

## Parks Commission

### Regular Meeting Agenda

Tuesday, February 10, 2015  
6:00 p.m., Council Chambers



City of South Haven

1. Call to Order
2. Roll Call
3. Approval of Agenda
4. Approval of Minutes for the Record – January 13, 2015
5. Public Comments and Inquiries Concerning Items not on the Agenda

#### OLD BUSINESS

6. Commission will be requested to review a request for addition of a non-motorized watercraft lane at North Beach.
7. Commission will be requested to review the Kid's Corner Assessment Report prepared by Leathers Associates.
8. Commissioner Comments
9. Adjourn

RESPECTFULLY SUBMITTED,

A handwritten signature in black ink, appearing to read "Larry Halberstadt".

Larry Halberstadt, PE  
City Engineer

## Parks Commission

### Regular Meeting Minutes

Tuesday, January 13, 2015  
6:00 p.m., Council Chambers



#### 1. Call to Order by Reinert at 6:00 p.m.

#### 2. Roll Call

Present: Cobb, Fitzgibbon, Moore, Toneman, White, Reinert  
Absent: McAlear

Also present: Brian Dissette, City Manager; Roger Huff, DPW Director

#### 3. Approval of Agenda

Motion by Fitzgibbon, second by Cobbs to approve the January 13, 2015 regular meeting agenda as presented.

All in favor. Motion carried.

#### 4. Approval of Minutes for the Record – December 9, 2014

Motion by Toneman, second by Moore to approve the December 9, 2014 regular meeting minutes as written.

All in favor. Motion carried.

#### 5. Public Comments and Inquiries Concerning Items not on the Agenda

None at this time.

#### NEW BUSINESS

#### 6. Commission will be requested to provide comments related to improvements of the South Beach restroom and concession area.

Halberstadt noted that staff from GMB Architects are here tonight to take the board through a presentation for redevelopment of the South Beach restroom and concession area. Objectives of their presentation are based on the city's need for a new enclosed building space for the South Beach concessionaire. At the same time the city would like to improve the restroom facilities by adding extra toilet space for busy times of the year and have a

discussion with the Historical Association of South Haven (HASH) about doing some kind of interpretative plaza area for south pier lighthouse fundraising.

Jeff Hoag, Architect, GMB Architects, introduced Tim Garretson and Nate Bosch who are landscape architects with GMB. Hoag noted that he wants to outline some preliminary concepts for discussion to get ideas and dialogue from the group. Hopes they can isolate one or more concepts for a little further development and come back to the board with a follow-up presentation.

Hoag described the pros and cons of development at the current site:

Pros:

- Temporary concession has positive revenues at current location
- Temporary concession has utilities in place. This will keep the cost of redevelopment reasonable.
- The site is ideally suited to provide a connection between and services to both South Beach and the Harborwalk.

Cons:

- Insufficient number of fixtures in bathrooms for peak season needs.
- Facilities are difficult to maintain due to style of construction and materials utilized.
- Harsh environment due to location on beach.

The proposal includes upgrade of exterior finishes; improved pedestrian circulation; improved underground utilities; and provides an element of lighthouse improvement revenue awareness.

Using a slide presentation with photos, it was pointed out that the roofs of the existing restroom and pavilion are beyond their life cycle. Halberstadt noted that the site is surrounded by a concrete wall originally constructed to surround the Coast Guard station. Vandalism of the wall in the form of graffiti is a recurring issue. Hoag noted the sand encroaching toward the covered pavilion.

Discussion ensued regarding the temporary concession facility which Halberstadt noted is simply a shed with a wooden floor that the concessionaire leaves onsite year round. In response to questions, Halberstadt confirmed that the shed is owned by the concessionaire who brings in a couple of additional trailers during the season.

There is another existing wall on the other side of the walkway which, when removed, will help develop that area for circulation through the site.

Interior existing conditions of the pavilion observed; it was noted that painting and other maintenance is necessary due to wood structure. Noted that the interior roof structure of the restroom building allows an open pathway for sound and light between men's and women's restrooms. GMB feels it is important to make a permanent barrier between men's and women's areas. The upgrades will also meet all ADA (American Disabilities Act) guidelines and accessibility requirements for the structures in this area.

