

# Whooshh Scanner at AFF

Proposal documents for Design and Installation

DRAFT VERSION 4

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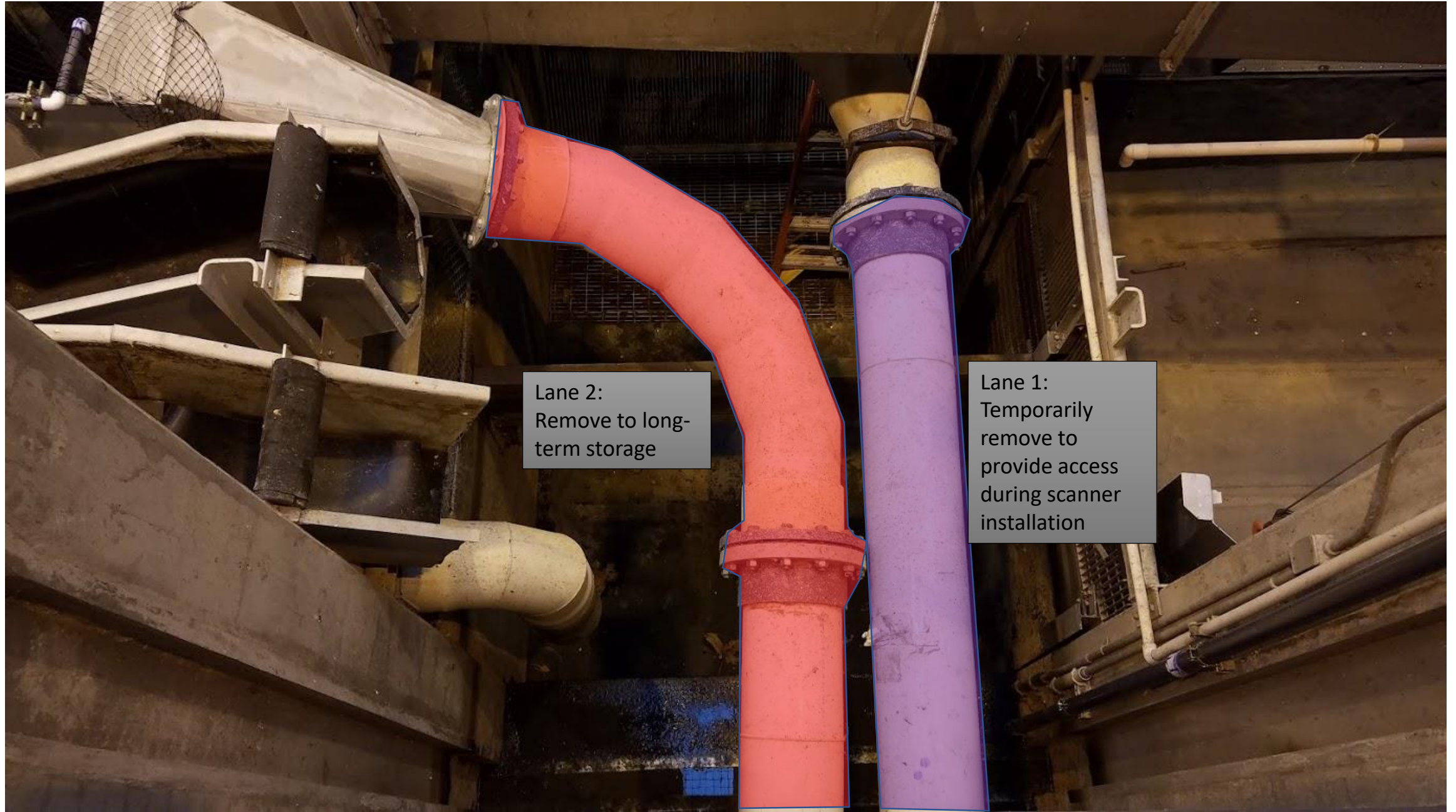


# Whooshh Scanner Installation: Lane Terminology





# Whooshh Scanner Installation: Remove Components

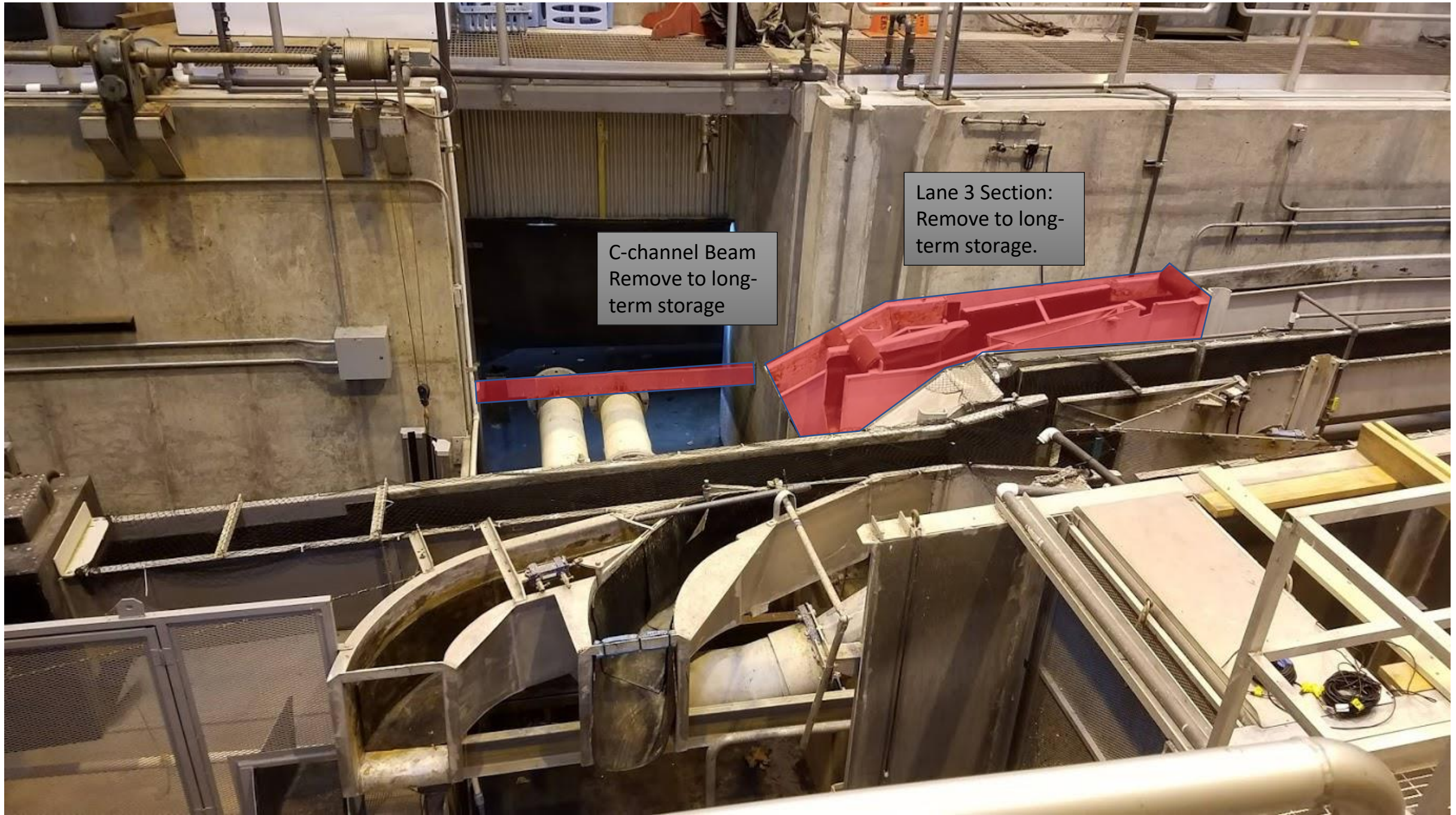


Lane 2:  
Remove to long-term storage

Lane 1:  
Temporarily remove to provide access during scanner installation



# Whooshh Scanner Installation: Remove Components



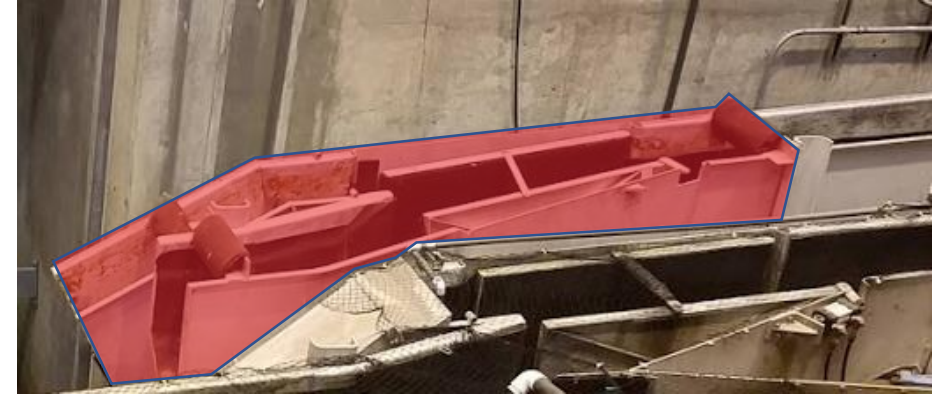
C-channel Beam  
Remove to long-term storage

Lane 3 Section:  
Remove to long-term storage.



