



Yamhill County Parks

Unique natural, cultural, and historic places where people can enjoy outdoor activities and educational activities.

615 E. Sixth Street. McMinnville. Oregon 97128 · Phone: 503-434-7463 · Fax: 503-472-5216

Inter-Office Memorandum

Date: April 25, 2017
To: Yamhill County Board of Commissioners
From: Brett Henry, Parks Division Manager
Subject: Oregon State Marine Board Facilities Grant for Dayton Landing
Attachments (1): OSMB Dayton Landing Park Concept and Conceptual Cost Estimate

Yamhill County Parks is seeking Board of Commissioner approval to apply for an Oregon State Marine Board Boating Facilities Grant to reroute and replace the boat ramp, improve the parking/lighting, and add a public restroom at Dayton Landing County Park. Yamhill County Parks is also seeking Board of Commissioners' assistance with providing \$58,000 in a cash match contribution towards this project. Yamhill County Parks is seeking \$527,000 in grant funds from the Oregon State Marine Board (OSMB) and the total cost of the project is estimated at \$585,000.

The Dayton Landing boat launch site was purchased by Yamhill County in 1966 from Publisher's Paper Company. Shortly afterwards the County constructed a boat ramp and accompanying dock to accommodate local fisherman. Located at the confluence of the Yamhill River and Palmer Creek, the boat ramp has deteriorated over time. During the winter and spring floods eddies created by the competing hydrological forces have resulted in erosion and scouring of the sediment beneath the precast concrete planks causing them to separate. The boat ramp was inspected by the OSMB in 2007 during low water and the planks showed slight separation indicating an issue with the sediment under the ramp toe. On May 24, 2015, the OSMB performed a follow-up inspection where engineers detected a significant separation of the first plank to an extent that the ramp toe was deemed hazardous for launching boats during low water conditions. In 2015, Park staff consulted with OSMB engineers to determine an improved ramp alignment upstream of Palmer Creek. The resulting design concept was completed by OSMB on March 22, 2016. The design realigns the ramp to a more favorable location and reduces the ramp slope by extending the ramp further into the river. In addition to the ramp realignment and construction, the small parking area is designed for expansion to accommodate the required 15 trailer stalls and ADA parking spaces. Other design elements include a small day use area with room for picnic tables and a public restroom.

Yamhill County Parks is seeking Oregon State Marine Board assistance for boating facility improvements at Dayton Landing County Park. If funding is approved, it is anticipated that the project would be completed by the fall of 2019.

Accepted by Yamhill County
Board of Commissioners on

4-27-17 by Board Order

17-133

Prepared By:
 Oregon State Marine Board
 Facilities Department
 February 14, 2017

**FACILITY IMPROVEMENTS
 AT
 DAYTON BOAT RAMP, YAMHILL RIVER MILE 4.9
 FOR
 YAMHILL COUNTY PARKS**

Conceptual Cost Estimate

Item	Quantity	Unit	Unit Cost	Total Cost
Mobilization	1	LS	\$50,000.00	\$50,000.00
Bonds & Insurance	1	LS	\$15,000.00	\$15,000.00
Survey, Layout, & Verification	1	LS	\$5,000.00	\$5,000.00
Demolition & Disposal	1	LS	\$5,000.00	\$5,000.00
Excavation	6000	CY	\$15.00	\$90,000.00
Base Rock	1500	CY	\$50.00	\$75,000.00
Riprap	500	CY	\$80.00	\$40,000.00
Cast-In-Place Conc. Curb	700	LF	\$15.00	\$10,500.00
Asphaltic Concrete	700	TONS	\$100.00	\$70,000.00
Concrete Sidewalk	2600	SF	\$10.00	\$26,000.00
Precast Concrete Planks Ramp	960	SF	\$25.00	\$24,000.00
Steel Frame for Precast Planks	1	LS	\$10,000.00	\$10,000.00
V-Groove Cast-In-Place Concrete Ramp	3900	SF	\$15.00	\$58,500.00
1 Stall Vault Toilet	1	EA	\$20,000.00	\$20,000.00
Lighting	1	LS	\$10,000.00	\$10,000.00
Plantings	1	LS	\$10,000.00	\$10,000.00
Stormwater	1	LS	\$10,000.00	\$10,000.00
Striping	1	LS	\$2,000.00	\$2,000.00
Signs	1	LS	\$500.00	\$500.00
			SUBTOTAL	\$531,500.00
			Contingency	\$53,500.00
			TOTAL	\$585,000.00

Exhibit "A"
 page 1 of 8

DAYTON LANDING PARK CONCEPT
March 22, 2016

Attached please find a concept for boating facility improvements at Dayton Landing Park. Typically we can come up with a couple of concepts to consider, however, with the arrangement of topography and property line locations there only seems to be one logical layout. I am not saying this is the one and only concept/layout there is. We would consider other ideas however this is about all I can see at this time. Feel free to suggest other layout ideas you might have. Below are some challenges taken into consideration during this design session.

