

SEC. 10, T. 20N., R. 3E., W.M.
CITY OF TACOMA

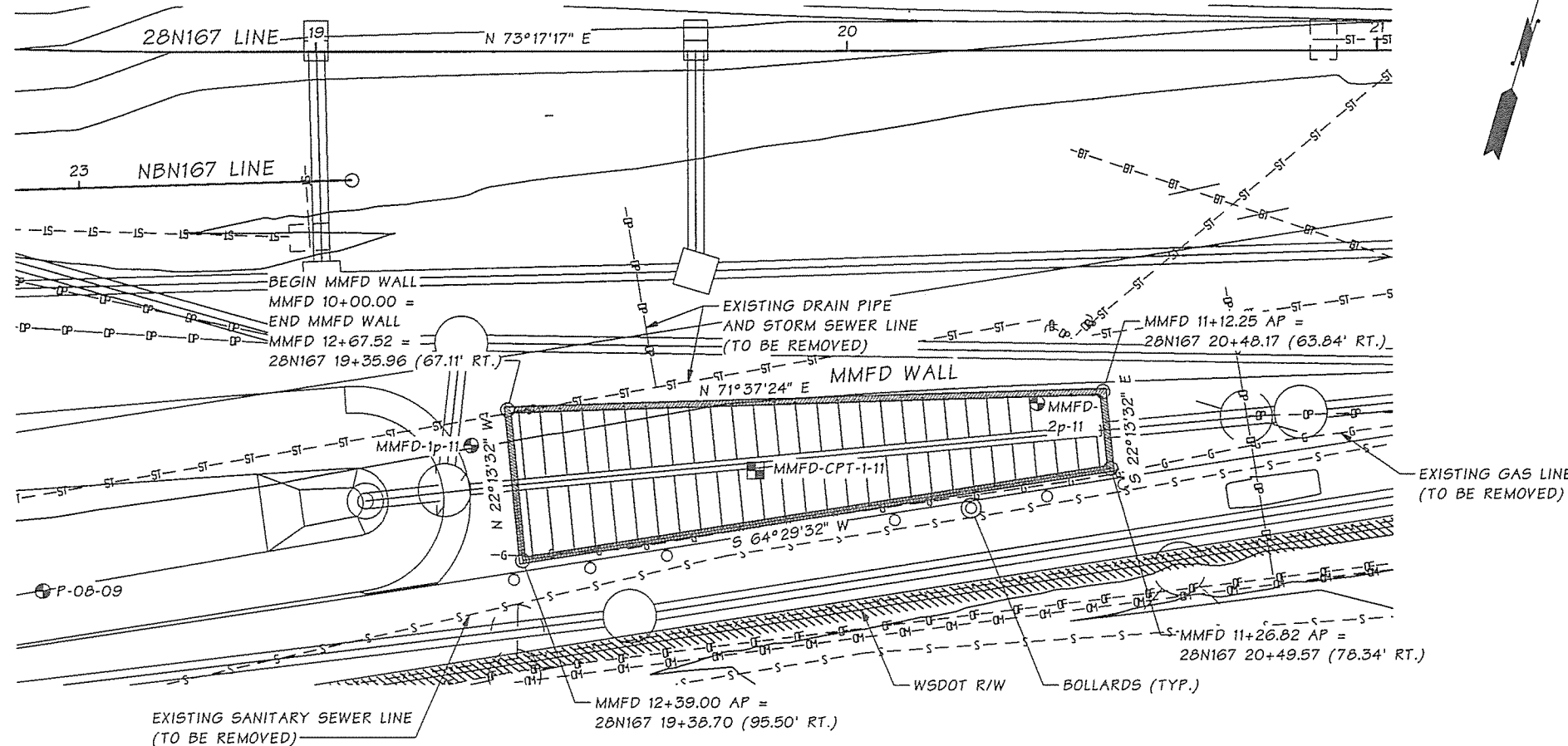
1-5

LEGEND

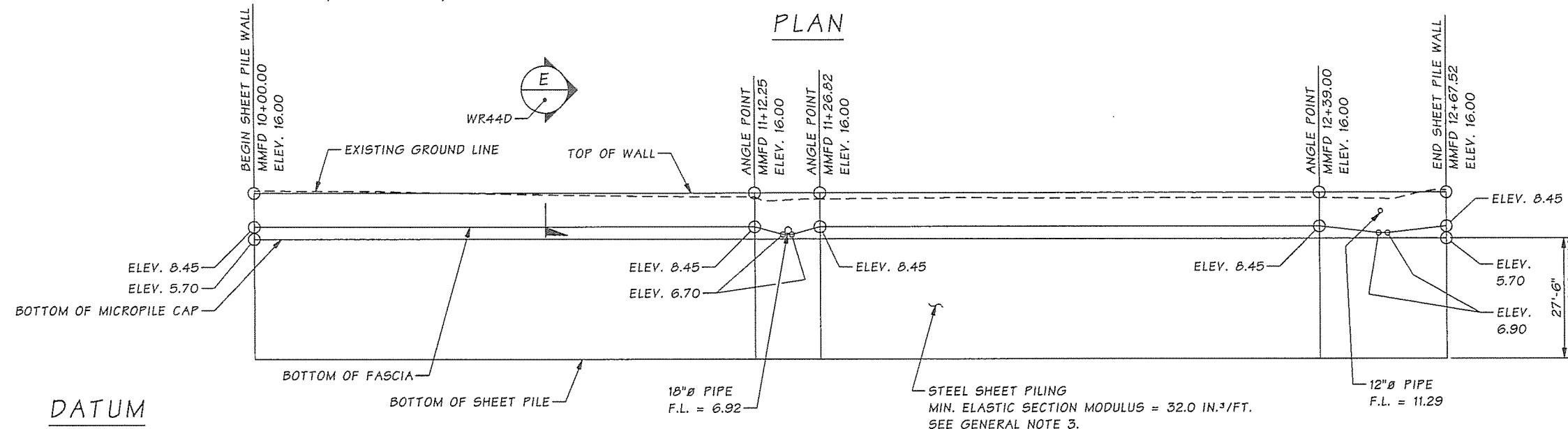
-  IDENTIFIES SECTION, VIEW OR DETAIL
-  TAKEN OR SHOWN ON BRIDGE SHEET 15
-  TAKEN OR SHOWN ON THE SAME SHEET
-  TEST HOLE
-  CONE PENETROMETER

GENERAL NOTES

- ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION DATED 2014 AND AMENDMENTS.
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS - 5TH EDITION - 2010.
- THE STEEL SHEET PILE SHALL BE ASTM A690 GRADE 50. THE STEEL SHEET PILE SHALL BE DESIGNED FOR 0.20" OF TOTAL SECTION LOSS OVER 75 YEARS. THE CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS TO THE ENGINEER FOR APPROVAL. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SHEET PILES PROVIDE THE MIN. ELASTIC SECTION MODULUS AFTER 75 YEARS.
- ALL STEEL SHALL BE LEFT UNPAINTED.
- CONDUITS, JUNCTION BOXES, AND UTILITIES ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL COORDINATE THESE PLANS WITH ELECTRICAL, I.T.S. AND OTHER CIVIL PLANS. FOR EXISTING UTILITIES LEGEND SEE SHEET EUI.
- UNLESS OTHERWISE SHOWN IN THE PLANS, THE CONCRETE COVER MEASURED FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING STEEL SHALL BE 3" MIN.
- ALL CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.
- SHOTCRETE SHALL NOT BE USED AS A REPLACEMENT FOR CAST-IN-PLACE CONCRETE.
- THE SERVICE DESIGN LOAD FOR THE MICROPILES IS 70 KIPS COMPRESSION AND 12 KIPS TENSION. THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS AND DESIGN CALCULATIONS TO THE ENGINEER FOR APPROVAL AS SPECIFIED IN THE SPECIAL PROVISIONS. REFER TO THE SUMMARY OF GEOTECHNICAL CONDITIONS FOR SOIL AND GROUNDWATER INFORMATION.



