



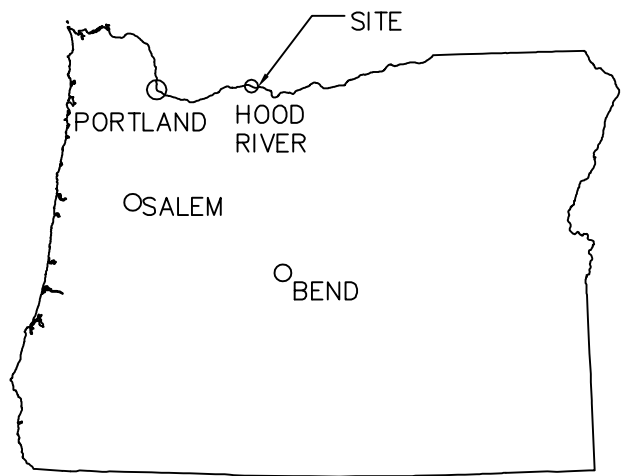
'C' DOCK EXPANSION

PORT OF HOOD RIVER

December 4, 2009

NOTE—THESE PLANS SHOULD BE PLOTTED ON 11'x17' SHEET TO REFLECT FULL SCALE

SHEET	1	OF	10
	COVER		
PORT OF HOOD RIVER - C DOCK SOUTH P.O. Box 289 Hood River, OR 97031			
DATE: 11/04/09			
PROJECT: HR-CDOCK			
Flowing Solutions 3305 S.W. 87th Avenue Portland, OR 97225 Phone: (503) 297-6311 Fax: (503) 297-6053			
			
			
SCALE	PLAN	HORIZ.	VERT.
			ONE HALF INCH (NET)
BY	APPROV.		
NO.	DATE		



GENERAL REQUIREMENTS:

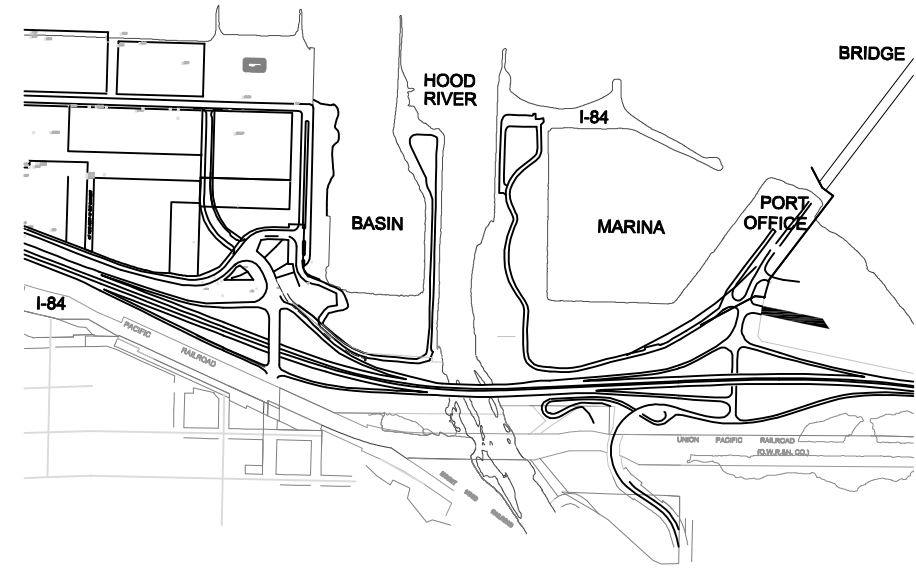
1. THIS PLAN SET DETAILS DESIGN SPECIFICATIONS, OVERALL LAYOUT, SPECIFIC OWNER REQUIREMENTS AND REQUIRED CONFIGURATIONS. MANUFACTURER IS RESPONSIBLE FOR SPECIFIC DOCK, AND UTILITY DESIGN AND TRADE PERMIT APPROVALS. REQUIREMENTS DETAILED IN THIS PLAN SET AND WRITTEN SPECIFICATIONS MUST BE MET.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH DESIGN ELEMENT FOR REVIEW AND APPROVAL BY ENGINEER.
3. CONTRACTOR SHALL BRING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER IMMEDIATELY UPON DISCOVERY.

SITE CONDITIONS:

1. MARINA IS LOCATED WITHIN A PROTECTED BASIN OF THE COLUMBIA RIVER, AND WITHIN THE BONNEVILLE POOL. MARINA ADDITION IS ISOLATED FROM CURRENT.
2. MARINA ADDITION IS LOCATED WITH A PROTECTED CORNER AND MAY BE SUBJECTED TO FREEZING WATER SURFACE.
3. POOL VARIATION CAN RANGE BASED ON DAM OPERATIONS AND SEASONAL FLOW RATES UP TO 10 FT.
4. ANCHOR PILE ARE EXISTING AND CONTRACTOR SHALL ASSUME THEY ARE SOUND FOR ANCHORING DOCKS UNDER LOAD. DOCK MUST BE DESIGNED TO SPAN EXISTING PILING. NO NEW PILING ARE PERMITTED.

DESIGN REQUIREMENTS:

1. MARINA SHALL BE DESIGNED TO MEET A REASONABLE COMBINATION OF ENVIRONMENTAL FORCES AND COMPLIANCE WITH CURRENT UBC CODE WITH THE STATE OF OREGON AMENDMENTS.
2. FLOAT PRODUCT SHALL BE CONCRETE DECKED AND FLOATATION SHALL BE FULLY ENCAPSULATED MEETING O.S.M.B REQUIREMENTS. OVERALL FLOAT DIMENSIONS SHALL BE AS SHOWN ON THE PLANS.
3. DESIGN VESSEL VARIES ACCORDING TO SLIP SIZE. SIDE TIES SHALL HAVE CAPACITY FOR 60' VESSELS WITH TWO KNOT IMPACT SPEED.
4. THE DOCK SHALL BE CONSIDERED TO HAVE A 100% OCCUPANCY RATE DURING DESIGN LOAD CONDITIONS.
5. FLOATS SHALL BE DESIGNED TO FLOAT LEVEL UNDER DEAD LOADS ONLY. OVERALL FLOAT DESIGN SHALL BE IN CONFORMANCE WITH THE PROJECT FLOAT PERFORMANCE CRITERIA.
6. FLOAT SUPPLIER SHALL VERIFY ACTUAL PILE TO PILE SPACING DISTANCE AND CONNECTION TO EXISTING DOCK METHODOLOGY PRIOR TO SHOP-DRAWING PREPARATION.
7. NEW FLOATS SHALL HAVE REQUIRED FREEBOARD. EXISTING DOCKS HAVE ABSORBED WATER AND HAVE REDUCED FREEBOARD. NEW TO OLD CONNECTION SHALL BE FLUSH, THIS WILL REQUIRE A RIGID CONNECTION, OLD DOCK MAY BE LIFTED BY NEW FLOAT SYSTEM AND FREEBOARD REQUIREMENT IS WAIVED AT THE CONNECTION.
8. SEE DOCK DETAIL SHEETS FOR ACCEPTABLE FLOAT STYLES.
9. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