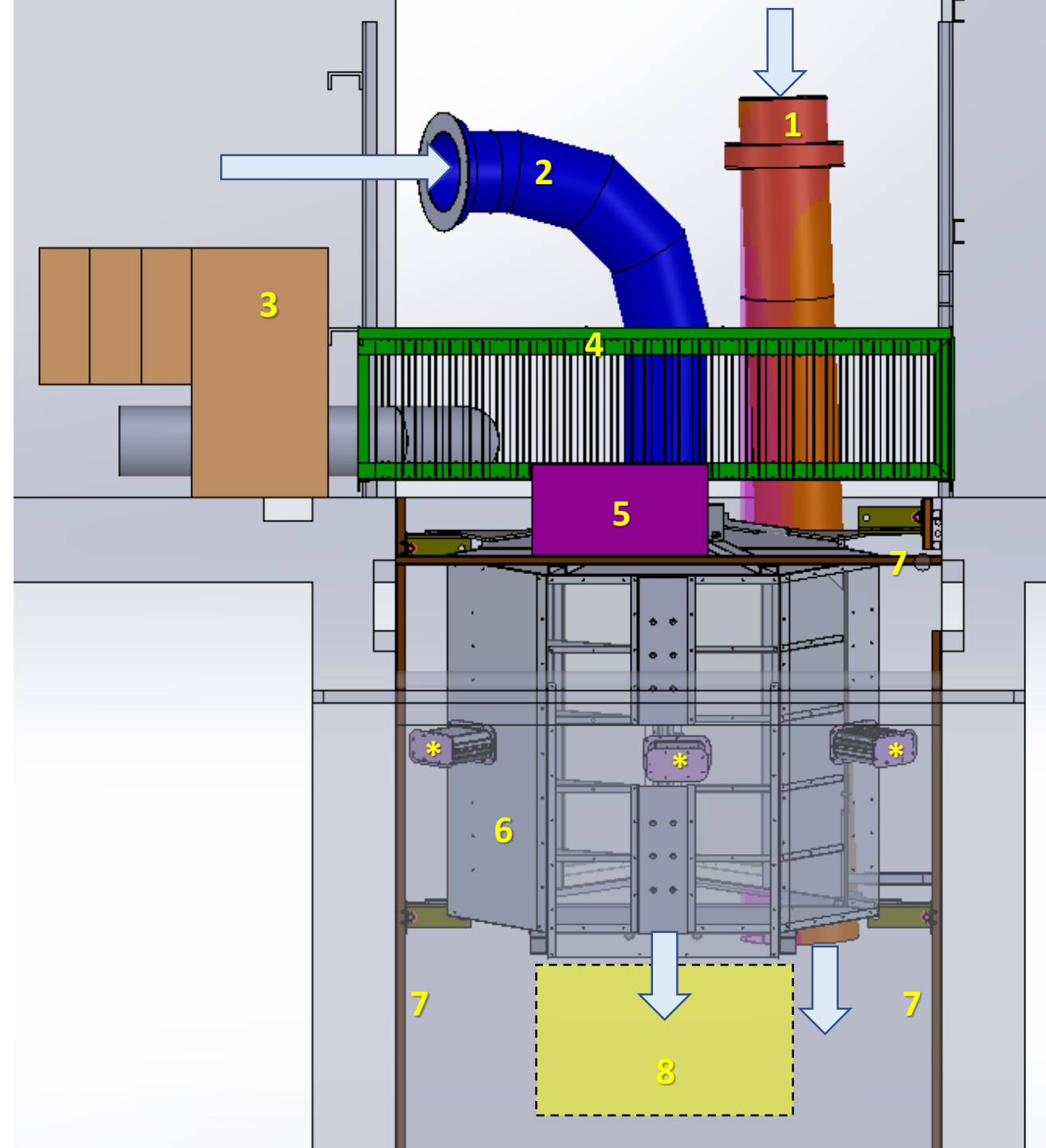
# Whooshh Scanner Installation: Remove Components

Unbolt connections between trough section and existing frame.  
Remove from facility and place in long term storage.  
Collect hardware and store with removed section.



# Component Layout

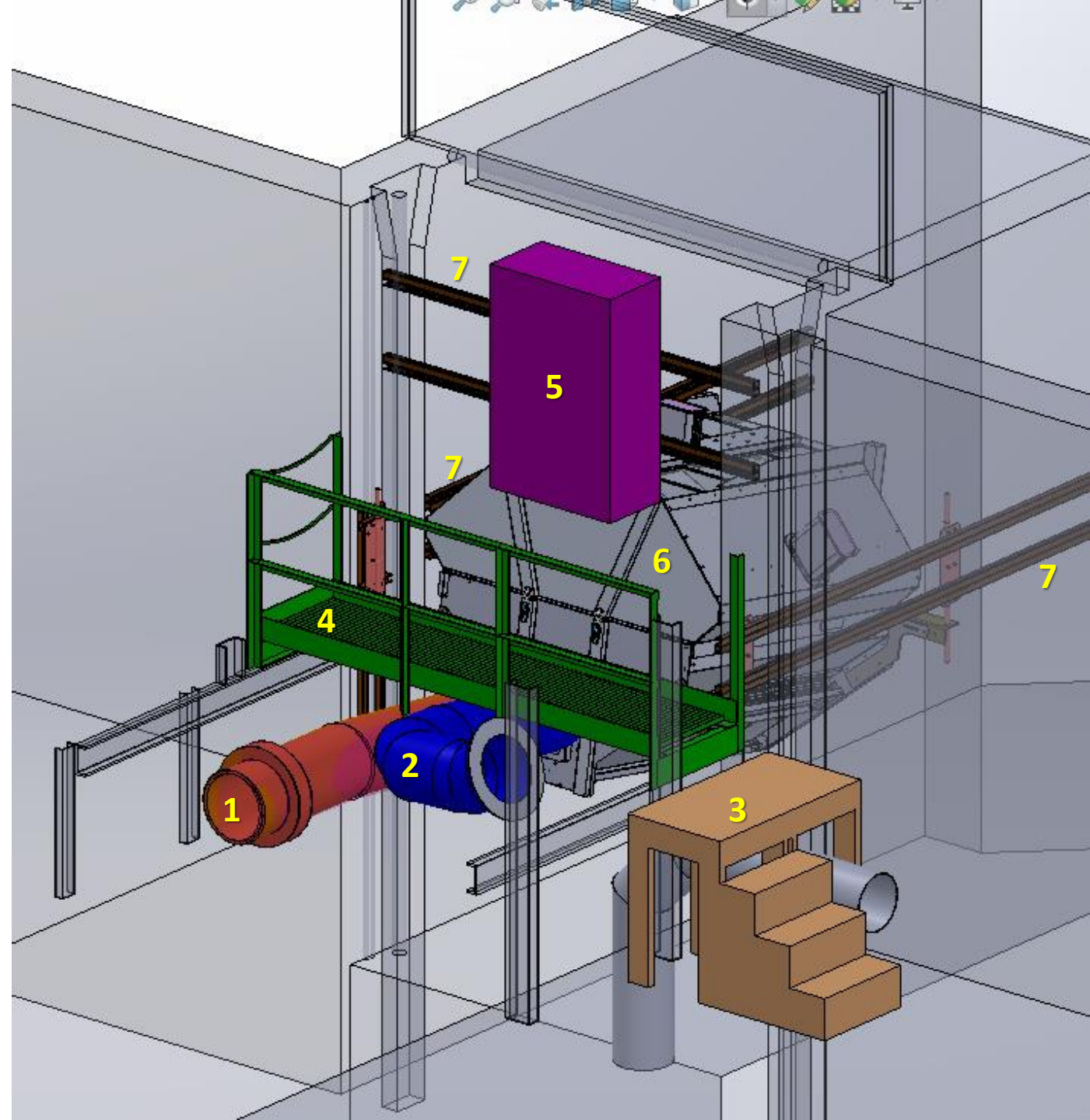
1. Lane 1 bypass pipe. (shifted slightly to avoid interference with scanner)
2. New custom fabricated fiberglass sweep transition from Lane 2 trough into scanner
3. Maintenance access steps (wooden)
4. Maintenance Walkway Platform (steel)
5. Control Cabinet
6. Scanner (Cameras: \*)
7. Unistrut mounting brackets for components
8. Light shroud around exit (Not pictured)