Ramp Location – Moving the ramp upstream off of the boat trailer parking lot was considered. However, there is a parcel of private property between the parking lot and the river that would need to be acquired before something like that could be done. Moving the ramp to a new location didn't seem to offer any benefits so we thought we would research the existing location for now.

Ramp Alignment - Typically we like a ramp angled downstream about 30 degrees for ease of launch/retrieval in a river current situation, which this ramp appears to be. The existing maneuver area is undersized/short and not in alignment with the ramp. The maneuver area for the existing ramp would cross into private property if it was lengthened in alignment with the ramp. So I decided to align the launch ramp with the property line which rotated the ramp upstream about 25 degrees from the existing alignment making the ramp alignment almost perpendicular to the river flow. This is normally not desired. My rationale for doing this was two-fold, first we could provide an adequate length maneuver area by extending it up the alley right-of-way between Alder and Mill Streets. Secondly, it would provide some separation between Palmer Creek and the launch ramp to help mitigate issues related to fish migration/activity and the potential for sediment deposition from the creek. The proposed alignment has a substantial cut of 3,500 CY through the bank leaving a bit of a berm between the new ramp and the existing ramp/creek for separation. It also extends out into the river requiring about 350 CY of fill when compared to the existing surface.

Ramp Slope & Elevation – The existing launch ramp is slightly steeper (16%) than the maximum slope (15%) our design guidelines recommend. By reducing the proposed ramp slope to 15% slope will increase the ramp length for the same vertical difference. I kept the top of the ramp the same elevation as existing so that we would not be in a cut at the toe of the bank for the adjacent properties. Due to the flatter ramp slope, the ramp extends further out into the river than the existing ramp. I would have liked to raise the top of the ramp a bit but that would have pushed the ramp out further into the river so I didn't. I would have liked to have the approach road enter on the maneuver area side of the vertical curve to lessen the grade change in the transition area between the ramp/maneuver area and the approach road but that would have pushed the ramp out even further. As a compromise I centered the approach road on the vertical curve to keep the ramp pulled in as much as possible yet ease the amount of vertical grade change that occurs through that area as the boater approaches and leaves the ramp.

A couple of things occur when a ramp is pushed out into a river channel, the ramp and boaters are exposed to more current and the fill can cause issue with a FEMA No-Rise. Exposure to current can be good and bad. More exposure to current typically means more water velocity which can help prevent sediment deposition from occurring on the ramp but can make it more difficult for boaters to control their vessels during launch/retrieval activities. Depending at what river water levels the higher velocities occur, the levels may be high enough that boaters will launch/retrieve on the ramp that is in the cut in the bank which will provide protection from the river current. However, with the calm water in the bank cut will likely come some sediment deposition. I wouldn't expect that we can totally get away from deposition at this point in the system but we can try to reduce it as much as possible.

The final design would need to have a hydro evaluation and modeling to see if the project would raise the base flood elevation in this reach of the river. If this design or one similar to are moved forward, I would hope that having 10 times more cut (3,500 CY) than fill (350 CY) would offset any backwater effect this project might create.

Lower Parking Area – Referring to the parking area adjacent to the launch ramp. The small area beyond the approach road for the launch ramp is small enough that I am showing it in grass with a single stall vault toilet and disabled parking for a single car and boat trailer. I thought some green might make it more attractive as a park than just a boating facility only. The downside to this is I provide some opportunity for day use but don't have any adjacent single car parking for that activity, something that may need another look before final design. This concept shows some grading in the lower parking area and regrading the ramp approach road. The approach road is shown with (2) 12' wide lanes and a 5' wide paved sidewalk that could be curbed concrete sidewalk if desired from the maneuver area to the upper parking lot.

