



**Meeting of the  
BOYNE CITY  
PARKS AND RECREATION COMMISSION  
Thursday, January 6, 2017  
6:00 p.m. at the  
City Hall**  
(Temporary location: 364 N. Lake St.)



*Scan QR code or go to  
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commissions for complete  
agenda packets & minutes  
for each board*

1. CALL TO ORDER
2. ROLL CALL
  - A. Excuse absence(s)
3. APPROVAL OF MINUTES
  - A. Approval of the December 1, 2016 meeting minutes
4. CITIZENS COMMENTS (non-agenda items – limit to 5 minutes)
5. DIRECTOR'S REPORT
6. CORRESPONDENCE
  - A. None
7. REPORTS OF OFFICERS, BOARDS, AND STANDING COMMITTEES
  - A. Park Reports
  - B. Disc Golf Update
  - C. Trail(s) update (Boyne City/Charlevoix and Boyne Valley
  - D. Friends of Avalanche
8. UNFINISHED BUSINESS
  - A. Charlevoix County Millage Allocation Project Proposals
9. NEW BUSINESS
  - A. Leadership Charlevoix County Service Project Proposal – Installation of boot brush stations to heavily used trails in Charlevoix County to both help stop the spread of invasive species as well as to increase awareness about the dangers of invasive species.
  - B. Proposal to groom a Fat-Tire Bike Trail at Avalanche over the winter
  - C. Proposed Amendment to the 5 Year Recreation Plan to include "Recreation Harbor/Marina Facilities Plan
  - D. MParks Membership Request
10. GOOD OF THE ORDER
11. ANNOUNCEMENTS
  - A. Next meeting is scheduled for February 2, 2017
12. ADJOURNMENT

*Individuals with disabilities requiring auxiliary aids or services in order to participate in municipal meetings may  
contact Boyne City Hall for assistance:  
Cindy Grice, City Clerk, 319 North Lake Street, Boyne City, Michigan 49712 (231) 582-0334*



Approved:

**MEETING OF**  
December 1, 2016

RECORD OF THE PROCEEDINGS OF THE **REGULAR BOYNE CITY PARKS AND RECREATION COMMISSION MEETING HELD AT 6:00 P.M. AT CITY HALL ON THURSDAY, DECEMBER 1, 2016.**

**CALL TO ORDER**

Meeting was called to order by Vice Chair Swift at 6:00 p.m.

**ROLL CALL**

Present: Mike Sheehan, Jo Bowman, Patrick Patoka, Hugh Conklin and Mike Doumanian

Absent: Marie Sheets, Darryl Parish

**MEETING ATTENDANCE**

City Staff: Streets/Parks & Recreation Superintendent Andy Kovolski and Recording Secretary Barb Brooks

Public Present: None

**APPROVAL OF MINUTES \*\*MOTION**

**Patoka moved, Bowman seconded, PASSED UNANIMOUSLY**, a motion approving the November 3, 2016 meeting minutes as presented.

**CITIZENS COMMENTS**  
(on non-agenda items)

None

**DIRECTOR'S REPORT**

Kovolski reported all of the parks are closed except Avalanche which is ready for winter activities as soon as the weather allows and the City has placed an ad for an attendant.

**CORRESPONDENCE**

None

**REPORTS OF OFFICERS, BOARDS AND STANDING COMMITTEES**

**Park Inspection Reports -**

- Alexander gave a report on discussions that took place at the City Commission meeting regarding the Open Space property. The current owners would like to place a conservation easement on the property through the Little Traverse Conservancy as a condition of the sale of the property to the City. This would place restrictions on how the property is used and developed to keep the property "public open space" in perpetuity. There was also discussion regarding grants that have been applied for and possible funding mechanisms to help purchase the property.
- **Disc Golf Update** - None
- **Trail(s) Update** - Boyne City/Charlevoix Trail Phase 2 contract has been awarded.
- **Friends of Avalanche** - There was an inquiry to sprucing up the entrance to the reservoir; removing and/or replacing old signs

and repair or replace the old gate. Conklin also requested further discussion regarding whether horses should be prohibited on Avalanche trails and asked that it be placed on a future agenda.