PLAN



DEVELOPED ELEVATION

DATUM

N.A.V.D. OF 1988

SHEET PILE WALL

Bridge Design Engr.	Khaleghi, B	M:\Y-Team\15 Puyallup River NB\13350\NB WALL\window files\ADD4-MMFDLAYOUT.WND	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	Khaleghi, B		10	WASH.			
Designed By	Pawelka, M	01/12					
Checked By	Mizumori, A	04/12					
Detailed By	Nettle, J	01/12					
Bridge Projects Engr.							
Prelim. Plan By							
Architect/Specialist							
DATE	REVISION	BY	APPD				

BRIDGE
AND
STRUCTURES
OFFICE

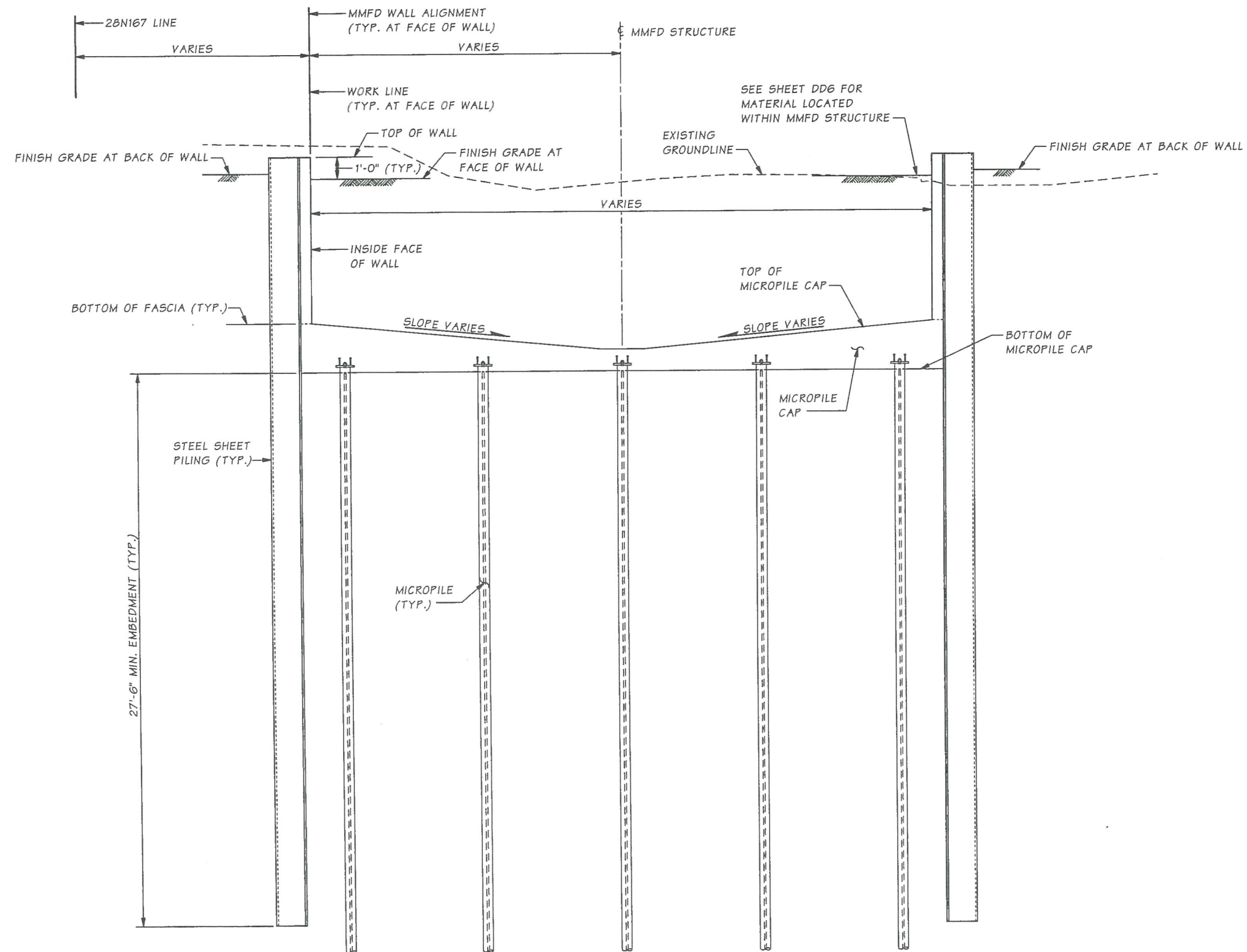


Washington State
Department of Transportation

1-5 PORTLAND AVENUE TO PORT OF TACOMA ROAD-NORTHBOUND HOV	BRIDGE SHEET NO. WR44
MMFD WALL LAYOUT	SHEET 578 OF 1255 SHEETS

SR 5 FILE NO. SHEET WR44

Fri Oct 16 10:00:30 2013



TYPICAL SECTION

SR 5 FILE NO. SHEET WR44

Bridge Design Engr.	Khaleghi, B	M:\Y-Team\I5 Puyallup River NB\13350\NB WALL>window files\MMFD SECTION.WND					
Supervisor	Anderson, MW						
Designed By	Pawelka, M	01/12					
Checked By	Mizumori, A	04/12					
Detailed By	Nettle, J	01/12					
Bridge Projects Engr.							
Prelim. Plan By							
Architect/Specialist		DATE	REVISION	BY	APPD		