ENGINEER:

Flowing Solutions, LLC
 3305 S.W. 87th
 Portland, OR 97225
 Contact - Andrew Jansky
 (503) 297-6311

OWNER:

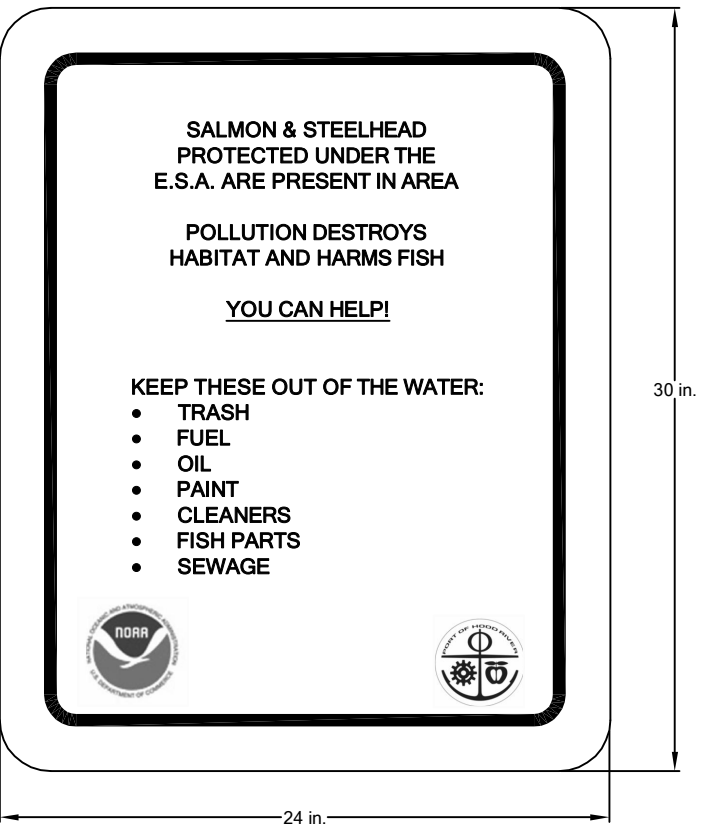
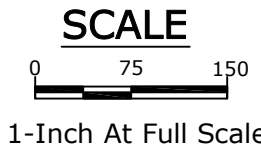
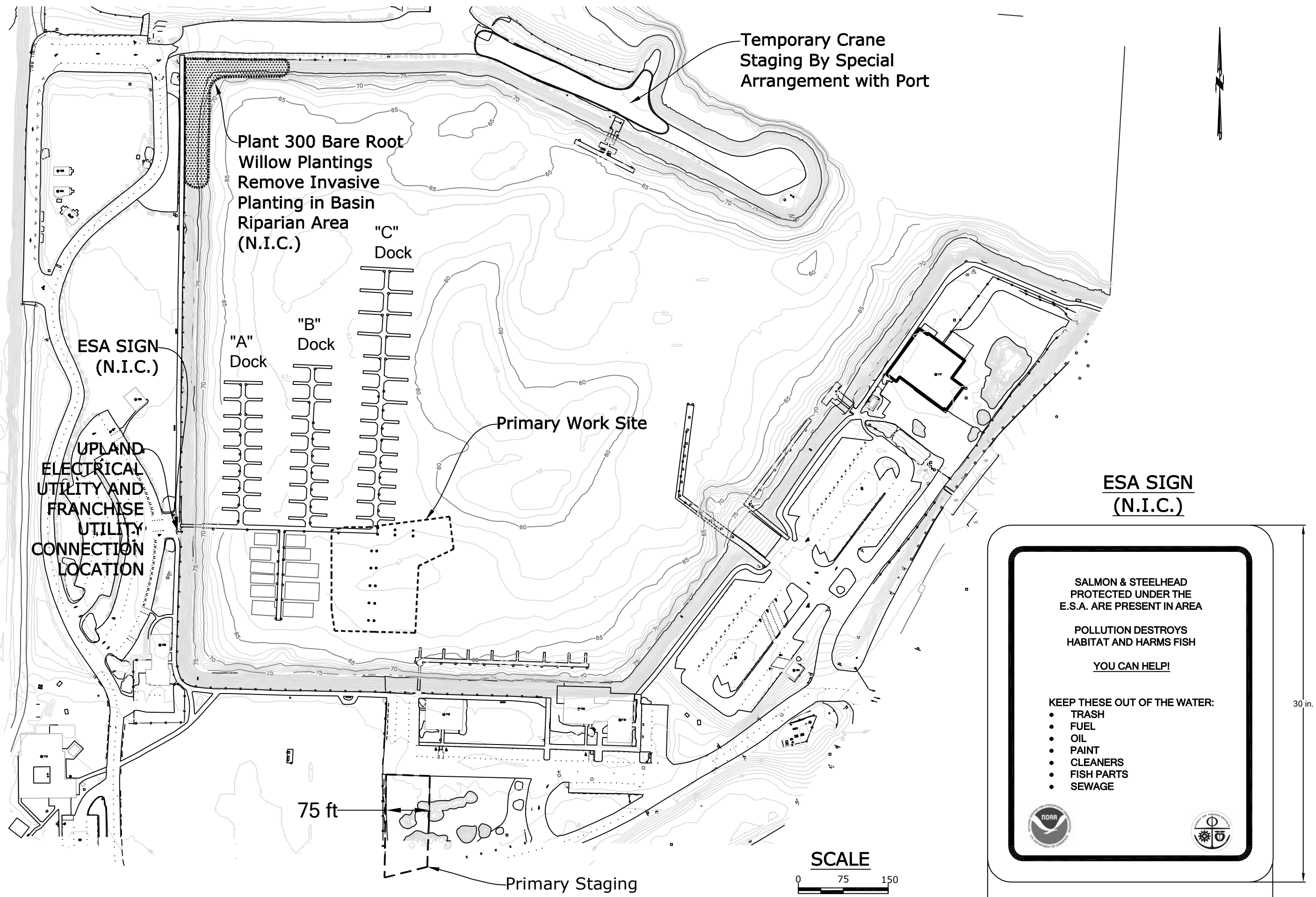
Port of Hood River
 1000 E Port Marina Drive
 Hood River, Oregon
 Contact - Michael McElwee

SHEET INDEX

1. COVER
2. SITE AND SIGNAGE
3. PILE PLAN
4. DOCK LAYOUT
5. CONNECTION
6. SLIP DIAGRAMMATIC
7. UTILITY PLAN
8. DOCK DETAIL 1
9. DOCK DETAIL 2
10. DOCK ALTERNATE 'A'