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**UNFINIHSED  
BUSINESS**

**Charlevoix County  
Parks Millage  
Allocation**

The board reviewed the numbers of the amount the City has contributed through the millage and how much it's received back for projects. They also refined ideas for project applications for the next round of funding allocations that start January 1, 2017. Staff will proceed with working through the application process.

**Board Member Term  
Expirations**

Board member terms expiring on December 31, 2016 are Patrick Patoka, who has expressed an interest in serving another term, and Marie Sheets. Marie expressed her desire to allow her term to expire; however, she further stated that she would be happy to serve until a replacement is found. Bowman moved, Alexander seconded a motion to recommend Sheets be elected to another four year term or until a replacement is found. Board discussion – Patoka stated that if Sheets is ready to done, it doesn't make sense to re-elect her and have her resign when we find a replacement. Secretary Brooks added that it would not be the first time that we have been down a board member and business has always continued to be conducted. Patoka. The general consensus of the board was it could be confusing to advertise we are looking to fill a vacancy that doesn't exist if Sheets is re-elected. Bowman withdrew her motion. No further motion was needed as Sheets term will automatically expire. All of the board members thanked Sheets for her many years of service to the board.

**\*\*MOTION**

**Parish moved, Sheets seconded, PASSED UNANIMOUSLY** to recommend the City Commission appoint Patoka to another four year term expiring December 31, 2020.

**\*\*MOTION**

**Conklin moved, Doumanian seconded, PASSED UNANIMOUSLY** to elect Patoka to serve as the board's Vice Chair.

**NEW BUSINESS**

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**Adoption of the 2017  
Meeting Schedule**

The general consensus of the board was to continue the meetings on the first Thursday of the month and not schedule a regular meeting in July. There was discussion regarding the start time of the meetings. After discussion it was decided to continue to start the meetings at 6 p.m.

**\*\*MOTION**

**Shean moved, Parish seconded, PASSED UNANIMOUSLY** to adopt the 2017 meeting schedule as presented.

**Review of FY 2016/17  
Budget**

Kovolski reviewed the current fiscal budget with the board members and went through each category. There appears to be a shortage due to paying for the MParks project up front but when the reimbursement check comes it will be credited back to that account. At this time nothing seems out of line and everything is within the budgeted amounts.

**FY 2017/18 Budget Discussion**

Kovolski reported that the budget will be probably be status quo and most all of the money allocated in capital outlay will go towards the purchase of the open space and possibly remodeling the river mouth bathrooms.

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**NEXT MEETING**

The next regular meeting of the Parks and Recreation Board is scheduled for Thursday, January 5, 2017 at 6 pm at City Hall.

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**ADJOURNMENT**

The December 1, 2016 meeting of the Parks and Recreation Board adjourned at 7:53 p.m.

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Barb Brooks, Recording Secretary

*Draft*

## Leadership Charlevoix County Community Service Project 2017

As part of the Leadership Charlevoix County program, we have a community service project on which we all work to improve quality of life in Charlevoix County. This year, our group of 20 participants has decided to focus on a project with environmental impact. We plan to install boot brush stations to heavily used trails in Charlevoix County to both help stop the spread of invasive species as well as to increase awareness about the dangers of invasive species in Northern Michigan.

We would like to install a boot brush station at Avalanche Park. As a heavily used trail, by both locals and tourists, we think this is an ideal place in the Boyne Area to raise awareness about invasive species. We will have more information forthcoming about what specific invasive species threats may exist at Avalanche in the coming weeks. Some common invasive species include wild parsnip, which closely resembles Queen Anne's Lace, but if touched, can cause the skin to break out in painful blisters and boils. Other invasives include garlic mustard and a variety of knotweeds, which are less toxic to humans, but still pose a threat to the biodiversity of an area, which decreases life-sustaining plants on which other species of birds and animals rely.

