



**Transcontinental Gas Pipe Line Company, LLC**

**Appendix 3 – Aids To Navigation Plan**

**Regional Energy Access Expansion Project –  
Regional Energy Lateral and Existing Compressor Station 515**

**Added March 2022**



# Pennsylvania Fish & Boat Commission

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June 16, 2021

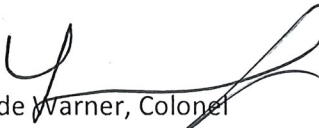
Ryan Nelson, PWS  
WHM Consulting, LLC  
2525 Green Tech Drive, Suite B  
State College PA, 16803

I have reviewed the recently submitted Aids to Navigation Plan for the trenchless pipeline crossing of the Susquehanna River in Wyoming Borough and Jenkins Twp., Luzerne County. The plan is acceptable as submitted and has been approved. All signage/buoys must be installed prior to construction and inspected frequently to ensure it is always visible to boaters. Any changes to this plan must be submitted directly to this office for further review. If buoys are to be utilized PFBC-277 Application to Install Floating Structures/Private Aids to Navigation must be submitted and approved prior to installation.

I will share the approved ATON plan with the PA Fish & Boat Commission Division of Environmental Services and the Regional Law Enforcement Office to ensure they are aware of the project. Please advise the contractor that the project site may be inspected at any time by Bureau of Law Enforcement personnel for compliance with this plan. A copy of the approved plan along with this letter should be available for inspection if requested.

Please feel free to contact me if you have any questions concerning this project or the PA Fish & Boat Commission Aids to Navigation program in general.

Sincerely,

  
Clyde Warner, Colonel  
Bureau of Law Enforcement

Cc: (electronic).NE Region BLE-DES

## **Our Mission:**

*To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.*

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***Transcontinental Gas Pipe Line Company, LLC***

***AID TO NAVIGATION PLAN***

***Regional Energy Access Expansion Project***

***Regional Energy Lateral***

***Susquehanna River Crossing***

***Luzerne County, PA***

***Submitted to:***

Captain Clyde Warner  
PA Fish & Boat Commission  
Bureau of Law Enforcement  
1601 Elmerton Ave.  
Harrisburg, PA 17110

***June 2021***

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SECTION 1.0  
PROJECT NARRATIVE

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC  
REGIONAL ENERGY ACCESS EXPANSION PROJECT – REGIONAL ENERGY LATERAL  
SUSQUEHANNA RIVER CROSSING  
AID TO NAVIGATION PLAN  
LUZERNE COUNTY, PENNSYLVANIA  
PROJECT DESCRIPTION

**1.0 PROJECT DESCRIPTION**

Transcontinental Gas Pipe Line Company, LLC (Transco) is proposing the Regional Energy Access Expansion Project, which includes the Regional Energy Lateral, an approximately 22-mile 30-inch gas pipeline in Luzerne County. To install the pipeline, a trenchless crossing of the Susquehanna River via Direct Pipe® is proposed. During the pipeline installation, a temporary tracking cable will be weighted to the river bottom to track Direct Pipe® construction. Also, at the pipeline crossing location, a temporary water withdrawal and hydrostatic discharge is proposed from the west bank of the Susquehanna River. These activities are proposed in the Wyoming Borough (west bank) and Jenkins Township (east bank), Luzerne County.

Direct Pipe® Construction

The pipeline installation will not involve disturbance of the riverbed during Direct Pipe® construction. In-river work associated with the installation is associated with the tracking cable and water withdrawal. The temporary weighted tracking cable (+/- 1/2" diameter) will be laid on the riverbed via a jon boat (or similar) to track direct pipe progress during construction. Once the Direct Pipe® installation is complete, this will be removed. Jon boat access is proposed from the river's west bank within the proposed construction workspace. The Direct Pipe® installation is anticipated to take 2-3 months.

Water Withdrawal and Hydrostatic Discharge

The temporary water intake will be installed to support Direct Pipe® construction and remain in place to support hydrostatic testing, as water is necessary for both activities. Transco is proposing a water withdrawal from the west bank of the Susquehanna River. The temporary withdrawal structure will extend up to 230-feet into the river, depending on water level at the time of installation. The withdrawal structure will have either a 4" or 12" intake.

Hydrostatic test water is proposed for discharge to the Susquehanna River. Test water will enter a weir tank located on the west bank to reduce velocity and pressure from the pipeline testing prior to entering the river. From the weir tank, the water will gravity flow out of discharge hoses that will be placed on the riverbank. A 90-degree fitting will be installed on the end of each hose and pointed vertically to allow gravity and the surface tension of the river water to dissipate the remaining energy and prevent scour of the riverbed. Construction details showing the design of the withdrawal and discharge structure are included with this plan.

**2.0 AID TO NAVIGATION PLAN (ATON), SIGN DETAILS, AND TIMING**

The Susquehanna River is large enough for motorized boats; therefore, the plan is developed to provide safety for all types of watercraft, including motorized boats, which may travel by the Project area. To enable navigation safely around the work area, "Warning – Construction – Use Extreme Caution when boating in this area" signage will be placed along both

banks 200 feet upstream and downstream of the pipeline crossing. These signs will be placed jointly with "Keep Left No Stopping" or "Keep Right No Stopping" signage, which will direct boaters around the water withdrawal and discharge structures. The no stopping will also be indicated on these signs to prevent boaters from stopping within the work zone to prevent potential conflicts with the tracking cable. One additional sign indicated "No Anchoring – Submerged Cable Located Within Construction Area" will also be placed to notify boaters of the cable presence and not to anchor in this area. The signage will be placed as shown on the attached plan.

"Boats Keep Out" buoys will be placed 100-200 feet upstream, downstream and to the east of the intake location and will be spaced approximately 75 feet apart. Buoys upstream of the crossing shall be placed at an angle facing downstream towards the center of the river crossing. The buoys will be placed as shown on the plan by the contractor prior to starting work. Upon completion of all work, the buoys and construction area signage will be removed.