In response to a question by Moore about how many existing fixtures are in current restrooms, it was determined to be four (4) each.

Hoag: Due to changing needs with young families the incorporation of family restrooms/changing rooms is being considered.

Nate Bosch: Noted that pieces of the various concepts can be picked from the three (3) available options.

Option 1: Turn existing restroom building into all-women's facility and turn existing pavilion into combination men's/family facility. Add eating plaza between restrooms and concession area. Pick up pedestrian connection points. Pointed out that future splash pad area has been blocked in on the drawing. Make way finding easier.

Option 2: Move concession a little closer to the restroom facilities than in Option 1. Build out underneath existing pavilion for new women's restroom facility and turn existing restrooms into a combination men's and family restroom. Provide a larger open eating space covered with a temporary/seasonal shade structure.

Option 3: Develop men's and women's restrooms within the existing structures. Build out the pavilion with concessions in one half and men's restroom in the other. The existing restroom facility to become a women's restroom with removal of dividing wall. This option is the most cost effective but does not include a family restroom.

In response to questions Hoag noted that all restrooms in all three concepts will be ADA compliant.

Reinert asked whether any of this could become year round. "As we develop as a year round destination it would be nice to have a restroom that could be used year round in the pier area. Could the concession building have multiple functions for fall events or other events?"

Hoag said the simple answer is it can be done; adding heat to the buildings and maintenance would likely increase the project cost.

Moore noted that there is no provision on any of these site plans for a pavilion. Bosch said we could talk about a shade structure. Hoag noted there could be permanent columns or posts and an added shade structure that could be taken down after the main season is over. Hoag stated they do want to maintain seating and shade but maybe in a less permanent way.

Toneman asked about shade close to the splash pad even if it is just for the summer. Halberstadt pulled up a picture of a shade structure with temporary panels from the internet to demonstrate the concept.

Fitzgibbon asked about the number of units that are being considered for toilets. Hoag said we talked about doubling fixture counts but could maybe do some studies by looking at parking space counts and determine how many people might be in the area. Noted that this area is different than an indoor space regarding an occupant load count.

Fitzgibbon asked whether it is known how many toilets the existing sewer will support. Hoag responded that the engineering has not been done yet.

Fitzgibbon asked whether the parking would stay the same. Jeff stated that the city has indicated that the plan is to keep the parking there. Concerns were expressed regarding splash pad users having to cross the parking lot to reach the restrooms and changing areas as well as the distance between the splash pad and other facilities.

Fitzgibbon noted that the pavilion does provide shelter when there have been storms; she hates to lose that. When the splash pad is added there will be a need for a changing area. Still hates to lose that permanent roof structure; regarding the temporary canvas shade element, Fitzgibbons pointed out the condition of flags in that area.

Dissette, City Manager: Noted that GMB is very aware of success as it relates to the splash pad. The St. Joseph splash pad is a wonderful facility but there are no on-site restrooms. We are seeing more and more people going to the South Beach. The project is a success but we are getting lines for the restrooms. One of the biggest issues is that the restroom doors are incredibly heavy; there are no automatic door openers and they are not accessible. As a parent, Dissette affirmed that these are less than ideal facilities to try to manage your kids while trying to change diapers and swimsuits using the restrooms. As we develop the splash pad it will only grow the need. Dissette also remarked on the need for outdoor showers.

Moore noted that the footprints on the old structures are being used; "can you not move anything?" Hoag responded that it would be a savings to reuse as much as we possibly can, especially plumbing and access to sanitary sewer.

Moore asked what the ideal picture would be. Fitzgibbons does not want to get rid of the pavilion; it is a safe place in a storm. Fitzgibbons suggested a roof between the two existing structures to provide shade and shelter. Hoag said a more permanent structure for shade and shelter could be provided.

Toneman observed that when we do the splash pad we will really need to have the restrooms and changing areas.

