



VICINITY MAP

NTS

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**GENERAL NOTES:**

1. GENERAL NOTES FOR SHEETS INVOLVING CIVIL WORK ARE SHOWN ON THIS SHEET.
2. UNLESS SHOWN ON THESE DRAWINGS, ALL WORK SHALL CONFORM TO MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS (CURRENT EDITION) AND THE CITY OF WHITEFISH ENGINEERING STANDARDS (CURRENT EDITION). AMENDMENTS TO MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS HAVE BEEN DEVELOPED FOR THIS PROJECT. THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR THOSE AMENDMENTS.
3. PRIOR TO STARTING ANY UTILITY RELATED WORK, THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE PARKS AND RECREATION DEPARTMENT.
4. FIRE DEPARTMENT AND EMERGENCY SERVICES SHALL BE PROVIDED ACCESS TO THE SITE DURING CONSTRUCTION.
5. CONSTRUCTION WORK, STAGING, AND RELATED IMPACTS SHALL NOT EXTEND OUTSIDE OF THE PROJECT LIMITS AS SHOWN ON THE DRAWINGS.
6. EXISTING UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN. ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND SHALL BE VERIFIED BY THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT EACH UTILITY COMPANY PRIOR TO ANY EXCAVATION ACTIVITIES. THE CONTRACTOR IS ALSO RESPONSIBLE FOR COORDINATING ALL UTILITY LOCATES PER STATE LAWS.
7. LOCATION AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR.
8. THE CONTRACTOR SHALL DETERMINE POSITION AND DEPTH OF EACH UTILITY IN ADVANCE OF MAKING A CONNECTION.
9. ALL STRUCTURES, FOUNDATIONS, ASPHALT, AND CONCRETE REMOVED SHALL BE LEGALLY DISPOSED OF AT THE COUNTY LANDFILL. ALTERNATIVE DISPOSAL METHODS MUST RECEIVE ADVANCED APPROVAL BY THE OWNER. ALL DEPRESSIONS/VOIDS LEFT BY DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH SUITABLE FILL MATERIAL PER MPWSS 02230.
10. MINIMAL HORIZONTAL STAKING DATA IS SHOWN ON THESE DRAWINGS WITH THE ASSUMPTION THAT THE CONTRACTOR CAN SUPPLEMENT USING DIGITAL FILES PROVIDED BY THE CIVIL ENGINEER FOR STAKING.



Date	By	Revision	Sym

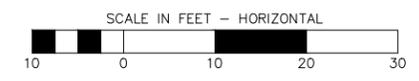


Designed By: Brandon Theis, PE	Drafted By: Carolyn Mulinix	Reviewed By: Brandon Theis, PE	Date: August, 2025
CS Project Number: 24-08			

**Project Name**  
WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION

**Sheet Name**  
COVER SHEET

**Sheet Number**  
**C100**



Date	
By	
Revision	
Sym	

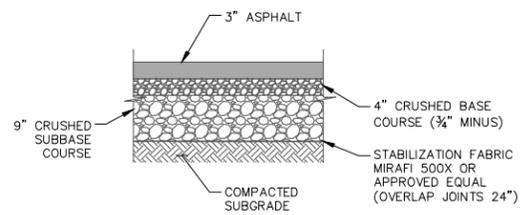


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Project Name  
**WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION**

Sheet Name  
**GENERAL  
DETAILS**

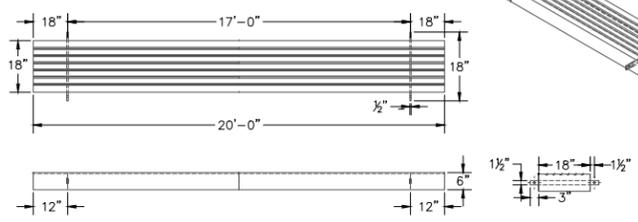
Sheet Number  
**C101**



**1 ROADWAY PAVEMENT**  
C104 SCALE: NONE

**NOTES:**

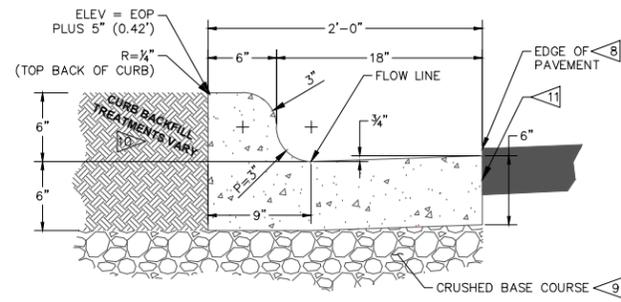
1. CONCRETE PANELS AND STAINLESS STEEL HARDWARE TO BE PROVIDED AND DELIVERED TO THE SITE BY THE CITY.



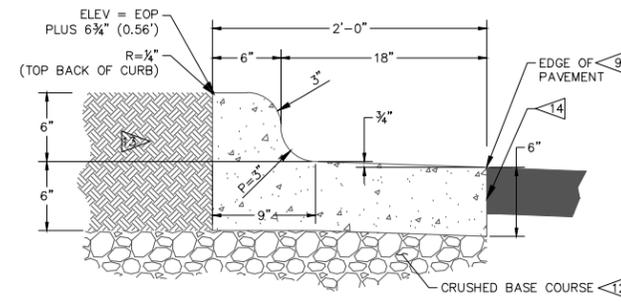
**2 GPC BOAT RAMP PANELS**  
C105 SCALE: NONE

**NOTES:**

1. 1/2" EXPANSION JOINT MATERIAL SHALL BE PLACED AT EACH POINT OF CURVATURE AND POINT OF TANGENCY.
2. CONTRACTION JOINTS SHALL BE PLACED AT EVERY 10' OF CURB LENGTH AND SHALL HAVE A MINIMUM DEPTH OF 1 1/2" AND A MINIMUM WIDTH OF 1/2". CONTRACTION JOINTS SHALL BE CONSTRUCTED BY SAWING OR SCORING. A TOOL SHALL BE USED WHICH WILL LEAVE CORNERS ROUNDED AND DESTROY AGGREGATE INTERLOCK FOR THE SPECIFIED MINIMUM DEPTH.
3. EXPOSED EDGES SHALL BE FINISHED TO A RADIUS OF 1/4".
4. CONCRETE SHALL BE M-4500 WITH 3/4" MAXIMUM AGGREGATE, MINIMUM 28-DAY STRENGTH OF 4500 PSI, 5%-8% AIR ENTRAINMENT, AND MAXIMUM SLUMP OF 4".
5. INDIVIDUAL CONTRACTOR FORMS MAY VARY SLIGHTLY FROM THIS PATTERN. PATTERNS DIFFERING MATERIALLY FROM THE ABOVE DIMENSIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
6. EXPANSION AND CONTRACTION JOINTS SHALL BE PLACED IN ACCORDANCE WITH MPWSS 02528.
7. UNLESS OTHERWISE SPECIFIED IN THESE PLANS, CONSTRUCTION MATERIALS & PROCEDURES SHALL CONFORM TO MPWSS CURRENT EDITION.
8. FINISHED PAVEMENT SURFACE SHALL BE 1/8" TO 1/4" ABOVE END OF CURB ON STANDARD "CATCH" TYPE CURBS.
9. CRUSHED BASE COURSE BELOW CURB & GUTTER SHALL BE A MINIMUM 2" THICK OR THE BALANCE OF THE TYPICAL SECTION, WHICH EVER IS GREATER.
10. ALL NEW CURB SHALL BE BACKFILLED IN ACCORDANCE WITH MPWSS 02528.
11. CONTRACTOR SHALL TACK ALL VERTICAL SURFACES (MATCH LINES) PRIOR TO PAVING.
12. CONCRETE SHALL INCLUDE 0.75 POUNDS OF REINFORCING FIBERS PER CUBIC YARD.