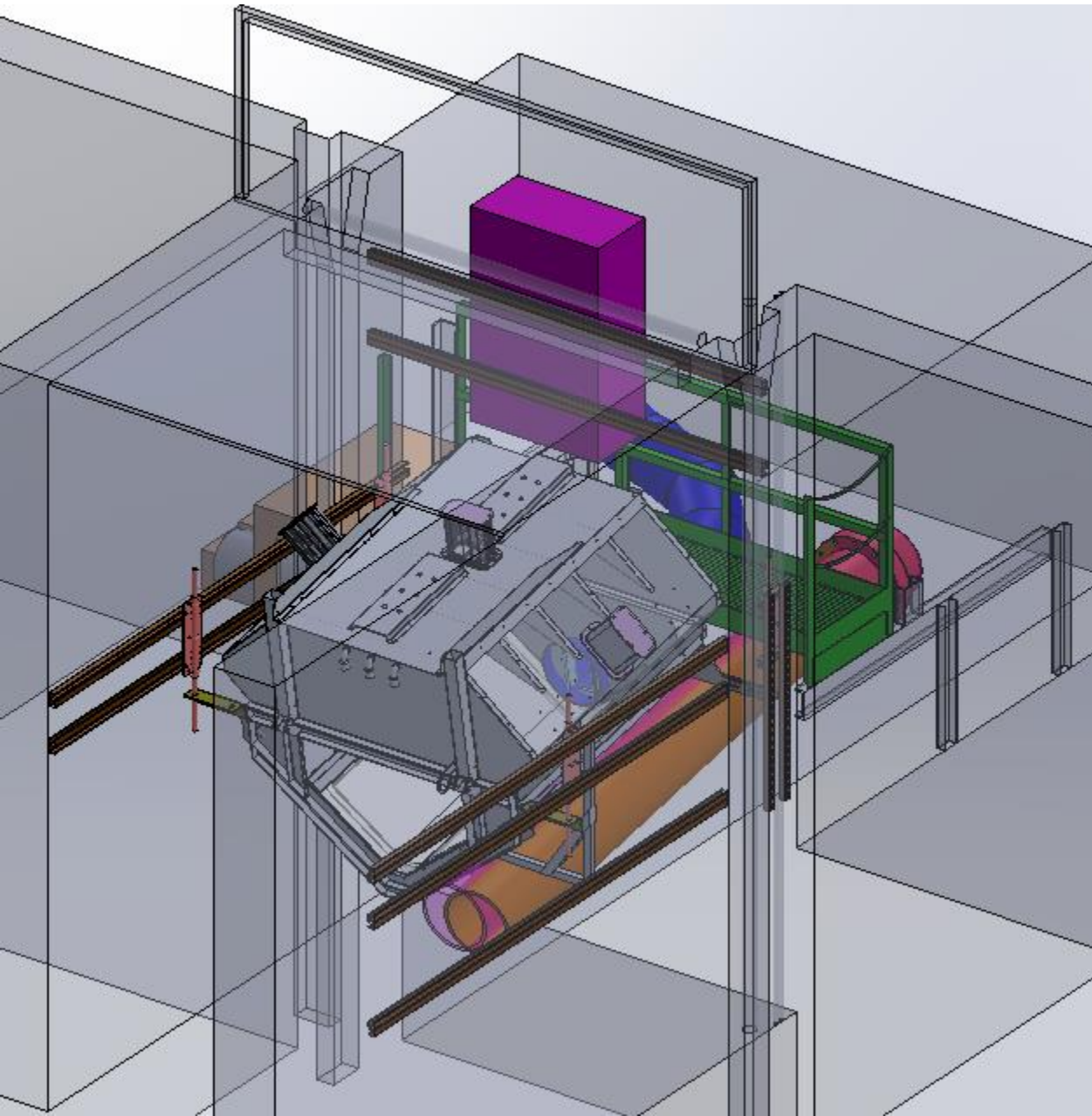
# Component Layout

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2. New custom fabricated fiberglass sweep transition from Lane 2 trough into scanner
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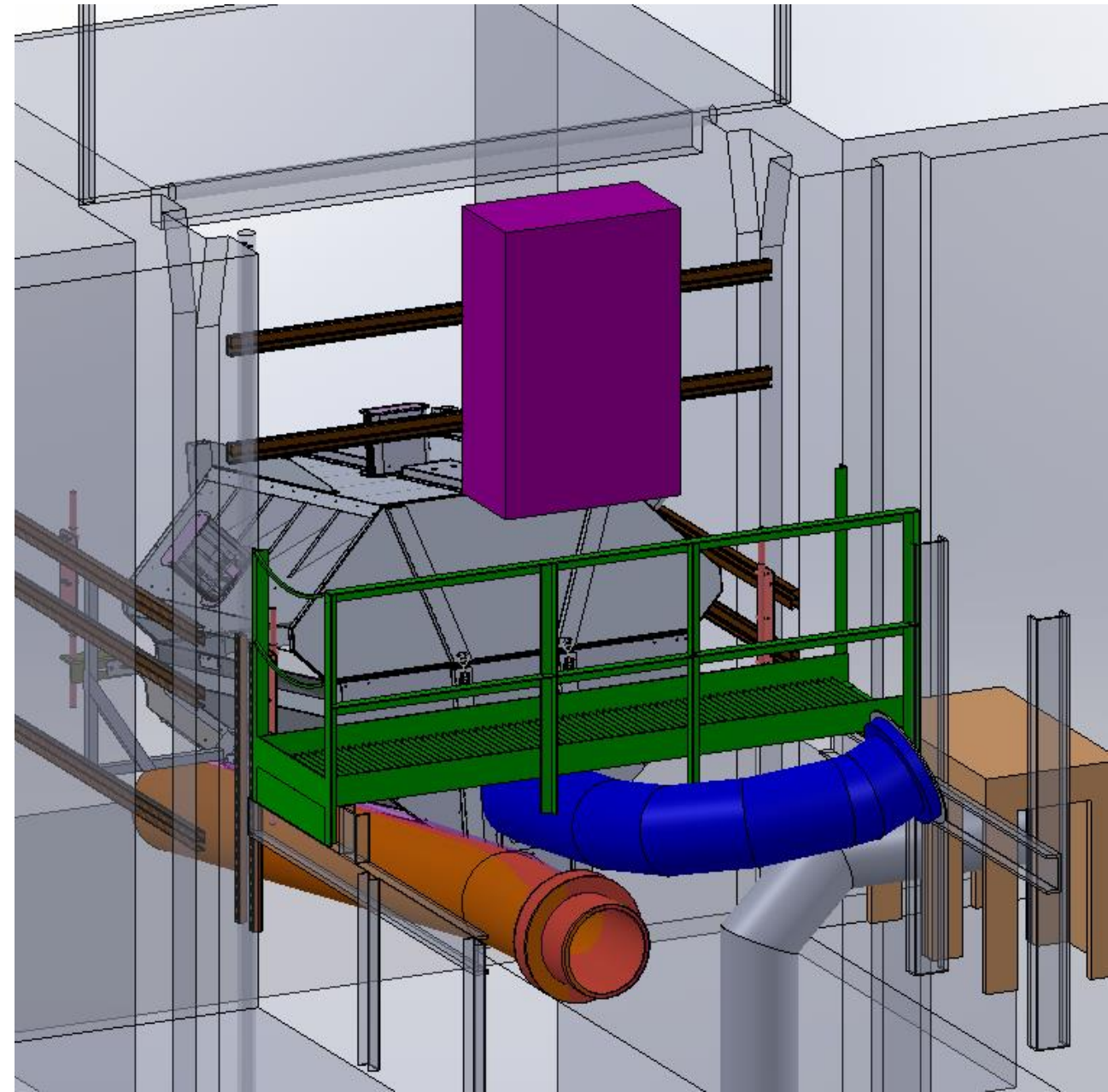