Moore asked how this is being funded. Dissette explained that when the city initially applied for the grant for the South Beach we included upgrades to concession and restrooms. The State made it clear that they were not going to add money for those facilities, the concession being more of a business endeavor. Dissette said we hope to set aside a quarter of a million in our capital projects fund; it would be a general fund contribution. It was noted that people are using the pavilion to change diapers and change clothes. An onsite outdoor shower which backs up to Water Street is being utilized extensively. Dissette noted, "For two decades we've had these facilities that are not ADA facilities. We need to look to the future, but looking back, the setup of restrooms at Packard Park is the best we have with multiple stalls and small changing rooms inside the building. That was a restroom set up with a lot of forward thought; they're Spartan but very usable."

Dissette noted that the concession stand is driving this project but the restrooms, outside shower and changing rooms are also needed. Hoag said, "We have studied this from a planning perspective. The existing buildings are not a detriment due to location; we have pedestrian connectivity; Water Street is raised so the structures being tucked in there is not a bad thing. If you open them, make them larger, they will block views. We want to

reinforce the idea of the plaza and circulation through there. Nice to start from scratch but there is a lot of possibility with what is there.”

Moore asked about pavilion cost. Reinert interjected that we will just give it back to these folks and let them determine how to add covered space and still provide open space. Reinert noted that everybody sees the need and supports that; we have been asked to give input.

Fitzgibbon asked about concession stand size. Bosch asked for input based on “your experiences down there; what do you like or not like?”

Fitzgibbon is concerned with pedestrian connection going through the parking. Halberstadt handed the GMB representatives a sketch illustrating removal of that parking area to be used for public connectivity; slide the splash pad closer; add more angle parking where the entrance to that parking area is. Hoag agreed that would be a significant improvement to the area. Discussion ensued about adding some handicap spaces near the restrooms.

Fitzgibbon noted that it sounds like we all agree that we need a permanent space for shelter. Dissette wondered about a structure that would combine pavilion and concession. Fitzgibbon reiterated that the space between the existing buildings could be covered to provide shelter.

Hoag noted that one of the next steps is to do some high-level budget evaluation, conceptual budgeting, for example, “What is the cost of a covered pavilion?” We will start identifying place-holder budget figures. The concepts tonight were presented to bring ideas and start dialogue.”

Dissette: “I had asked GMB to plan for space that the Historic Association can use; a patio space where they could sell bricks.” Bosch noted that in Option 1.) The main water front area includes a donor plaza with a view of the lighthouse; these pavers are surrounding you as you walk through. Option 2.) Put the pavers on the actual path so you are walking over them. Option 3.) Utilizes that existing wall; you could have names on the wall as you look beyond it to the lighthouse. Dissette explained he is advocating for this space because the Historical Association has agreed to and does own the South Pier light; HASH worked with the city and federal government to prevent the removal of the lighthouse.

Dissette noted that Ed Appleyard and Jim Ollgaard from the Historical Association have spent an unbelievable amount of time acquiring the light; when you see fresh red paint, that’s them. Now they are trying to raise money to bring the lighthouse back to its original condition; trying to raise approximately one million (\$1) dollars to maintain and restore that light.

Discussion ensued regarding why fundraising cannot occur on the pier. Dissette noted, “The city does not own the pier, so we cannot do anything on the pier to raise money for the light. The city wants to help them because having an excellent light in excellent condition helps everybody.”

As an example, Dissette explained how Ellen Avery Park was developed with donations. A group sold pavers with people’s names engraved and the city got great landscaping and a decorative clock was installed. “That went well. Now I hope the Parks Commission will get

on board with what Ed and Jim have been doing.”

Fitzgibbon asked whether the Historical Association sells all the bricks first or if the city is going to add on as they are sold.

Jim Ollgaard; HASH: “We are obligated to the federal government and the Parks Service to bring the lighthouse back to the condition it was in 1950 and provide interactive education to the public at some point in time. The State wanted us to start the fundraising within a couple of years so we really need to get going. When you ask people to donate money they would like to receive some recognition. I had a fantasy of putting pavers on that little kidney shaped space (near the handicapped parking area on South Beach) and Brian suggested the areas you see on the drawings. 2015 is the capital campaign. We want to put the pavers all in at once so we need to be able to tell the prospective donors there will be a place for them and when.”