For reference, we have included a photo of what a boot brush station could look like. The actual design we've been talking about with our partner (Charlevoix, Antrim, Kalkaska, Emmet Coordinated Invasive Species Management Area - CAKE CISMA) would actually also include a large box filled with gravel, on which the station would be placed - to help stop the spread of invasive species by providing an inhospitable environment underneath the actual boot brush, so that invasives that fall off people's boots would not be able to regrow around the kiosk. The example I've included is an example used elsewhere in Michigan, to help you get the idea of what we're working on.

We are currently reaching out to land owners and starting to work with them to get permission and input about where one of these stations might go. If the city is interested, we would love the opportunity to present our ideas to the appropriate committee or group to seek approval for installation of a boot brush station. Other members of our group will be working on fundraising, marketing, station design, and more, once we know what locations we are targeting.

What is the process to gain approval?

How long does it take to get permission/approval?

## Stop Invasive Hitchhikers!



Use this **boot brush** before and after your hike to remove dirt and invasive seeds.

Seeds of invasive plants hitchhike on your shoes' lugs and laces, allowing invasive plants to spread quickly and crowd-out native plants. It takes time and costs money to remove the invaders. Stopping the unintentional spread of seeds is the best way to protect the native landscape.



The hitchhiking seeds could be spread throughout the area. This invader crowds out native plants and produces toxins, preventing other plants from growing nearby. Always clean seeds from shoes and gear before and after visiting any area.



MDOT



State of Michigan



----- Original Message -----

Subject: grooming of avalanche for snow biking  
From: Steve Schnell <[steveschnell13@gmail.com](mailto:steveschnell13@gmail.com)>  
To: Michael Cain <[mcain@boynecity.com](mailto:mcain@boynecity.com)>  
CC:

Mike,

Can you tell me if the city would be willing to allow TOMMBA to try grooming of a fat bike loop at Avalanche? I'm running this by our board still to see if they want to take this on. To decide though, it might be helpful to get permission to at least run the groomer through the trail to see if the groomer can handle the hills - a trial run.

Thanks,  
Steve

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Steve Schnell

On Saturday, December 31, 2016 3:38 PM, Andy Kovolski <[maintenance@boynecity.com](mailto:maintenance@boynecity.com)> wrote:  
Should present to Park and Rec board first. I think at the very least a trial trail would be good

Andy

On Sun, Jan 1, 2017 at 7:46 PM, Michael Sheean <[m\\_sheean@yahoo.com](mailto:m_sheean@yahoo.com)> wrote:

Hi Steve,

Your proposal for grooming for "fat tire" on Avalanche should be reviewed by the Parks and Recreation Commission and we have meeting this Thursday, Jan 5th at 6 PM at the City Hall. As Andy suggested, we could consider a trial period to see how it would work out.

The proposal should be specific as to which trails and how it would work with the other users who have been enjoying the area for some time: hiking, snow shoeing, cross-country skiing and snowmobiling. Would these other users be prohibited or included for using the "fat tire" course? Have the Friends of Avalanche considered this proposal? Do they support the proposal?

Hope to see you on Thursday evening.

Michael

Mike,

Thanks for the opportunity. We think that we can raise the money for a grooming machine if we could store it at the park somewhere. Deciding which trails may take some time as the groomer has some limitations when it is climbing so there may be spots that would be difficult, however

most of the trails at the park should be groomable. It will involve some trial and error but we'd learn very quickly.

It is a groomer that can maneuver around obstacles quite well, better than a standard snowmobile.

The users that would be welcome on the trail would be skiers and fatbikers. Snowshoers would make it a little bumpy but could probably co-exist. Hikers and especially dogs, except in the hardest snow conditions, would be detrimental to the trail surface as they would create depressions with every step that would make for a very bumpy trail for fat bikers. This will be the greatest challenge due to the popularity of hiking there and the attractiveness that a groomed trail would be for hikers. This is our greatest concern.

We have signs at the Boyne school forest that say "please don't walk on the groomed trail" and there were shoe prints on the trail this morning even with the signs. Perhaps with more explanation this would help at times, but there will be many people who will simply disregard the signs.