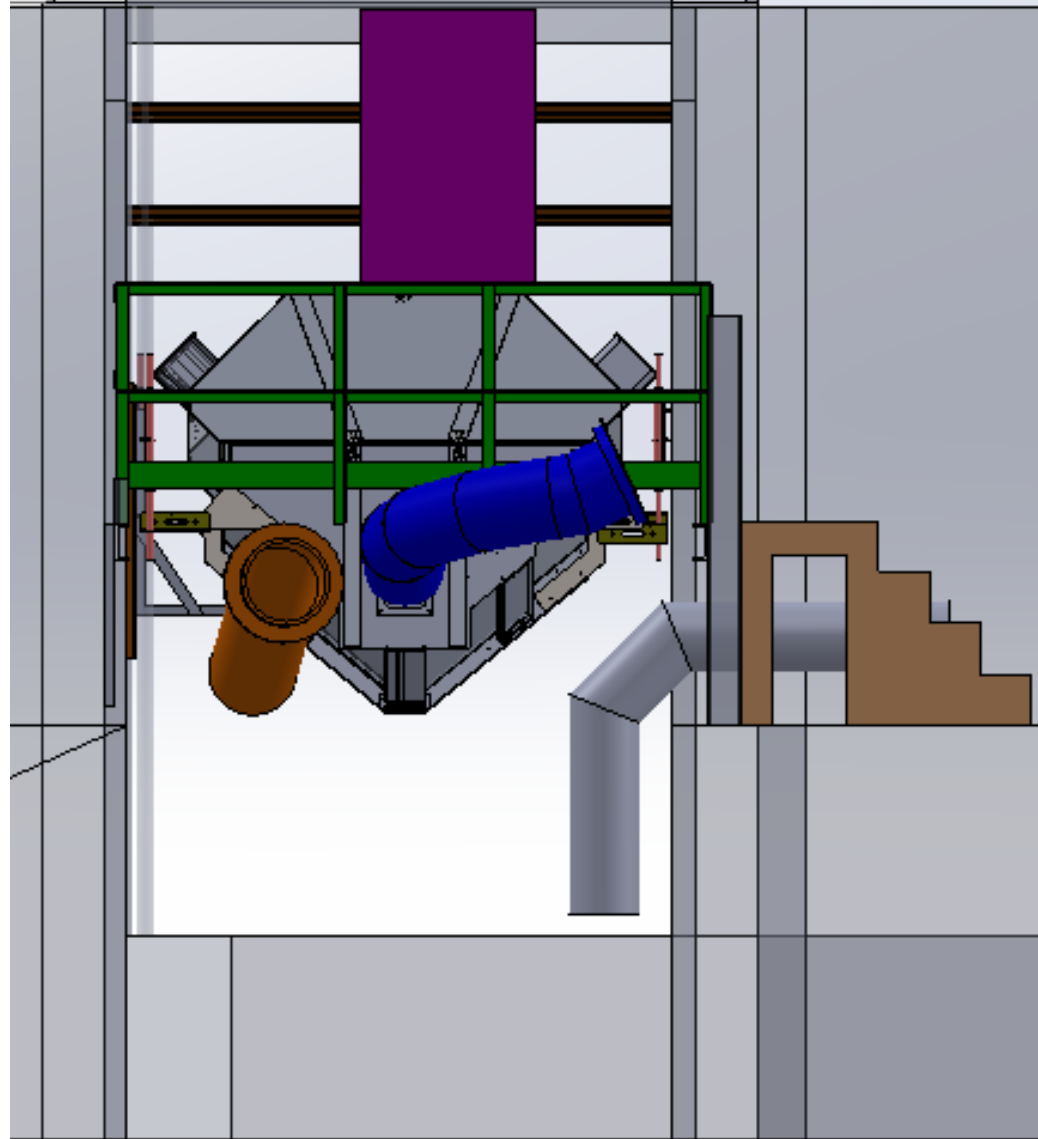
Back Left View



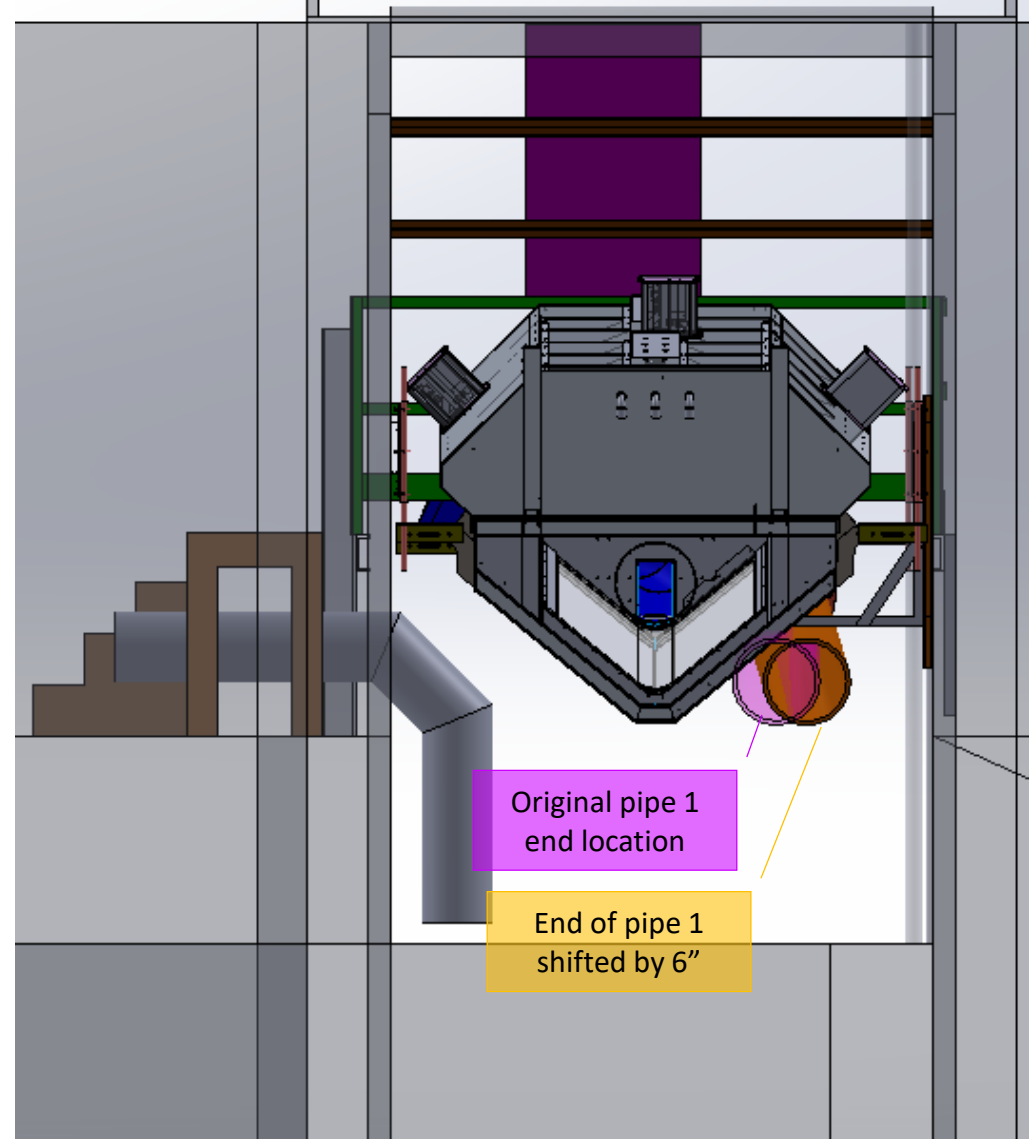
Front Left View



LOOKING DOWNSTREAM

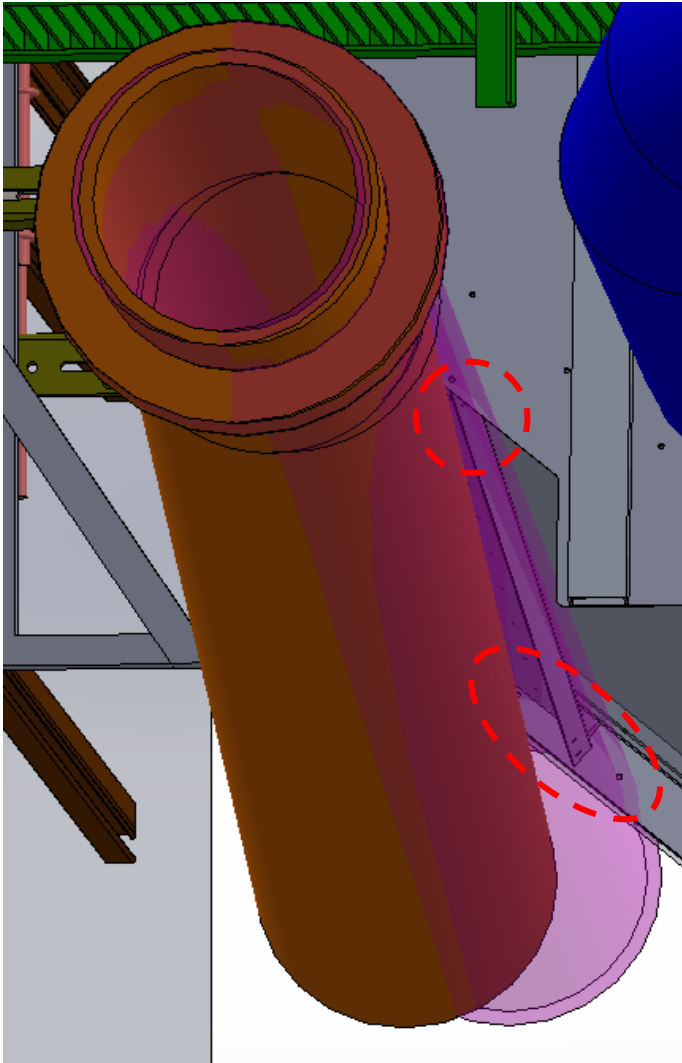


LOOKING UPSTREAM

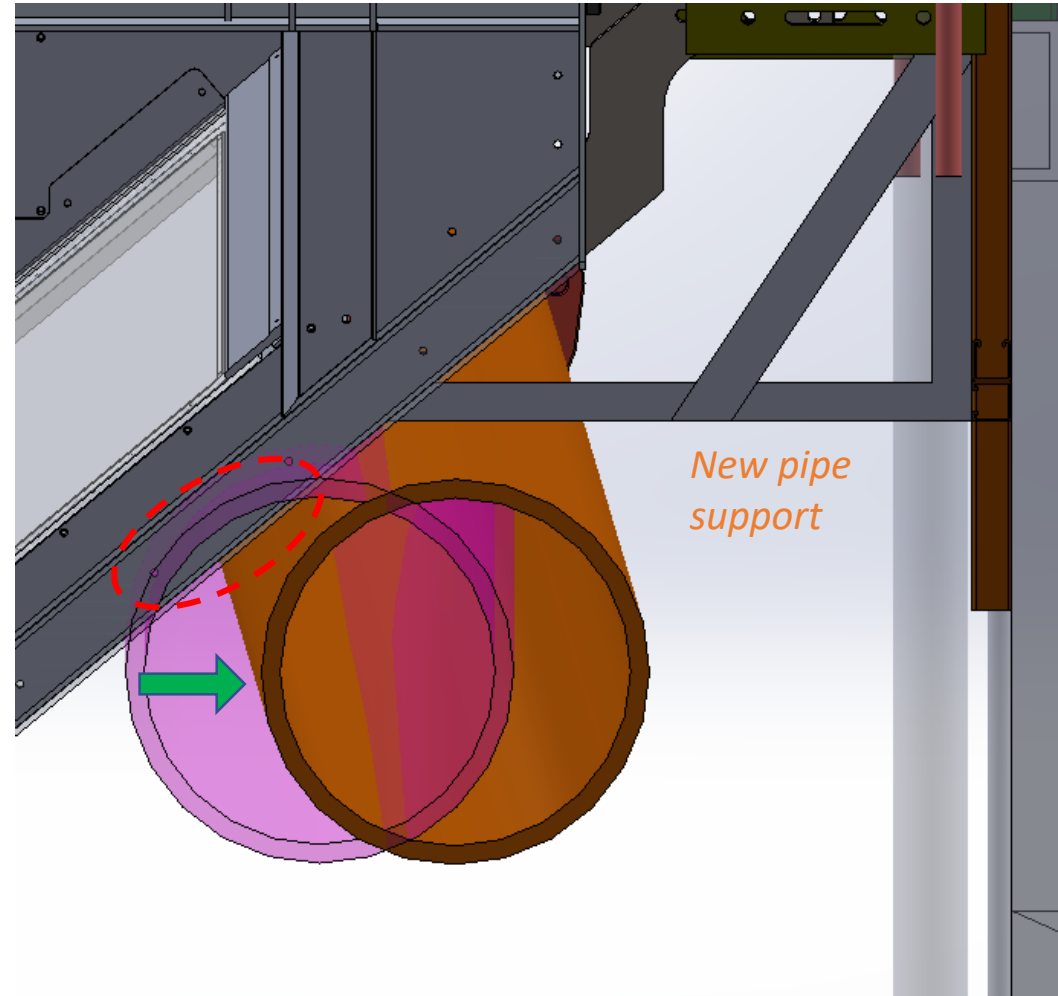




- Purple: Approximate location of 10ft x 14" existing Lane 1 bypass pipe.
- Orange: Proposed location of 10ft x 14" existing Lane 1 bypass pipe.
- Method: Pivot pipe at joint by  $\sim 2$  deg to achieve a shift of 6" at the end of the pipe.