SECTION 2.0  
PHOTOGRAPHIC DOCUMENTATION

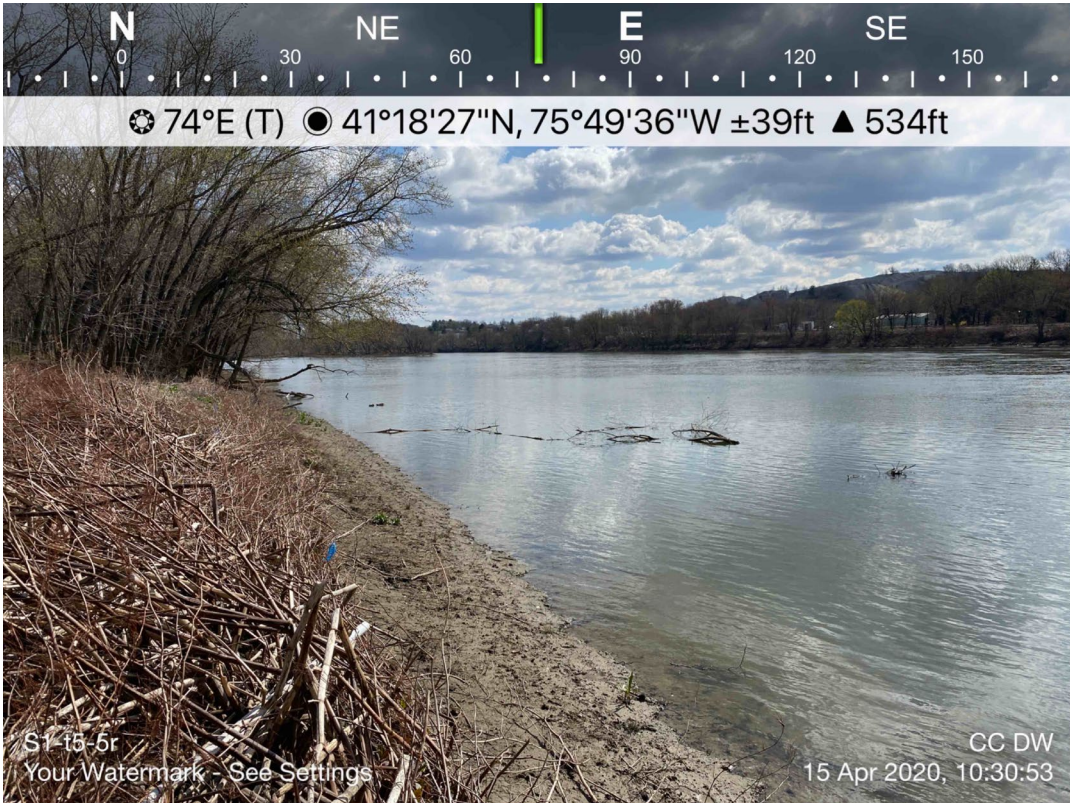


**ID:** Photo 1

**Date:** 4/14/2020

**Taken by:** RN

**Comments:**  
This photo shows a western view looking across the crossing location of the Susquehanna River. The pipeline crossings is to the left of the powerline.



**ID:** Photo 2

**Date:** 4/15/2020

**Taken by:** CC

**Comments:**  
This photo shows an upriver view from the western bank of the Susquehanna River. This is the approximate pipeline crossing location, and temporary discharge and withdrawal location.



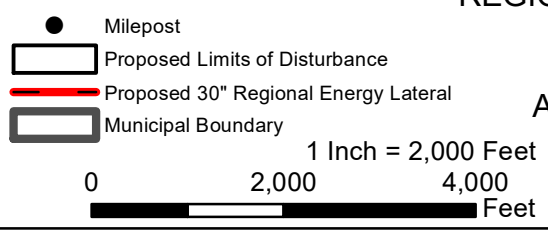
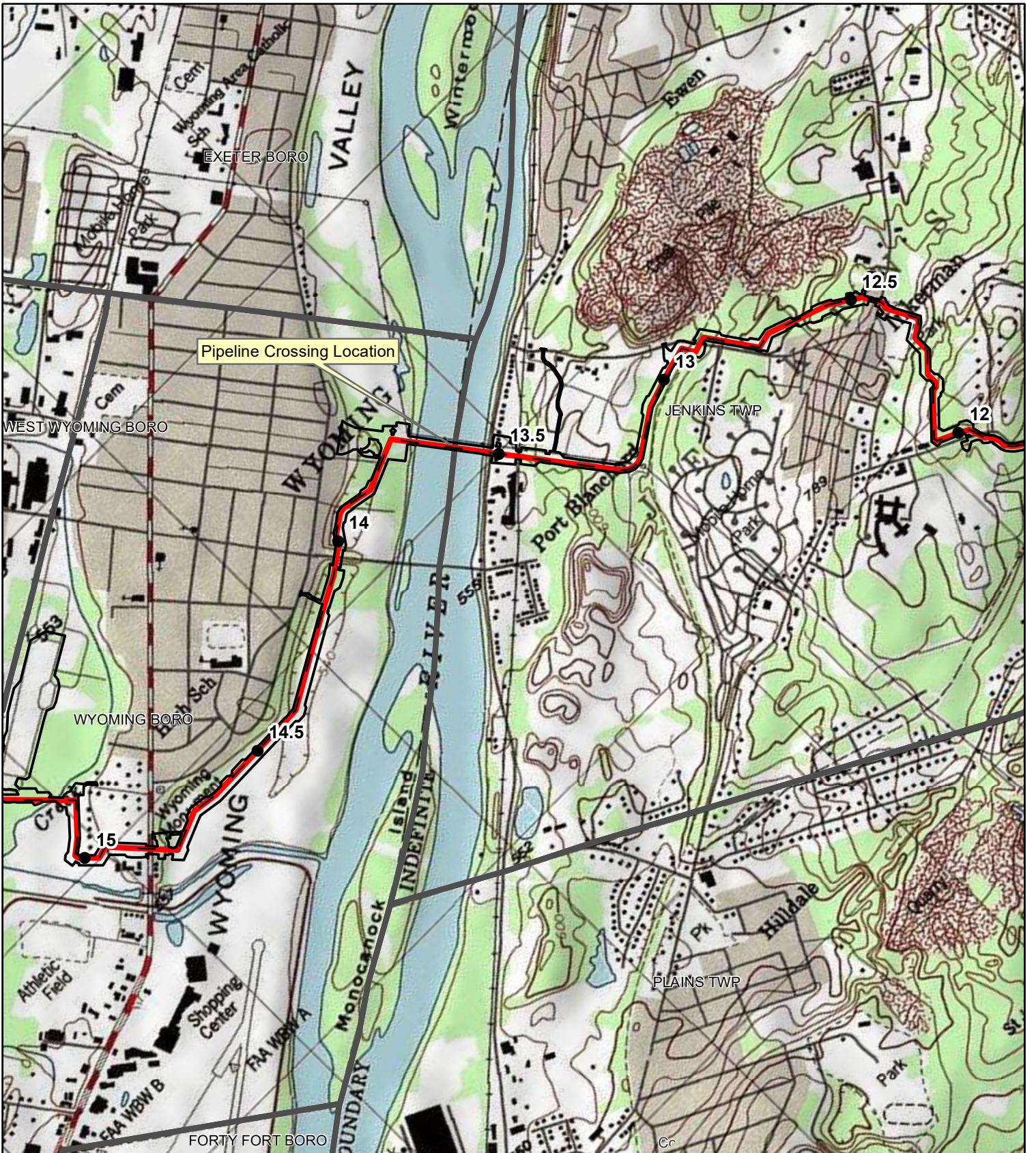
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**Date:** 4/15/2020

