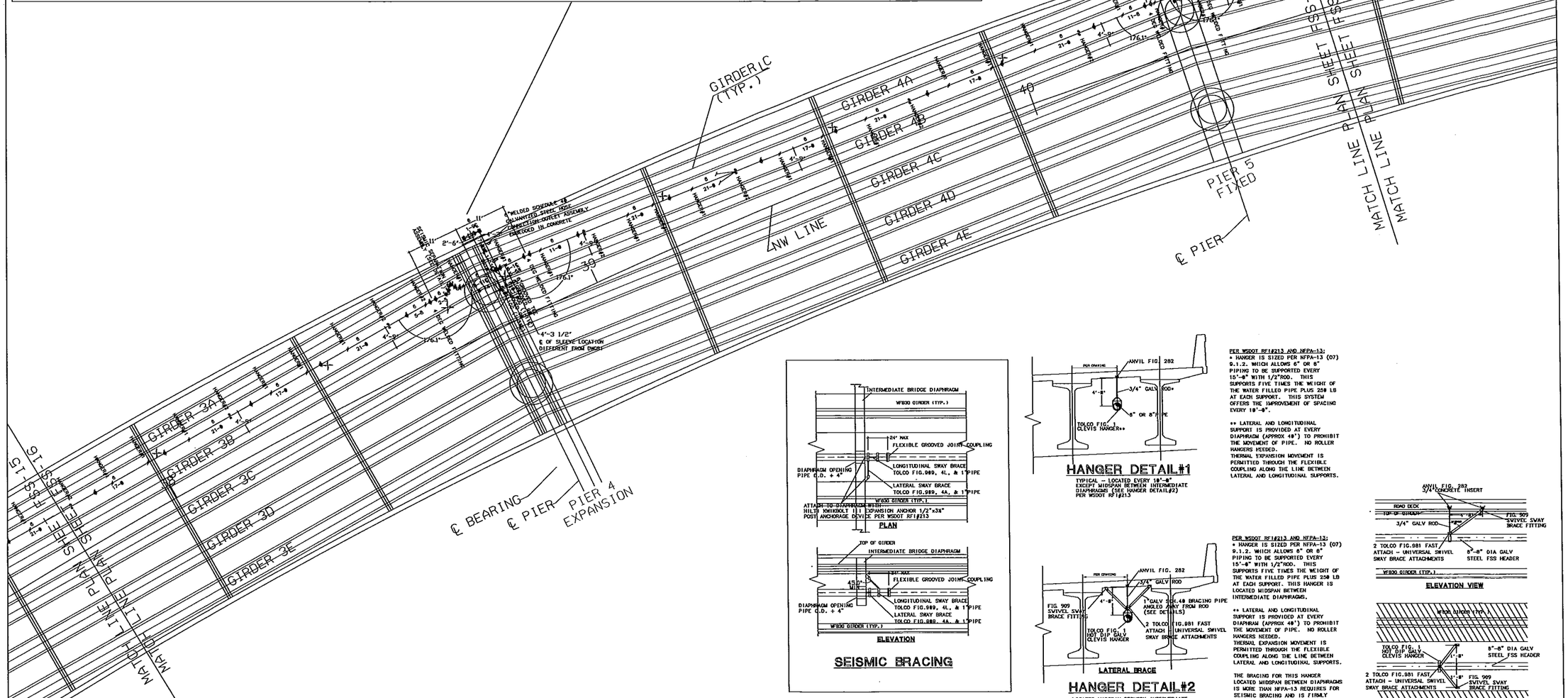
FSS PIPING AT EXPANSION PIER 4

STATION 36+78.81 : ROAD SLOPE=7% : CAVITY INSIDE DIM = 8'-8 1/4"



HOSE STATION DETAIL

TYPICAL PIER



SEISMIC BRACING

HANGER DETAIL#1

TYPICAL – LOCATED EVERY 19'-8" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-6" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 19'-8".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 48') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

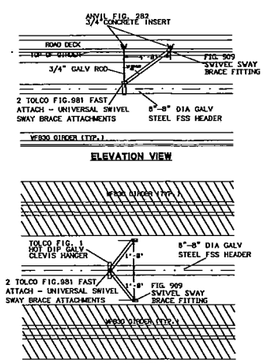
HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE 'WEDGE ANGLE AND JACK SCREW APPURTENANCE' ASSEMBLY IS NOT.

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-6" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 48') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
SUPERVISOR:					10	WASH			
DESIGNED BY:									
CHECKED BY:									
DETAILED BY: MOREN					JOB NUMBER 07C546				
BRIDGE PROJ ENGR:									
PRELIM PLAN BY:									
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD					