"CATCH" CURB

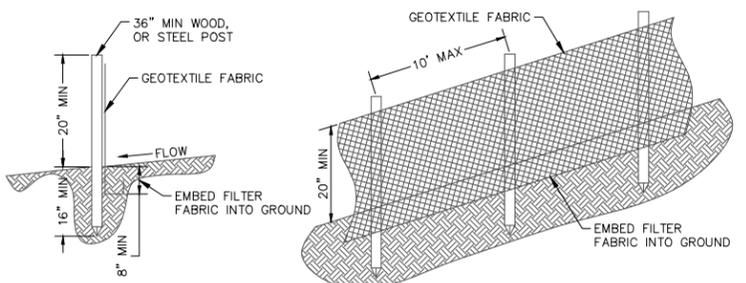


"SPILL" CURB

**3 CONCRETE CURB & GUTTER**  
C104 SCALE: NONE

**EROSION AND SEDIMENT CONTROL NOTES:**

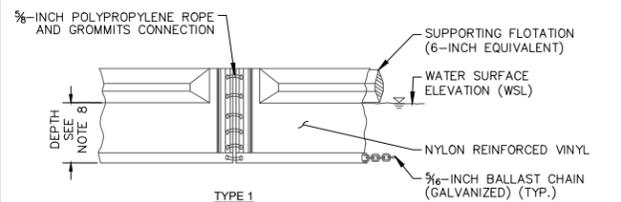
1. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL PERMITS ASSOCIATED WITH THIS PROJECT AND IMPLEMENT AND MAINTAIN THE EROSION AND SEDIMENT CONTROL PLAN AND PERMITS REQUIREMENTS UNTIL SUCH TIME AS THE PERMITS ARE TERMINATED.
2. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN OR CHANGE THE EROSION AND SEDIMENT CONTROL PLAN AS THE PROJECT PROGRESSES TO ENSURE PERMIT COMPLIANCE.
3. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD, AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE PUBLIC RIGHT OF WAY AS A RESULT OF THIS PROJECT. SAID MATERIAL SHALL BE REMOVED DAILY OR MORE FREQUENTLY PER THE CITY'S REQUEST.
4. THE CONTRACTOR SHALL ENSURE ALL CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE IS PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS OF WAY.
5. THE CONTRACTOR SHALL ENSURE ALL CUT AND FILL MATERIAL IMPORTED OR EXPORTED IS NOT STORED IN THE PUBLIC RIGHT OF WAY.
6. ALL STOCKPILED MATERIAL SHALL BE DESIGNATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
7. TEMPORARY BMPs ON THE EROSION PLAN SHALL BE INSTALLED PRIOR TO ANY EXCAVATION.
8. INLET PROTECTION BMPs SHALL BE INSTALLED PRIOR TO ANY EXCAVATION AND MAINTAINED UNTIL PAVING IS COMPLETE. INLET PROTECTION BMPs SHALL BE APPROVED BY THE CITY OF KALISPELL PRIOR TO INSTALLATION.



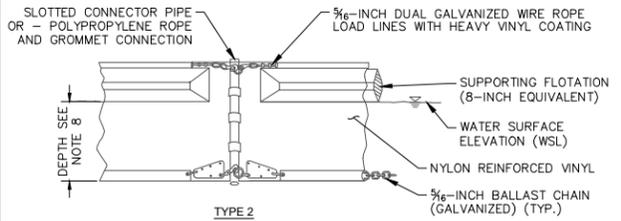
- NOTE:**
1. SILT FENCE SHALL BE USED AS A TEMPORARY SEDIMENT CONTROL, FENCES SHALL BE INSTALLED WITH THE CONTOUR OF SLOPE.
  2. WOOD POSTS SHALL BE HARDWOOD WITH AND MINIMUM CROSS SECTION AREA OF THREE INCHES.
  3. TEMPORARY SILT FENCE SHALL BE REMOVED UPON SITE STABILIZATION WITH 70% ESTABLISHED VEGETATIVE COVER.

- GEOTEXTILE FABRIC REQUIREMENTS:**
- TENSILE GRAB STRENGTH = 90 LBS (ASTM D1682)
  - ELONGATION MINIMUM = 50% (ASTM D1682)
  - MULLEN BURST STRENGTH MINIMUM = 190 LBS (ASTM D3786)
  - PUNCTURE STRENGTH MINIMUM = 40 LBS (ASTM D751)
  - EQUIVALENT OPENING SIZE MAXIMUM = 40-80 US STANDARD SIEVE SIZES
  - ULTRAVIOLET RADIATION STABILITY = 90 (ASTM G26)

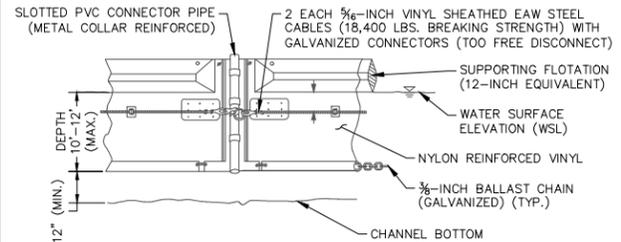
**4 SILT FENCE**  
C103 SCALE: NONE



TYPE 1



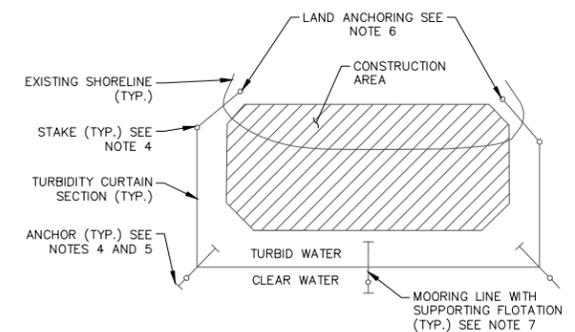
TYPE 2



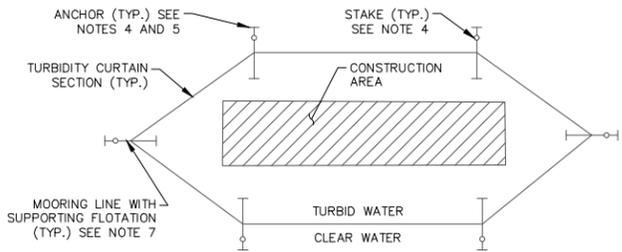
TYPE 3 (SEE NOTE 9)

**FLOATING TURBIDITY CURTAINS**

**5 TURBIDITY CURTAIN**  
CXXX SCALE: NONE



**PLAN VIEW - INSTALLATION FOR SHORELINE WORK**



**PLAN VIEW - INSTALLATION FOR PILE WORK**

**USAGE CHART**

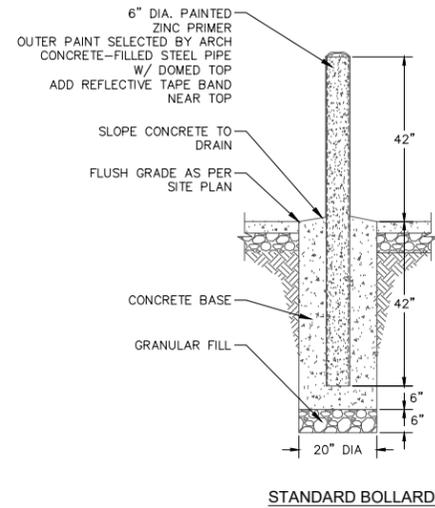
TYPE	MAXIMUM CURRENT (FT/S)	ADDITIONAL CONDITIONS
1	0.0	NO WAVE/WIND/TIDAL ACTION
2	3.5	MOVING WATER (ONE DIRECTION)
3	5.0	TIDAL ACTION OR SUBJECT TO WIND AND WAVE ACTIONS