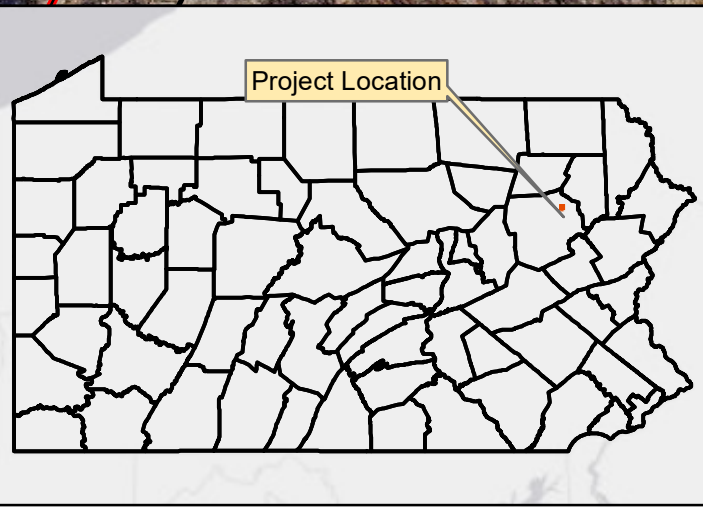
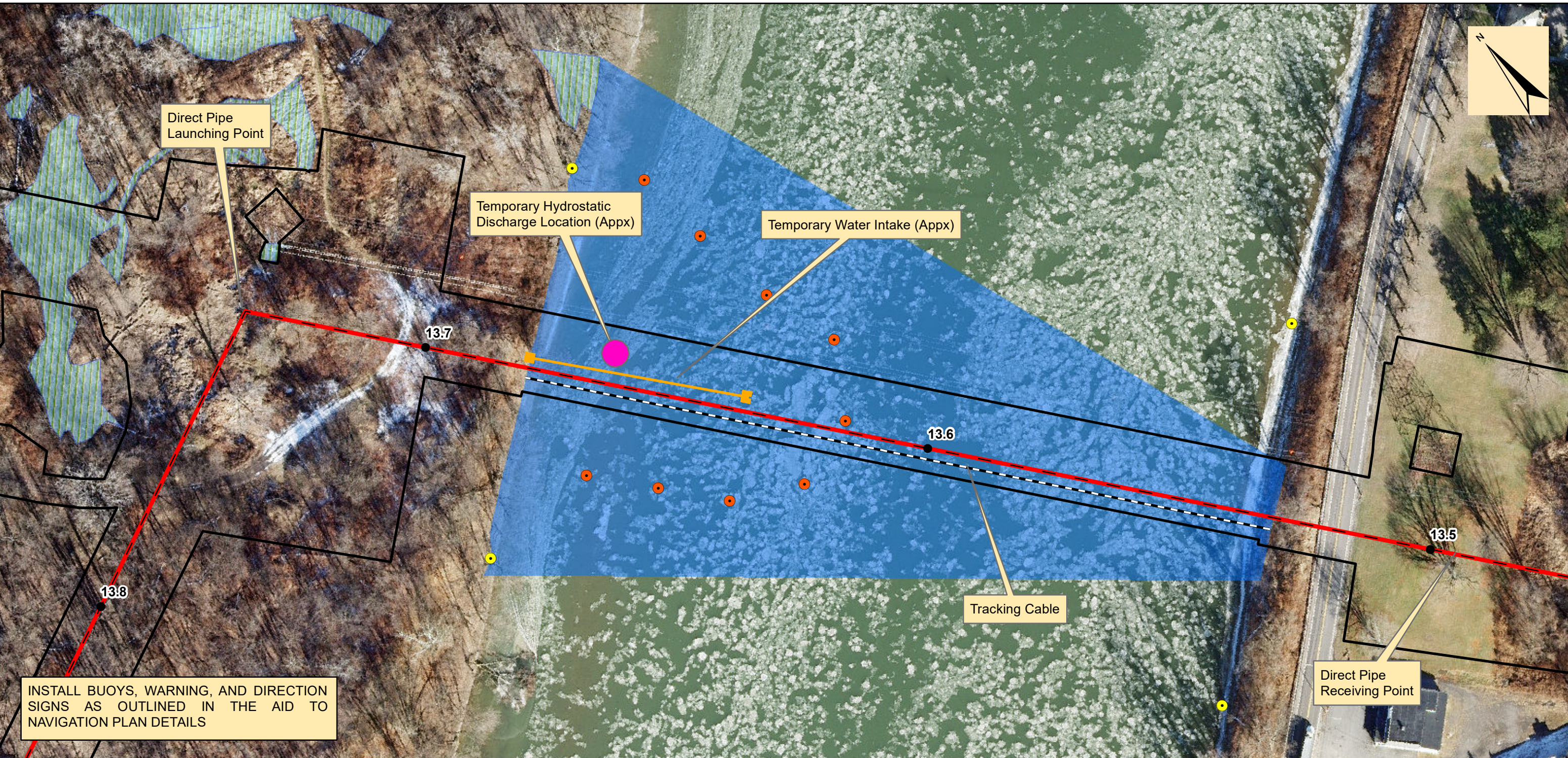
**Taken by:** CC