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

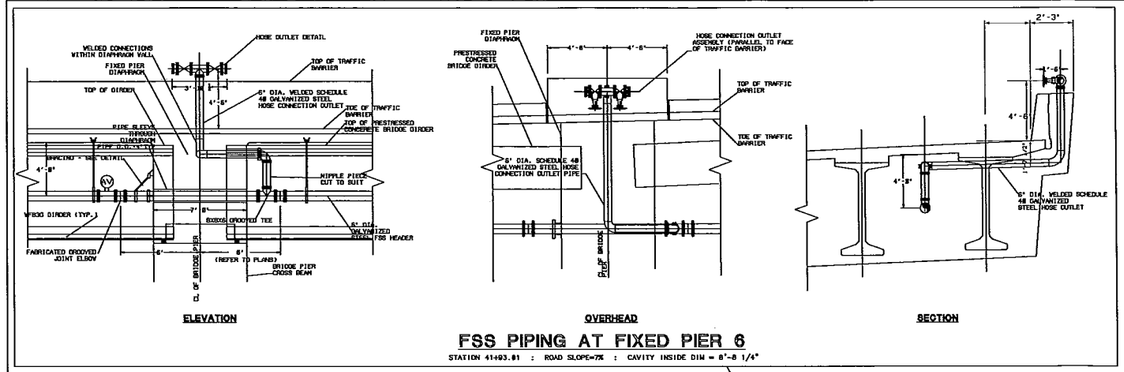
I-5/SR16 INTERCHANGE & WB NALLEY VALLEY

NW LINE PIER/SPAN 3-5

FIRE SUPPRESSION SYSTEM DETAILED PLAN

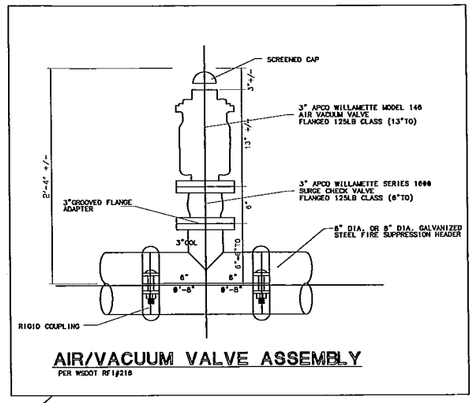
BRIDGE SHEET NO. FSS-16

SHEET OF SHEETS



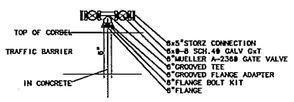
FSS PIPING AT FIXED PIER 6

STATION 41493.81 : ROAD SLOPE=7% : CAVITY INSIDE DIM = 8'-8 1/4"



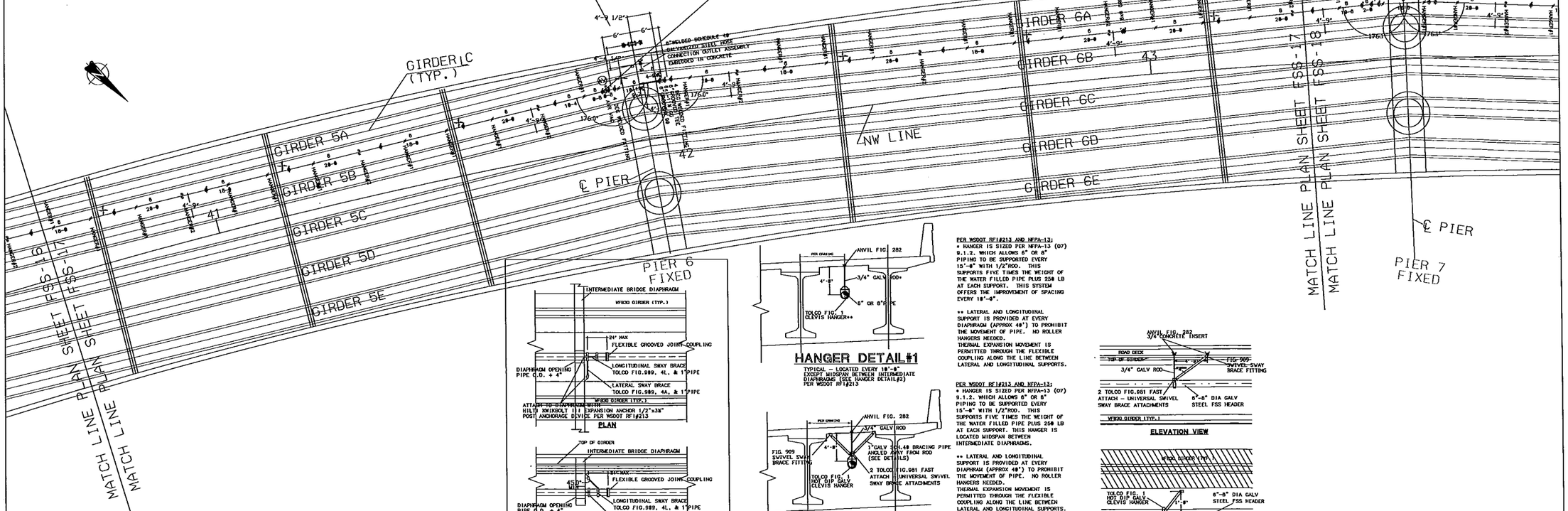
AIR/VACUUM VALVE ASSEMBLY

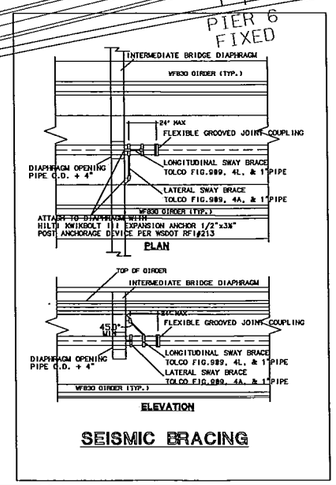
PER WSDOT RF1#218



HOSE STATION DETAIL

TYPICAL PIER





SEISMIC BRACING

HANGER DETAIL#1

TYPICAL – LOCATED EVERY 10'-0" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE "WEDGE ANGLE AND JACK SCREW APPURTENANCE" ASSEMBLY IS NOT.