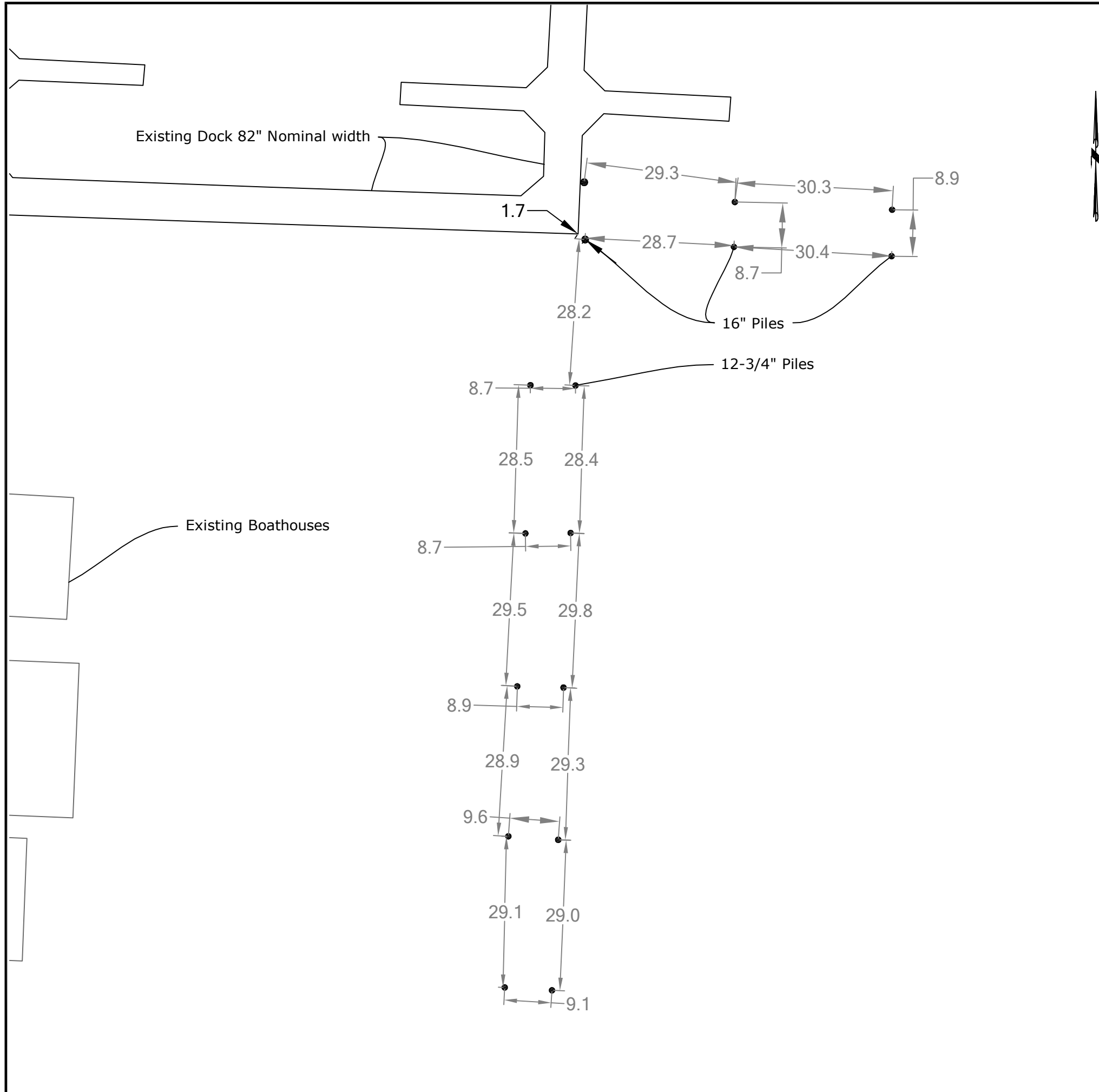
d:\fs\projects\porthoodriver\marinadock\cad\fs-porthr-c-dock-final-2009.dwg

d:\fs\projects\porthoodriver\marinadock\cad\fs-porthr-c-dock-final-2009.dwg



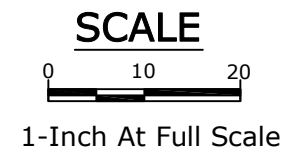
NO.	DATE	REVISION	BY	APPROV.	SCALE					Flowing Solutions 1000 SW 9727th Avenue Portland, OR 97228-6311 Phone: (503) 297-6311 Fax: (503) 297-6053	SHEET 2 OF 10
						SITE AND SIGNAGE PORT OF HOOD RIVER - C DOCK SOUTH P.O. Box 289 Hood River, OR 97031					
PROJECT HR-CDOCK DATE: 11/04/09											

d:\fs\projects\porthoodriver\marinadock\cad\fs-porthr-c-dock-final-2009.dwg



SHEET NOTES:

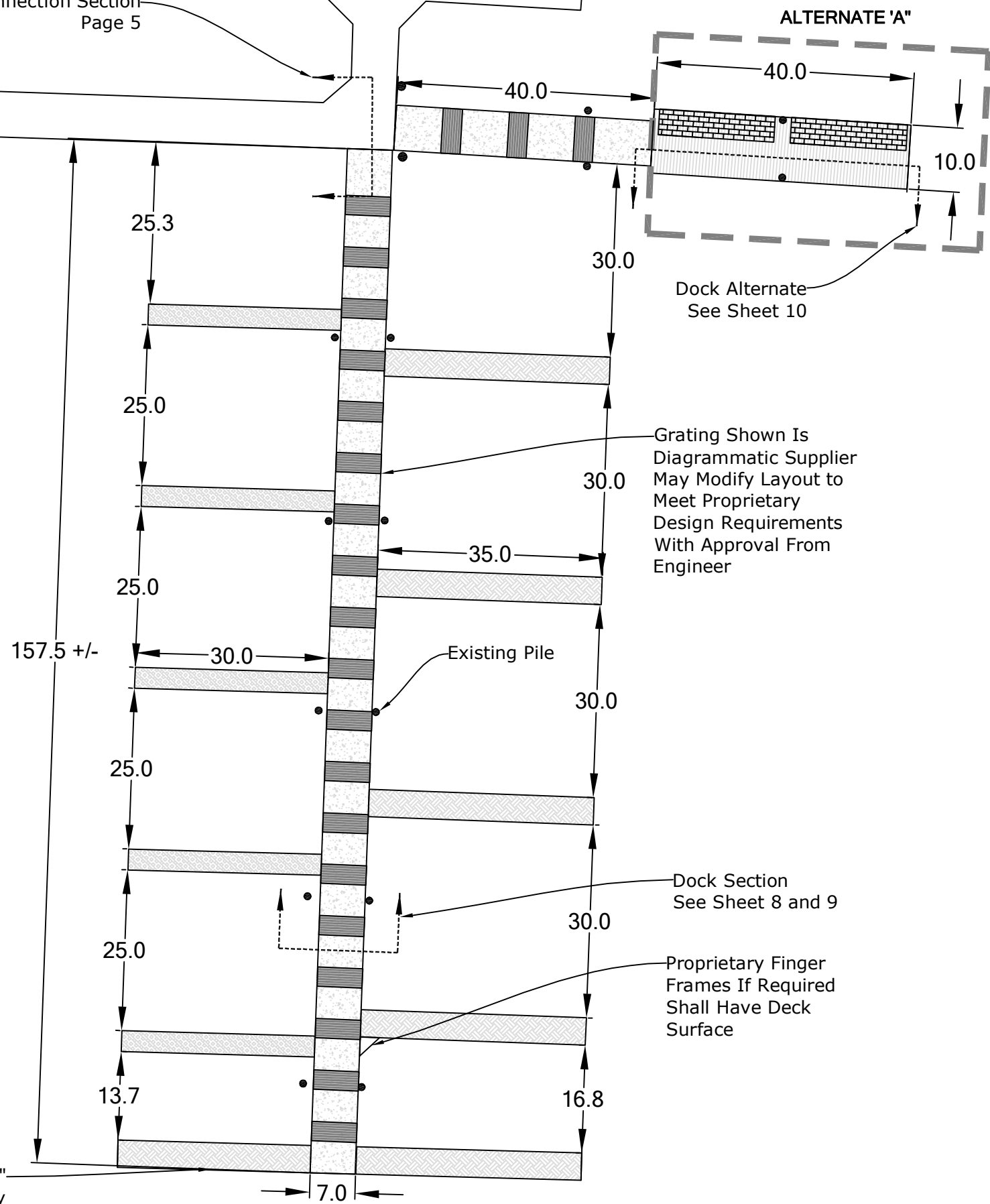
1. THESE DIMENSIONS PREPARED BASED ON SURVEY PROVIDED BY DAVID C. SMITH AND ASSOCIATES, PORTLAND, OR 2/21/07 AND FIELD MEASUREMENTS.
2. CONTRACTOR MUST VERIFY EXACT DIMENSIONS OF PILE AND CONNECTIONS PRIOR TO PREPARING FINAL SHOP DRAWINGS FOR REVIEW. SPECIAL PILE HOOPS/EXTENDERS OR ADJUSTED FLOATS MAY BE REQUIRED TO MATCH EXISTING PILE LOCATIONS.



