



5 Year Recreation Plan Proposed Amendment – Marina/Harbor/Boat Launch

The DNR and Waterways Commission requires certain elements addressing marinas/harbors to be included in a community's 5 Year Recreation Plan in order to be considered for grant funding. While the marina and boat launch are mentioned in the current plan, the specific elements they want communities to discuss and evaluate are not included in the plan at this time. The objective of the proposed addendum is to meet the requirements of the DNR.

Below is the description provided by the DNR/Waterways Commission and attached is a draft plan for discussion and additional input. The draft has been presented to the Parks and Recreation Board and the Planning Commission for their review and comments.

The proposed amendment is available for public review and input prior to being submitted to the City Commission in February for consideration and potential inclusion as an amendment to the City's 5 Year Recreation Plan.

The plan is also available on the City's website (cityofboynecity.com). Comments should be submitted to Harbormaster Barb Brooks at 231.582.0036 or bbrooks@boynecity.com.

Waterways Program Grants

Please note that now all harbor grant applications for the Waterways program will require:

- **A Recreation Harbor/Marina Facilities 5 year Recreation Plan which shall include the following:**
 - **A description of how your community intends to address recreational plan elements like correct size of facility, marketing/events/partnering plans, dredging needs, dredging cycles (how often), dredge volume, and disposal location. Also, please address infrastructure replacement schedules, annual maintenance schedules and replacement or habilitation schedules of large investments like docks, buildings, etc. A brief description is acceptable and may be covered in the goals and objectives and the action program.**

Harbor/Marina Facilities Recreation Plan

Marketing:

- Michigan Boating Industries Association (MBIA) Membership – Actively participate in opportunities provided by MBIA to network and advertise in their publications and website
- Participate in listings provided by publications and websites such as the State/DNR, Great Lakes Scuttlebutt, etc.
- Advertise in regional publications such as Traverse the Magazine and the Boyne Area Visitors Guide.
- Local websites – Keep current information on the City of Boyne City and Chamber of Commerce websites
- Social Media – Facebook
- Clean Marina – Continue to participate in the “Clean Marina” program and preserve our certification status and adhere to and promote best practices for our marina and Lake Charlevoix

Events:

- Boyne Thunder – Home of one of the largest Poker Runs for off-shore boats in the nation. Over 100 registered participants and thousands of visitors. The event draws such a crowd that every marina on Lake Charlevoix usually books solid during the event and extends to Petoskey, Bay Harbor and Harbor Springs.
- Red Fox Regatta – A sailboat race on Lake Charlevoix that the City of Boyne City has participated in for over thirty years drawing between 45 – 60 boats.
- Several other small boating events/races take place on Lake Charlevoix that either use the marina for a home base or a stop on their circuit.
- The marina also hosts yacht clubs, sailing clubs and other groups (big or small) traveling together who may want to stay as a group or host a small event.
- Boater/Marina Appreciation Day Dinner – Celebrated in August, the marina recognizes both seasonal and transient boaters and all of our hardworking staff. It’s a great social event, the boaters and staff share favorite stories, memories and life events.
- Movie Night – Movies are shown in the evening projected on the back of the lighthouse. Everyone brings a lawn chair or blanket, snacks, etc. and enjoys a boating themed movie under the stars.
- Impromptu potlucks and special breakfasts (i.e. Father’s Day – dad’s eat free, everyone else makes a donation).

Community Partnerships:

- Chamber of Commerce – The marina distributes visitors’ packets and guides to first time guests and post local events on our information board. The Chamber of Commerce keeps marina brochures in their visitor center, features the marina each year in their annual visitors guide and refers people to us on a regular basis.
- Main Street Program / DDA – The Boyne Thunder Poker Run is a Main Street sponsored event that draws not only hundreds of boaters but thousands of spectators to the area. The marina and Main Street work together through their promotions committee to provide downtown promotions and activities for boating groups and rendezvous. Shoppers dock / day docks are provided so boaters can enjoy the downtown shops and restaurants.

- Boyne City Yacht Club – The marina provides a home base for several boating events/races and partner to seek out and bring in new events.
- MSU Extension Sail School Program – Provided dock space and hosted the area youth learn to sail program for 3 – 4 weeks in June.
- Private Partnership – The City has taken advantage of a unique opportunity in operating a new, private marina located in close proximity to our municipal marina. The 24 slip marina was built prior to the land portion of the development. The developer did not want to be in the business of operating a marina and it seemed like a good fit for the City to operate as it provided additional slips, larger slips and upgraded electrical services.
- Marine Services – The marina consists of slip rental and boat launch services. For other services such as fuel and pump-out, the marina partners with a neighboring private marina (The Harborage Association). For repair and storage there are several reputable business that the marina recommends to its customers.
- Trailer Seasonal Storage – For local hotels, motels, condo rentals, etc. with limited parking, we offer a low cost parking option for boat trailer storage. This a partnership between the marina and the Boyne City Municipal Airport.