Discussion ensued regarding the logistics of installing the engraved pavers. Reinert said the passage of the number of people along that walkway will really help get you a lot more people interested in donating. Ollgaard said, regarding Dissette’s suggestion, “We were thrilled; we never knew we could do this.” Reinert stated that the board wants them to continue working forward.

Dissette said he would like to see a non-binding statement of support from the Commission. “This is a perfect window to incorporate our local citizens; the primary focus is concessions, the second is restrooms and third, helping our local volunteers and making it all look nice.”

Fitzgibbons suggested even if the city cannot move forward, due to financial constraints, that the pathway for the Historic Society still be allowed. Hoag said the paver concept allows the most flexibility versus a plaque that is a one-time deal. How we do it is not as much of a concern as including the concept during planning.

Toneman suggested a lighthouse patio on the pier. Dissette reminded that it is not our property; it is federal property.

Halberstadt noted as they work on that there will need to be educational displays, perhaps closed circuit television so people can see inside the lighthouse.

Consensus: Have city staff continue with planning.

#### **7. Commission will be requested to review a request for addition of a non-motorized watercraft lane at North Beach.**

Dissette explained the State’s methodology in awarding points to determine grant awards and that while the city has had a long run, there is less money available and the at some point the awards may stop. However, staff has learned that the governor has an initiative to provide locations in lakefront communities where people can put in and launch their non-motorized watercraft. Dissette noted that in the last grant application for North Beach improvements the city fell short of receiving funding by forty (40) points and that fifty (50) points could be gained by providing a non-motorized watercraft lane at North Beach. Dissette made it clear that he does not want the grant to be a reason to

approve the idea of such a lane, but rather to have open discussion of the pros and cons regarding the impact of the lane itself and input from the Parks Commission.

While kite boarders will still use the area closer to the pier, Dissette does not advise placing the watercraft lane there, due to the danger from wave action, but instead would like to place it near the north end of the North Beach, down from the concession stand. It was noted that buoys and signage would be components of adding such a lane. Discussion took place regarding the possibility of a space or two near the concession stand being for drop off for those using the lane. However, Dissette also pointed out that the parking is an Enterprise Fund and that there are no parking requirements for the non-motorized watercraft lane initiative.

While the South Beach lane has been well accepted the North Beach is a residential area, which is one of the points Dissette wants discussion to address.

During discussion regarding the fifty (50) foot width, Dissette noted that the lane near the blue stairs, which is used for both non-motorized and small motorized watercraft, is that size but there is nothing in the governor's specs requiring a specific size. Toneman stated his discomfort with allowing motorized watercraft to be on the North Beach and Dissette clarified that is not his intent. After discussion, Moore would like to see some sort of visual, and that the width could be less than fifty (50) feet. It was noted that while the city can provide this lane, that does not prohibit anyone from using Dyckman Beach access, the blue stairs area on the South Beach or anywhere else to launch or put in non-motorized watercraft.

Commissioners expressed their general support of the idea but requested additional details be provided. Dissette indicated that staff will work on developing the concept and continue the discussion at a future meeting.

## **8. Commissioner Comments**

Moore: Asked for an update on the review of Kids' Corner. Halberstadt reported that he received a draft report and after he reviewed it, he sent it back for corrections. Once Halberstadt gets that information he will bring it back to you.

Moore: Asked for an update on Black River Park. Halberstadt reported that a \$150,000 grant award was received, which means the city has to provide a \$75,000 match. The project will renovate the parking lot and upgrade the riprap, among other things.

Toneman: Asked that the board members get the info on Kids Corner in a timely manner so it can be reviewed ahead of time. Halberstadt agreed to send it to the board as soon as he gets it back.

## **9. Adjourn**

Motion by Fitzgibbon, second by Moore to adjourn at 7:12 p.m.