NO.	DATE	REVISION	BY	APPROV.	SCALE		
					PLAN	HORIZ.	VERT.
					1"=20'		
							ONE HALF INCH (REF)
					PILE PLAN PORT OF HOOD RIVER - C DOCK SOUTH P.O. Box 289 Hood River, OR 97031		
					SHEET 3 OF 10 PROJECT HR-CDOCK DATE: 11/04/09		

d:\fs\projects\porthoodriver\marinadock\cad\fs-porthr-c-dock-final-2009.dwg

See Connection Section
Page 5



ALTERNATE 'A'

Dock Alternate
See Sheet 10

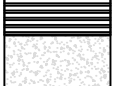



Grating Shown Is
Diagrammatic Supplier
May Modify Layout to
Meet Proprietary
Design Requirements
With Approval From
Engineer

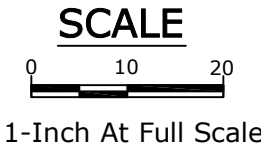
Dock Section
See Sheet 8 and 9



Proprietary Finger
Frames If Required
Shall Have Deck
Surface

SHEET NOTES:

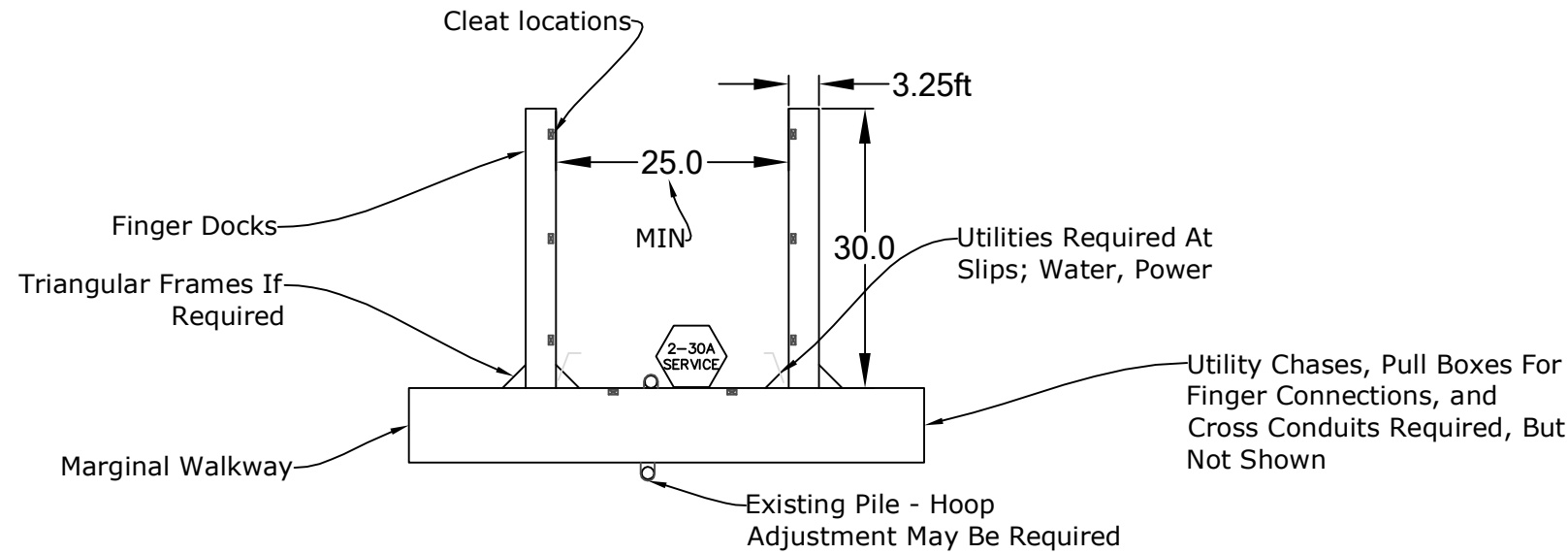
1. CONTRACTOR MAY INCREASE WALKWAY WIDTH BASED ON DIMENSIONS AVAILABLE TO AVOID LARGER HOOPS.
2. NOTE EXISTING PILE MAY NOT BE SQUARE RELATIVE TO EXISTING DOCKS.
3. ALTERNATE 'A' INCLUDES LOW FREEBOARD DOCK WITH ATTACHMENT SYSTEM, SEE SHEET 10

-  CONCRETE MARGINAL WALKING FLOAT 84" NOMINAL WIDTH, WITH 40% GRATED AREA
-  CONCRETE FINGER FLOAT 51" NOMINAL WIDTH
-  CONCRETE FINGER FLOAT 39" NOMINAL WIDTH
-  WOOD DECK LOW FREEBOARD (6") DOCK SEE SHEET 10