Dredging Needs / Schedule:

- Dredging took place in 2002 due to infill from the Boyne River and to increase the depth for larger boats to come to the Boyne City end of Lake Charlevoix. At the same time the dredging took place, there was also work done in the Boyne River to address future infill from the flow of the river.
- Dredging took place again in 2012 as a result of the state-wide emergency dredging due to record low water levels on Lake Michigan, not due to infill from the river.
- In 2012, a few hundred yards of dredge material was taken to a “Type II” landfill. The remaining approximately 3,000 yards of materials were hauled offsite to the City’s Wastewater Treatment site which has deed restrictions and can accept material with minimal levels of contaminate.
- Looking at past history, it is not anticipated that annual maintenance dredging is required, nor any dredging in the future for the current marina basin. There is the possibility of minor dredging in phases of the proposed marina expansion

Annual Maintenance:

- Approximately every two years an inspection of the underside of the docks is performed to assess the structural integrity.
- Deck boards are tightened and replaced an as-needed basis throughout the season; however an initial inspection is done each spring.
- Regular building and grounds maintenance is performed in the spring and throughout the summer as needed.
- Electrical maintenance is performed by a licensed electrician on an as-needed basis.
- Aerators/Bubblers are installed each fall and run through the winter to prevent ice damage in the marina basin.
- The floating shoppers dock is removed from its summer location and floated and secured in the marina basin for safe keeping over the winter.

Correct Size of Facility:

- While partnering with the private One Water Marina Development lent itself as a unique prospect; it also provided the marina with an opportunity to test the waters of marina expansion needs. The One Water Marina consists of 24 slips; 45', 65' and 80' with a floating breakwall that provides 180' of broadside docking and some additional broadside closer to shore. The marina receives regular request for slip rentals of these docks due to their size, upgraded electrical service and proximity to downtown. They are also used for overflow when the municipal marina is full. While these docks are popular, they are not full all summer. We believe this is due to the lack of boater amenities and lack of protection provided by the floating breakwall, not a clear reflection of demand.
- Lake Charlevoix and Boyne City are becoming more of a destination each year. Boyne City is a vibrant community with events and activities year around. The region is abuzz about what is going on in Boyne City and how much it has to offer. Even though sections of the marina are more than 40 years old, it has not lost its appeal, in fact it seems to gain more popularity each year and there are regular requests for expansion.
- Waitlist –When the State (DNR & Waterways Commission) look at expansion of recreational harbors, they are generally looking at transient demands. Seasonal demand should be considered as part of the equation as well. The makeup of current seasonal boaters and those on the waitlist are a mix of local residents and people from outside of the area; however, the majority are from all over the state and a few out of state. There are 45 people on the 2017 waitlist. These people pay a fee of \$25 to get on the list and a \$25 annual fee. The top person on the list has been on since 2005. This is an indicator of the popularity and demand for slips at the marina.

Infrastructure Replacement Needs:

- Replacement of docks and finger piers - With the exception of four (4) fixed docks that were replaced in 2013, all of the main piers and finger piers are at least 40 years old. Finger piers have been “re-skinned” on the bottom and foam replaced. The main gangways and piers underwent repairs and temporary baffles/tubs have been placed under the piers to maintain flotation. These have all been temporary fixes to extend the life of the marina while finances and expansion, renovation plans are vetted.
- Breakwall – The current breakwall was a prototype installed approximately 25 to 30 years ago and provides some wave protection, when the winds are strong and prevailing out of the west/northwest (which is common on Lake Charlevoix), the is insufficient.
- Shoppers/Day Dock – Built new in 2013, this dock should only require regular maintenance. Replacement should be considered approximately in the year 2030. With proper care and maintenance it could last longer; however, exposure to heavy wave action, twisting and contorting of the structure, shortens the life expectancy.
- Boat Launch – The City operates two boat launches; one adjacent to the marina and the other three blocks from the marina. The launch adjacent to the marina is a single dock with one launch lane and six vehicle w/trailer parking spaces. Due to water depth and length of the ramp and dock, it will only support smaller vessels, approximately 24' and under. The second boat launch is a single dock with two launch lanes that can accommodate most any size vessel. It also has a restroom and fish cleaning station. During the shoulder season the launch and parking area is sufficient; however, during the summer boating season neither the two lanes nor the parking lot is enough to handle the demand. Future expansion will consist of an additional one or two launch lanes, a reconfigured and expanded parking lot and renovation of restrooms and fish cleaning station.
- Utilities – Water and Electrical do not currently extend to all of the docks. The current electrical wiring providing service to the pedestals is safe and had some upgrades; however, it does not meet current

code standards. The sanitary pump-out was located upland and during times of low lake levels, it was not conducive to use so it was abandoned back in the 1990's and a portable pump-out was purchased. Portable equipment serves a purpose but has many deficiencies.