Upper Parking Lot – The slope in this parking lot is about 8%, it would be nice to reduce this to about a 5% slope. To accomplish this it appears that fill material would need to be added at the lower portion of the parking lot to raise it up since the upper portions of the lot are adjacent to and used as access to private properties. A cut in these areas would limit/eliminate access to private properties and an alley. I show an idea of what a trailer/single car parking arrangement that stays within the limits of the existing gravel lot. It appears that there are some areas in this parking lot that have some drainage/ground water issues that would need to be addressed prior to any long term improvement such as paving.

Park Access Road – The park is accessed off an extension of Ferry Street. The right-of-way is split between a single lane 12' wide lower road to the park and a raised upper road leading to a cable supported footbridge crossing the river. It appears that this structure provides a crossing for possible waste water to get it to the treatment plant on the other side of the river.

Lastly, it would be nice if there was some way to widen the access road enough to have two way traffic flow at the entrance to the park.

DATE	BY	REVISIONS

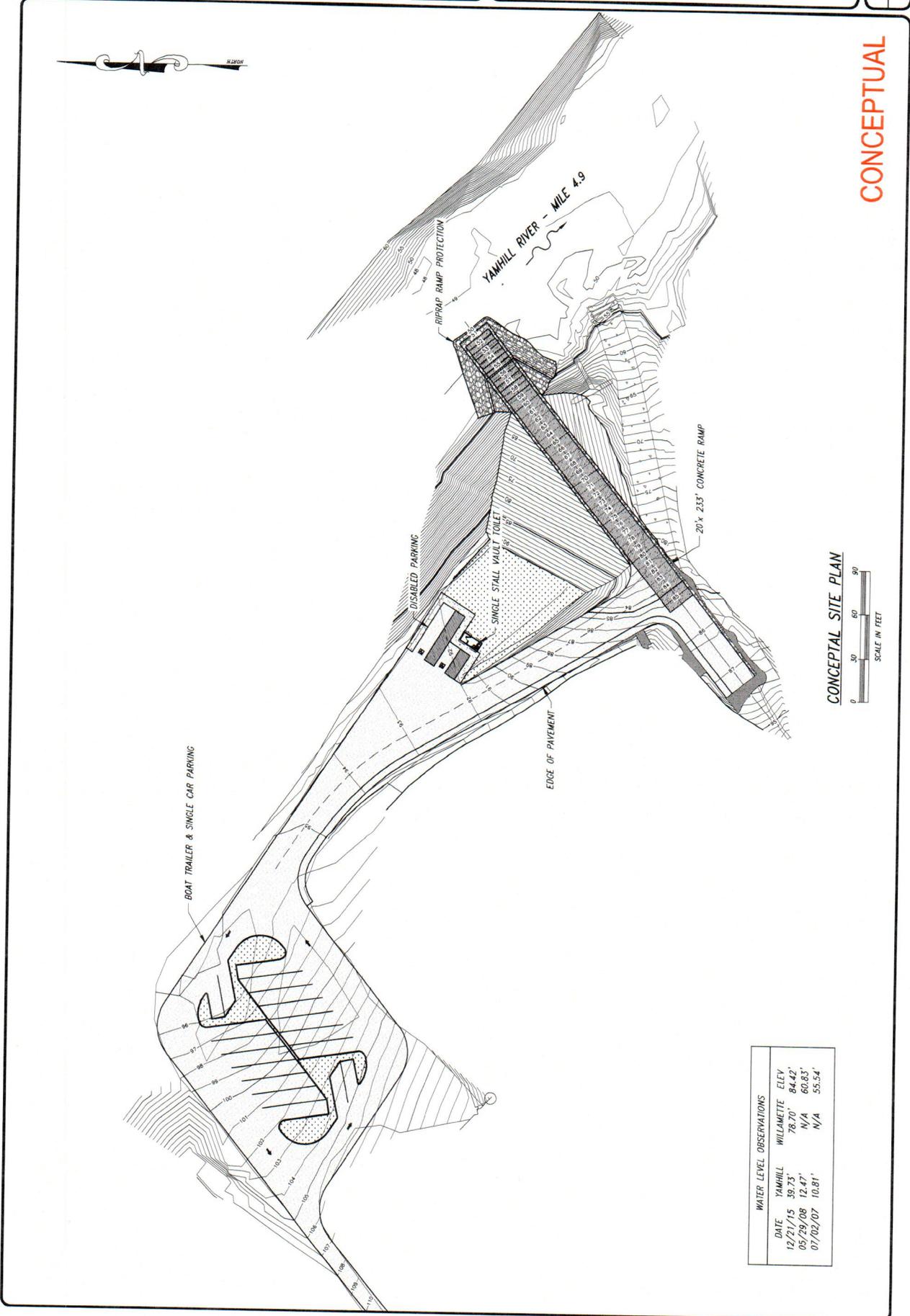
APPROVED BOATING FACILITIES MANAGER	DATE
R. LANHAM	03/21/16
DESIGNED BY	
R. LANHAM	
FINAL CHECK BY	
R. LANHAM	
ENGINEER	