**Comments:**  
This photo shows a downriver view from the western bank of the Susquehanna River near where a downriver "Caution Construction Area" signage will be placed.

## FIGURES



TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC  
 REGIONAL ENERGY ACCESS EXPANSION PROJECT  
 REGIONAL ENERGY LATERAL  
 SUSQUEHANNA RIVER CROSSING  
 AID TO NAVIGATION PLAN- LOCATION MAP  
 LUZERNE COUNTY, PENNSYLVANIA



- Milepost
- Boats Keep Out Buoy - 100 to 200 Feet (as shown) Above and Below Temporary Water Intake/Discharge
- Warning and Direction Signs (200 Feet Above and Below Pipeline)
- Direct Pipe Temporary Tracking Cable (Weighted to River Bottom)
- Proposed 30" Regional Energy Lateral
- Temporary Water Intake
- Limits of Disturbance
- Susquehanna River (Delineated Portion)
- ▨ Wetlands

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC  
 REGIONAL ENERGY ACCESS EXPANSION PROJECT  
 REGIONAL ENERGY LATERAL  
 SUSQUEHANNA RIVER CROSSING  
 AID TO NAVIGATION PLAN

LUZERNE COUNTY, PENNSYLVANIA

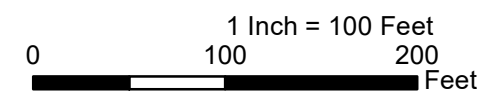


Figure 2

## ATON DETAILS



Place "Boats Keep Out" buoys approximately 100 to 200-feet upstream, downstream and to the east of the intake location. Space the "Boats Keep Out" buoys approximately 75-feet apart. See Aid to Navigation Plan Map.



2525 GREEN TECH DRIVE, SUITE B  
STATE COLLEGE, PA 16803

TELEPHONE: (814)-689-1650

FAX: (814)-689-1557

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC  
REGIONAL ENERGY ACCESS EXPANSION PROJECT  
REGIONAL ENERGY LATERAL  
SUSQUEHANNA RIVER CROSSING  
AID TO NAVIGATION PLAN

**BOATS KEEP OUT BUOYS**

PENNSYLVANIA

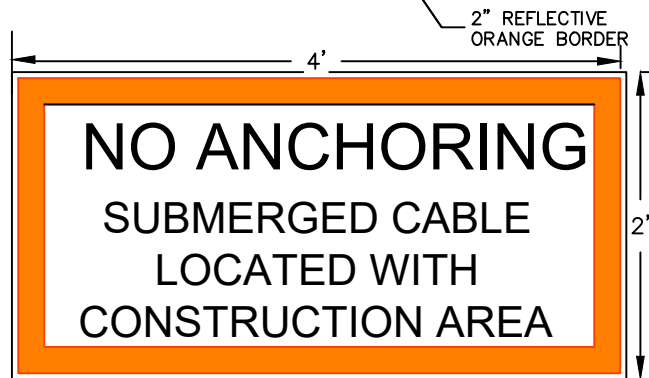
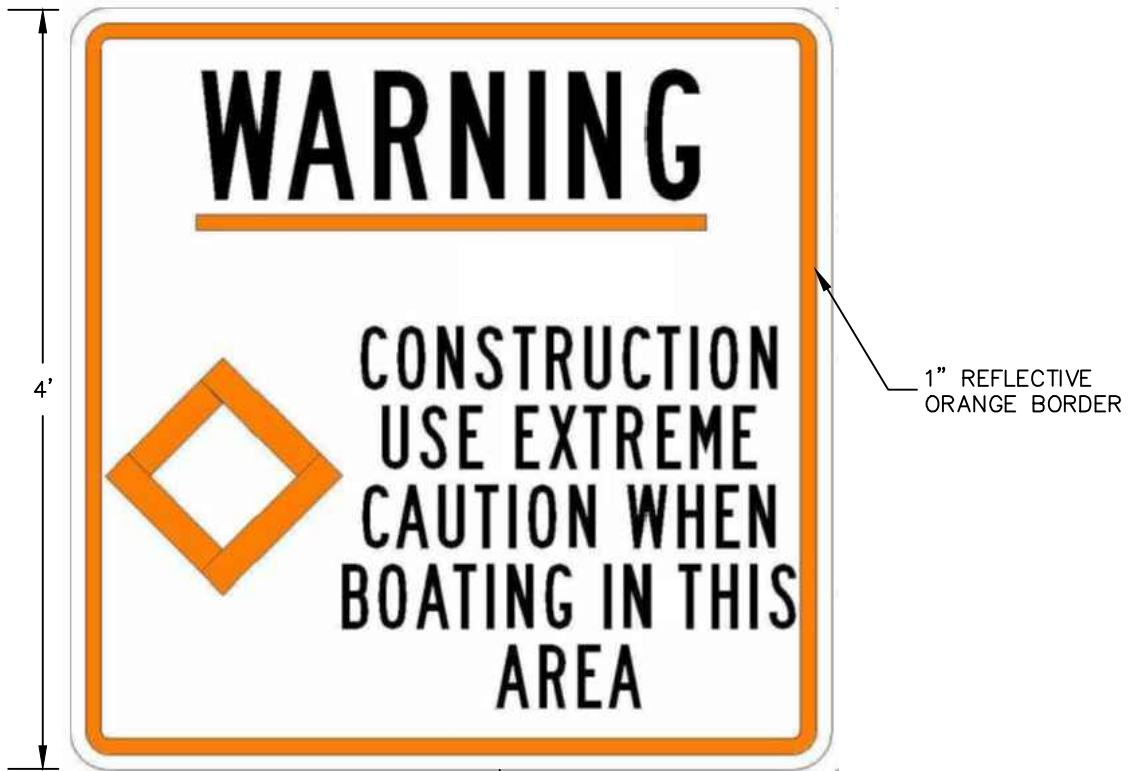
DATE:  
06/08/2021