These will be our challenges. We are asking around to find volunteer groomers as this is also one of our challenges: to make sure it is well and consistently groomed as well as ensuring the equipment is maintained. We think this will be covered but are making sure now.

Let me know if you have any other questions. I'll see if someone can make the meeting this week.

Thanks!  
Steve

## Public Notice

The City of Boyne City is seeking public input for a proposed amendment to their 5 Year Recreation Plan to incorporate design and capital outlay plans for the improvement and expansion of the City's public marina. This subject will be discussed at the January 5, 2017 Parks and Recreation Board meeting, 6 p.m. and at the January 16, 2017 Planning Commission meeting at 5 p.m. The location of both meetings are at temporary City Hall at 364 N. Lake St. For more information or to provide input contact Harbormaster Barb Brooks at 231.582.0336 or [bbrooks@boynecity.com](mailto:bbrooks@boynecity.com)

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## DNR Requirements:

### 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.**
- **The last three years of harbor traffic (harbor logs)**
- **The last three years of financial summaries for the harbor (submitted with the community's Waterways grant application)**

# Harbor/Marina Facilities Recreation Plan

## Marketing:

- Michigan Boating Infrastructure Association (MBIA) Membership – Actively participate in opportunities provided by MBIA to network and advertise in their publications and website
- Participate in listing 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 nations. 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 we have 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.
- We also host yacht clubs, sailing clubs and other groups (big or small) traveling together who may want to stay with us as a group or host a small event.
- Boater/Marina Appreciation Day Dinner – Celebrated in August, we recognize both seasonal and transient boaters and all of our hardworking staff. It’s a great social event, the boaters share favorite stories or memories, the staff gets to talk about
- 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 onlookers 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 Ext. 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 upland 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 gave us 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 we recommend to our 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 this 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 dead 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 on 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 for 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 all year around. The region is abuzz about what is going on in Boyne City and how much it has to offer. Even though the parts 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 – While 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. Very few people on the marina's waitlist are local residents. 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 have 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 protection proves to be 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 its' 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, 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 has some upgrades; however, it does not meet current code standards. The sanitary pumpout 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 pumpout 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 and expanded office and storage space will need to be considered as part of expansion.

**CIP Schedule:**

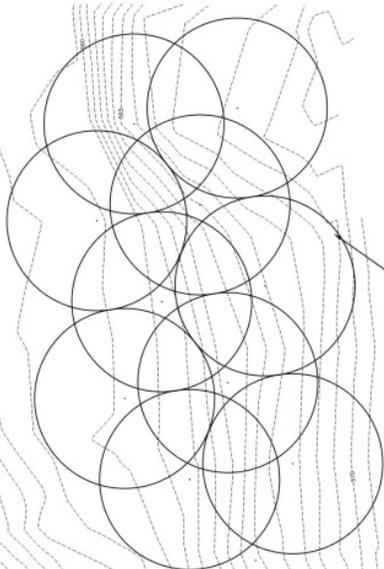
| Year         | Project Description  | Cost Estimate      | Funding Source(s)                            |
|--------------|--|--------------------|--|
| 2016/2017    | Finalize engineering for marina dock renovation and expansion. Finalize pre-qualification of dock and breakwall manufacturers/builders. Determine project phasing breakdown. Line up financing |                    | Local  |
| 2017 or 2018 | Implement first phase of expansion (breakwall, docks, utilities and pumpout)   | \$1,500,000        | Waterways<br>Clean Vessel Act<br>Local Match |
| 2019         | Implement second phase of expansion/renovation including facility expansion  | \$ 850,000         | Waterways<br>Local Match                     |
| 2020         | Boat launch improvements and Phase 3 expansion and renovation  | \$1,000,000        | Waterways<br>MNRTF/Land&Water<br>Local Match |
| 2022         | Phase 4 renovation/expansion   | \$1,000,000        | Waterways<br>Local Match                     |
|              | <b>TOTAL</b>   | <b>\$4,350,000</b> |  |