OREGON STATE MARINE BOARD

CONCEPTUAL SITE PLAN
 AT DAYTON LANDING COUNTY PARK, YAMHILL RIVER - MILE 4.9
 FOR YAMHILL COUNTY PARKS

3	5
SHEET	OF
3604 - NC - 3	
DRAWING NO.	



CONCEPTUAL SITE PLAN

SCALE IN FEET

WATER LEVEL OBSERVATIONS			
DATE	YAMHILL	WILLAMETTE	ELEV
12/21/15	39.73'	78.70'	84.42'
05/29/08	12.47'	N/A	60.83'
07/02/07	10.81'	N/A	55.54'

CONCEPTUAL

DATE	REVISIONS

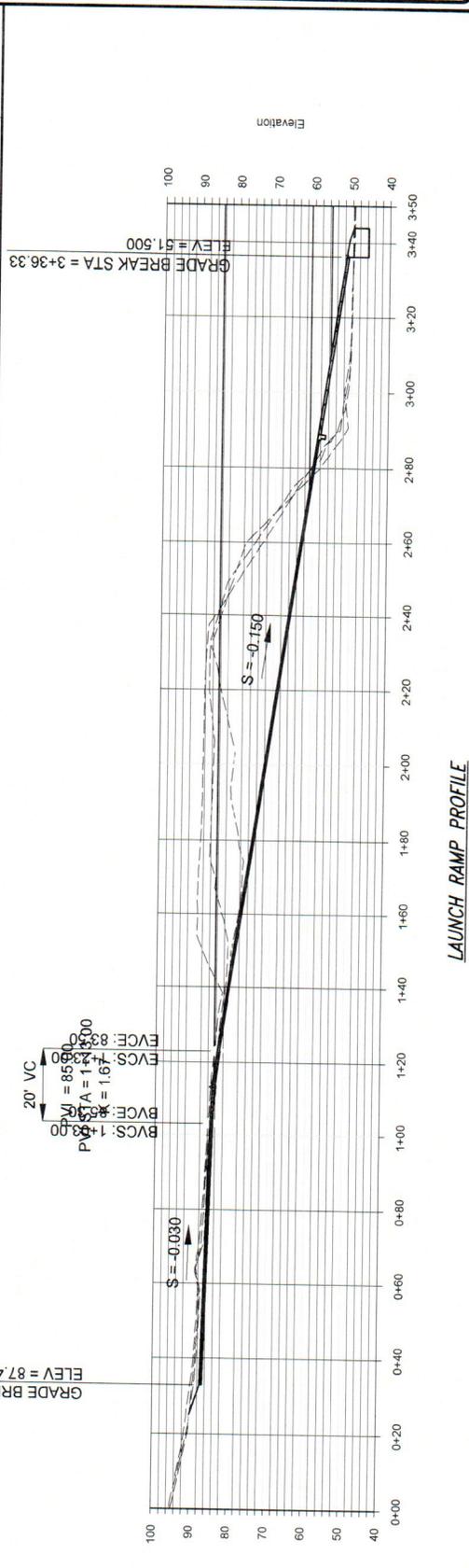
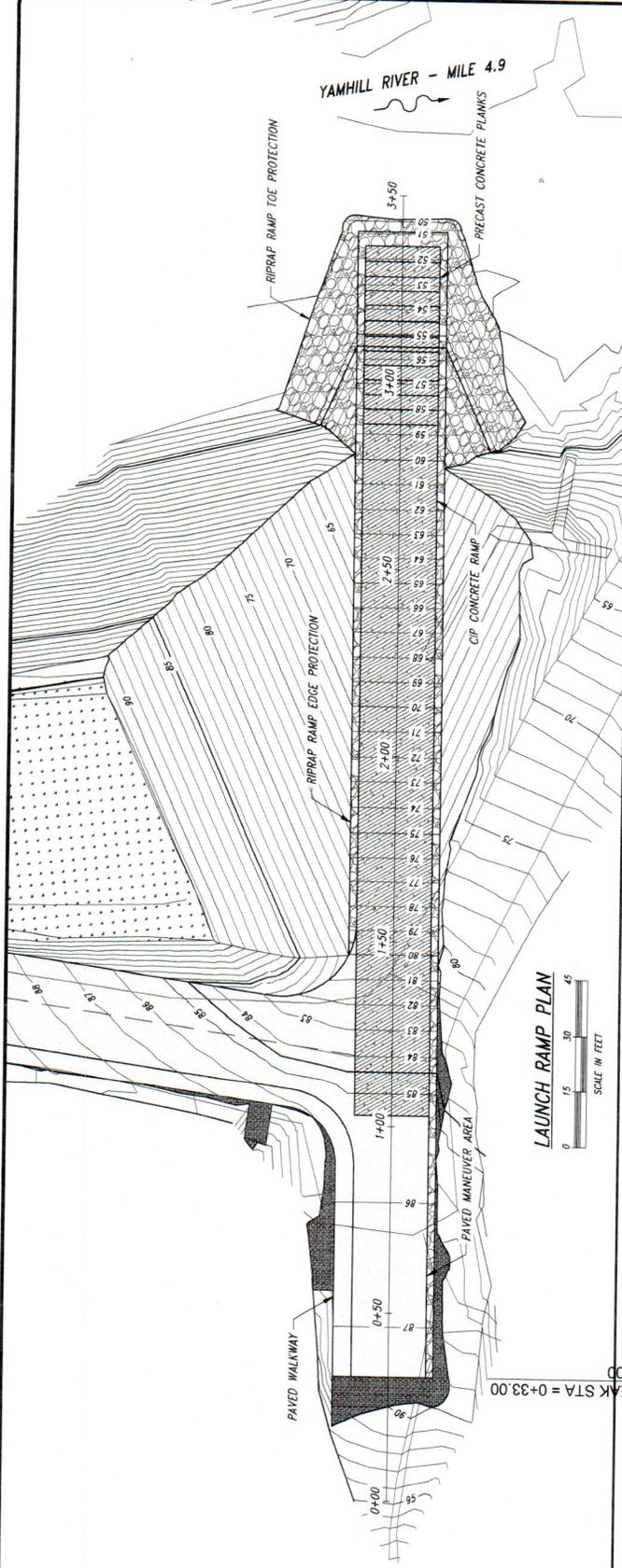
APPROVED BOATING FACILITIES MANAGER	DATE
R. LANHAM	03/21/16
DESIGNED BY	
R. LANHAM	
EXPIRES	