All in favor. Motion carried.

RESPECTFULLY SUBMITTED,

January 13, 2014  
Parks Commission  
Regular Meeting Minutes  
DRAFT

Marsha Ransom  
Recording Secretary



## Agenda Item 6

### North Beach Non-Motorized Watercraft Lane

#### Background Information:

At the January meeting, Commissioners were requested to review a proposal to add a non-motorized watercraft lane at the City's North Beach. At the time of the request, Commissioners requested additional information prior to making a recommendation.

In order to prevent interference with other beach users, the non-motorized watercraft lane would be located at the far north end of North Beach. At the January meeting, the lane was shown as being 50 feet wide. Based upon comments from Commissioners, the width has been reduced to 25 feet. The total length of the North Beach is approximately 1300 feet. Thus, the watercraft lane would encompass approximately 2% of the water frontage. It was also noted at the January meeting that non-motorized uses have been permitted at various locations along North Beach, particularly during non-peak use periods. The purpose of the non-motorized watercraft lane is not to restrict the use to a single area, but to ensure that the public has a clear understanding of where non-motorized watercraft use is permitted. The non-motorized watercraft lane would serve as an access point to Lake Michigan and would be promoted as part of the Lake Michigan Water Trail.

Although the plans for development of non-motorized watercraft lane are not fully complete at this time, it is likely that the lane will include the following elements:

- One or two parking spaces signed for non-motorized watercraft loading and unloading only. These spaces would be near the north end along Lakeshore Drive and would have a 15 minute time limit.
- Within Lake Michigan, a series of four buoys would be installed to mark the limits of the lane and to indicate the end of the swim area. The buoys would extend 125 feet into the lake to the outer limit of the swim area.
- Signs indicating the location of the non-motorized watercraft launch area, water trail signage, and any rules that need to be implemented
- A storage area with racks for storage of kayaks and stand up paddleboards
- A barrier free mobimat extended to the water's edge

The addition of the non-motorized watercraft lane would occur as part of the overall North Beach Improvement Project. The City is currently in the process of revising its application to the Michigan Natural Resources Trust Fund (MNRTF). This application has been submitted during the past two application cycles, but has not yet been selected for funding. Adding the non-motorized watercraft lane as an improvement during the 2015 application process is anticipated to add 40 points to the project score. Revising the application to include the non-motorized watercraft lane

and promoting the access as part of the Lake Michigan Water Trail provides an improved chance of receiving funding assistance in 2016.

The Harbor Commission has also been asked to review the request for a non-motorized watercraft lane at North Beach and passed a motion of support at their January 20, 2015 regular meeting.

**Recommendation:**

Discuss the addition of a non-motorized watercraft lane at North Beach. If the Commissioners feel that the use is compatible with the North Beach and would benefit the public, then they are requested to pass a motion of support for the addition of a non-motorized watercraft lane at North Beach.

If Commissioners approve a motion of support, the non-motorized watercraft lane will be added to the North Beach Master Plan and included in the 2015 MNRTF application. Final details of providing the access would be developed at the time that the project enters the design phase. At that point in time, additional input would be solicited from the Parks Commission and the City Code would be reviewed and revised to ensure that use of the launch area was restricted to non-motorized watercraft only.

**Attachments:**

North Beach Non-Motorized Watercraft Lane Map  
North Beach Master Plan  
Abonmarche Memorandum on MNRTF Grant  
Lake Michigan National Recreation Water Trail Map – Southwest Michigan

# Proposed Non-Motorized Watercraft Lane North Beach - South Haven, MI



All Swim Area buoys are approximately 125 feet from shore.