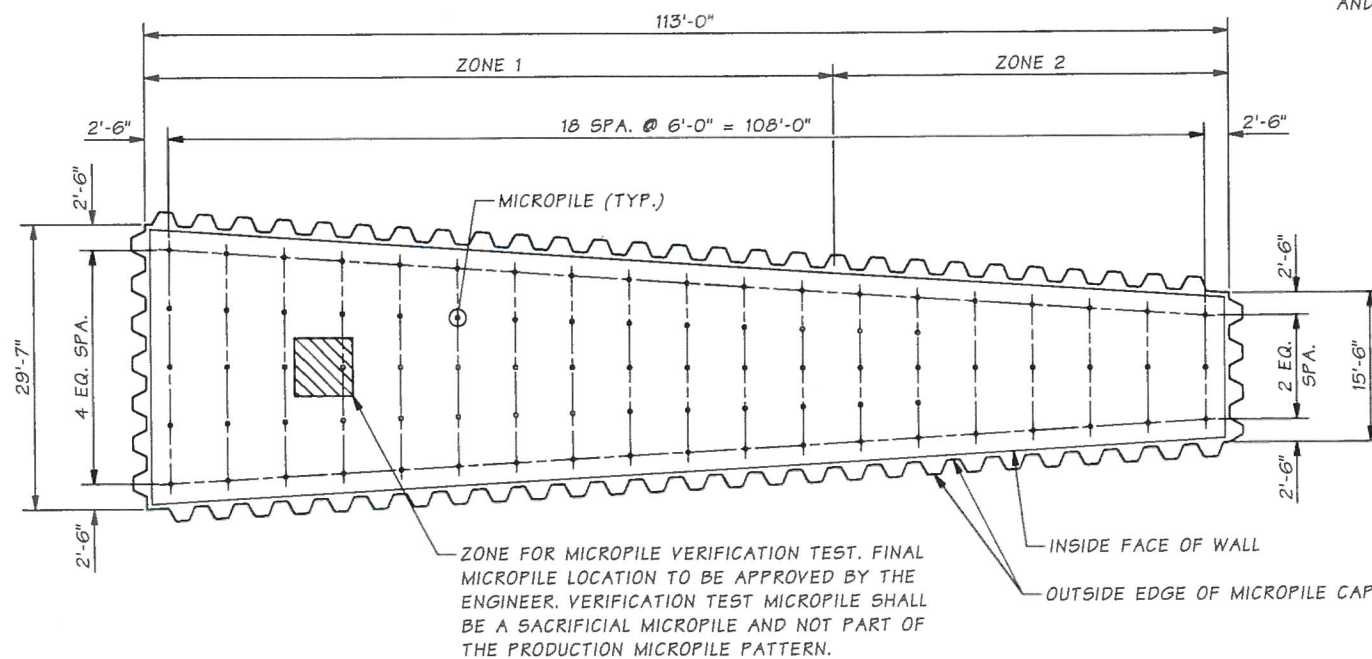
BRIDGE AND
STRUCTURES
OFFICE
4/20/12