**NOTES:**

1. SELECT A FLOATING TURBIDITY CURTAIN TYPE TO SUIT THE SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS. SUBMIT DETAILS AND SPECIFICATIONS OF THE SELECTED CURTAIN TYPE FOR APPROVAL PRIOR TO INSTALLATION.
2. INSTALL FLOATING TURBIDITY CURTAINS BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES THAT COULD IMPACT THE AREA OF CONCERN.
3. INSTALL FLOATING TURBIDITY CURTAINS PARALLEL TO THE DIRECTION OF FLOW OF A MOVING WATER BODY. DO NOT INSTALL CURTAINS ACROSS THE MAIN FLOW OF A SIGNIFICANT MOVING WATER BODY. DO NOT INSTALL CURTAINS WHERE THE FLOW OF WATER WILL REMOVE ACCUMULATED SEDIMENT OR SIGNIFICANTLY MOVE THE CURTAIN.
4. INSTALL FLOATING TURBIDITY CURTAIN STAKES IN A VERTICAL POSITION UNLESS OTHERWISE DIRECTED. INSTALL ANCHORS AND STAKES AT NO MORE THAN 100-FOOT SPACING.
5. FOR TYPE 1 FLOATING TURBIDITY CURTAINS, INSTALL ANCHORS MADE OF WOODEN STAKES (2- BY 4-INCH RECTANGULAR OR 2 1/2-INCH MINIMUM DIAMETER) OR METAL STAKES (1 1/2 POUNDS PER LINEAR FOOT). FOR TYPE 2 AND 3 CURTAINS, INSTALL ANCHORS THAT ARE EITHER WEIGHTED OR THAT DIG INTO THE CHANNEL BOTTOM.
6. EXTEND THE ENDS OF FLOATING TURBIDITY CURTAINS WALL UP INTO THE SHORELINE AS APPROVED, ESPECIALLY IF HIGH WATER CONDITIONS ARE EXPECTED. SECURE THE ENDS FIRMLY TO THE SHORELINE (PREFERABLY TO RIGID BODIES SUCH AS TREES OR PILES) TO FULLY ENCLOSE THE AREA WHERE SEDIMENT MAY ENTER INTO THE WATER BODY.
7. PROVIDE MINIMUM 1/2-INCH NYLON ROPE FOR ADJUSTMENT LINE FOR MOORING SYSTEM. ENSURE THE MOORING LINE IS SECURELY ATTACHED AND IS SUFFICIENTLY BUOYANT TO REMAIN AFLOAT UNDER NORMAL LOAD CONDITIONS.
8. FOR TYPE 1 AND 2 FLOATING TURBIDITY CURTAINS, EXTEND THE NYLON REINFORCED VINYL FABRIC THROUGH THE ENTIRE DEPTH OF THE WATER (TO THE CHANNEL BOTTOM) UNLESS TIDAL ACTIONS ARE PRESENT.
9. IN AREAS SUBJECT TO WIND AND WAVE ACTIONS OR WHERE TIDAL ACTIONS ARE PRESENT, USE TYPE 3 FLOATING TURBIDITY CURTAINS AS DIRECTED. INSTALL TYPE 3 CURTAINS ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND AS APPROVED.
10. REMOVE CAPTURED SEDIMENT BEHIND FLOATING TURBIDITY CURTAINS PRIOR TO REMOVING THE CURTAINS. DO NOT DISPERSE SEDIMENT INTO ADJACENT WATER BODY.

**NOTES:**

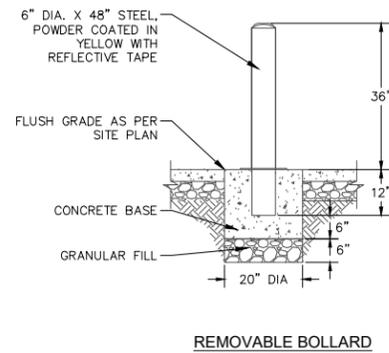
1. BOLLARDS SHALL RECEIVE REFLECTIVE TAPE AS DIRECTED BY THE OWNER.
2. REMOVABLE BOLLARD SHALL BE POST GUARD, SCHEDULE 40 STEEL, SMOOTH DOME TOP.
3. STANDARD BOLLARD SHALL BE SCHEDULE 40 STEEL, SMOOTH DOME TOP (CONCRETE TROWELED).



**STANDARD BOLLARD**

6 BOLLARD  
CXXX

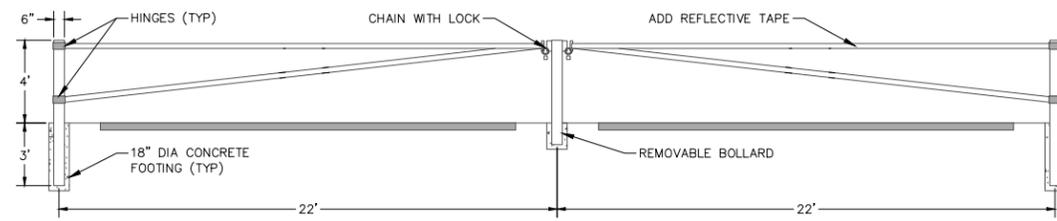
SCALE: NONE



**REMOVABLE BOLLARD**

**NOTES:**

1. GATE SHALL BE SWING TYPE.
2. DESIGN OF GATE TO BE COMPLETED BY CONTRACTOR. SHOP DRAWINGS TO BE PROVIDED AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION.
3. GATE SHALL RECEIVE REFLECTIVE TAPE AS DIRECTED BY THE OWNER.



7 DOUBLE GATE  
CXXX

SCALE: NONE



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Designed By: Brandon Theis, PE
Drafted By: Carolyn Mulinix
Reviewed By: Brandon Theis, PE
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CS Project Number: 24-08