- Facilities/Buildings – Restroom size and number of stalls are sufficient. A family restroom will be a future addition during facility renovations. As the number of slips increase, additional shower/bathing rooms will be needed. Laundry facilities, a boaters' lounge expanded office and storage space will need to be considered as part of expansion.

CIP Schedule:

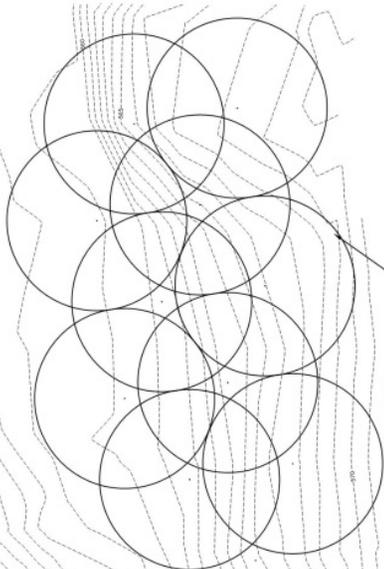
Year	Project Description	Cost Estimate	Funding Source(s)
2017	Finalize engineering for marina dock renovation and expansion. Finalize pre-qualification of dock and breakwall manufacturers/builders. Determine project phasing breakdown. Line up financing	\$17,000	Local
2017 or 2018	Implement first phase of expansion (breakwall, docks, utilities and pump-out)	\$1,500,000	Waterways Clean Vessel Act Local Match
2019	Implement second phase of expansion/renovation including facility expansion	\$ 850,000	Waterways Local Match
2020	Boat launch improvements and Phase 3 expansion/renovation	\$1,000,000	Waterways MNRTF/Land&Water Local Match
2022	Phase 4 renovation/expansion	\$1,000,000	Waterways Local Match
	TOTAL	\$4,350,000	

Goals:

- Continue current marketing efforts and find ways to expand in other areas
- Remain open to and grow relationships with community partners
- Market and build on both marina and community events and remain open to new opportunities
- Expand and renovate to provide a sufficient number of slips and up to date accommodations/services. This will be accomplished by phasing the project.
- Obtain property to expand boat launch lanes and parking
- Maintain a positive cash flow and continue to grow fund balance
- Continue to provide a positive economic impact on the community

Objectives:

- The Boyne City F. Grant Moore Municipal Marina seeks to be the premier marina on Lake Charlevoix providing boating access, day, overnight and seasonal dockage any size vessel showcasing a facility that is sustainable, energy efficient and environmentally sensitive using Clean Marina best practices and deliver the best customer care for a one hundred percent positive recreational boating experience.
- Strengthen and support the economic impact on the parks and recreation system through recreational boating opportunities.



SCHEDULE OF SLIP ADDITIONS - BY PHASE					
SLIP LENGTH	EXISTING	PHASE I	PHASE II (DOCK "A")	PHASE III (DOCK "B")	PHASE IV (FINAL)
25'	-	-	-	-	22
30'	8	9	13	14	-
35'	4	-	-	-	-
40'	4	-	12	12	-
45'	15*	-	-	-	-
50'	6*	-	9	-	-
60'	3*	-	-	-	7
80'	-	-	-	-	2
TOTAL SLIP COUNT BY PHASE	40	9	34	26	31
TOTAL BROADSIDE MOORING	-	-	-	78*	58*
PUMP OUT	-	-	-	-	70*
SWING MOORING	-	-	-	-	10

SCHEDULE OF SEASONAL SLIPS - OVERALL					
SLIP LENGTH	EXISTING	PHASE I	PHASE II (DOCK "A")	PHASE III (DOCK "B")	PHASE IV (FINAL)
25'	-	-	-	-	22
30'	8	16	29	35	35
35'	4	4	4	-	-
40'	4	4	16	23	23
45'	15*	14	14	8	-
50'	6*	2	11	9	9
60'	3*	-	-	-	7
80'	-	-	-	-	2
TOTAL SLIP COUNT	40	40	74	75	98
TOTAL BROADSIDE MOORING	-	-	-	78*	136*
PUMP OUT	-	-	-	-	70*
SWING MOORING	-	-	-	-	10