DRAWN BY:  
PF

CHECKED:  
RN

WHM DRAWING NO:  
**DETAILS**

**DETAIL - 1**



2525 GREEN TECH DRIVE, SUITE B  
STATE COLLEGE, PA 16803

TELEPHONE: (814)-689-1650

FAX: (814)-689-1557

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC  
REGIONAL ENERGY ACCESS EXPANSION  
PROJECT  
REGIONAL ENERGY LATERAL  
SUSQUEHANNA RIVER CROSSING  
AID TO NAVIGATION PLAN

ATON SIGNS

PENNSYLVANIA

DATE: 06/08/21

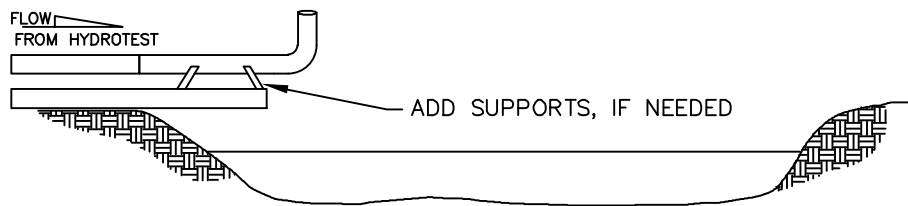
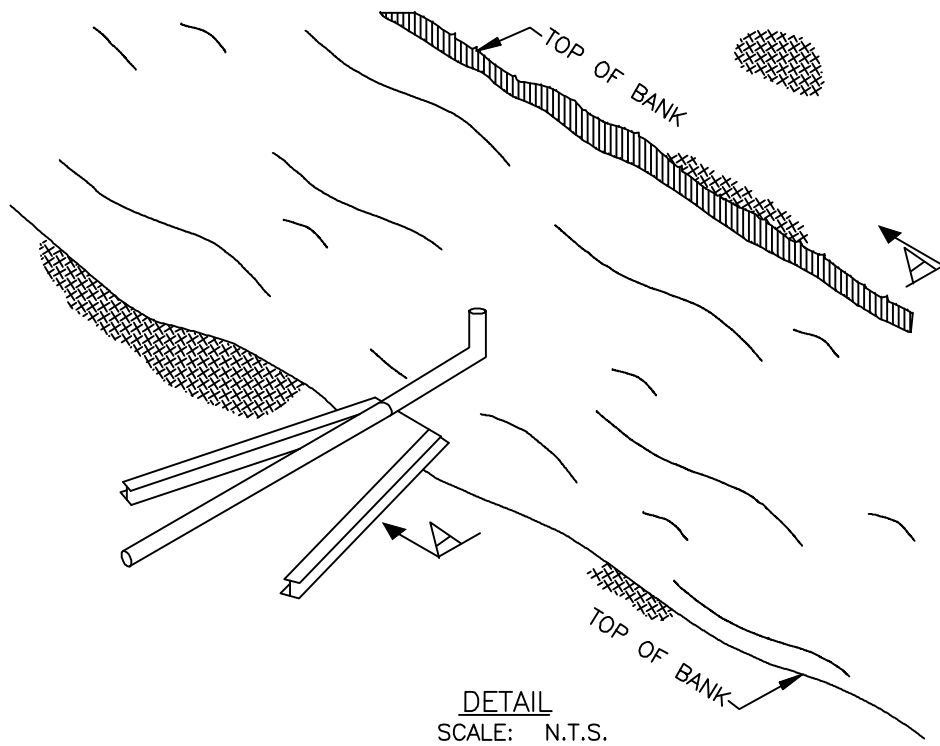
DRAWN BY: BWH

CHECKED: RJN

WHM DRAWING NO: DETAILS

DETAIL 2

## CONSTRUCTION DETAILS



NOTES:

1. CONTRACTOR TO POSITION ELBOW SUCH THE DISCHARGE WATER IS CONTAINED TO OPEN WATER PORTIONS OF THE RIVER TO PREVENT EROSION.
2. ELBOW TO BE POSITIONED SUCH THAT NO SOIL EROSION OCCURS.