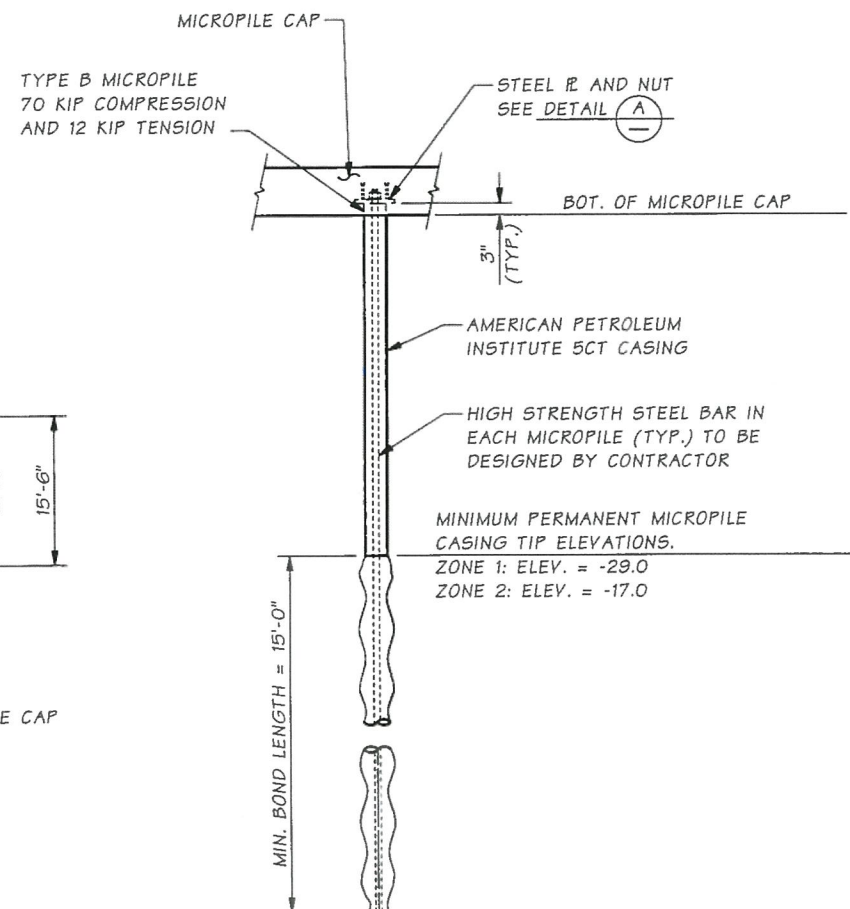
Washington State
Department of Transportation