**Goals:**

- Continue with current marketing efforts and find new ways to expand in other areas
- Remain open to 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
- Maintain a positive cash flow and continue to grow fund balance

**Objectives:**

- The Boyne City F. Grant Moore Municipal Marina seeks to be the premier marina on Lake Charlevoix providing 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 experience.



| 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               |

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

| 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               |

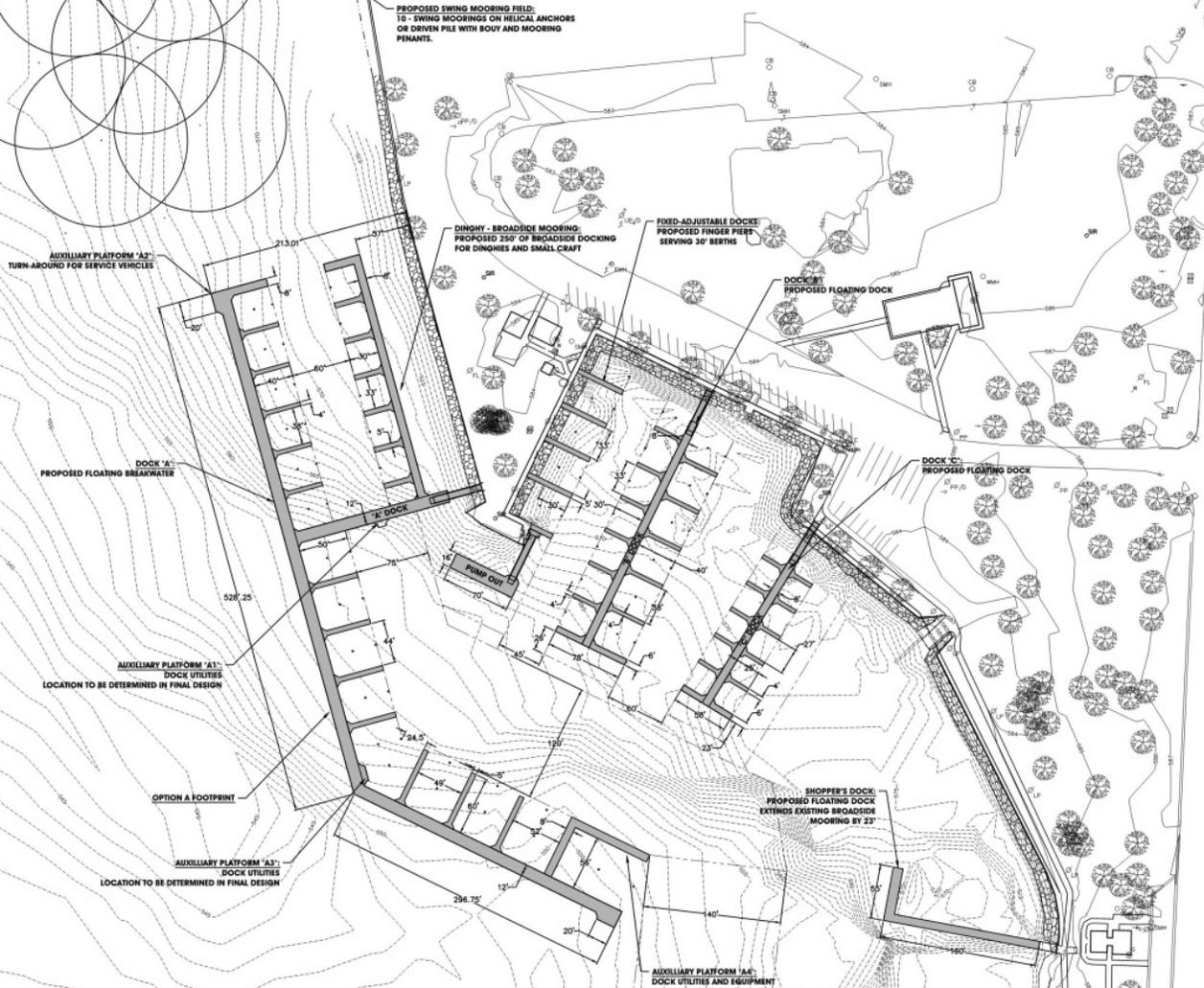
\*\* ACTUAL LENGTH OF BERTH MAY NOT BE FULL LENGTH OF SLIP AS INDICATED HERE.