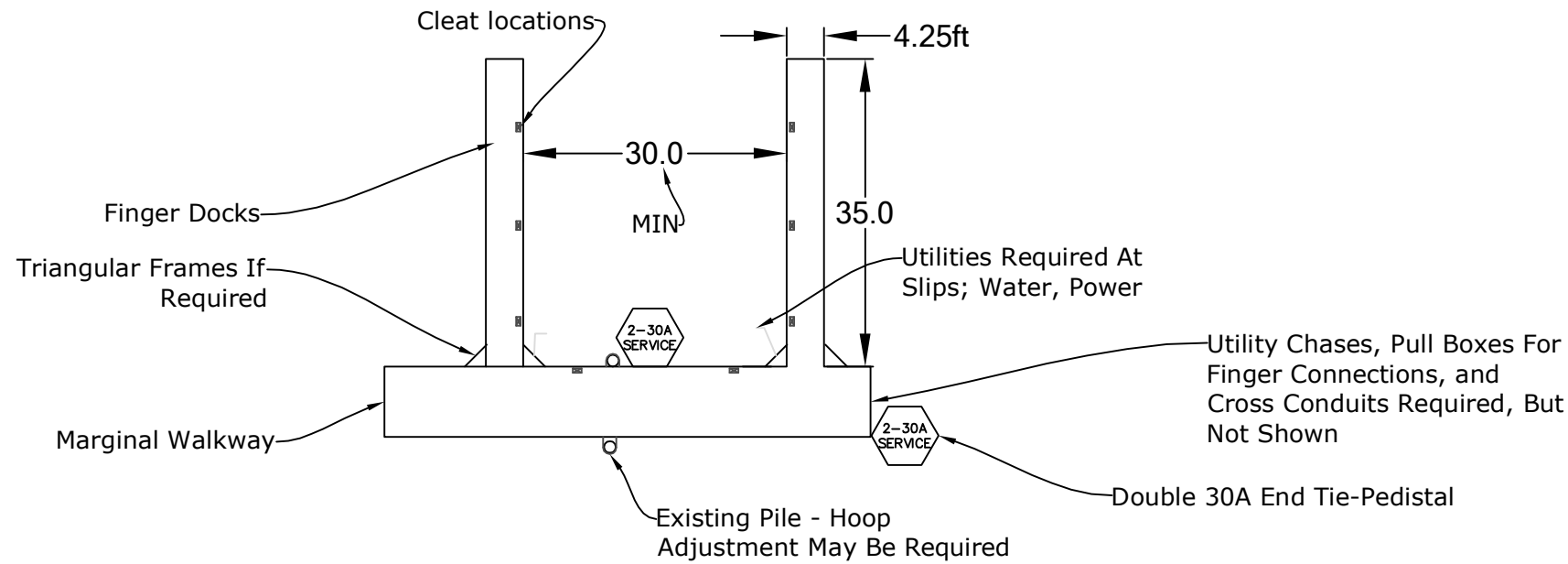


SHEET	4	OF	10		PROJECT HR-CDOCK
DOCK LAYOUT					
PORT OF HOOD RIVER - C DOCK SOUTH					
P.O. Box 289 Hood River, OR 97031					
DATE: 11/04/09					
					
					
SCALE	1"=20'	HORIZ.	VERT.		
BY	APPROV.				
NO.	DATE				

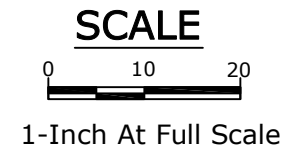
d:\fs\projects\porthoodriver\marinadock\cad\fs-porthr-c-dock-final-2009.dwg



30 FT SLIP DIAGRAM



35 FT SLIP DIAGRAM



SHEET NOTES:

1. NO CONNECTION TO EXISTING MARINA REQUIRED. ONLY PROVIDE TEMPORARY POWER CABLE UTILITY CONNECTION TO ELECTRICAL SERVICE ON SHORE, AND FINAL DOCK CONDUIT, CONDUCTORS AND COMPLETE PEDESTALS FOR NEW SLIP SERVICE.
2. LICENSED ELECTRICAL CONTRACTOR TO VERIFY CAPACITY OF EXISTING TRANSFORMER, PROVIDE ONE-LINE DIAGRAM FOR REVIEW.
3. SPECIAL NOTE-CONDUCTORS FOR 35ft SLIPS SHALL BE SIZED FOR 50A SERVICE, TO REDUCE TEMPORARY POWER CABLE CONNECTION SIZE. REQUIRED PEDESTALS SHALL BE CONFIGURED WITH 30A SERVICE.

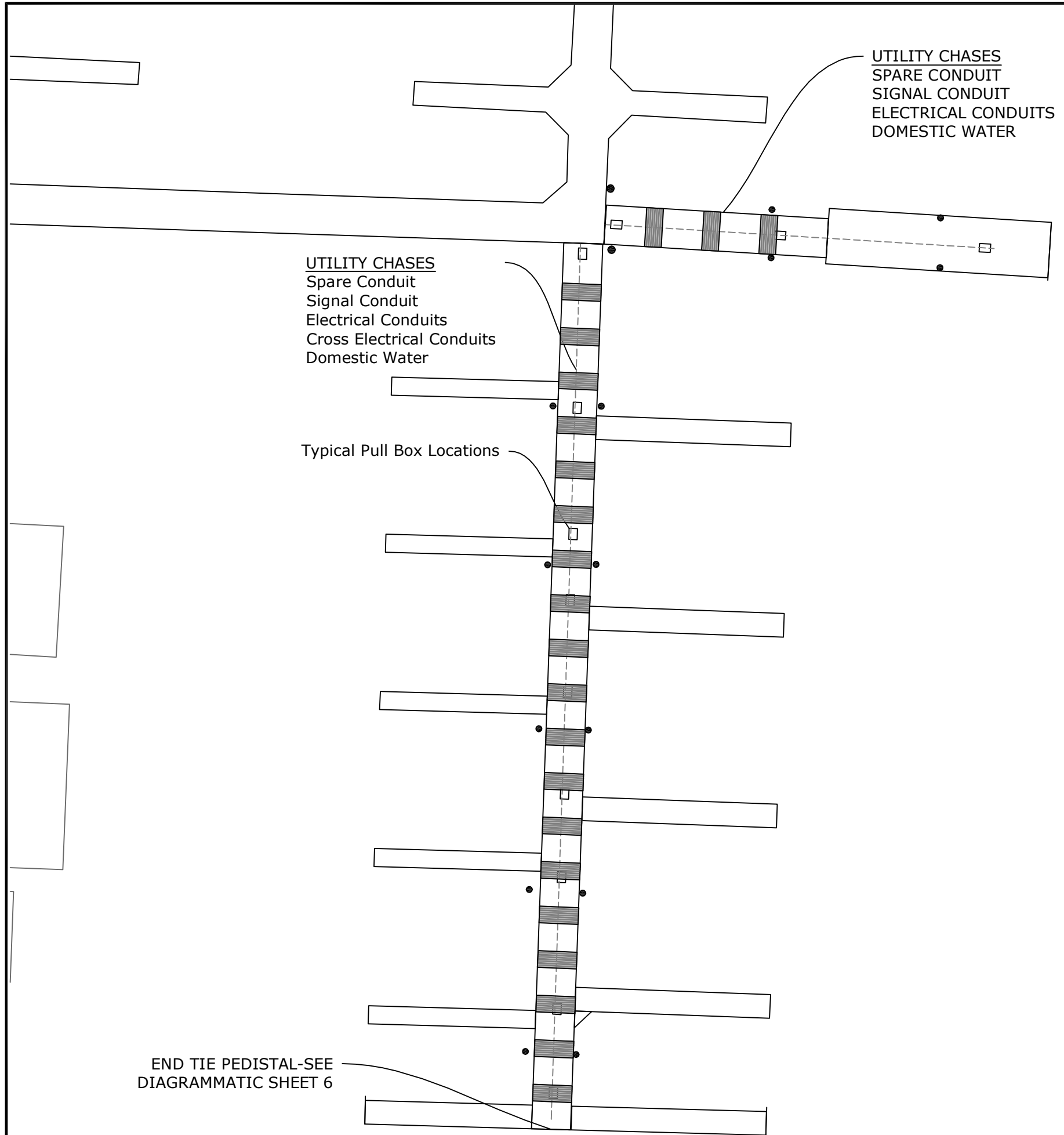
Flowing Solutions
1000 SW 10th Avenue
Portland, OR 97205
Phone: (503) 297-6311
Fax: (503) 297-6053



SCALE	N.T.S.		
	PLAN	HORIZ.	VERT.