Project Name  
**WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION**

Sheet Name  
**GENERAL  
DETAILS**

Sheet Number  
**C102**

# SCHEDULE ONE - BOAT RAMP

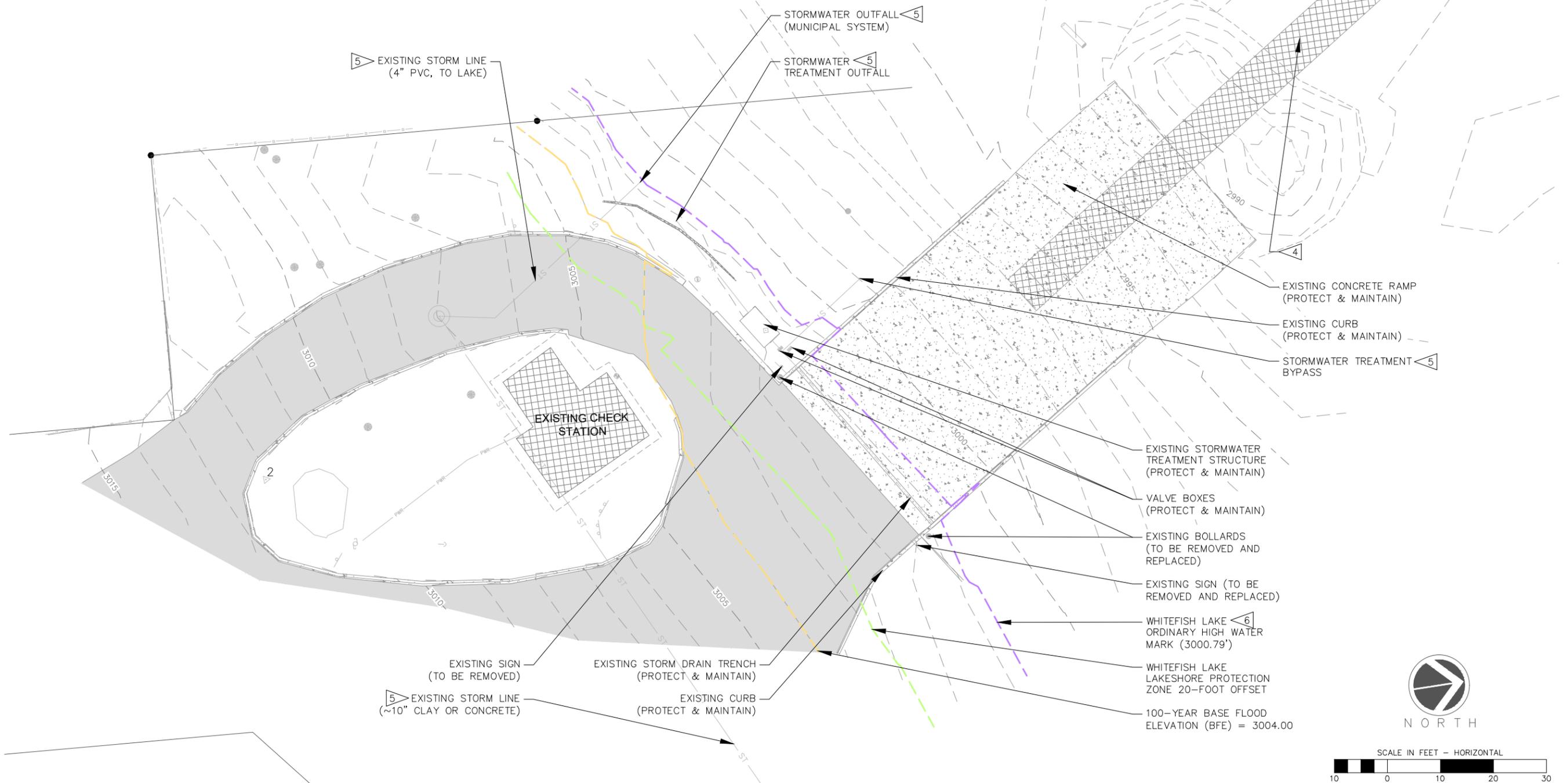
**DEMO NOTES:**

1. CONTOURS ON THIS SHEET ARE EXISTING CONTOURS.
2. PROTECT AND MAINTAIN ALL EXISTING CONCRETE FLAT WORK AND CURB, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
3. THE SITE SURVEY INFORMATION WAS PROVIDED BY OTHERS (RPA).
4. OWNER WILL REMOVE DOCK PRIOR TO STARTING CONSTRUCTION.
5. LOCATIONS ARE APPROXIMATE.
6. THE "ORDINARY HIGH WATER MARK (OHWM)" IS ALSO KNOWN BY THE CITY OF WHITEFISH AS THE "AVERAGE HIGH WATER LINE"

**SHADING LEGEND:**

-  EXISTING ASPHALT TO REMAIN
-  EXISTING CONCRETE TO REMAIN
-  EXISTING STRUCTURE TO REMAIN

SURVEY CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	NOTES
1	1555506.29'	791369.04'	3010.697'	RPA CONTROL POINT – NOT SHOWN ON THIS SHEET (~100- FEET EAST OF CHECK STATION)
2	1555444.58'	791240.50'	3012.390'	RPA CONTROL POINT





By	Date				
Revision					
Sym					



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Reviewed By: Brandon Theis, PE	
Date: August, 2025	

**Project Name**

WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION

**Sheet Name**

DEMOLITION PLAN -  
BOAT RAMP

**Sheet Number**

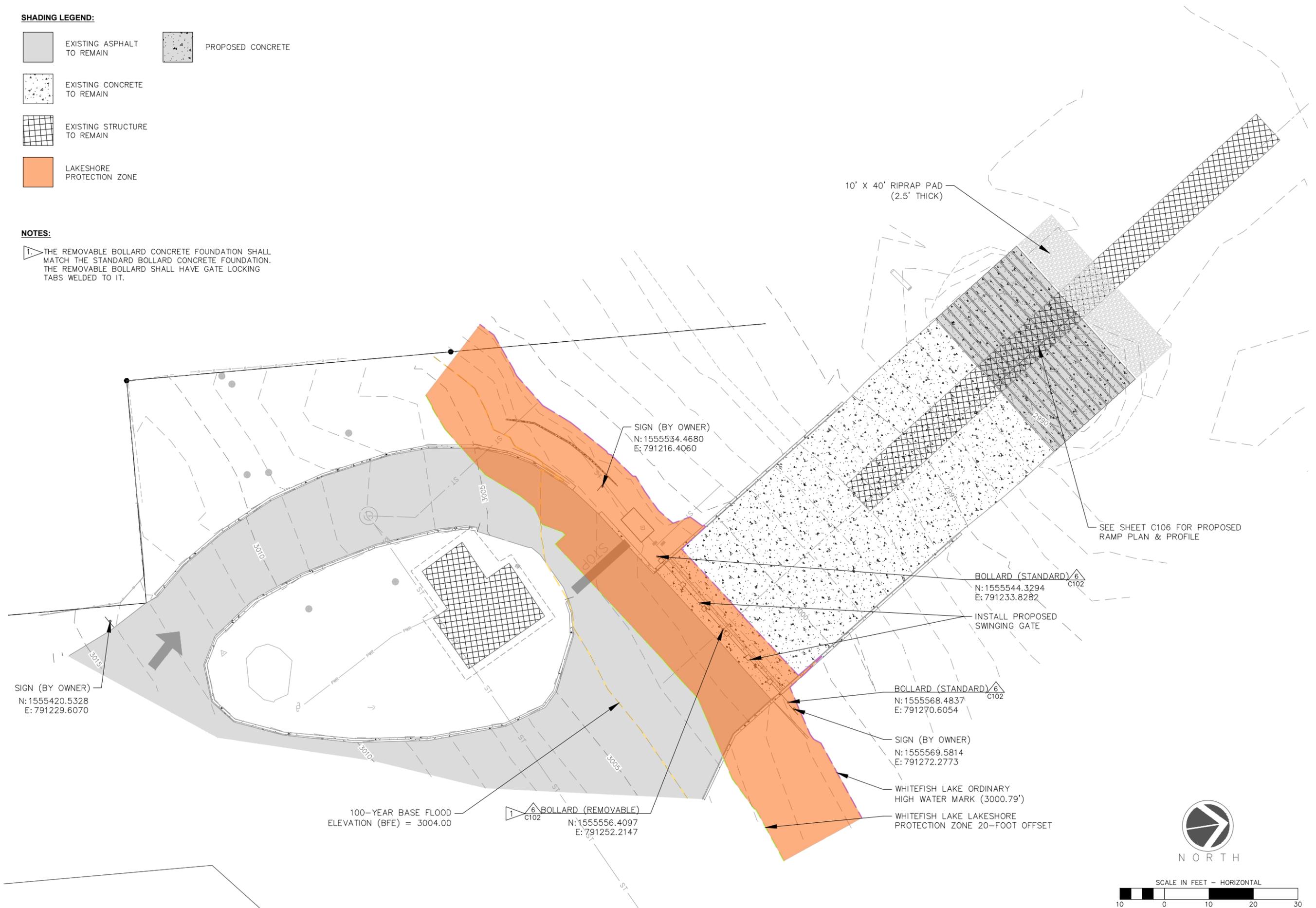
**C103**

**SHADING LEGEND:**

-  EXISTING ASPHALT TO REMAIN
-  PROPOSED CONCRETE
-  EXISTING CONCRETE TO REMAIN
-  EXISTING STRUCTURE TO REMAIN
-  LAKESHORE PROTECTION ZONE

**NOTES:**

1. THE REMOVABLE BOLLARD CONCRETE FOUNDATION SHALL MATCH THE STANDARD BOLLARD CONCRETE FOUNDATION. THE REMOVABLE BOLLARD SHALL HAVE GATE LOCKING TABS WELDED TO IT.





By	Date

Sym	Revision



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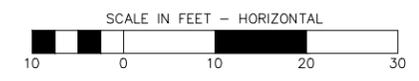
Project Name

**WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION**

Sheet Name

**SITE OVERVIEW -  
BOAT RAMP**

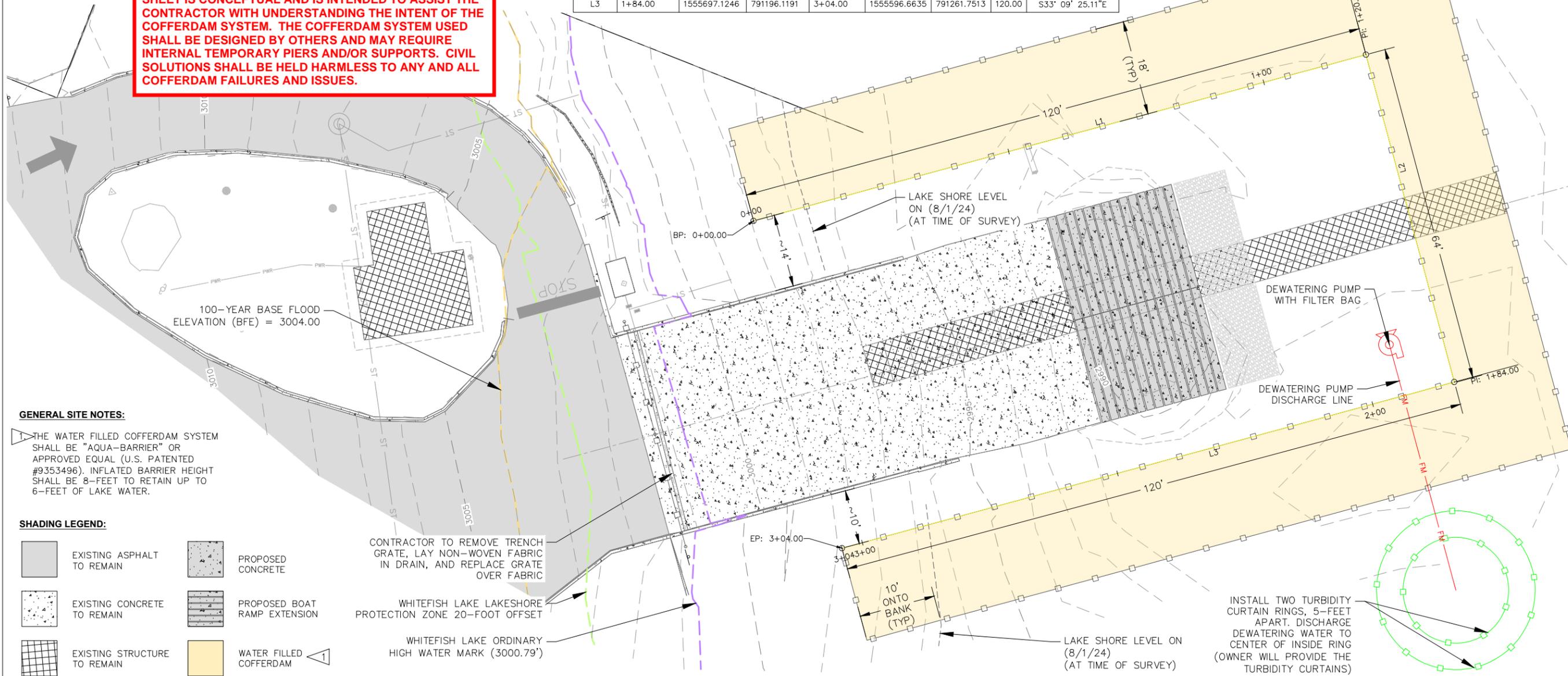
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**NOTE: COFFERDAM INFORMATION SHOWN ON THIS SHEET IS CONCEPTUAL AND IS INTENDED TO ASSIST THE CONTRACTOR WITH UNDERSTANDING THE INTENT OF THE COFFERDAM SYSTEM. THE COFFERDAM SYSTEM USED SHALL BE DESIGNED BY OTHERS AND MAY REQUIRE INTERNAL TEMPORARY PIERS AND/OR SUPPORTS. CIVIL SOLUTIONS SHALL BE HELD HARMLESS TO ANY AND ALL COFFERDAM FAILURES AND ISSUES.**

Alignment – BMP Internal Perimeter								
Segment	Start Station	Start Northing	Start Easting	End Station	End Northing	End Easting	Length	Line/Chord Direction
L1	0+00.00	1555561.6597	791208.1721	1+20.00	1555662.1208	791142.5399	120.00	N33° 09' 25.11"W
L2	1+20.00	1555662.1208	791142.5399	1+84.00	1555697.1246	791196.1191	64.00	N56° 50' 34.89"E
L3	1+84.00	1555697.1246	791196.1191	3+04.00	1555596.6635	791261.7513	120.00	S33° 09' 25.11"E



**GENERAL SITE NOTES:**

THE WATER FILLED COFFERDAM SYSTEM SHALL BE "AQUA-BARRIER" OR APPROVED EQUAL (U.S. PATENTED #9353496). INFLATED BARRIER HEIGHT SHALL BE 8- FEET TO RETAIN UP TO 6- FEET OF LAKE WATER.

**SHADING LEGEND:**

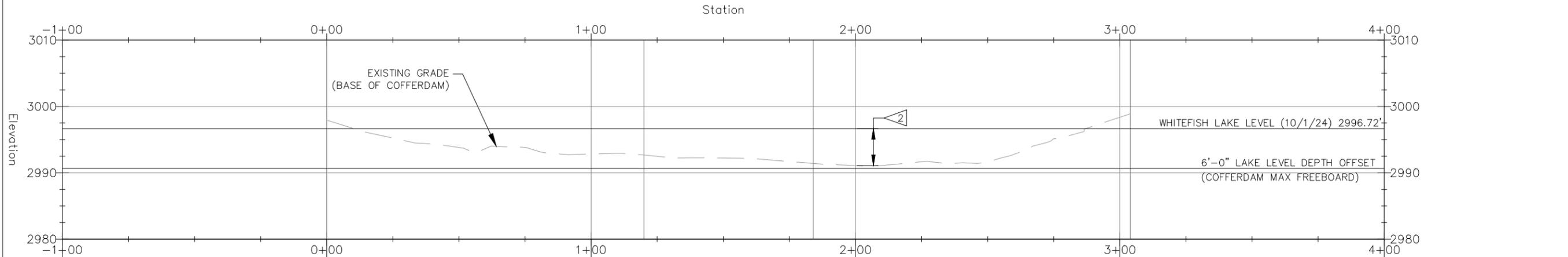
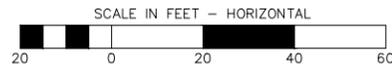
- EXISTING ASPHALT TO REMAIN
- EXISTING CONCRETE TO REMAIN
- EXISTING STRUCTURE TO REMAIN
- PROPOSED CONCRETE
- PROPOSED BOAT RAMP EXTENSION
- WATER FILLED COFFERDAM

CONTRACTOR TO REMOVE TRENCH GRATE, LAY NON-WOVEN FABRIC IN DRAIN, AND REPLACE GRATE OVER FABRIC

WHITEFISH LAKE LAKESHORE PROTECTION ZONE 20-FOOT OFFSET

WHITEFISH LAKE ORDINARY HIGH WATER MARK (3000.79')

ESTIMATED WATER DEPTH TO BE RETAINED BY COFFERDAM SYSTEM = 5.7- FEET (BASED ON 10/1/24 LAKE LEVEL OF 2996.72)