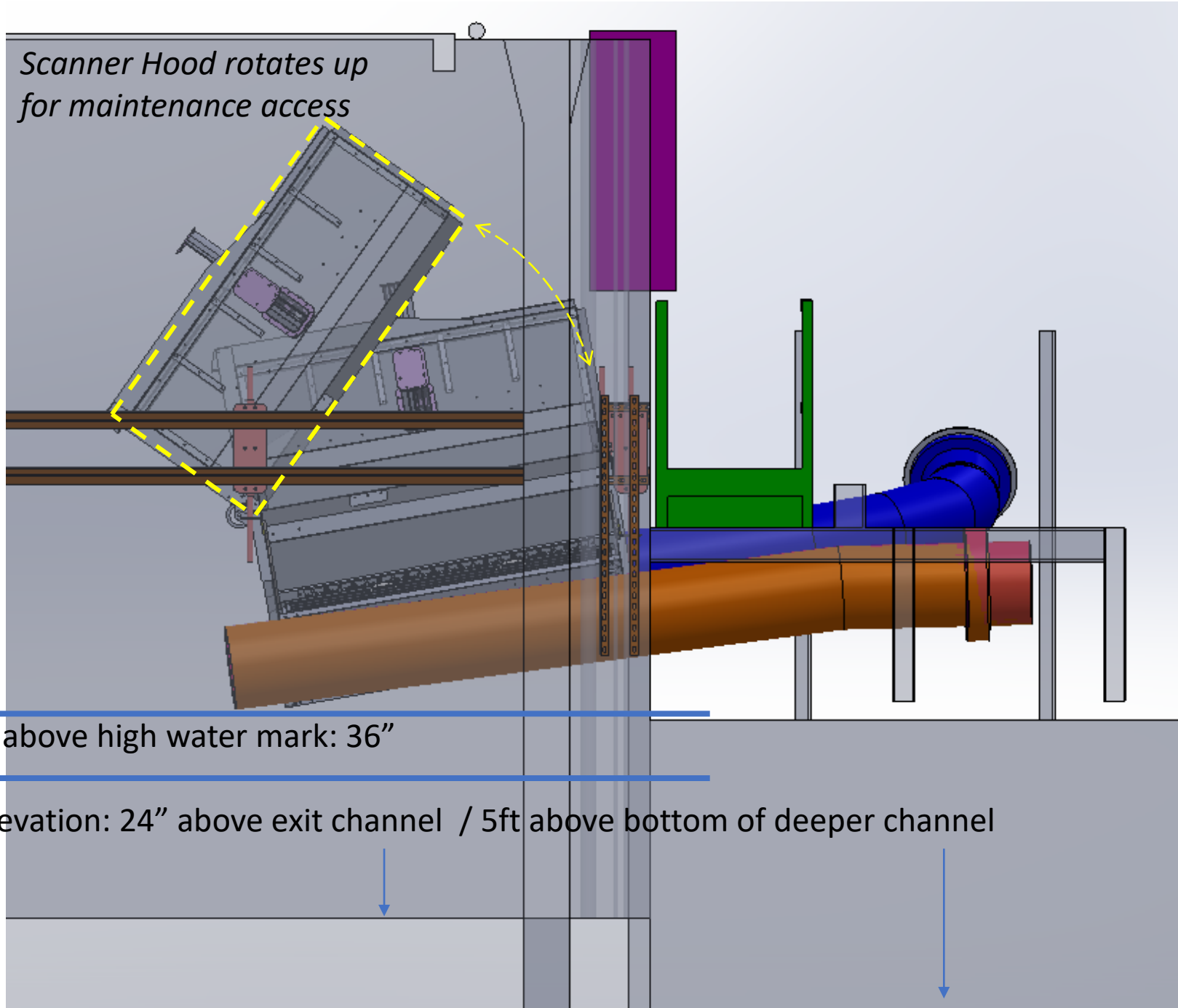
Looking  
downstream



Looking  
upstream

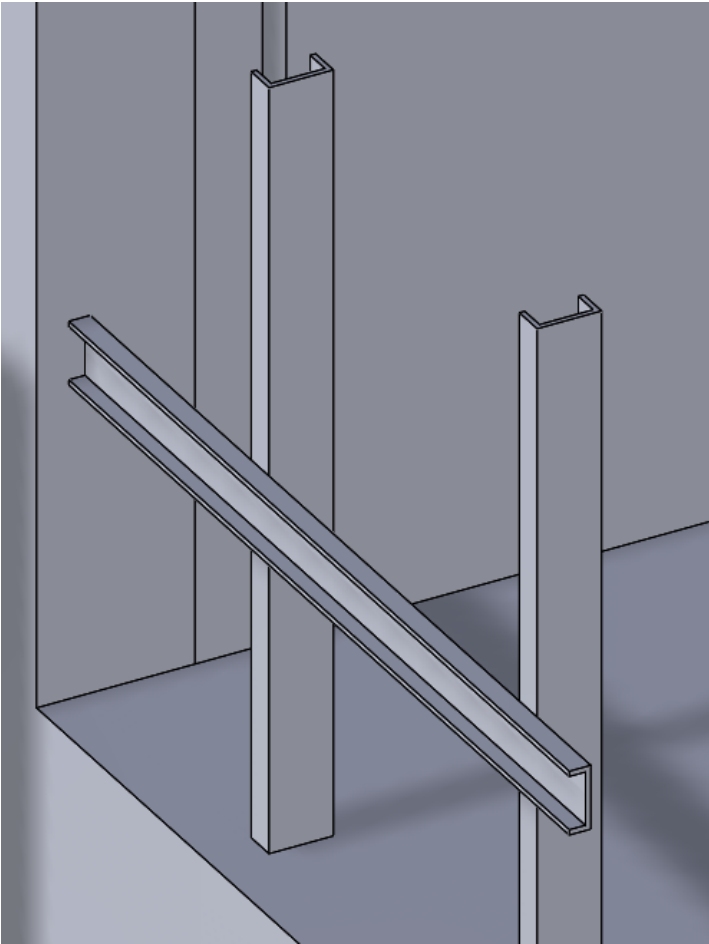
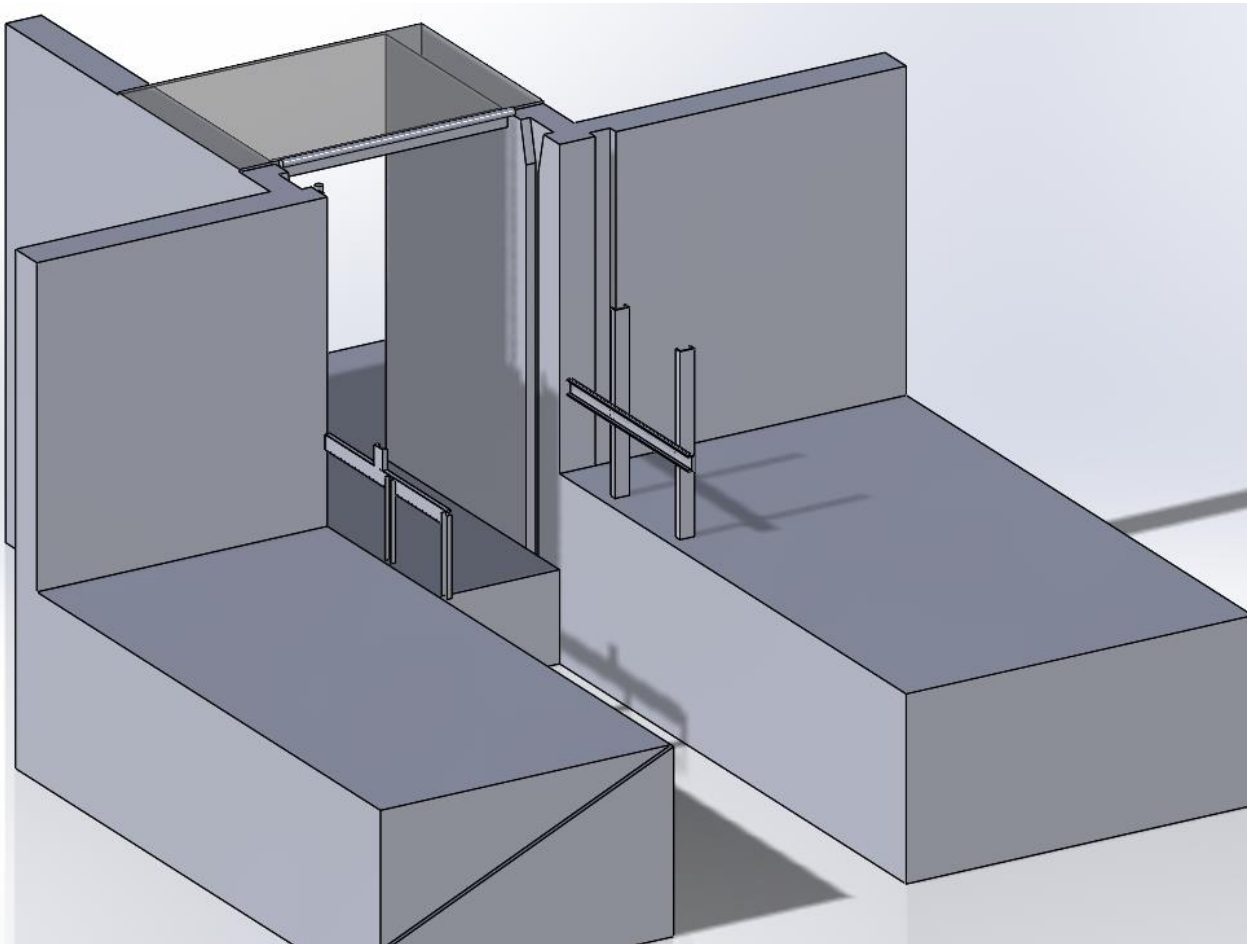
*New pipe  
support*

Left side view



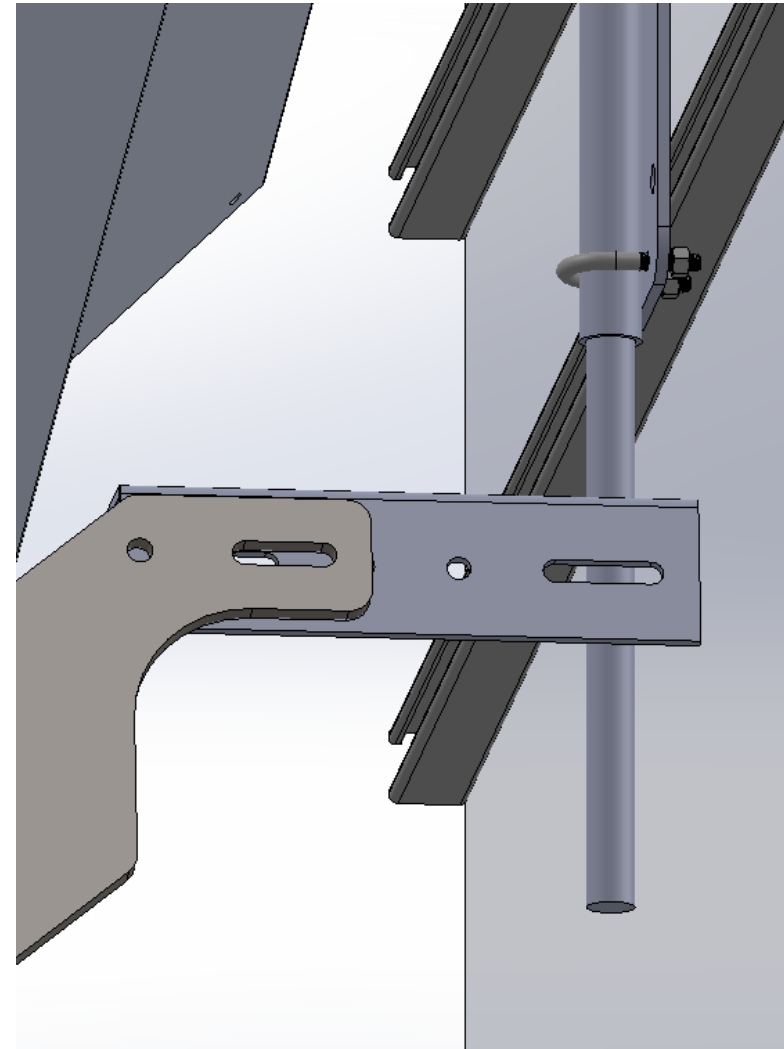
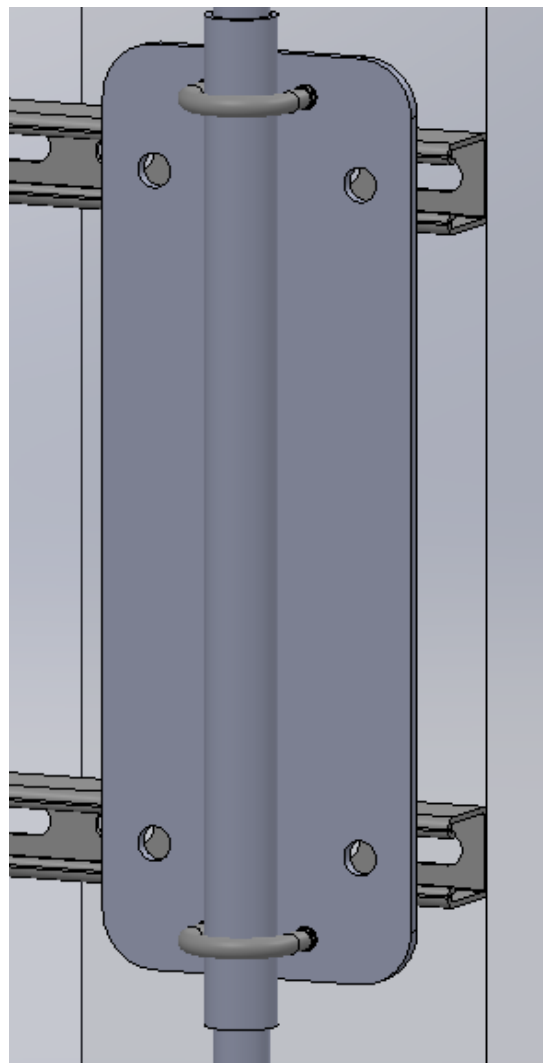
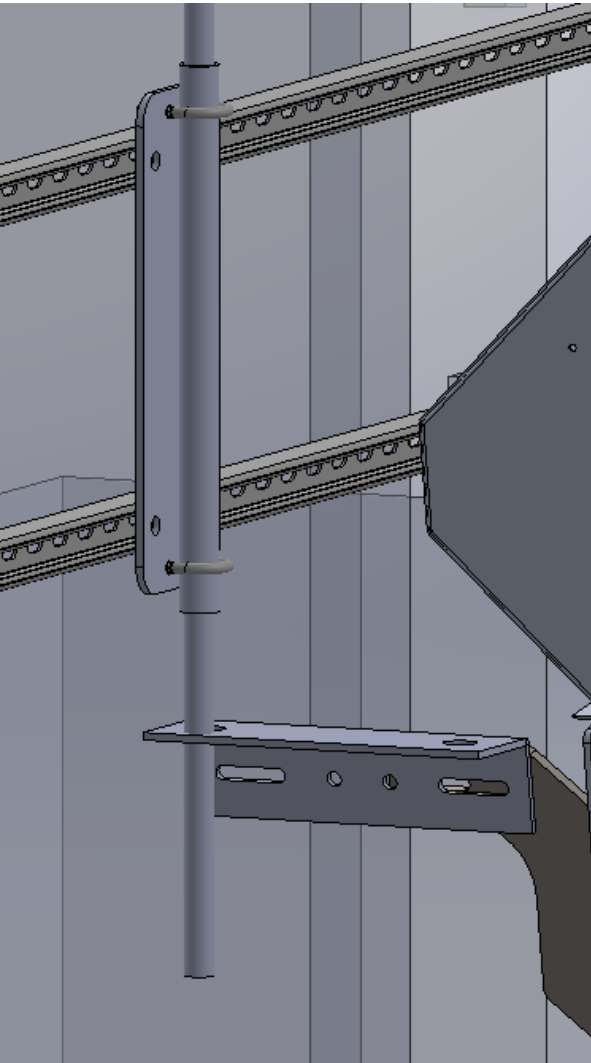