PENNSYLVANIA

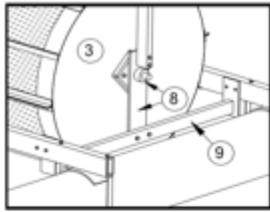
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC  
STANDARD ENVIRONMENTAL DETAIL

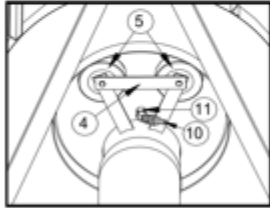


VERTICAL HYDROSTATIC  
DEWATERING STRUCTURE

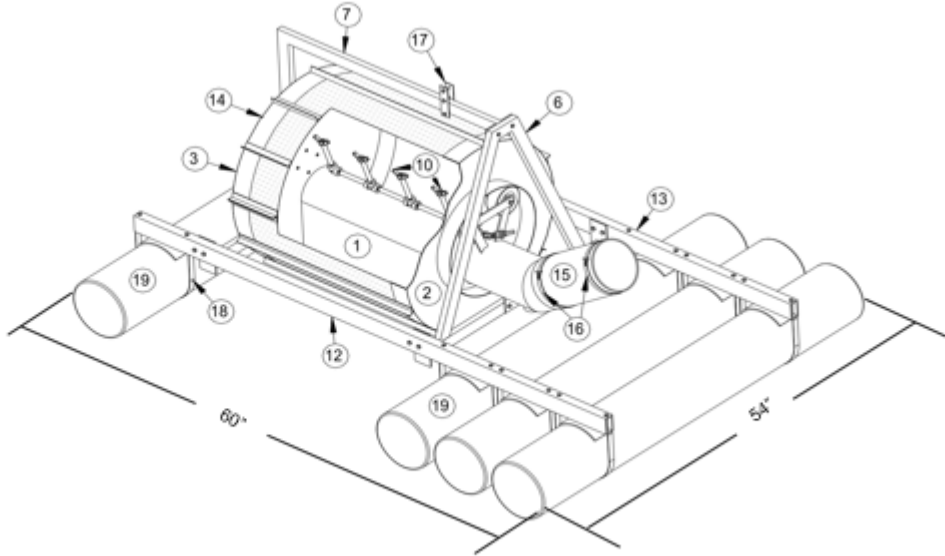




END VIEW



WHEEL ASSEMBLY VIEW



## Parts List

Item	Part No.	Qty.	Description
1	R - SF0400	1	4" Suction Funnel
2	R - DPB0400	1	Drum Plate B
3	R - DPA0400	1	Drum Plate A
4	R - WB0004	1	4" Wheel Bracket
5	WA300	2	Wheel Assembly
6	R - AF0400	1	A Frame
7	R - LF0400	1	L Frame
8	R - DSP0004	1	Drum Support Plate
9	RS413	1	Drum Support Rail
10	R - CSB0400	1	Cleaning Spray Bar
11	R - SBA0612	1	Spray Bar Attachment
12	R - LR0400	1	Left Side Rail
13	R - RR0400	1	Right Side Rail
14	REPL0400	2	Screen Assembly
15	SH004	1	4" X 18" Suction Hose
16	TBC004	2	4" T Bolt Clamps
17	R - HP0011	1	Hanger Plate
18	R - PS0400	8	Pontoon Clamp
19	R - P04	4	4' 6" Pontoon

**Additional Set-up Items (Not Shown in Picture)**

EPDM58	1	5/8" Hose
R - FA0612	1	Filter Assembly
CC6252	1	Anchor
AR1550	1	Cable

## Specifications

### Weights

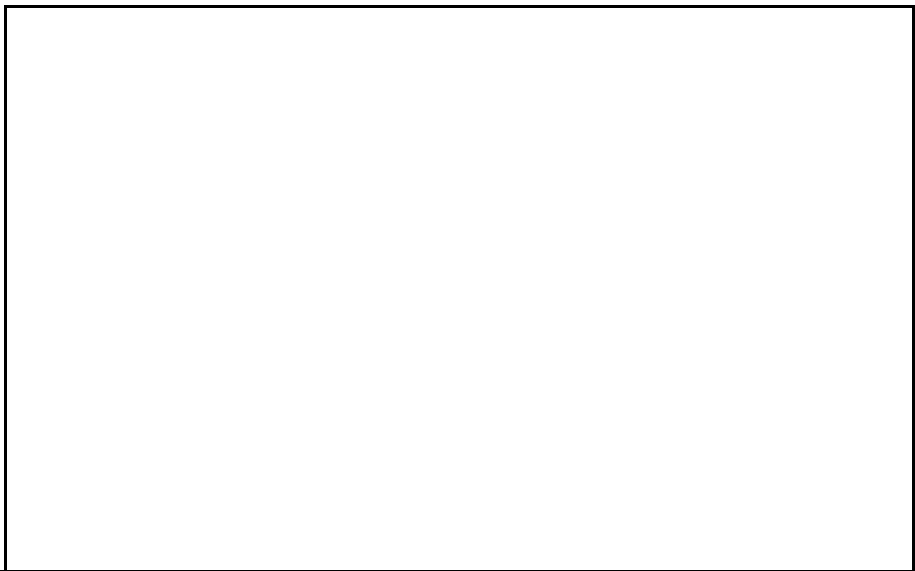
Basic Unit:	85 lbs
<b>Optional Equipment</b>	
Power Drive:	2 lbs
Foot Valve w/ Drain Valve:	7 lbs

### Maximum GPM Ratings & Through Pipe Velocities

300 GPM @ 7.00 ft per second
250 GPM @ 6.10 ft per second
200 GPM @ 4.85 ft per second
150 GPM @ 3.60 ft per second

Screen area at maximum depth (3 inches)  
 1.88 Square feet

R - BP0400 1 Bolt Package

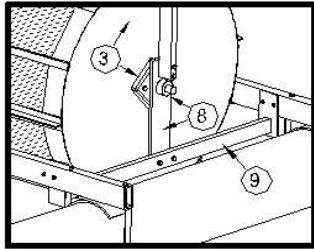


*RIVERSCREEN, Inc.*  
1919 Kiowa Road  
Clay Center, Kansas 67432

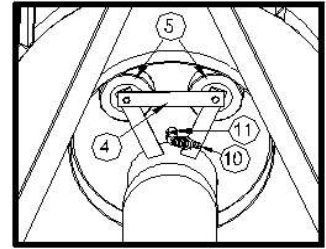
Fax: 785-632-6141 [www.riverscreen.com](http://www.riverscreen.com) Email: [joe@riverscreen.com](mailto:joe@riverscreen.com)