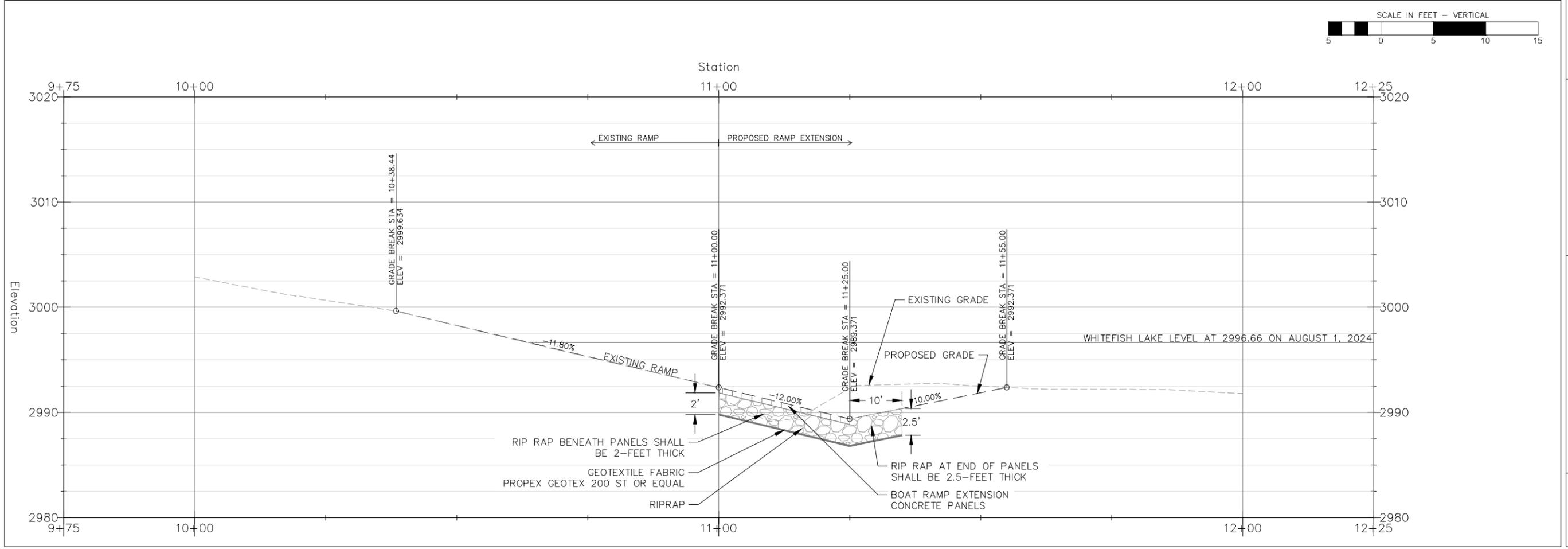
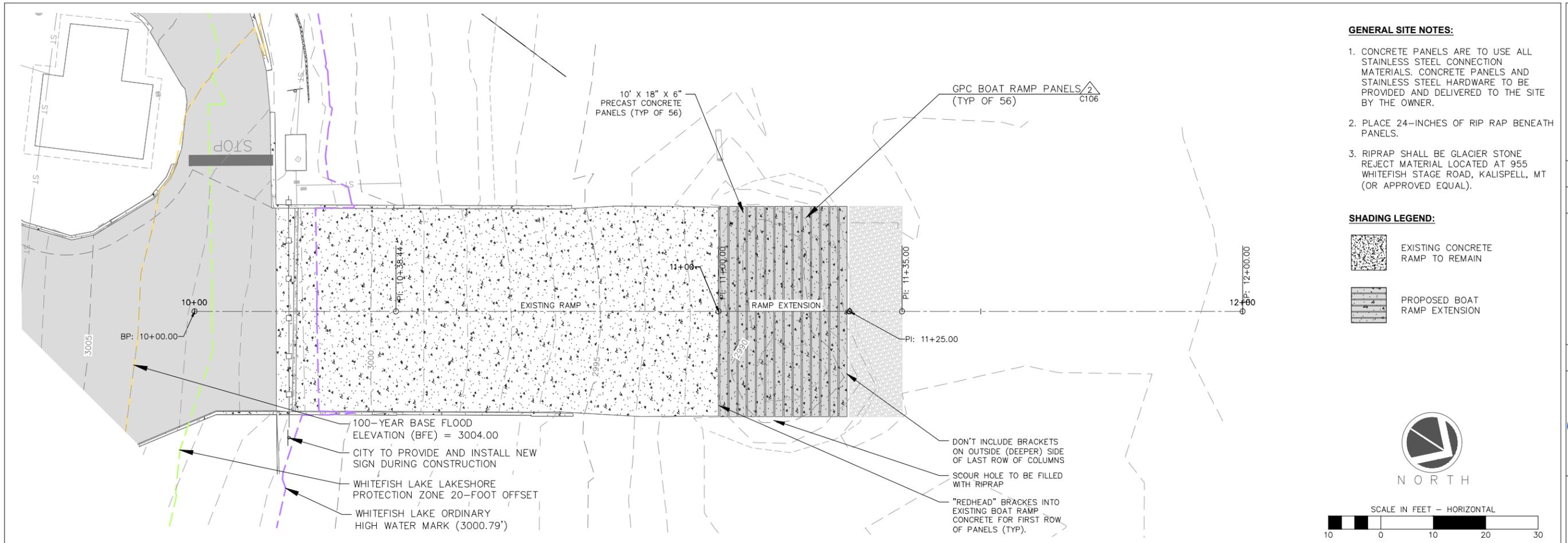
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 Reviewed By: Brandon Theis, PE  
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Project Name  
 WHITEFISH CITY BEACH  
 BOAT RAMP EXTENSION

Sheet Name  
 EROSION &  
 SEDIMENT CONTROL  
 PLAN - BOAT RAMP

Sheet Number  
**C105**



**CIVIL SOLUTIONS**

**DESIGNED BY:** Brandon Theis, PE  
**DRAFTED BY:** Carolyn Mulinix  
**REVIEWED BY:** Brandon Theis, PE  
**DATE:** August, 2025  
**CS PROJECT NUMBER:** 24-08

**PROJECT NAME:** WHITEFISH CITY BEACH BOAT RAMP EXTENSION

**SHEET NAME:** BOAT RAMP EXTENSION PLAN & PROFILE

**SHEET NUMBER:** C106

# SCHEDULE TWO - AIS LOOP

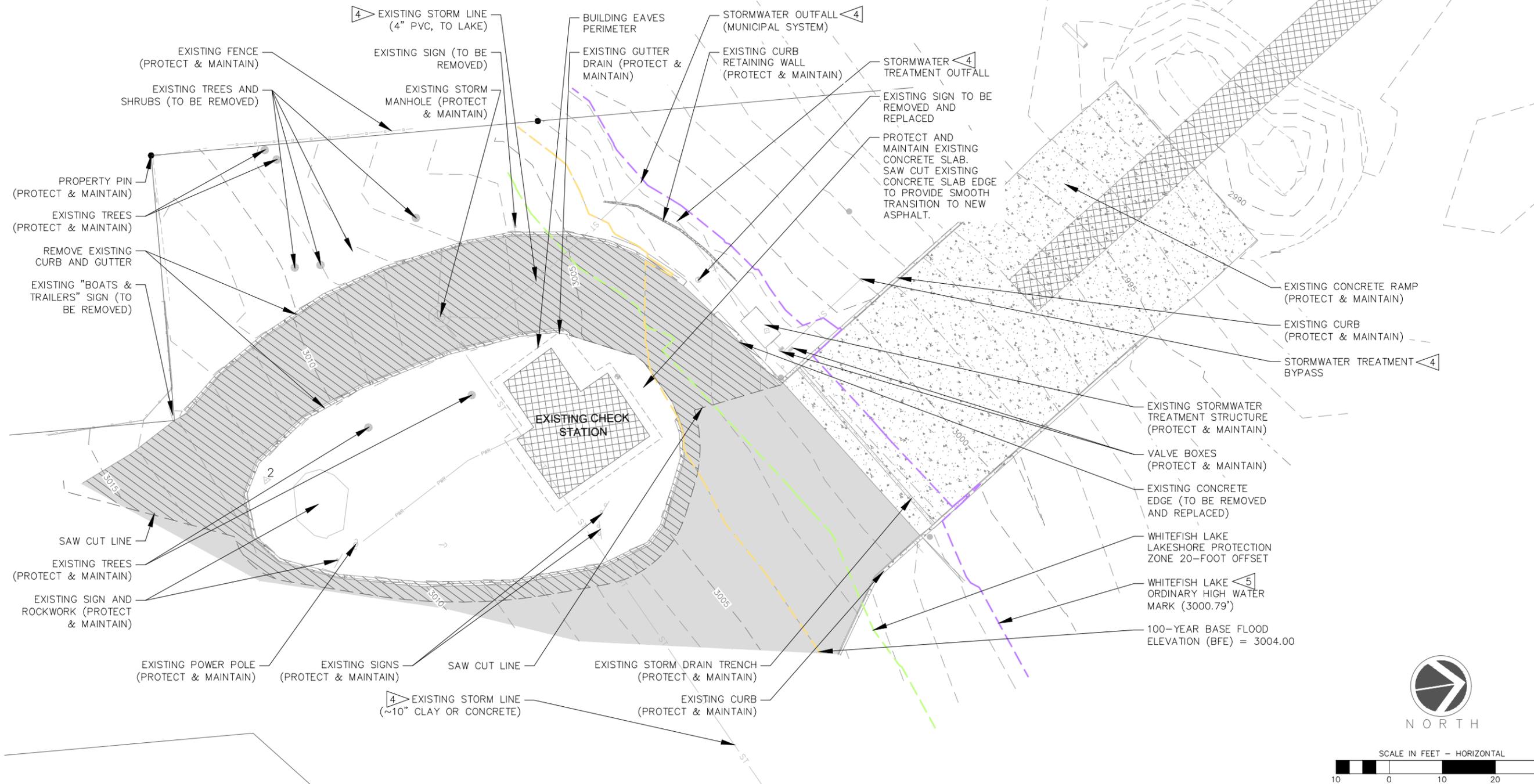
**DEMO NOTES:**

1. CONTOURS ON THIS SHEET ARE EXISTING CONTOURS.
2. PROTECT AND MAINTAIN ALL EXISTING CONCRETE FLAT WORK AND CURB, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
3. THE SITE SURVEY INFORMATION WAS PROVIDED BY OTHERS (RPA).
4. LOCATIONS ARE APPROXIMATE.
5. THE "ORDINARY HIGH WATER MARK (OHWM)" IS ALSO KNOWN BY THE CITY OF WHITEFISH AS THE "AVERAGE HIGH WATER LINE"