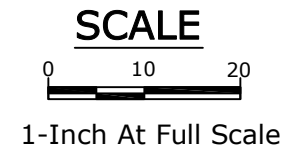
NO.	DATE	REVISION	BY	APPROV.	SCALE
					ONE HALF INCH (REF)

d:\fs\projects\porthoodriver\marinacdock\cad\fs-porthr-c-dock-final-2009.dwg



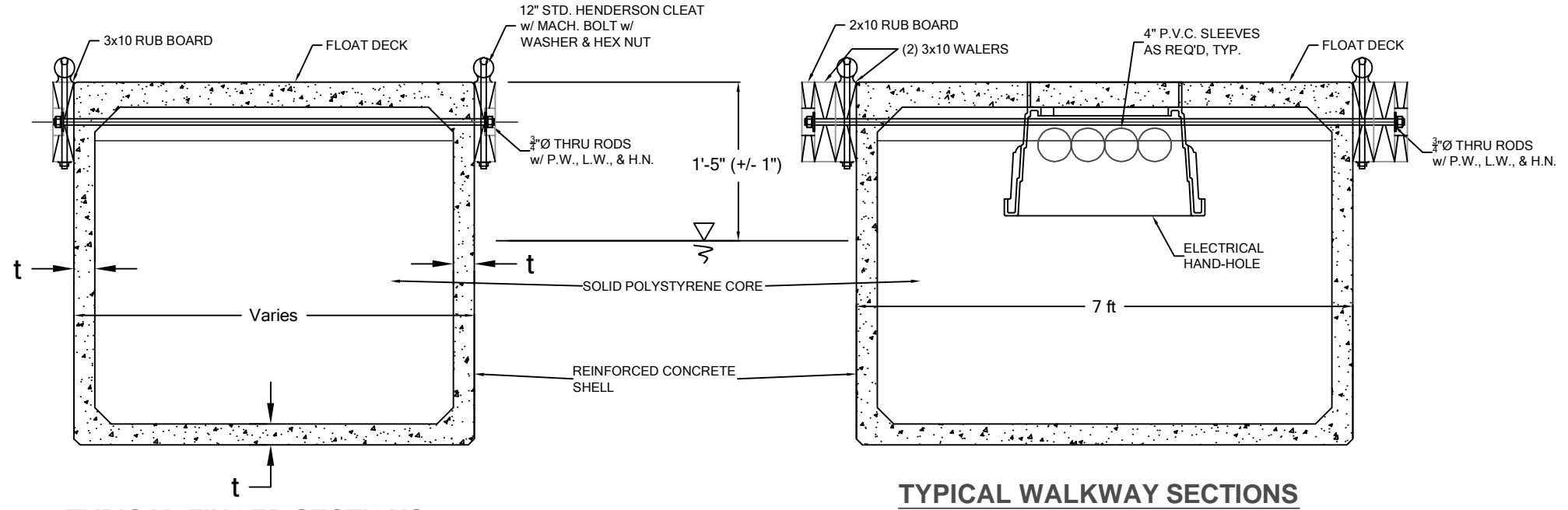
SHEET NOTES:

1. CONTRACTOR SHALL PROVIDE CONDUITS LISTED, AND MISCELLANEOUS CROSS CONDUITS, AND ADDITIONAL PULL BOXES NECESSARY TO INSTALL REQUIRED SYSTEMS.
2. LIGHT ONLY PEDESTALS ARE REQUIRED ALONG DOCK SERVICING LOW FREEBOARD DOCK. ALL CONDUITS MUST BE PLACED FOR FUTURE MARINA EXTENSION, HOWEVER ONLY LIGHTING CONDUCTORS AND WATER ROUTED TO PEDESTALS.

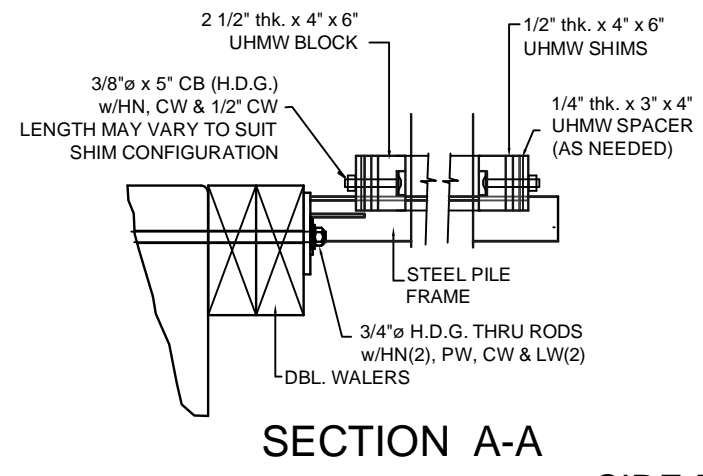
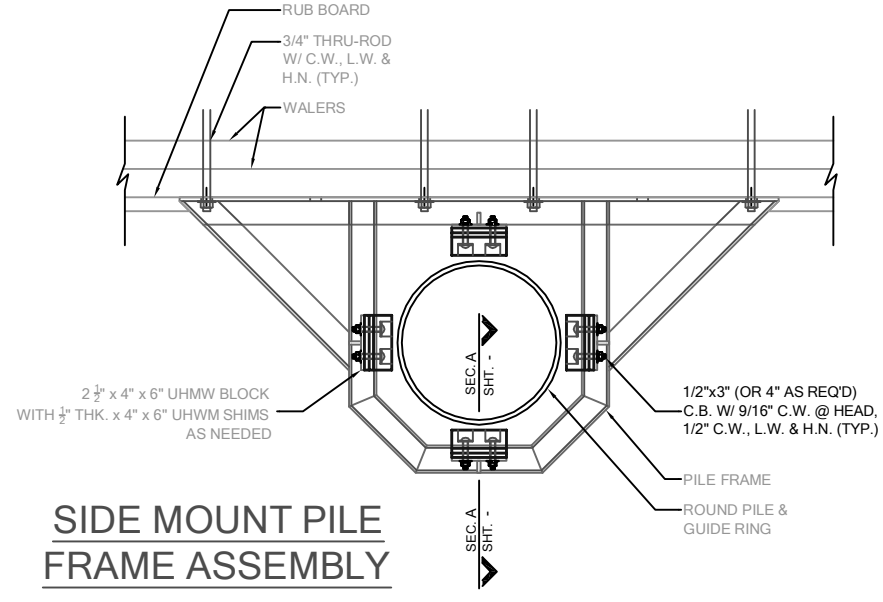