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 10'-0".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
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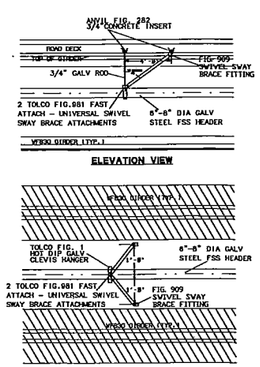


PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
SUPERVISOR:					10	WASH			
DESIGNED BY:									
CHECKED BY:									
DETAILED BY: MOREN					JOB NUMBER 07C546				
BRIDGE PROJ ENGR:									
PRELIM PLAN BY:									
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD					

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

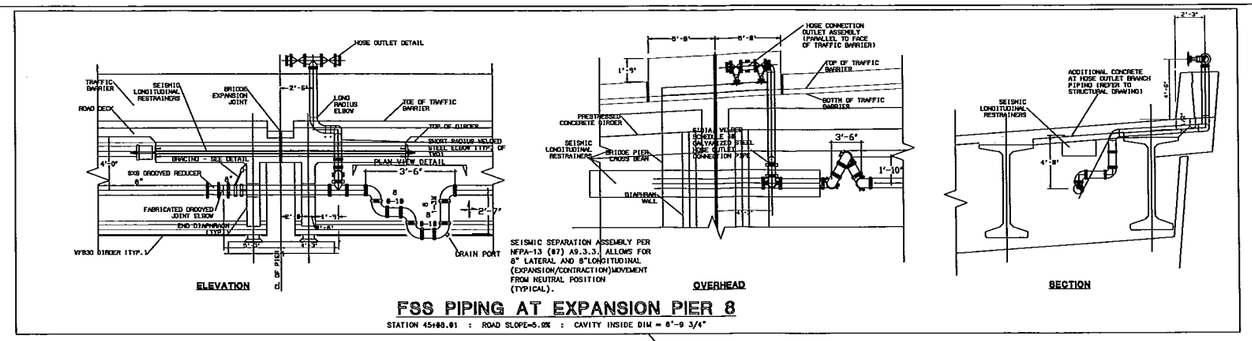
I-5/SR16 INTERCHANGE & WB NALLEY VALLEY

NW LINE PIER/SPAN 5-6

FIRE SUPPRESSION SYSTEM DETAILED PLAN

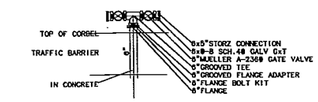
BRIDGE SHEET NO. FSS-17

SHEET OF SHEETS



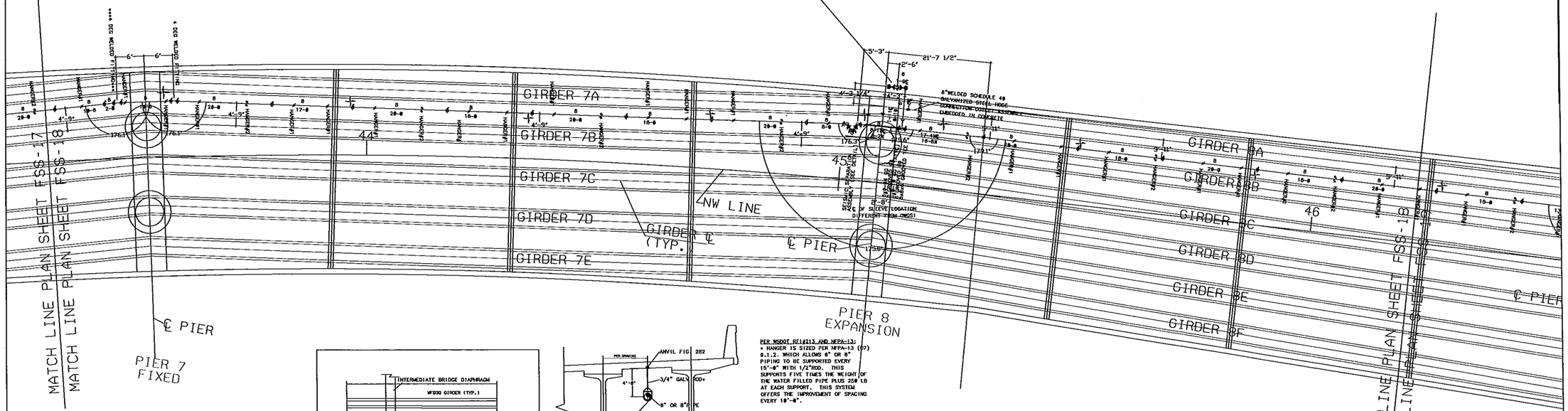
FSS PIPING AT EXPANSION PIER 8

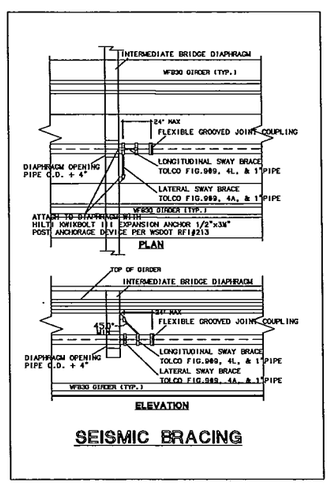
STATION 45+80.01 : ROAD SLOPE=5.0% : CAVITY INSIDE DIM = 8'-9 3/4"



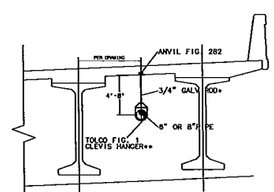
HOSE STATION DETAIL

TYPICAL PIER





SEISMIC BRACING

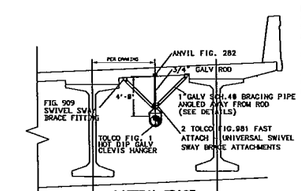


HANGER DETAIL#1

TYPICAL - LOCATED EVERY 10'-0" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1@213

PER WSDOT RF1@213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 10'-0".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.