**SHADING LEGEND:**

- |   |                              |  |                                 |
|---|------------------------------|--|---------------------------------|
|  | EXISTING ASPHALT TO REMAIN   |  | EXISTING ASPHALT TO BE REMOVED  |
|  | EXISTING CONCRETE TO REMAIN  |  | EXISTING CONCRETE TO BE REMOVED |
|  | EXISTING STRUCTURE TO REMAIN |  |                                 |

SURVEY CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEVATION	NOTES
1	1555506.29'	791369.04'	3010.697'	RPA CONTROL POINT - NOT SHOWN ON THIS SHEET (~100- FEET EAST OF CHECK STATION)
2	1555444.58'	791240.50'	3012.390'	RPA CONTROL POINT





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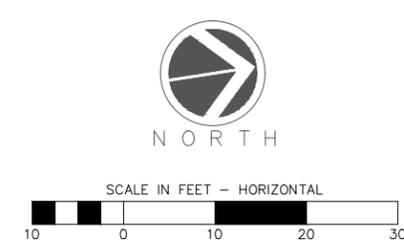
WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION

**Sheet Name**

DEMOLITION PLAN -  
AIS LOOP

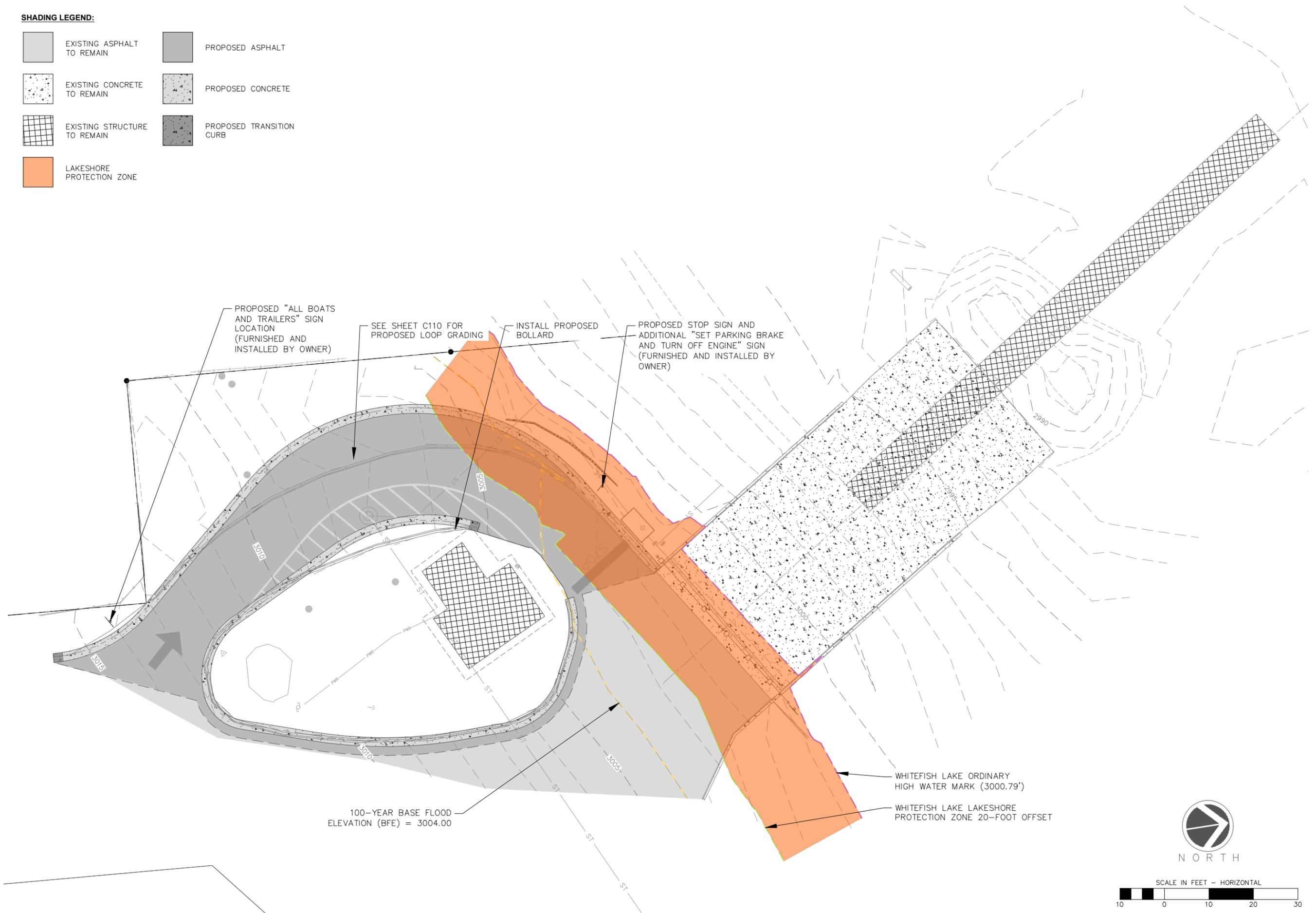
**Sheet Number**

C107



**SHADING LEGEND:**

	EXISTING ASPHALT TO REMAIN		PROPOSED ASPHALT
	EXISTING CONCRETE TO REMAIN		PROPOSED CONCRETE
	EXISTING STRUCTURE TO REMAIN		PROPOSED TRANSITION CURB
	LAKESHORE PROTECTION ZONE		





By		Date			
Revision					
Sym					



Designed By: Brandon Theis, PE	Reviewed By: Brandon Theis, PE	Date: August, 2025
Drafted By: Carolyn Mulinix		
CS Project Number: 24-08		