# AFF. Existing C-channel to support walkway



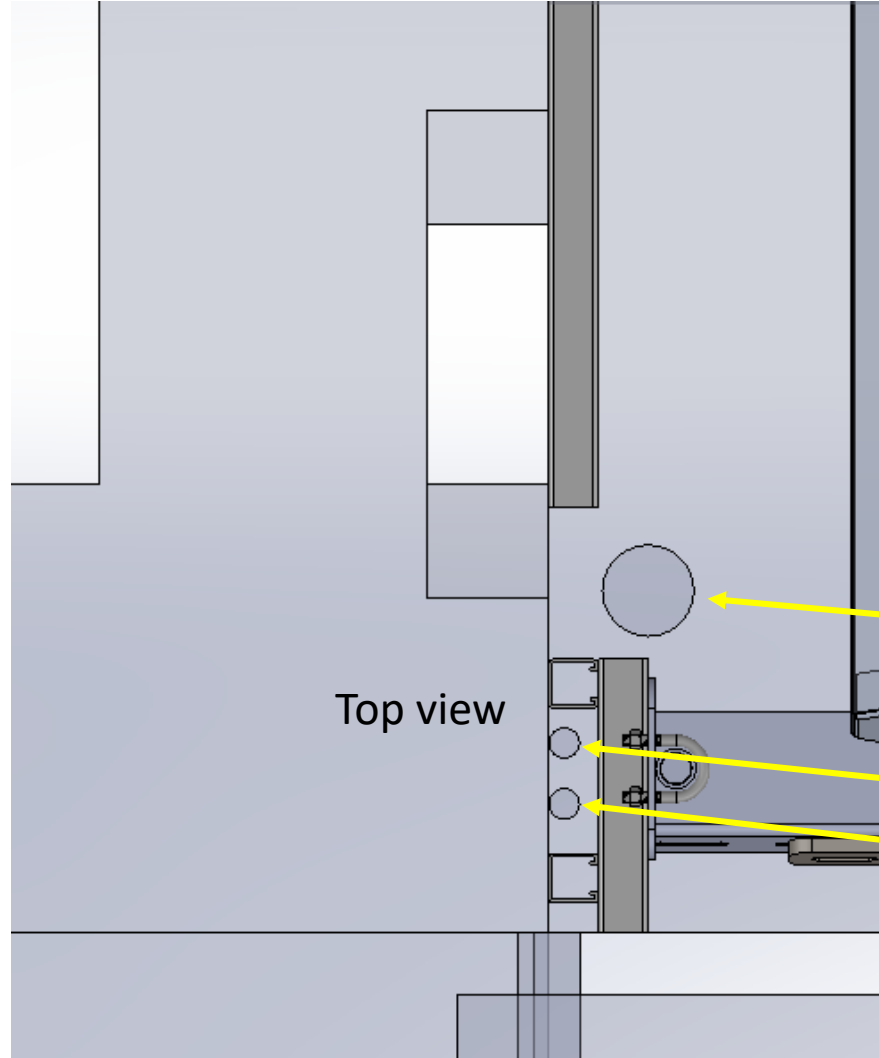
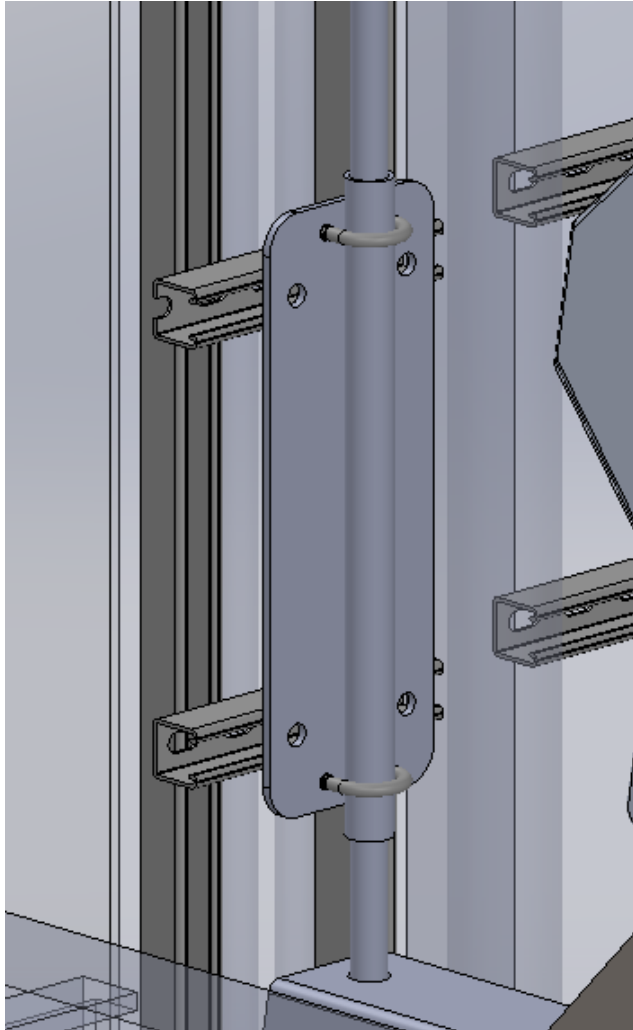
Scanner mounting system:

Adjustable left, right, up, down, in, out & rotate

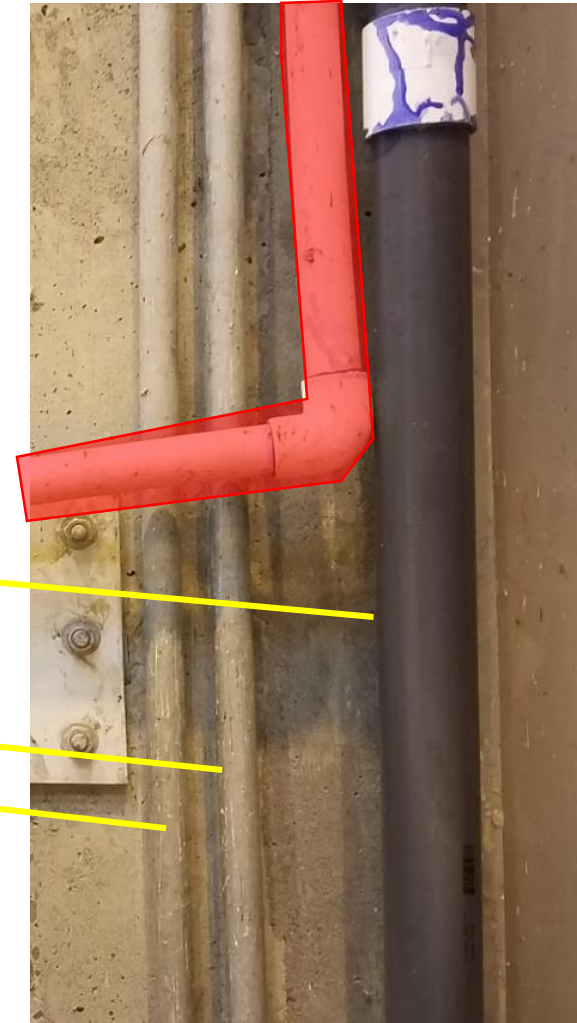




# Upstream, left wall. Conduit interference.

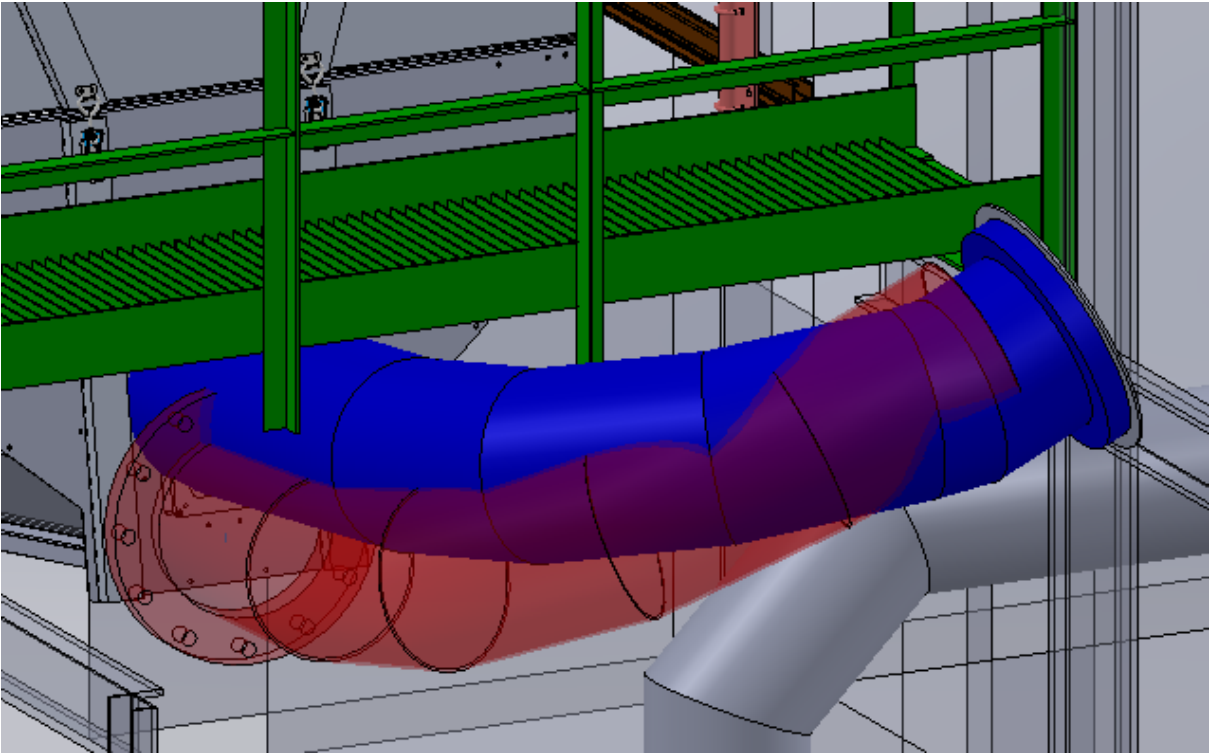
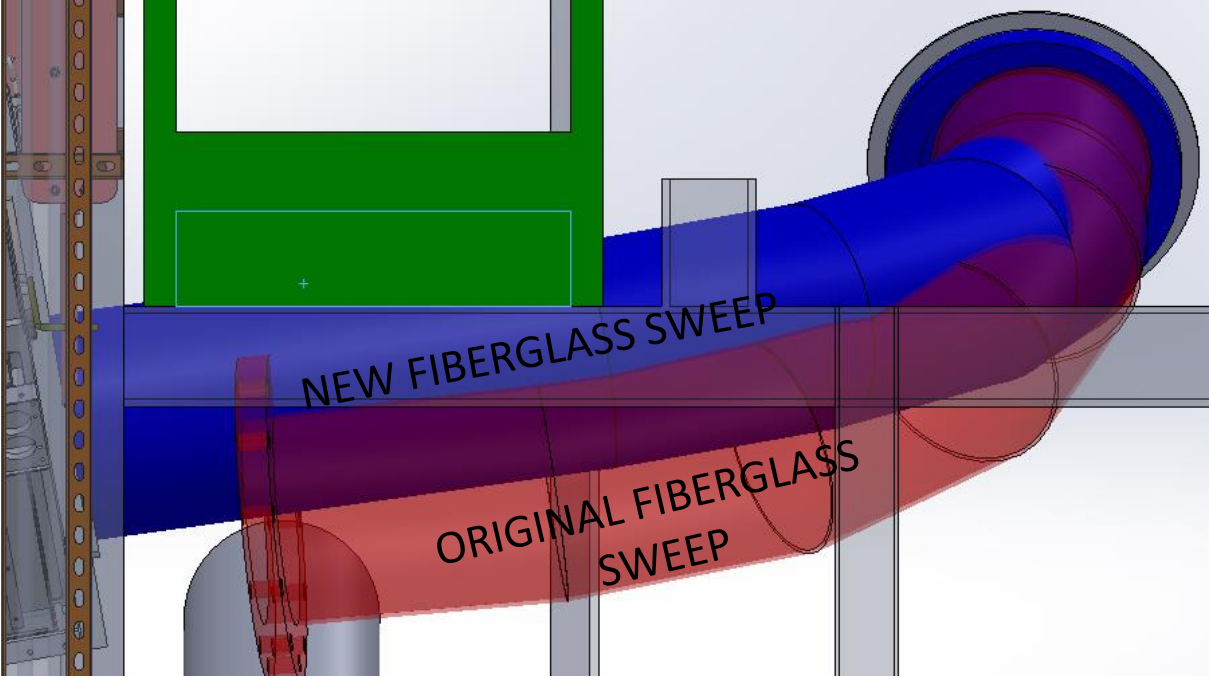


Interference with  
1" PVC water pipe :  
May need to be rerouted.



Original fiberglass sweep did not allow enough room to install scanner above waterline.

Platform will need to be 6" above C-channel to accommodate new fiberglass sweep.





Van Stone  
Flange on  
this end

10.2  
Length to  
mating surface

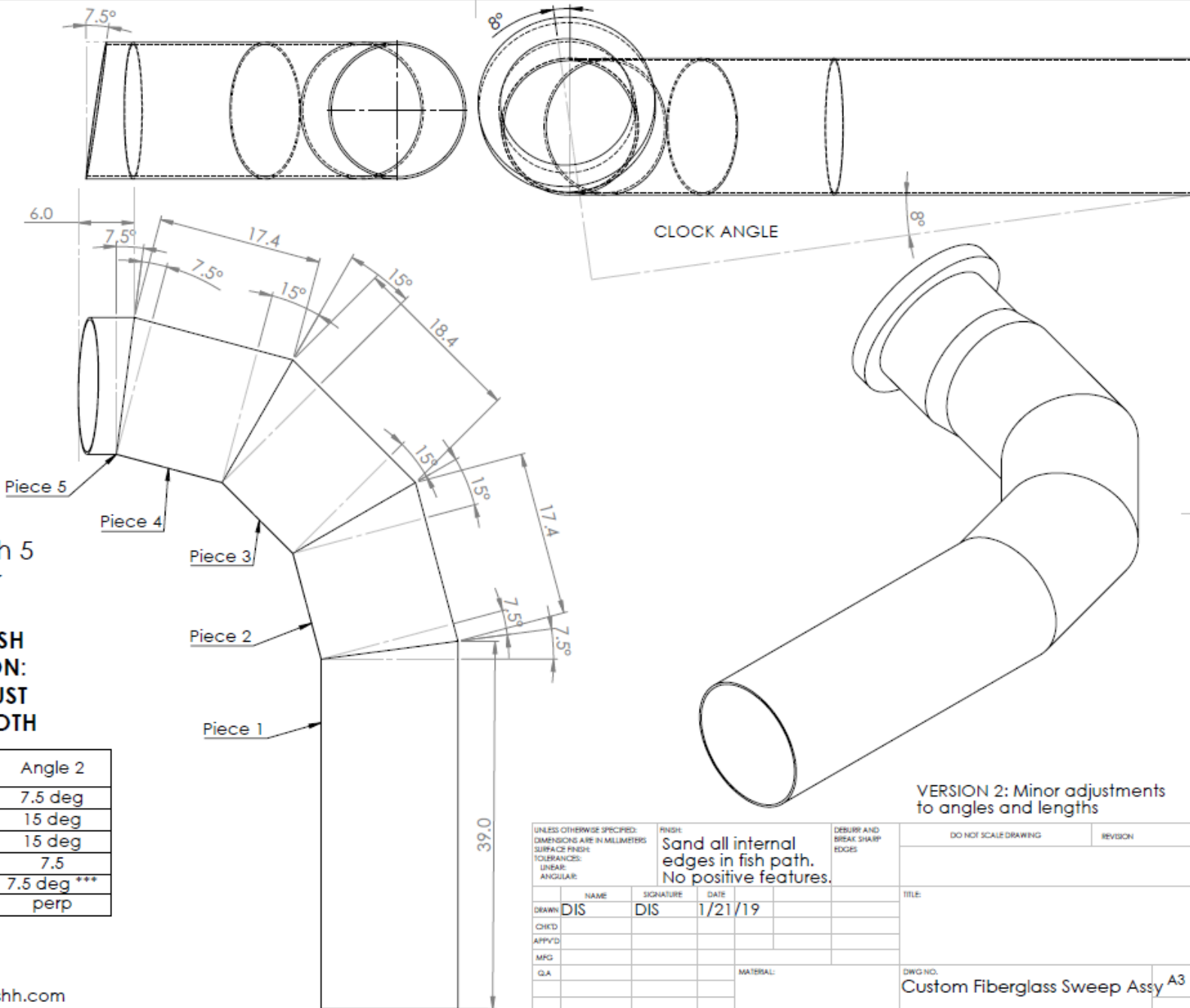
Piece 6

PIECES 1 through 5  
are all coplaner

**DESIGNED FOR FISH  
PATH APPLICATION:  
INSIDE JOINTS MUST  
BE SANDED SMOOTH**

Piece #	Length	Angle 1	Angle 2
1	39	Perp	7.5 deg
2	17.4	7.5 deg	15 deg
3	18.4	15 deg	15 deg
4	17.4	15 deg	7.5
5	6	7.5 deg	7.5 deg ***
6	8	7.5 deg	perp