OREGON STATE MARINE BOARD

LAUNCH RAMP PLAN & PROFILE
 AT DAYTON LANDING COUNTY PARK, YAMHILL RIVER - MILE 4.9
 FOR YAMHILL COUNTY PARKS

4	5
SHEET	OF
3604 - NG - 4	DRAWINGS



CONCEPTUAL

LAUNCH RAMP PROFILE

DATE	REVISIONS

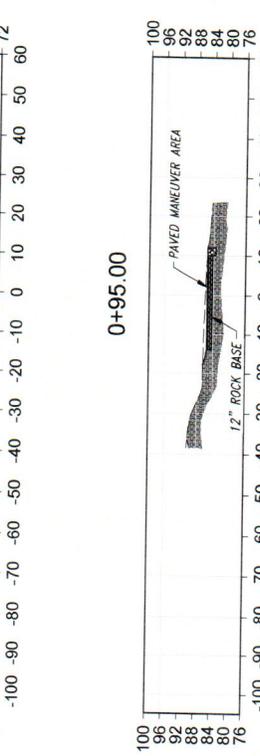
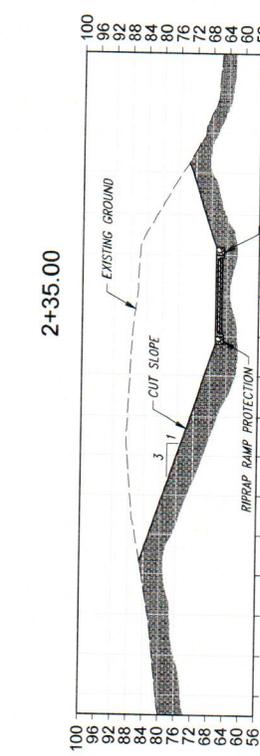
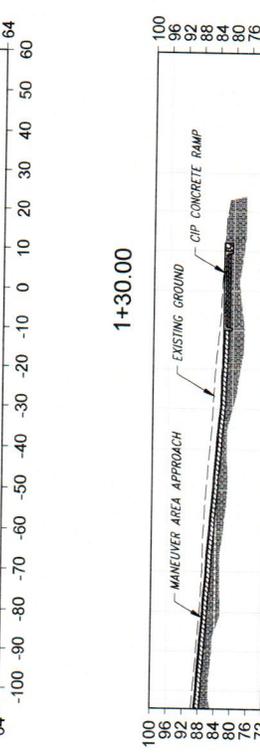
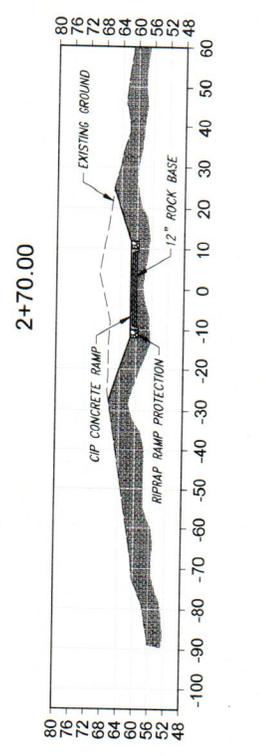
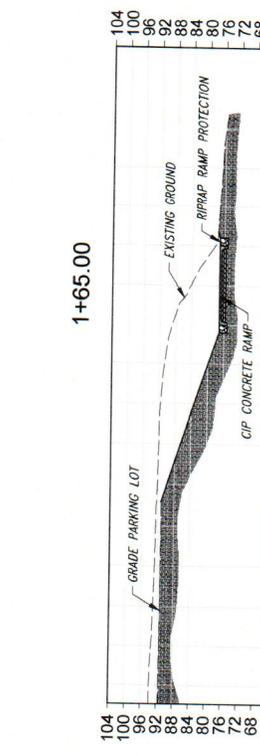
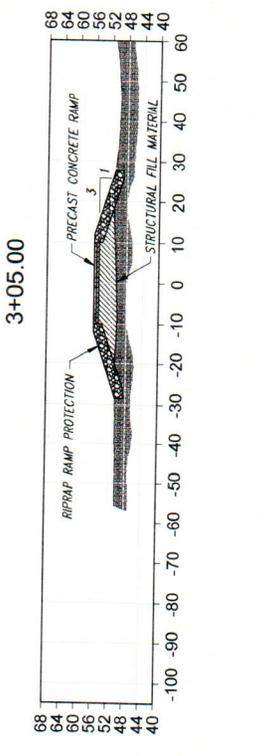
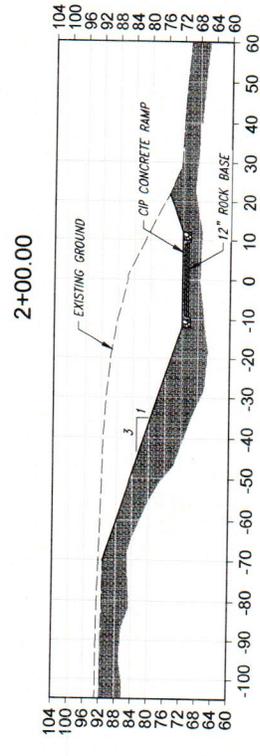
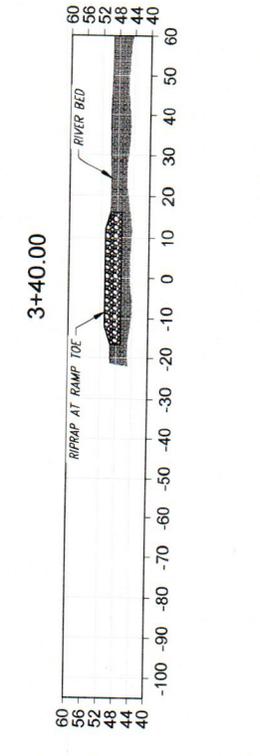
APPROVED BOATING FACILITIES MANAGER	DATE
	03/21/16
DESIGNED BY	EXAMINER
R. LANHAM	R. LANHAM
FINAL CHECK BY	DATE



OREGON STATE MARINE BOARD

FOR YAMHILL COUNTY PARKS
AT DAYTON LANDING COUNTY PARK, YAMHILL RIVER - MILE 4.9

5	5
SHEET	OF
3604 - NG - 5	
DRAWING NO.	



LAUNCH RAMP CROSS SECTIONS



CONCEPTUAL

Exhibit "A"
page 8 of 8