Contact Information:  
Office: 785-632-5452

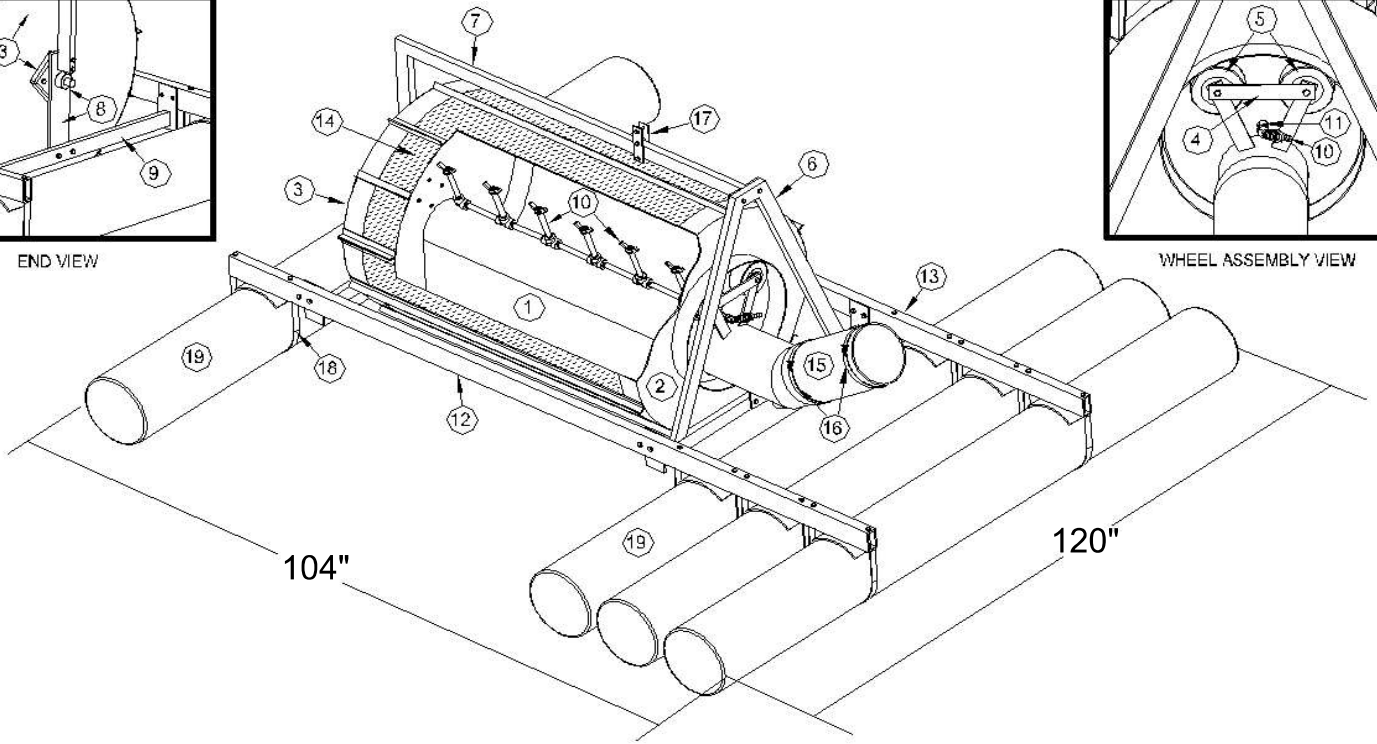
## 12 INCH RIVERSCREEN



END VIEW



WHEEL ASSEMBLY VIEW



### Parts List

Item	Part No.	Qty.	Description
1	R - SF1012	1	12" Suction Funnel
2	R - DPB0812	1	Drum Plate B
3	R - DPA0812	1	Drum Plate A
4	R - WB1012	1	10" Wheel Bracket
5	WA500	2	Wheel Assembly
6	R - AF0812	1	A Frame
7	R - LF0812	1	L Frame
8	R - DSP0812	1	Drum Support Plate
9	R - DSR0812	1	Drum Support Rail
10	R - CSB0812	1	Cleaning Spray Bar
11	R - SBA0612	1	Spray Bar Attachment
12	R - LR0812	1	Left Side Rail
13	R - RR0812	1	Right Side Rail
14	R - SA0812	2	Screen Assembly
15	SH012	1	12" X 36" Suction Hose
16	TBC012	2	12" T Bolt Clamp
17	R - HP001	1	Hanger Plate
18	R - PS0612	8	Pontoon Strap
19	R - P10	4	10 ft. Pontoon
<b><u>Additional Set-up Items (Not Shown in Picture)</u></b>			
	EPDM58	1	5/8" Hose
	R - FA0612	1	Filter Assembly
	CC6252	1	Anchor
	AR1550	1	Cable
	R - BP0612	1	Bolt Package

### Specifications

#### Weights

Basic Unit: 285 lbs  
Optional Equipment  
 Power Drive: 2 lbs  
 Foot Valve w/ Pressure Relief: 16 lbs  
 Extra pontoon: 24 lbs

#### Maximum GPM Ratings & Velocities

4,000 GPM @ 11.66 ft per second  
 3,000 GPM @ 8.75 ft per second  
 2,000 GPM @ 5.83 ft per second  
 1,000 GPM @ 2.91 ft per second

Screen area at maximum depth (7 inches)  
 8.29 Square feet

RIVERSCREEN, Inc.