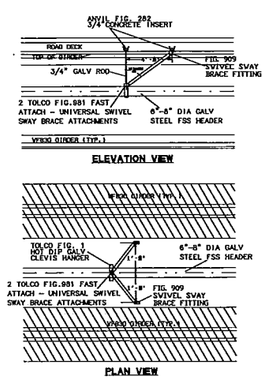
HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE "WEDGE ANGLE AND JACK SCREW APPURTENANCE" ASSEMBLY IS NOT.

PER WSDOT RF1@213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
SUPERVISOR:					10	WASH			
DESIGNED BY:									
CHECKED BY:					JOB NUMBER				
DETAILED BY: MOREN					07C546				
BRIDGE PROJ ENGR:									
PRELIM PLAN BY:									
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD					

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

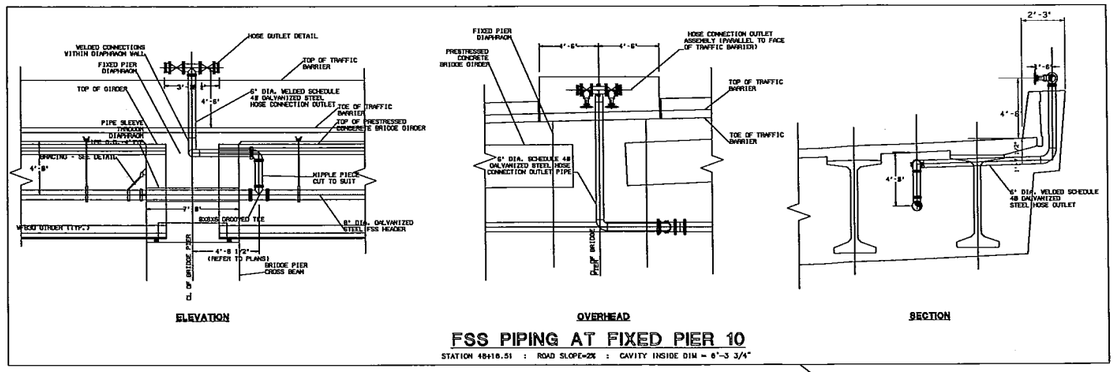
I-5/SR16 INTERCHANGE & WB NALLEY VALLEY

NW LINE PIER/SPAN 7-8

FIRE SUPPRESSION SYSTEM DETAILED PLAN

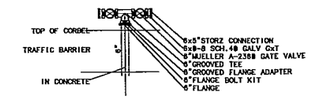
BRIDGE SHEET NO. FSS-18

SHEET OF SHEETS



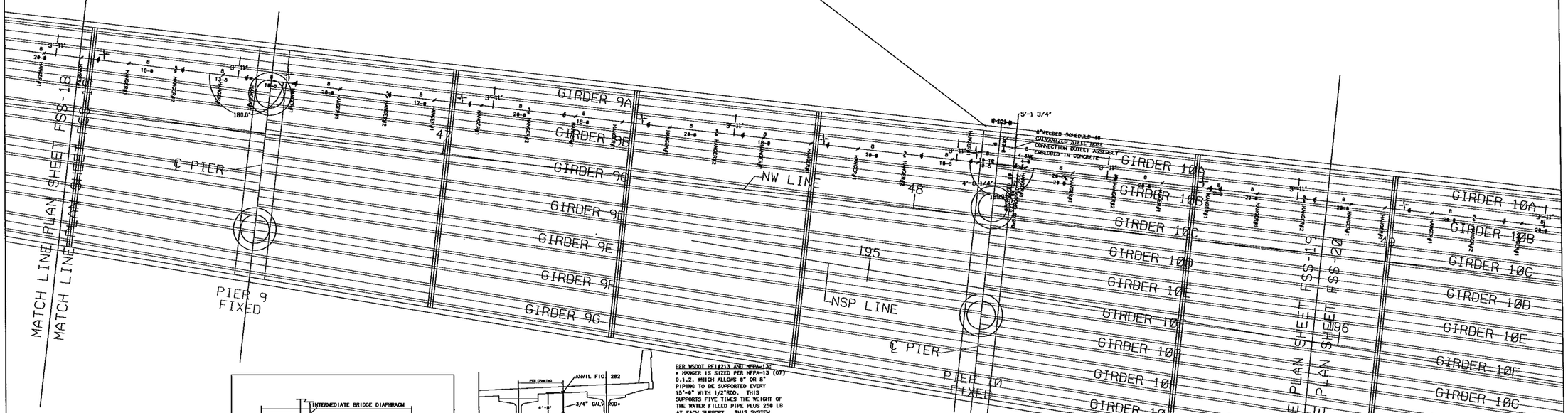
FSS PIPING AT FIXED PIER 10

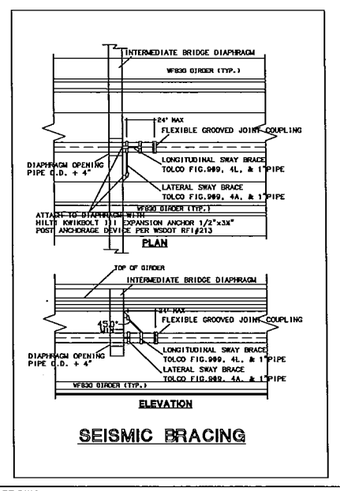
STATION 48+10.51 : ROAD SLOPE=2% : CAVITY INSIDE DIM = 6'-3 3/4"



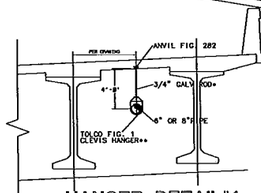
HOSE STATION DETAIL

TYPICAL PIER





SEISMIC BRACING

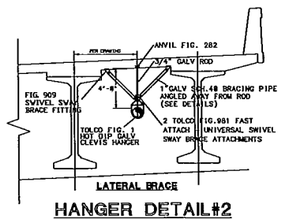


HANGER DETAIL#1

TYPICAL – LOCATED EVERY 10'-0" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RFI#213

PER WSDOT RFI#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 8" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 10'-0".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.