NO.	DATE	REVISION	BY	APPROV.	SCALE		
					PLAN	HORIZ.	VERT.
					1"=20'		
							ONE HALF INCH (REF)
					UTILITY PLAN PORT OF HOOD RIVER - C DOCK SOUTH P.O. Box 289 Hood River, OR 97031 DATE: 11/04/09 PROJECT: HR-CDOCK		
					SHEET 7 OF 10		

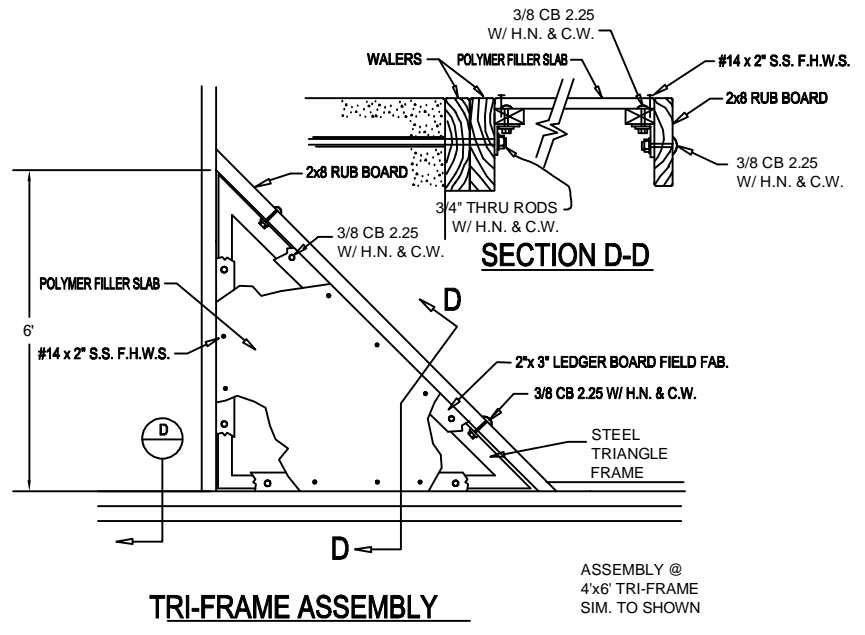
d:\fs\projects\porthoodriver\marinacdock\cad\fs-porthr-c-dock-final-2009.dwg



SHEET NOTES:
 1. MODULAR FLOATS MUST BE FABRICATED ACCORDING TO MANUFACTURER SPECIFICATIONS.



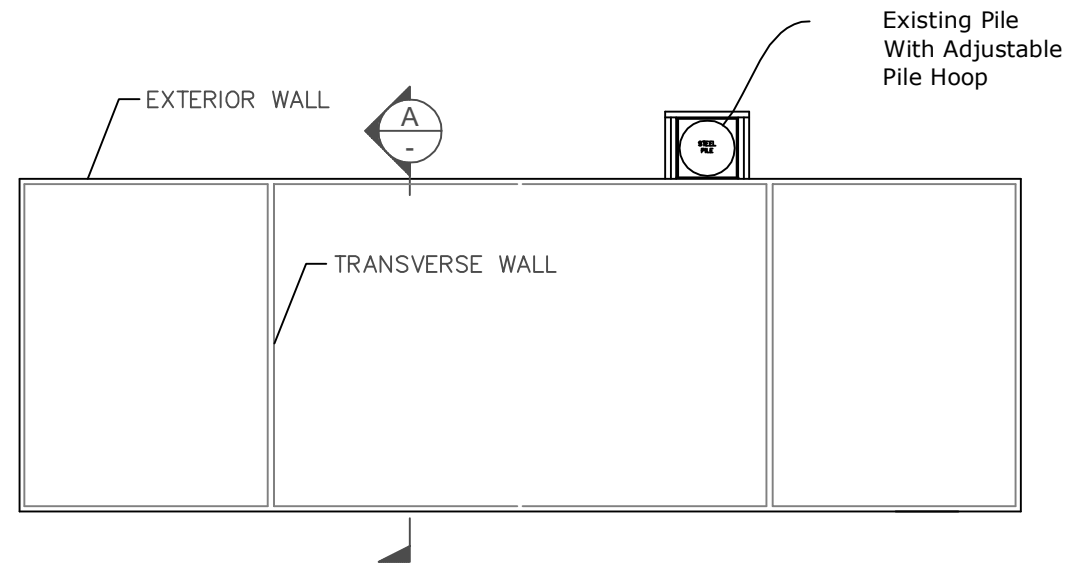
NOTE: DISTANCE BETWEEN OPPOSING U.H.M.W. PAD FACES SHALL NOT BE GREATER THAN PILE WIDTH PLUS 1".



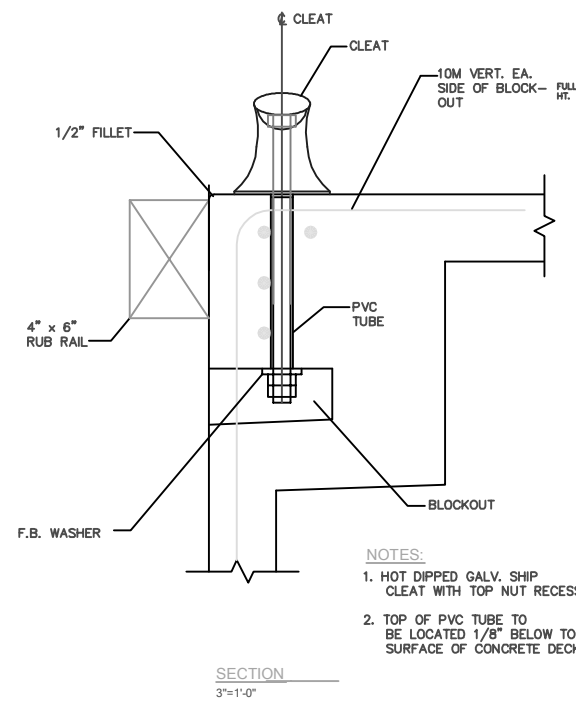
GENERAL DIAGRAMMATIC DETAIL FROM SUPPLIER. THIS ITEM IS BIDDER DESIGN

SHEET	8	OF	10
	PROJECT HR-CDOCK		
DOCK DETAIL '1'			
PORT OF HOOD RIVER - C DOCK SOUTH			
P.O. Box 289			
Hood River, OR 97031			
DATE: 11/04/09			
SCALE	N.T.S.	HORIZ.	VERT.
PLAN			
PROFILE			
			ONE HALF INCH (REF)
BY	APPROV.	REVISION	
NO.	DATE		