SLIP DIMENSION TABLE			
SLIP LENGTH	FENDER PILE	PIER WIDTH	
		PROPOSED	DOUBLE-LOADED SLIP WIDTH
25'	NO	4'	27*
30'	YES	4'	33*
40'	YES	4'	36*
50'	YES	4'	44*
60'	YES	5'	48*
80'	YES	6'	56*

NOTES:
 UNLESS OTHERWISE INDICATED, THE DIMENSIONS INDICATED IN THIS TABLE ARE TAKEN FROM THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MDNR) PARKS & RECREATION BUREAU HARBOR DEVELOPMENT STANDARD GUIDANCE.
 * - DIMENSION RECOMMENDATIONS BASED ON TOBIASSON AND KOLLMAYER, "MARINAS AND SMALL CRAFT HARBORS, SECOND EDITION."

** ACTUAL LENGTH OF BERTH MAY NOT BE FULL LENGTH OF SLIP AS INDICATED HERE.

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PROPOSED SWING MOORING FIELD:
 10 - SWING MOORINGS ON HELICAL ANCHORS OR DRIVEN PILE WITH BOUY AND MOORING PINNANTS.

DINGHY - BROADSIDE MOORING:
 PROPOSED 250' OF BROADSIDE DOCKING FOR ENGINES AND SMALL CRAFT

FIXED-ADJUSTABLE DOCKS:
 PROPOSED FINGER PIERS SERVING 30' BERTHS

DOCK "B":
 PROPOSED FLOATING DOCK

DOCK "C":
 PROPOSED FLOATING DOCK

SHOPPER'S DOCK:
 PROPOSED FLOATING DOCK EXTENDS EXISTING BROADSIDE MOORING BY 23'

AUXILIARY PLATFORM "A2":
 TURN-AROUND FOR SERVICE VEHICLES

DOCK "A":
 PROPOSED FLOATING BREAKWATER

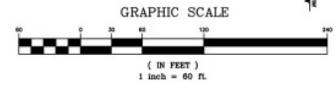
AUXILIARY PLATFORM "A1":
 DOCK UTILITIES
 LOCATION TO BE DETERMINED IN FINAL DESIGN