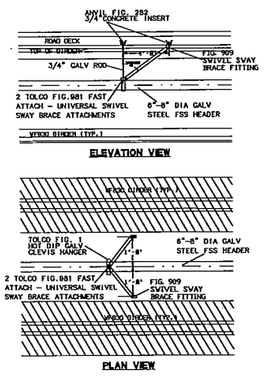
HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE "WEDGE ANGLE AND JACK SCREW APPURTENANCE" ASSEMBLY IS NOT.

PER WSDOT RFI#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 8" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.



PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG			
SUPERVISOR:				
DESIGNED BY:				
CHECKED BY:				
DETAILED BY: MOREN				
BRIDGE PROJ ENGR:				
PRELIM PLAN BY:				
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER 07C546				

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

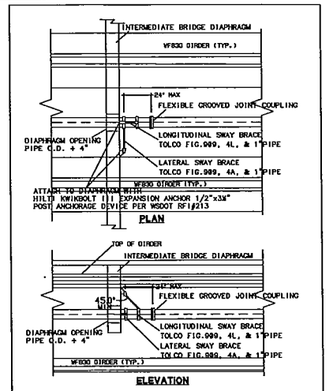
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY
NW LINE PIER/SPAN 9-10

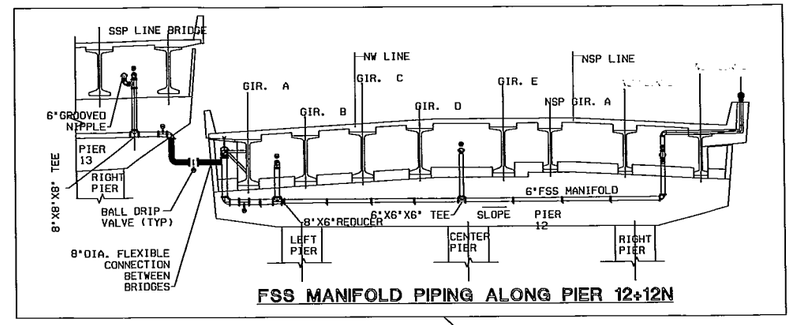
FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-19

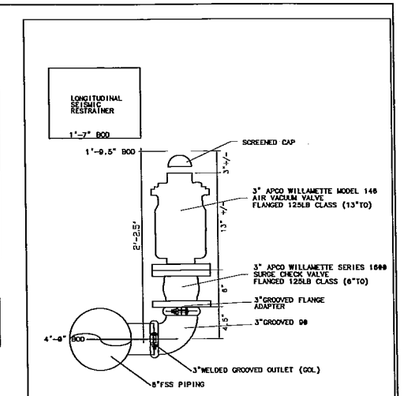
SHEET OF SHEETS



SEISMIC BRACING

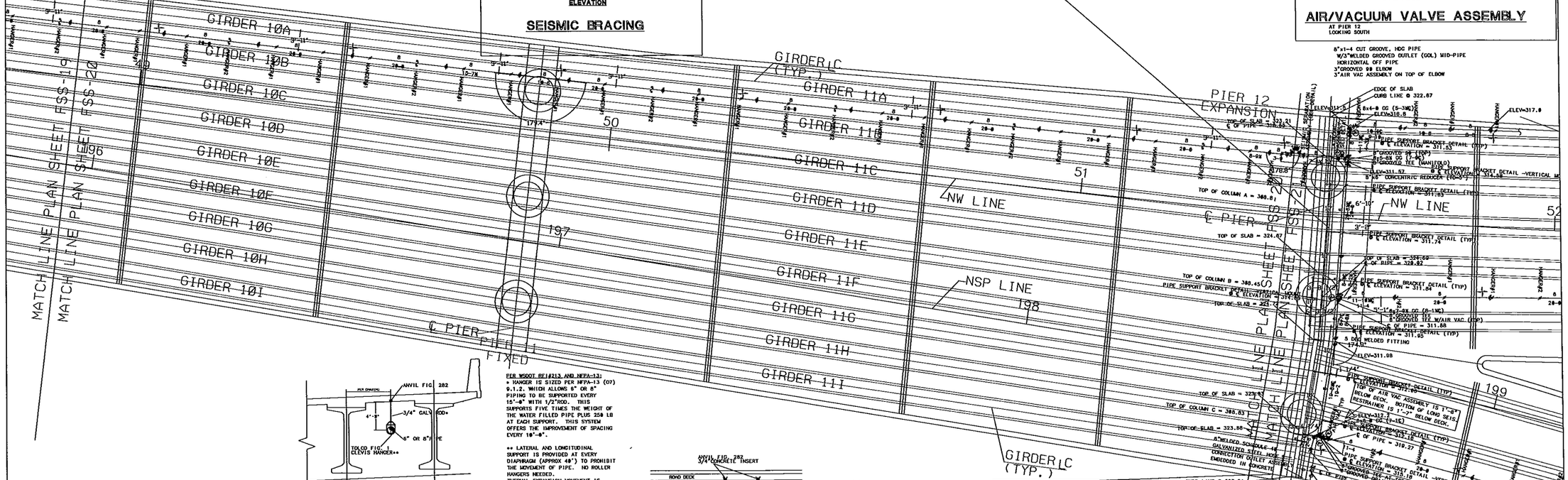


FSS MANIFOLD PIPING ALONG PIER 12+12N



AIR/VACUUM VALVE ASSEMBLY

AT PIER 12
LOOKING SOUTH

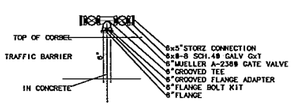


HANGER DETAIL#1

TYPICAL – LOCATED EVERY 10'-0" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