I-5
PORTLAND AVENUE TO PORT OF
TACOMA ROAD-NORTHBOUND HOV
MMFD WALL
TYPICAL SECTION

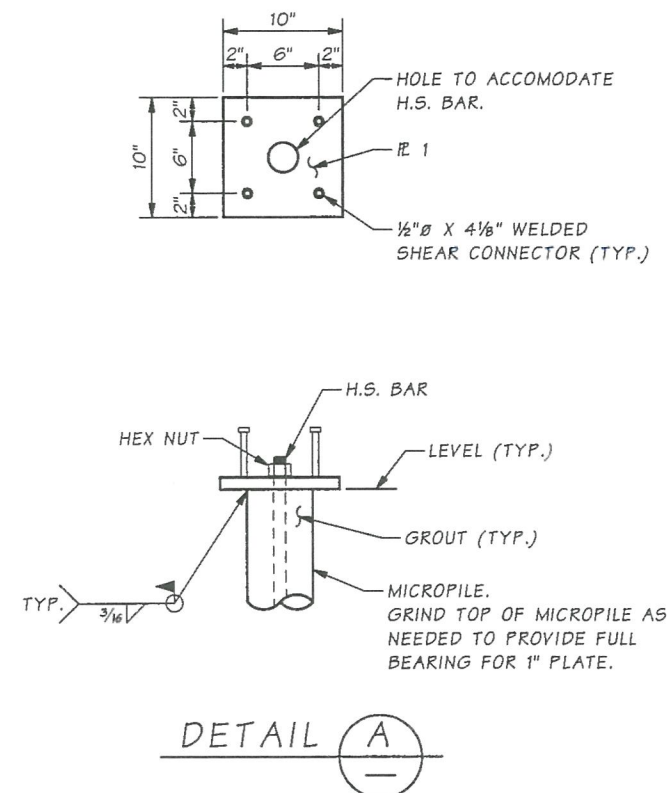
BRIDGE
SHEET
NO.
WR44A
SHEET
578A
OF
1255
SHEETS



MICROPILE LAYOUT



TYPICAL MICROPILE ELEVATION



Bridge Design Engr.	Khaleghi, B	M:\Y-Team\IS Puyallup River NB\13350\NB WALL\window files\MMFD MICRO PILE DET.WND	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	Anderson, MW		10	WASH.			
Designed By	Pawelka, M	03/12					
Checked By	Mizumori, A	04/12					
Detailed By	Nettle, J	03/12					
Bridge Projects Engr.							
Prelim. Plan By							
Architect/Specialist		DATE	REVISION	BY	APPD		

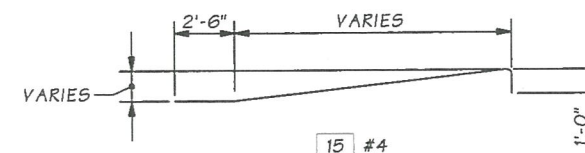
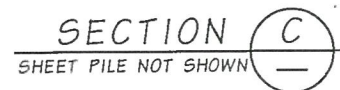


BRIDGE AND STRUCTURES OFFICE
4/20/12
4/24/12



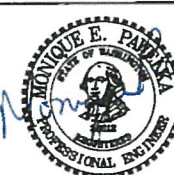
Washington State
Department of Transportation

I-5 PORTLAND AVENUE TO PORT OF TACOMA ROAD-NORTHBOUND HOV	BRIDGE SHEET NO. WR44B
MMFD WALL MICROPILE DETAILS	SHEET 578B OF 1255 SHEETS



1. UNLESS OTHERWISE NOTED, THE MINIMUM LENGTH OF LAP SPLICES SHALL BE:
 - 2'-0" FOR #4
 - 2'-0" FOR #6
2. KEEP LAP SPLICES OF LONGITUDINAL REINF. AT LEAST 1'-0" AWAY FROM THE CENTER OF MICROPILE.
3. ALL LAP SPLICES SHALL BE ALTERED SO THAT NO MORE THAN 50% OF LONGITUDINAL REBAR (TOP AND BOT.) IS SPLICED AT THE SAME LOCATION.

Bridge Design Engr. Khaleghi, B		M:\Y-Team\I5 Puyallup River NB\X13350\NB WALL\window files\MMFD REINFORCEMENT.WND									
Supervisor	Anderson, MW					REGION NO	STATE	FED. AID PROJ. NO.	SHEET NO	TOTAL SHEETS	
Designed By	Pawelka, M 04/12					10	WASH.				
Checked By	Mizumori, A 04/12										
Detailed By	Bontemps, W 04/12										
Bridge Projects Engr.						JOB NUMBER					
Prelim. Plan By											
Architect/Specialist	DATE	REVISION			BY	APPD					



BRIDGE AND
STRUCTURES
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**Washington State
Department of Transportation**

I-5
PORTLAND AVENUE TO PORT OF
TACOMA ROAD-NORTHBOUND HOV

MMFD WALL
MICROPILE CAP REINFORCING

BRIDGE
SHEET
NO.

VR44C

SHEET
578C
OF
1255
SHEETS