| 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*                      |

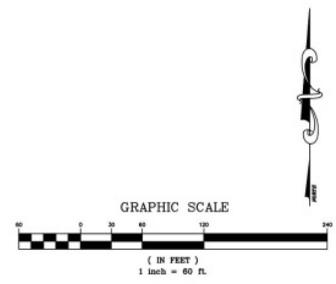
**NOTES:**

UNLESS OTHERWISE INDICATED, THE DIMENSIONS INDICATED IN THIS TABLE ARE TAKEN FROM THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MNR) PARKS & RECREATION BUREAU HARBOR DEVELOPMENT STANDARD GUIDANCE.

\* - DIMENSION RECOMMENDATIONS BASED ON TOBIASSON AND KOLLMAYER, "MARINAS AND SMALL CRAFT HARBORS, SECOND EDITION."



# PHASE IV MARINA IMPROVEMENTS WITH PUMP OUT AND SWING MOORINGS



**ABONMARCHÉ**  
CONSULTANTS INC.  
15 West Park Street  
Ann Arbor, MI 48103  
Tel: 734.767.2295  
Fax: 734.767.0317

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

PROPOSED MARINA LAYOUT  
OVERALL MARINA PLAN  
OPTION "C"

DRAWN BY: DIAL/DAD/TRI  
DESIGNED BY: DAD  
PM REVIEW: CJC  
GAUGE REVIEW:  
DATE: 09-23-2013

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"=60'  
VERT: N/A

ADJ JOB #  
**12-0842**

SHEET NO.  
**1 of 1**



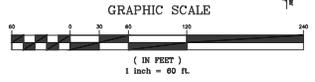
| SCHEDULE OF SEASONAL SLIPS - OVERALL |          |          |                    |
|--------------------------------------|----------|----------|--------------------|
| SLIP LENGTH                          | EXISTING | PROPOSED | PROPOSED ALTERNATE |
| 25'                                  | -        | 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 | 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*      |

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."

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



December 9, 2016

Patrick Kilkenny  
City of Boyne City  
319 N. Lake Street  
Boyne City, MI 49712

Dear Patrick,

On behalf of mParks, thank you very much for being a part of the 2016 BHC grant. In just a few short months, we were able to implement a series of sustainable and equitable policy and infrastructure changes to greenspaces, such as parks and trails, that created and/or enhanced access to safe and enjoyable places to be fit and active. By improving the aesthetics, accessibility, and safety of your community greenspaces, we were able to increase physical activity in youth and seniors using local parks and trails, and ultimately reducing poor health outcomes and health disparities in Michigan.

mParks and its 2,500+ members work every day to advance access to parks, trails and recreation that enhance the quality of life for all people. Our work draws local, state and national focus to the impact and benefits of parks and recreation at a community level. From education to networking, advocacy to grant programs, and so much more, becoming an mParks member provides numerous opportunities so that you can better support your community. mParks membership ensures access to benefits and services designed with your specific experience and needs in mind.

We encourage you to get involved with the Association and become an mParks member! Enclosed you will find more information on the different types of mParks memberships and the specific benefits that apply to each membership type. This membership pamphlet was sent out with our January membership renewal invoices (*please disregard the renewal instructions on the front of the pamphlet*). Also enclosed is a new member application. Please complete this application and return to mParks to become a member! If you have any questions, feel free to contact Aja Jenks at (517) 485-9888 or [ajenks@mparks.org](mailto:ajenks@mparks.org). We truly hope you consider becoming a member with us.

Thank you,

A handwritten signature in black ink that reads 'Aja Jenks'.

Aja Jenks  
Registrar  
mParks

A handwritten signature in black ink that reads 'Kari Woloszyk'.

Kari Woloszyk  
Health & Wellness Coordinator  
mParks