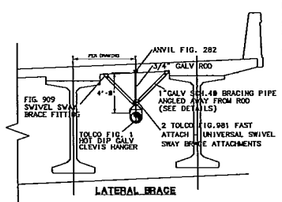
PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 10'-0".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.



HOSE STATION DETAIL

TYPICAL PIER



LATERAL BRACE

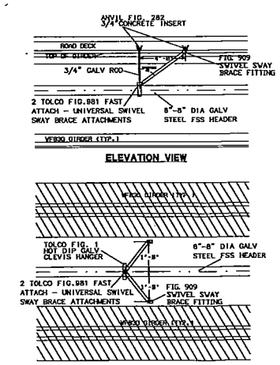
HANGER DETAIL#2

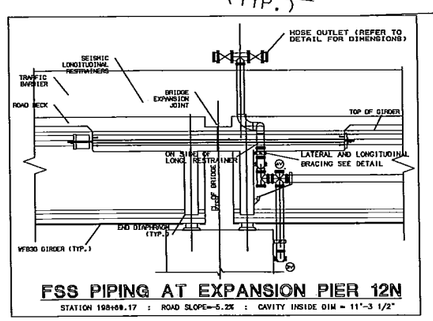
LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE "WEDGE ANGLE AND JACK SCREW APPURTENANCE" ASSEMBLY IS NOT.

PER WSDOT RF1#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 6" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

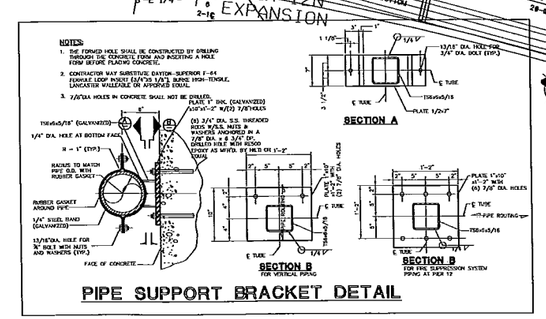
THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.





FSS PIPING AT EXPANSION PIER 12N

STATION 198+88.17 : ROAD SLOPE=-5.2% : CAVITY INSIDE DIM = 11"-3 1/2"



PIPE SUPPORT BRACKET DETAIL

PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG			
SUPERVISOR:				
DESIGNED BY:				
CHECKED BY:				
DETAILED BY: MOREN				
BRIDGE PROJ ENGR:				
PRELIM PLAN BY:				
ARCHICTECT/SPECIALIST:	DATE	REVISION	BY	APPD

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER 07C546				

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

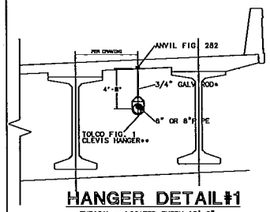
Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY
NW LINE PIER/SPAN 10-12

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-20

SHEET OF SHEETS

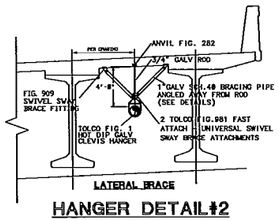


HANGER DETAIL#1

TYPICAL – LOCATED EVERY 10'-0" EXCEPT MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS (SEE HANGER DETAIL#2) PER WSDOT RF1#213

PER WSDOT RF1#213 AND NFPA-13:
+ HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 8" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 10'-0".

++ LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.



LATERAL BRACE

HANGER DETAIL#2

LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS. THIS IS AN NFPA-13 PERMITTED ASSEMBLY WHEREAS THE 'WEDGE ANGLE AND JACK SCREW APPURTENANCE' ASSEMBLY IS NOT.

PER WSDOT RF1#213 AND NFPA-13:
+ HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 8" OR 8" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS HANGER IS LOCATED MIDSPAN BETWEEN INTERMEDIATE DIAPHRAGMS.