Proposed Buoys Extended to Edge of Swim Area  
Lane Width = 25 ft

Concession Stand & Restrooms

- Swim Area Buoys
- Non-Motorized Watercraft Lane Buoys

Swim Area Buoy Spacing Approximately 250 ft

ADA Access Mat - Connect to Sidewalk at Restroom Building

NORTH BEACH

LAKE MICHIGAN

BLACK RIVER

SOUTH BEACH

2/4/2015

Water St

Esplanade Plz

Lake Shore Dr

Promenade

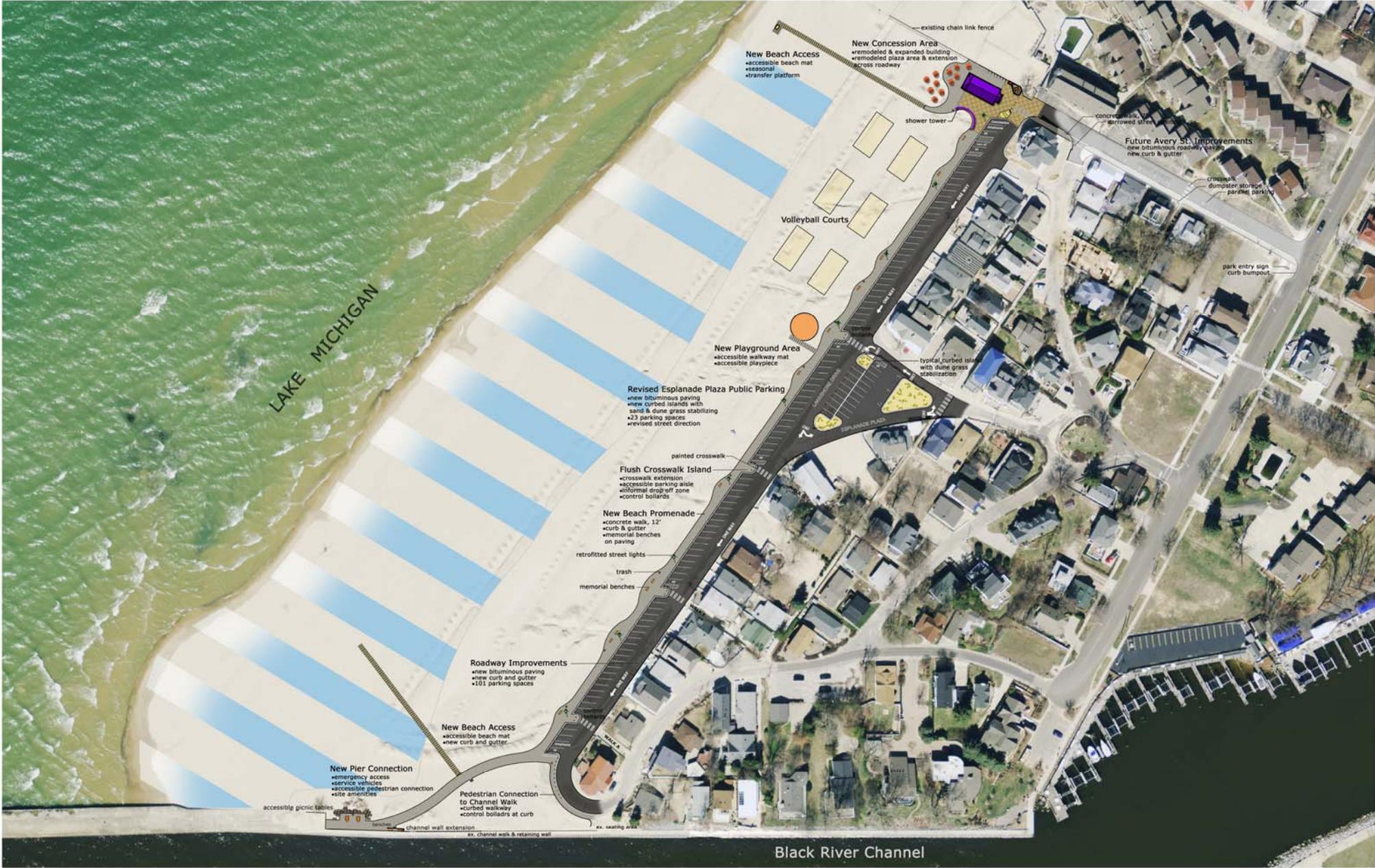
Walk D

Grand Blvd

Walk E

Chicago Ave

Walk F



# MEMORANDUM

DATE: December 16, 2014

TO: Brian Dissette, City of South Haven  
Deb Davidson, City of South Haven

FROM: Kate Genellie, Abonmarche

CC: Tony McGhee, Abonmarche

RE: Update on the City's Michigan Natural Resources Trust Fund grant application for North Beach improvements