Project Name

**WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION**

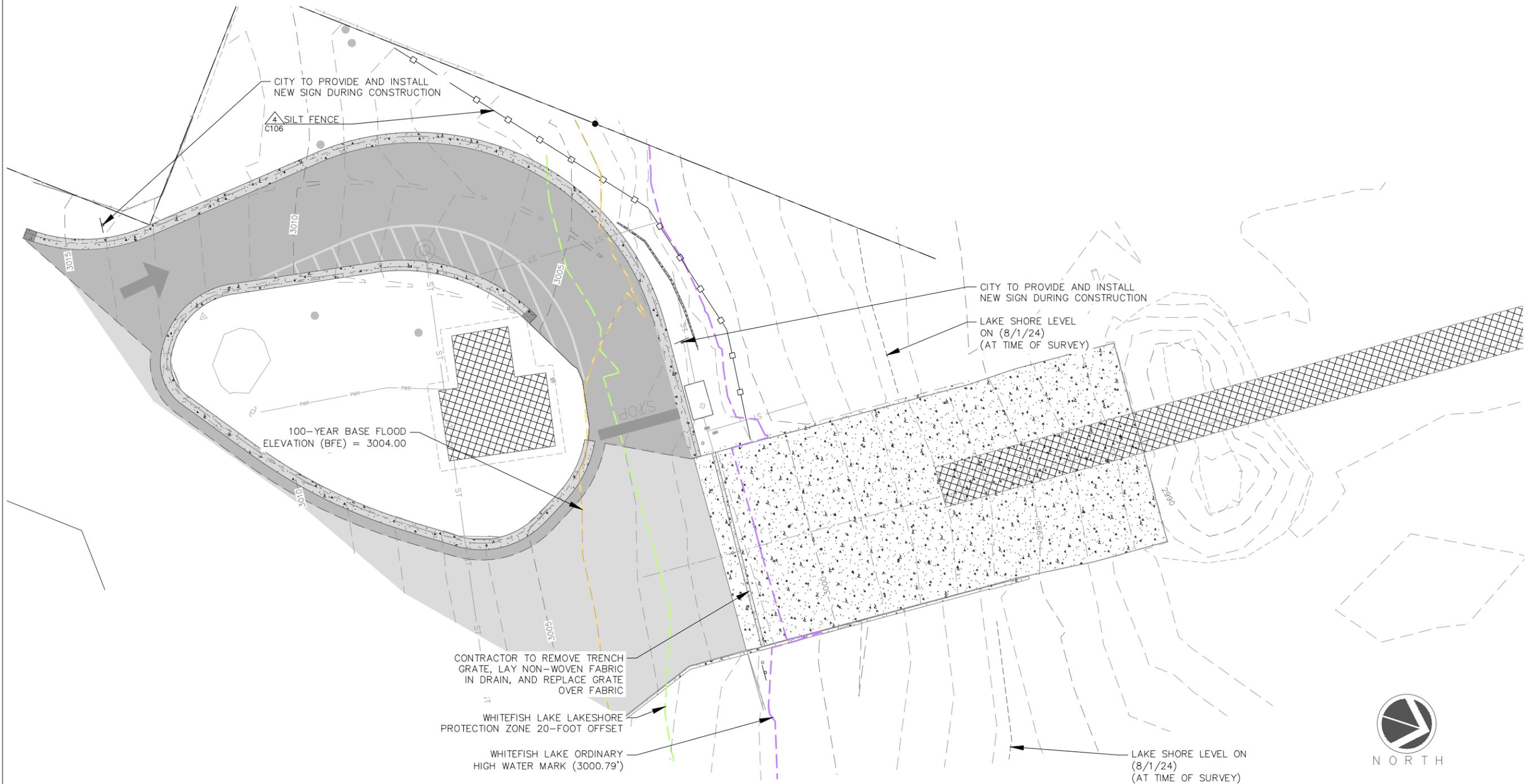
Sheet Name

**SITE OVERVIEW -  
AIS LOOP**

Sheet Number	<b>C108</b>
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**SHADING LEGEND:**

	EXISTING ASPHALT TO REMAIN		PROPOSED ASPHALT
	EXISTING CONCRETE TO REMAIN		PROPOSED CONCRETE
	EXISTING STRUCTURE TO REMAIN		PROPOSED TRANSITION CURB





Sym	Revision	By	Date



Designed By: Brandon Theis, PE	CS Project Number: 24-08
Drafted By: Carolyn Mulinix	
Reviewed By: Brandon Theis, PE	
Date: August, 2025	

**Project Name**  
WHITEFISH CITY BEACH  
BOAT RAMP EXTENSION

**Sheet Name**  
EROSION &  
SEDIMENT CONTROL  
PLAN - AIS LOOP

**Sheet Number**  
**C109**

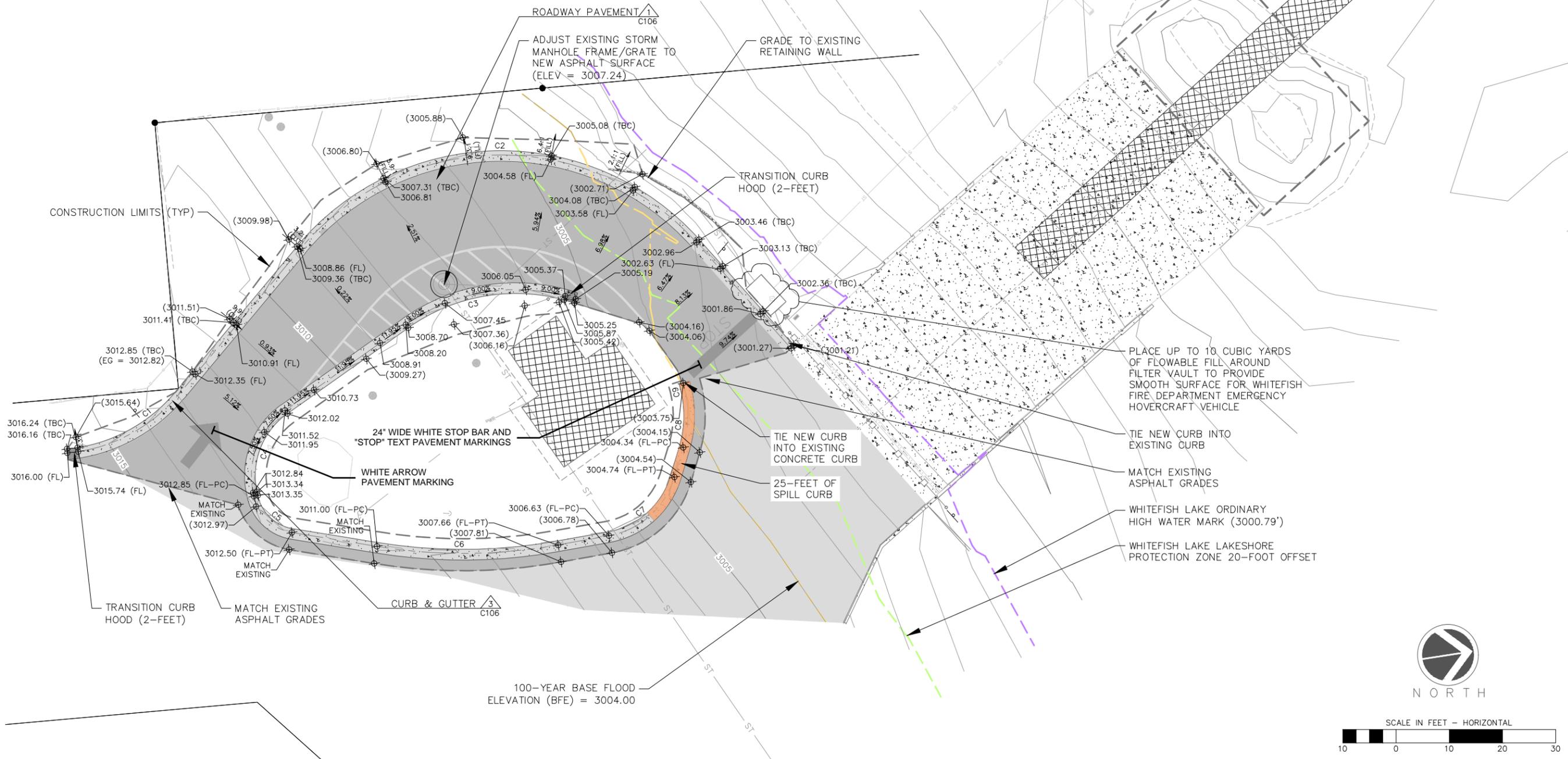
**GENERAL SITE NOTES:**

1. CONTOURS SHOWN ARE PROPOSED.
2. ALL PAVEMENT MARKING SHALL BE PER MUTCD.

**SHADING LEGEND:**

	EXISTING ASPHALT TO REMAIN		PROPOSED ASPHALT
	EXISTING CONCRETE TO REMAIN		PROPOSED CONCRETE
	EXISTING STRUCTURE TO REMAIN		PROPOSED TRANSITION CURB
	SPILL CURB (ALL OTHER CURB IS CATCH CURB)		

Curve Table							
Curve #	Length	Radius	Delta	START NORTHING	START EASTING	END NORTHING	END EASTING
C1	23.56	30.00	44.99	1555406.78	791234.83	1555428.50	791227.40
C2	85.72	50.00	98.23	1555455.25	791203.82	1555530.17	791213.98
C3	32.16	35.00	52.65	1555473.59	791222.08	1555504.63	791221.91
C4	16.65	14.30	66.71	1555440.87	791248.16	1555448.73	791234.55
C5	9.60	8.00	68.72	1555446.43	791255.98	1555440.91	791248.84
C6	33.92	100.00	19.44	1555495.26	791265.79	1555461.85	791260.97
C7	16.53	15.00	63.14	1555518.14	791256.96	1555504.98	791265.53
C8	11.78	20.00	33.75	1555522.34	791240.22	1555520.63	791251.71
C9	11.78	20.00	33.75	1555522.34	791240.22	1555520.63	791251.71





Date	
By	
Revision	
Sym	



6-8-25

Designed By: Brandon Theis, PE	CS Project Number: 24-08
Drafted By: Carolyn Mulinix	
Reviewed By: Brandon Theis, PE	
Date: August, 2025	

**Project Name**  
 WHITEFISH CITY BEACH  
 BOAT RAMP EXTENSION

**Sheet Name**  
 AIS LOOP LANE  
 WIDENING

**Sheet Number**  
 C110