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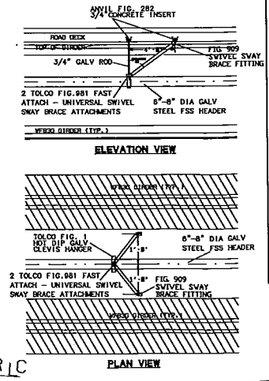
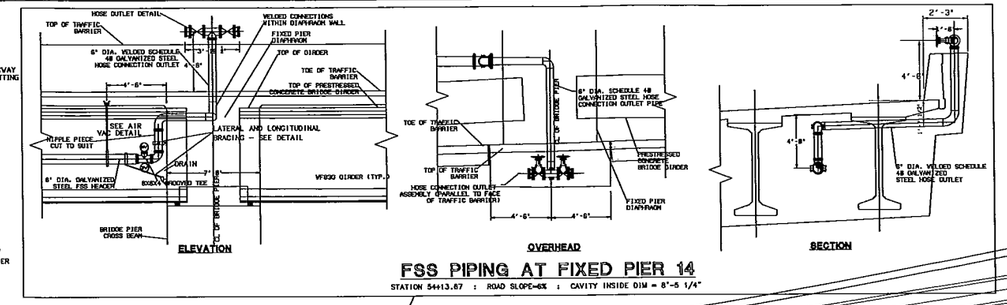
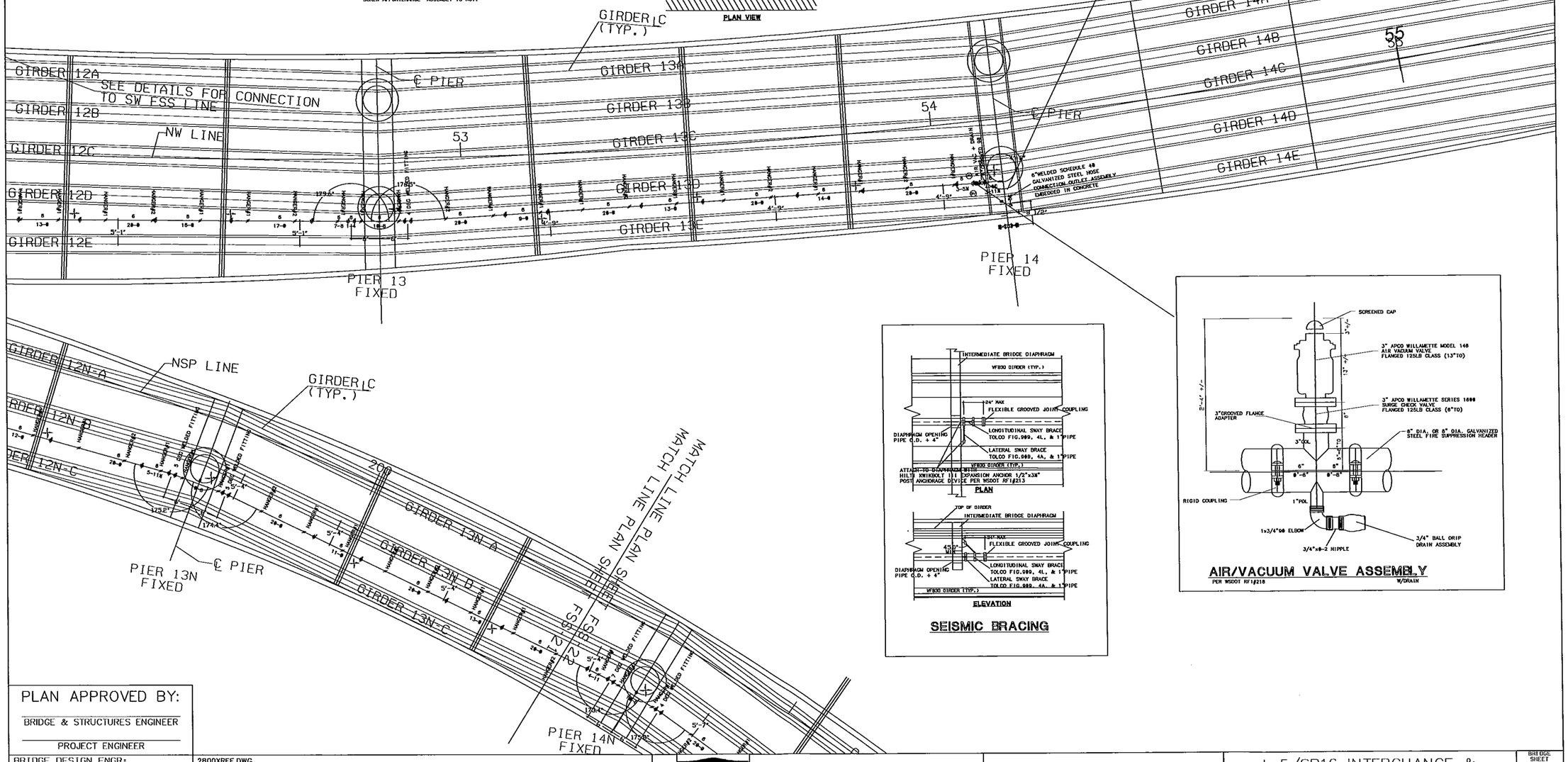




FSS PIPING AT FIXED PIER 14

STATION 54+13.87 : ROAD SLOPE=6% : CAVITY INSIDE DIM = 8'-5 1/4"



SEISMIC BRACING

AIR/VACUUM VALVE ASSEMBLY

PER WSDOT RF1#218 W/DRAIN

PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG			
SUPERVISOR:				
DESIGNED BY:				
CHECKED BY:				
DETAILED BY: MOREN				
BRIDGE PROJ ENGR:				
PRELIM PLAN BY:				
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER 07C546				