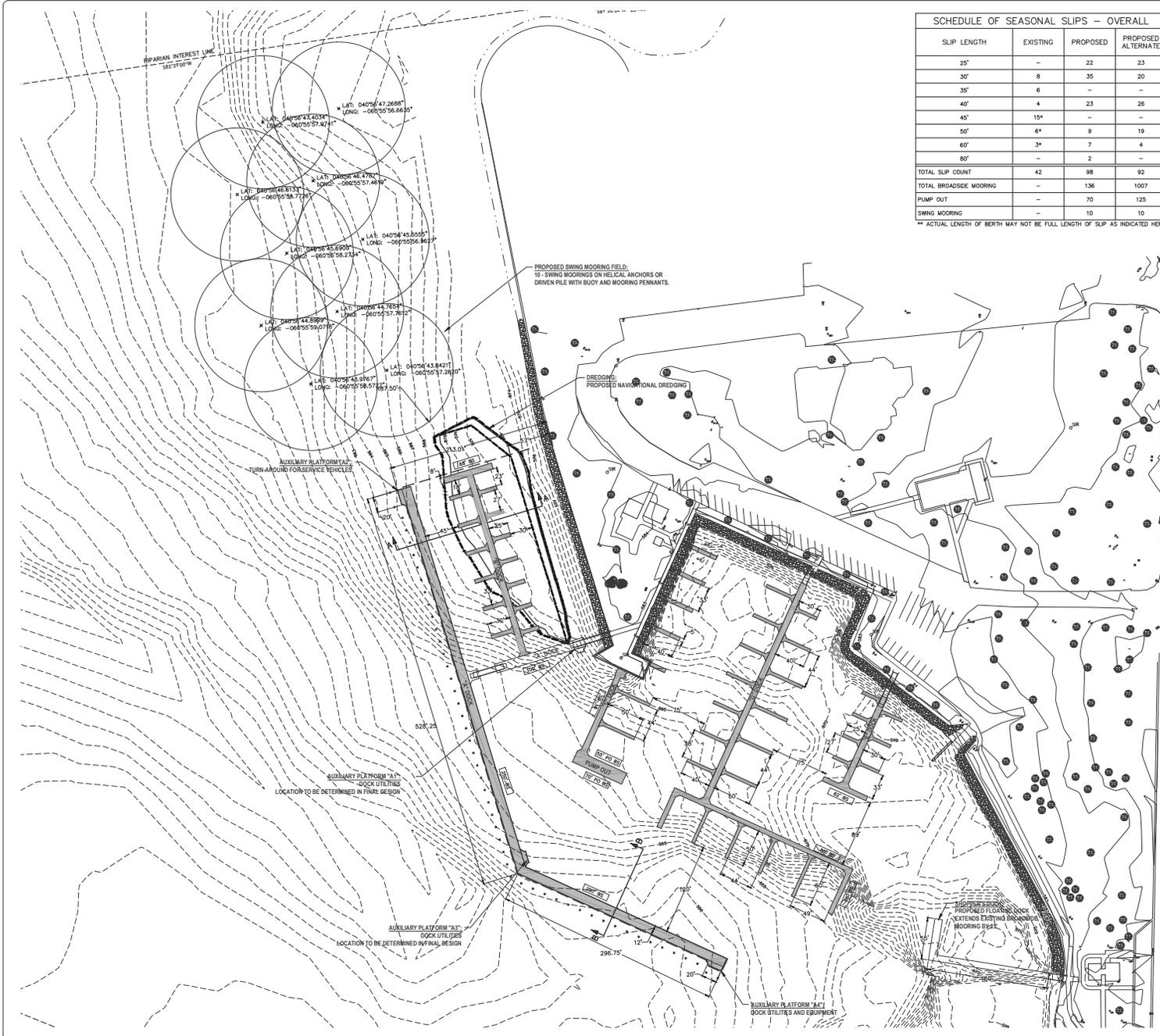
OPTION A FOOTPRINT

AUXILIARY PLATFORM "A3":
 DOCK UTILITIES
 LOCATION TO BE DETERMINED IN FINAL DESIGN

AUXILIARY PLATFORM "A4":
 DOCK UTILITIES AND EQUIPMENT

PHASE IV MARINA IMPROVEMENTS WITH PUMP OUT AND SWING MOORINGS





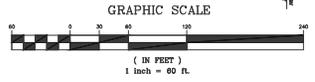
SCHEDULE OF SEASONAL SLIPS - OVERALL			
SLIP LENGTH	EXISTING	PROPOSED	PROPOSED ALTERNATE
25'	-	22	23
30'	8	35	20
35'	6	-	-
40'	4	23	26
45'	10*	-	-
50'	6*	9	19
60'	3*	7	4
80'	-	2	-
TOTAL SLIP COUNT	42	98	92
TOTAL BROADSIDE MOORING	-	136	1007
PUMP OUT	-	70	125
SWING MOORING	-	10	10

** ACTUAL LENGTH OF BERTH MAY NOT BE FULL LENGTH OF SLIP AS INDICATED HERE.

SLIP DIMENSION TABLE			
SLIP LENGTH	FENDER PILE	PIER WIDTH	DOUBLE-LOADED SLIP WIDTH
		PROPOSED	PROPOSED
25'	NO	4'	27*
30'	YES	4'	33*
40'	YES	4'	38*
50'	YES	4'	44*
60'	YES	5'	49*
80'	YES	6'	56*

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PROPOSED MARINA IMPROVEMENTS WITH FUEL DOCK AND SWING MOORINGS



F. GRANT MOORE
 MUNICIPAL MARINA
 CITY OF BOYNE CITY, MI

MARINA EXPANSION PLAN
 OVERALL MARINA LAYOUT
 ALTERNATE LAYOUT

DRAWN BY: DJL/DAD/TRI
 DESIGNED BY: DAD
 PM REVIEW: CJ/C
 QA/QC REVIEW:
 DATE: JUNE 2016

SIGNATURE:
 DATE:

HARD COPY IS INTENDED TO BE 24" X 36" WHEN PLOTTED. SCALES INDICATED AND GRAPHIC QUALITY MAY NOT BE ACCURATE FOR ANY OTHER SIZES.

SCALE:
 HORIZ: 1"=40'
 VERT: N/A

PROJECT # 15-0994

SHEET NO. 1 of 1

OVERALL SLIP COUNT COMPARRISON

SLIP LENGTH	EXISTING	PROPOSED	PROPOSED ALTERNATE
25'	-	22	23
30'	8	35	20
35'	6	-	-
40'	4	23	26
45'	15*	-	-
50'	6*	9	19
60'	3*	7	4
80'	-	2	-
TOTAL SLIP COUNT	42	98	92
TOTAL BROADSIDE MOORING	-	136	1007
PUMP OUT	-	70	125
SWING MOORING	-	10	10

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