1925 Kiowa Road  
 Clay Center, Kansas 67432

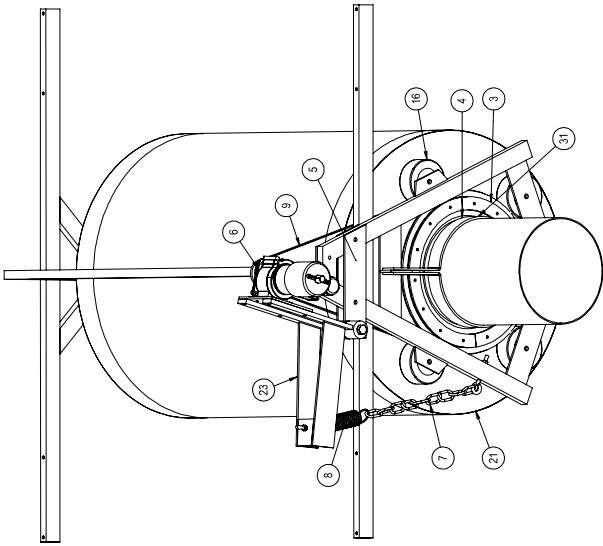
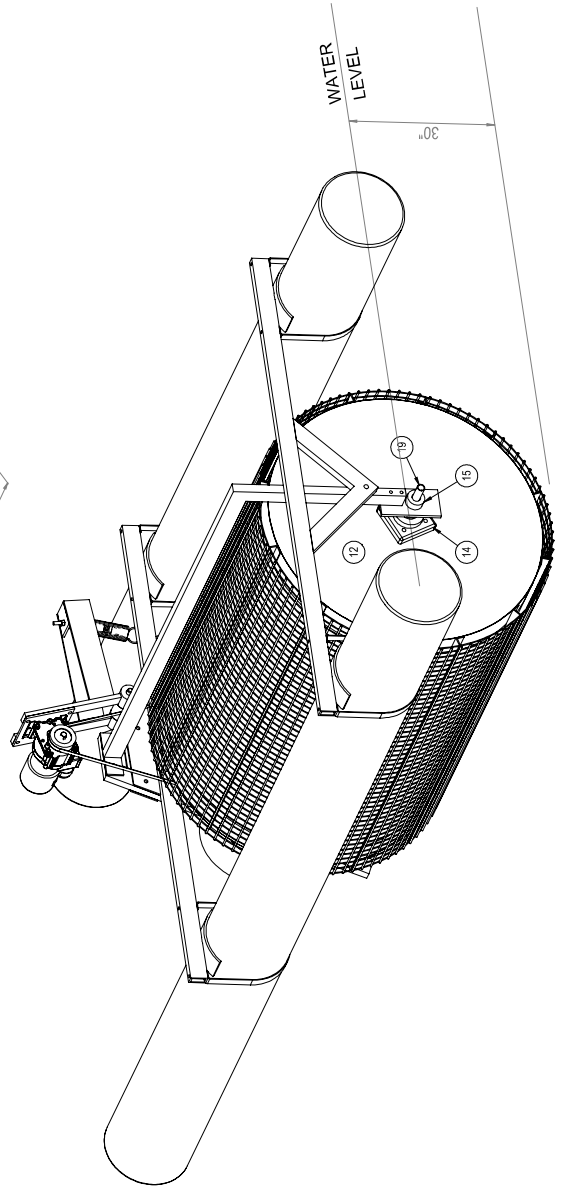
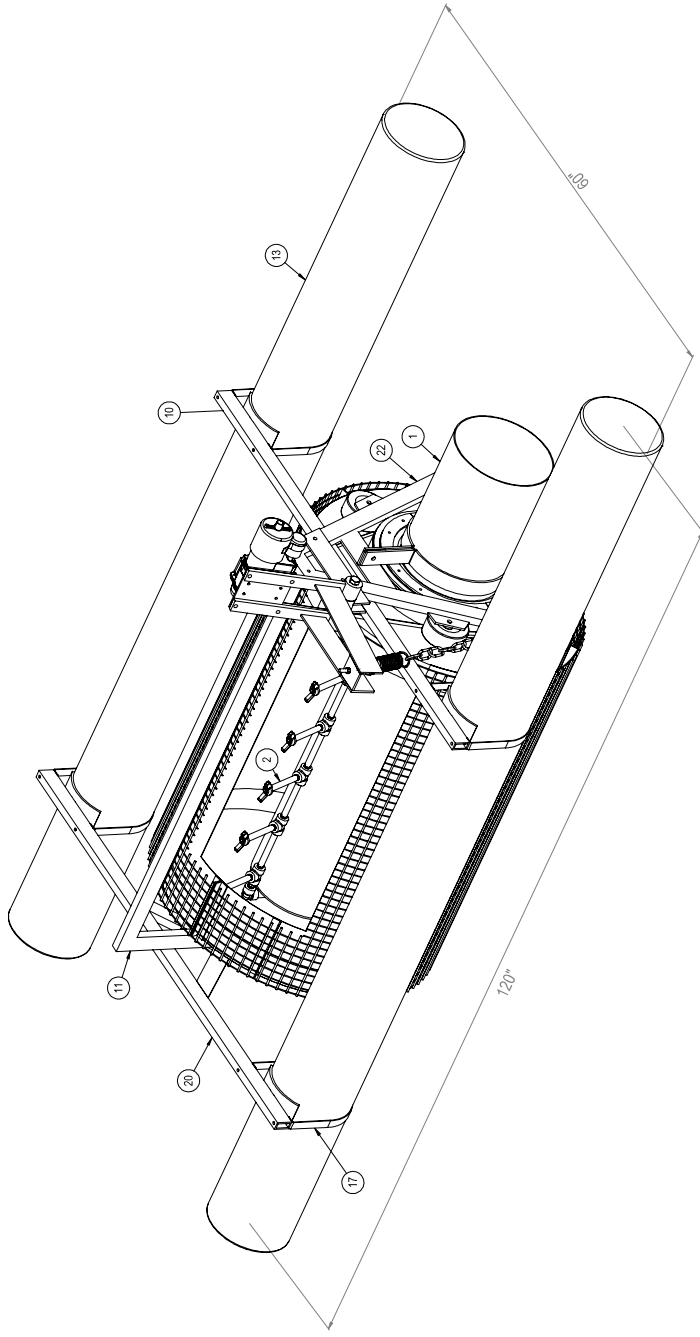
[www.riverscreen.com](http://www.riverscreen.com)

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Fax: 785-632-6141

Email: [jessica@riverscreen.com](mailto:jessica@riverscreen.com)



6 - 8020 Tips  
 40 PSI 2 GPM each Tip  
 12 GPM TOTAL