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

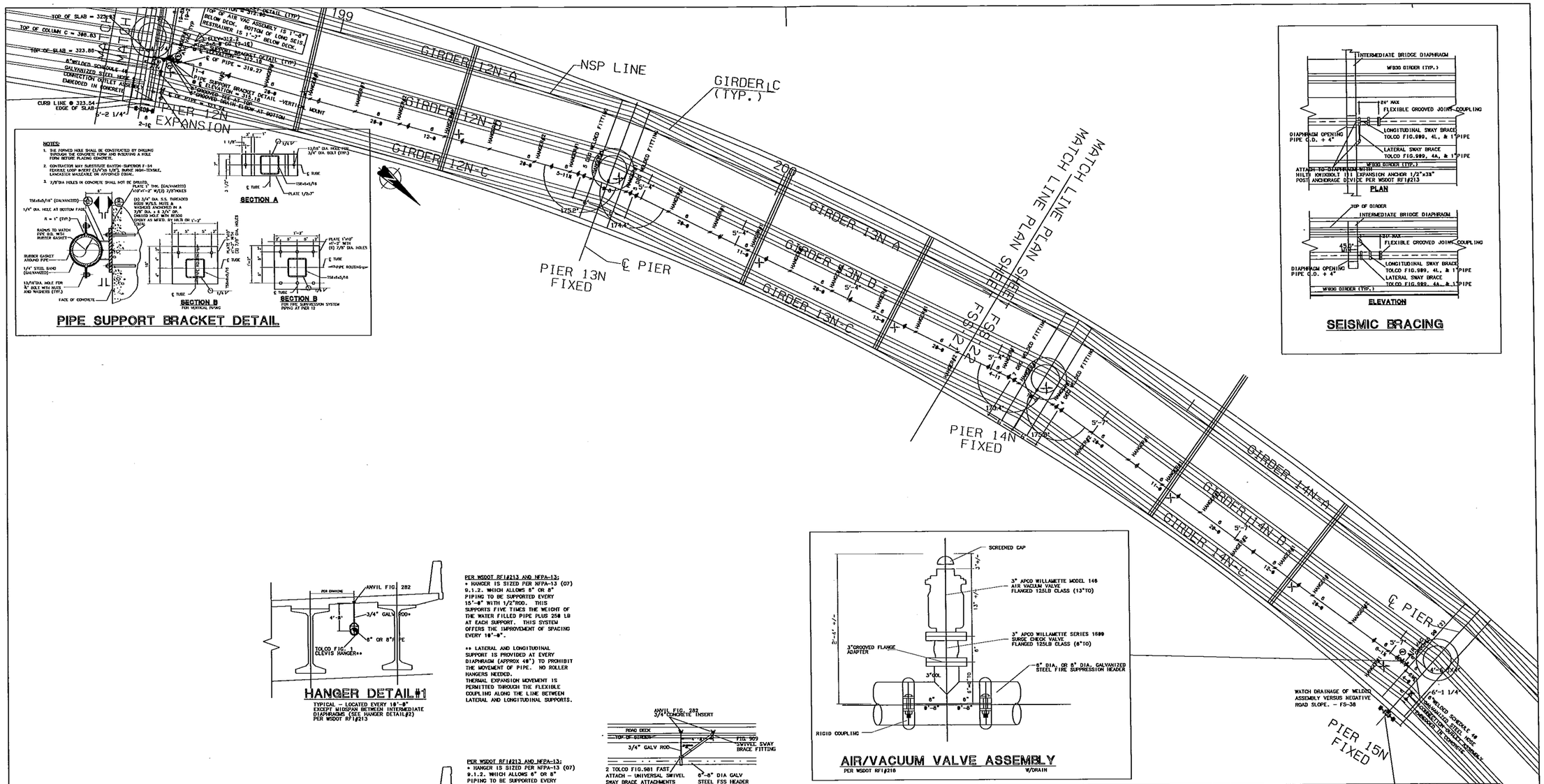
I-5/SR16 INTERCHANGE & WB NALLEY VALLEY

NW LINE PIER/SPAN 12-14

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-21

SHEET OF SHEETS



PER WSDOT RFI#213 AND NFPA-13:
* HANGER IS SIZED PER NFPA-13 (07) 9.1.2. WHICH ALLOWS 8" OR 6" PIPING TO BE SUPPORTED EVERY 15'-0" WITH 1/2"ROD. THIS SUPPORTS FIVE TIMES THE WEIGHT OF THE WATER FILLED PIPE PLUS 250 LB AT EACH SUPPORT. THIS SYSTEM OFFERS THE IMPROVEMENT OF SPACING EVERY 18'-0".

** LATERAL AND LONGITUDINAL SUPPORT IS PROVIDED AT EVERY DIAPHRAGM (APPROX 40') TO PROHIBIT THE MOVEMENT OF PIPE. NO ROLLER HANGERS NEEDED.
THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

PER WSDOT RFI#213 AND NFPA-13:
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THERMAL EXPANSION MOVEMENT IS PERMITTED THROUGH THE FLEXIBLE COUPLING ALONG THE LINE BETWEEN LATERAL AND LONGITUDINAL SUPPORTS.

THE BRACING FOR THIS HANGER LOCATED MIDSPAN BETWEEN DIAPHRAGMS IS MORE THAN NFPA-13 REQUIRES FOR SEISMIC BRACING AND IS FIRMLY ATTACHED TO THE STRUCTURE AS OPPOSED TO ATTACHED BY COMPRESSION.

PLAN APPROVED BY:

BRIDGE & STRUCTURES ENGINEER

PROJECT ENGINEER

BRIDGE DESIGN ENGR:	2800XREF.DWG				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
SUPERVISOR:					10	WASH			
DESIGNED BY:									
CHECKED BY:									
DETAILED BY: MOREN					JOB NUMBER 07C546				
BRIDGE PROJ ENGR:									
PRELIM PLAN BY:									
ARCHITECT/SPECIALIST:	DATE	REVISION	BY	APPD					

FIRESHIELD

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

I-5/SR16 INTERCHANGE & WB NALLEY VALLEY

NSP LINE PIER/SPAN 12N-14N

FIRE SUPPRESSION SYSTEM DETAILED PLAN

BRIDGE SHEET NO. FSS-22

SHEET OF SHEETS