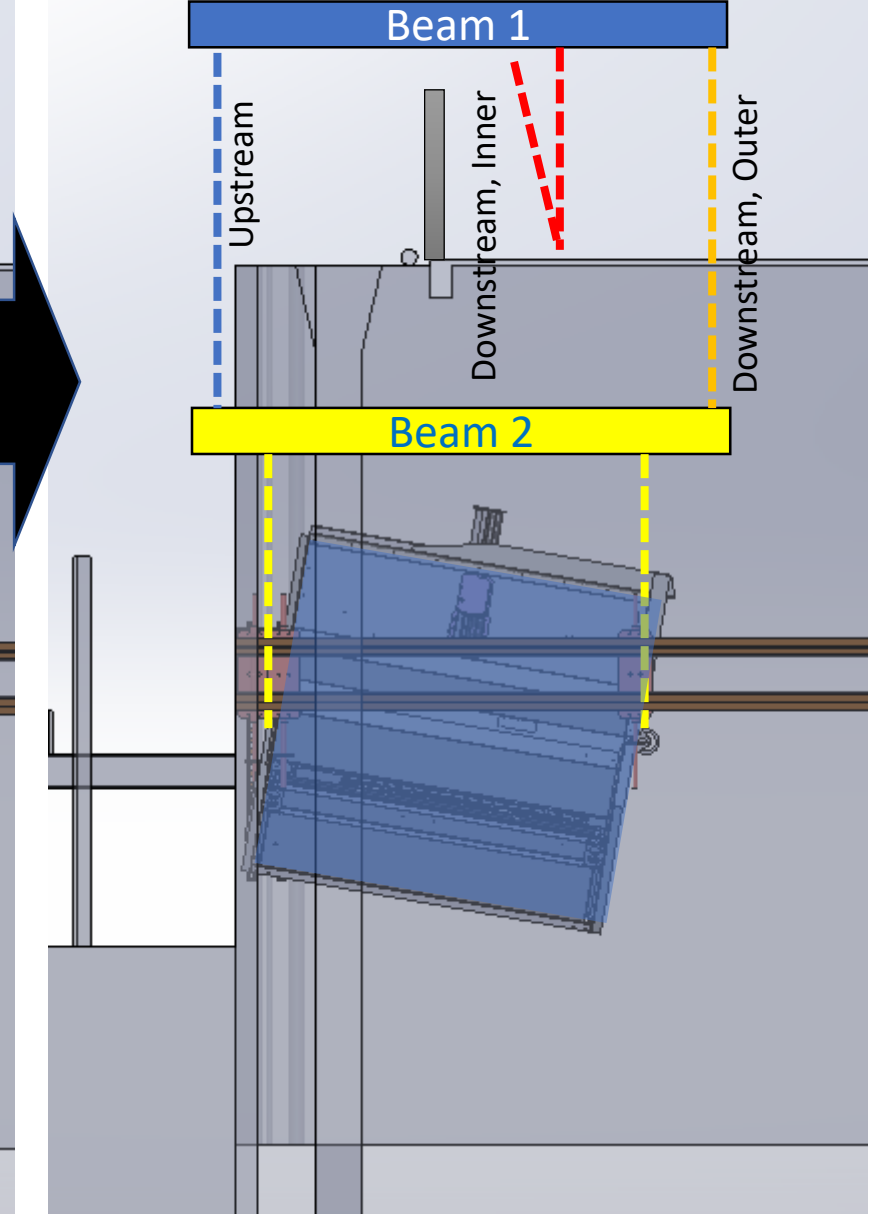
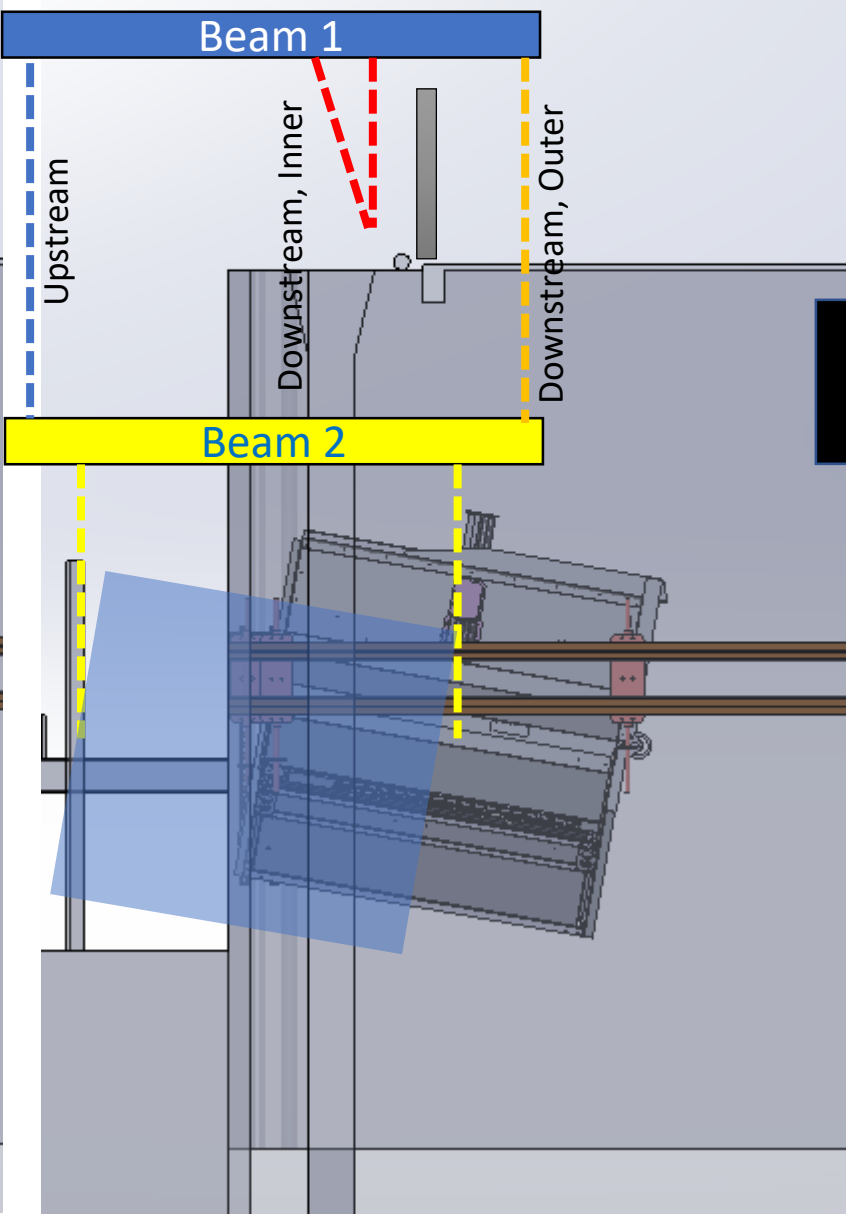
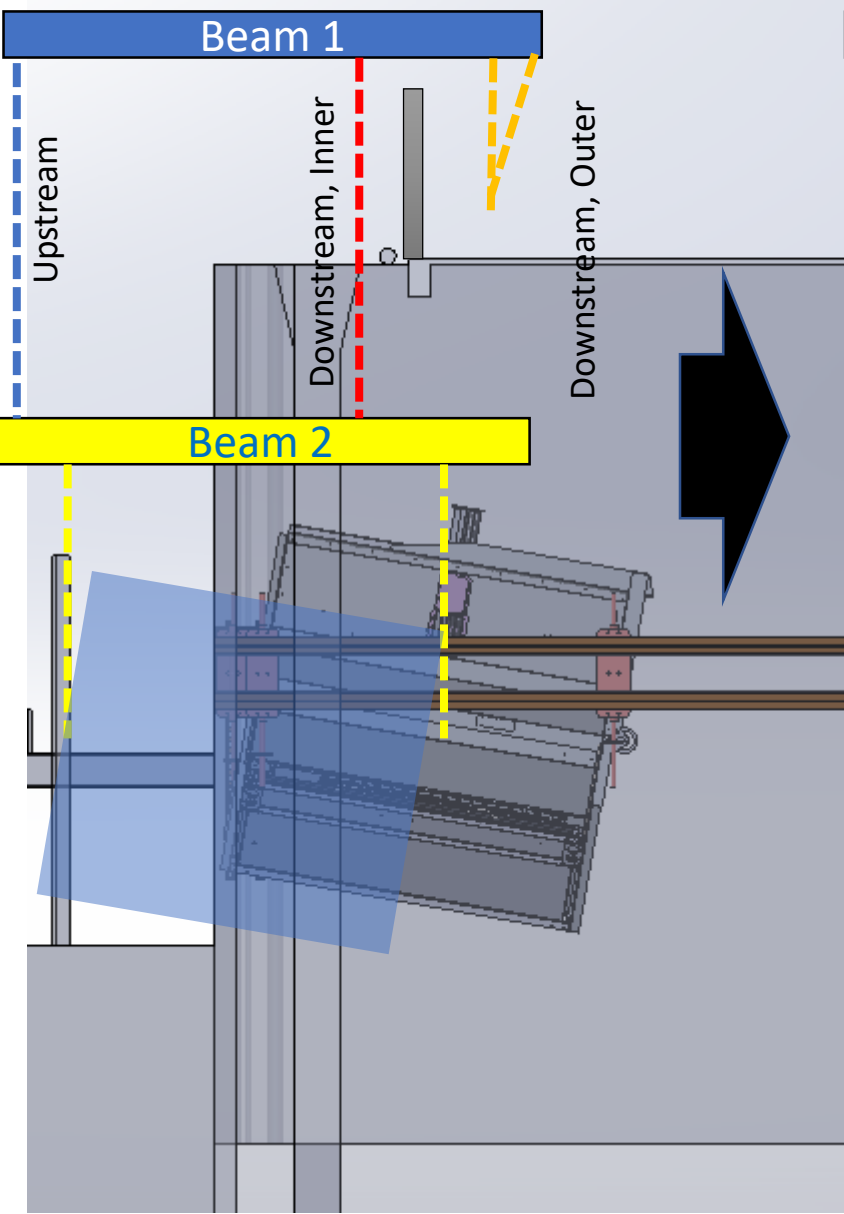
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VERSION 2: Minor adjustments  
to angles and lengths

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:			FINISH: Sand all internal edges in fish path. No positive features.		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
NAME	SIGNATURE	DATE								
DRAWN: DIS		1/21/19							TITLE:	
CHKD:										
APP'VD:										
MFG:										
QA:					MATERIAL:		DWG NO.		Custom Fiberglass Sweep Assy A3	
					WEIGHT:		SCALE: 1:00		SHEET 1 OF 1	

# LIFTING SEQUENCE FOR INSTALLING SCANNER UNDER WALKWAY





PREPARATION FOR LIFTING SEQUENCE FOR INSTALLING SCANNER UNDER WALKWAY

Beam 1



Restricted Access



Fall Protection  
Concrete Anchor  
into wall



Grating Panel to be removed  
during installation of scanner

Beam 2



Restricted Access