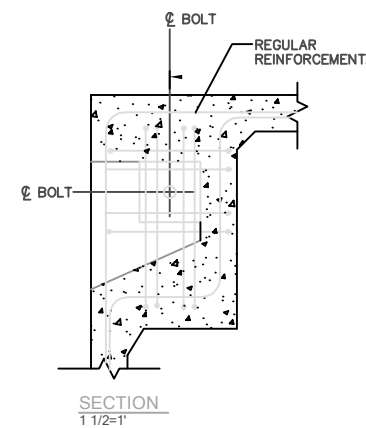
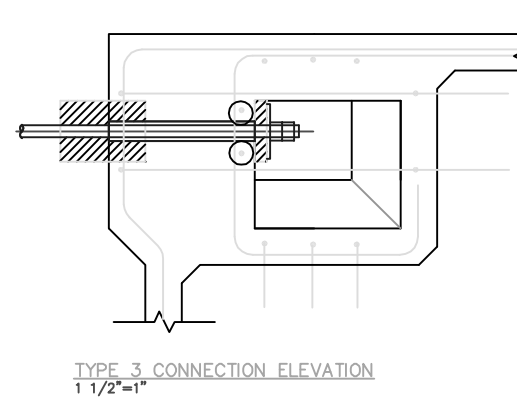
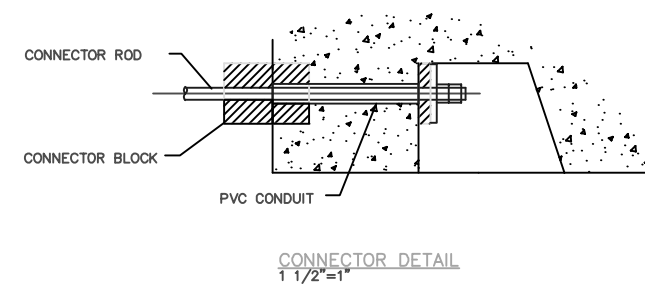
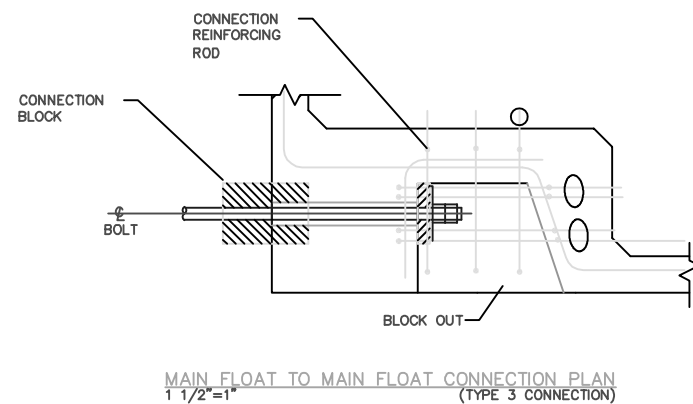
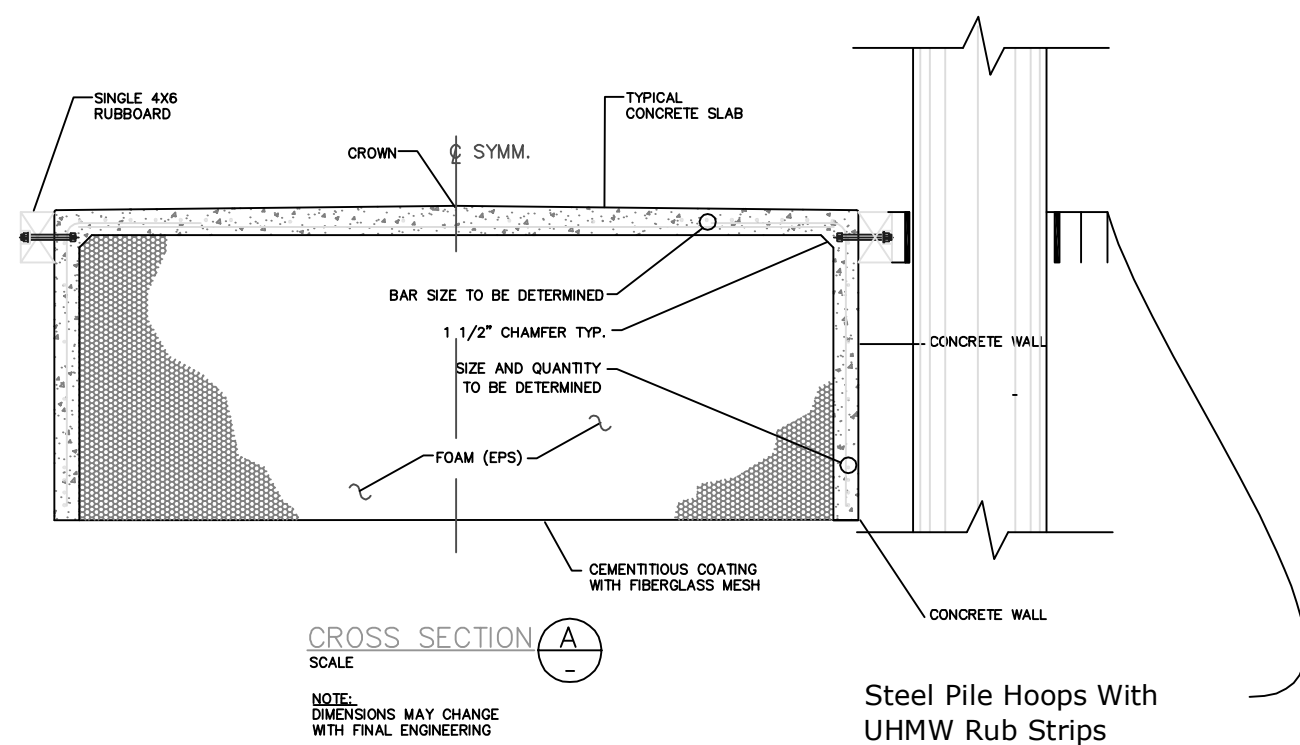
d:\fs\projects\porthoodriver\marinadock\cad\fs-porthr-c-dock-final-2009.dwg



TYP. PLAN OF MAIN FLOATS
1/8"=1'-0"



SHEET NOTES:
1. MONOLITHIC FLOATS MUST BE FABRICATED ACCORDING TO MANUFACTURER SPECIFICATIONS.



NOTE:
CONNECTION BAR/LOCATIONS AND SIZING ARE PROPRIETARY AND SHALL BE PROVIDED BY CONTRACTOR/SUPPLIER ACCEPTABLE EXAMPLE PROVIDED BY: INTERNATIONAL MARINE FLOATS

GENERAL DIAGRAMMATIC DETAIL FROM SUPPLIER. THIS ITEM IS BIDDER DESIGN

SHEET	9	OF	10
	DOCK DETAIL '2'		
PORT OF HOOD RIVER - C DOCK SOUTH			PROJECT HR-CDOCK
P.O. Box. 289 Hood River, OR 97031			
DATE: 11/04/09			
Flowing Solutions 1000 SW 10th Avenue Portland, OR 97205 Phone: (503) 297-6311 Fax: (503) 297-6053			
SCALE	N.T.S.	HORIZ.	VERT.
PLAN			ONE HALF INCH (REF)
APPROVED BY			
REVISION			
NO.	DATE		