The final scores were received for the MNRTF grant application, and the City's application received a score of 340 points. In previous years, that score would have qualified the City's North Beach project for funding. However, because the state put much more money into acquisitions projects this year, rather than into development projects like the North Beach improvements, the cut-off score for funding was much higher than in previous years. Only projects scoring 380 points and above were funded.

Looking ahead to next year, we have several recommendations that we believe will gain the City's grant application enough points to put it among the top scoring projects, increasing the North Beach improvement project's chances of being funded. These recommendations are based on a debrief conversation Abonmarche staff held with the MDNR to determine areas where it would be possible to increase the project's score in the evaluation process. These are the only areas identified where the City would be able to increase its existing score as the application has maxed out all other possible points.

The first is in a section called "Priority Project Types of the MNRTF Board." The board gives points to projects that focus on trails and water trails. This year, the North Beach project qualified as a secondary trail amenity, earning the grant application 10 points in this particular category, out of a maximum of 50 points. With some changes made to the North Beach project, next year's grant application could gain another 40 points, putting the grant application up to 380 points. This was the one area which was identified where the project could gain the necessary points to significantly increase its chance of being funded. The changes that would gain the grant applications points, according to Michigan Department of Natural Resources staff, are as follows:

- Link to an existing water trail. A water trail already exists on Lake Michigan's coast, so Abonmarche will work with the trail's organizers in order to have North Beach included on the trail map.
- The beach's already planned mobimat will be extended to the water.
- A designated launch area for non-motorized watercraft would need to be identified on the beach and related signage installed
- Kayak/canoe storage areas
- Water trail signage.
- Approximately 4-5 parking spots would be specified for kayak/canoe unloading and trailer parking.

The other area where the City's grant application could gain points is in the area of "Universal Access Design." The City's grant application received 10 points in this area, out of a maximum of 30. To try to increase to the maximum points possible we would:

- Abonmarche will set up public meetings with City residents, and representatives of persons with disabilities. Our goal is to make North Beach as accessible as possible.
- Abonmarche will look over the North Beach project with representatives from the Michigan Department of Natural Resources, and attempt to discover areas that can be improved. We will take these recommendations to the City for consideration.

With these changes, Abonmarche is confident the City will be funded during next year's grant application process. If you would like to pursue a new application with this revised strategy, we can begin working on the project at the beginning of the year to be ready for the April 1<sup>st</sup> submission. We would recommend beginning with meetings with both the Park and Harbor Commissions before proceeding to broader community meetings and finally City Commission approval. We would also recommend doing a web based meeting soliciting public input to allow property owners and other interested parties who are unable to make the local meetings the opportunity to comment on the revised plan/approach.

If you have any comments or questions, please do not hesitate to contact me at (269) 926-4554 or via email at [kgenellie@abonmarche.com](mailto:kgenellie@abonmarche.com)

# Southwest Michigan Benton Harbor to South Haven

Lake Michigan National Recreation Water Trail



### U.S. Bike Route 35 Directions

#### Traveling North

FROM ST. JOSEPH, from Port St., turn left (NE) to M-63 into Benton Harbor. | Continue on M-63 ~11 miles. | M-63 becomes Blue Star Hwy in Covert Twp. | Blue Star Hwy becomes Kalamazoo St. in South Haven. | In South Haven, turn right (E) to Phoenix St. | Turn left (N) to Williams St. | Turn left (W) to Dyckman Ave. | Turn right (N) to Northshore Dr. | Turn left (N) to Blue Star Hwy.

### LM Circle Tour Directions

#### Traveling North

FROM ST. JOSEPH, continue northerly through on M-63 into Benton Harbor | At the northern terminus of M-63 in Lake Michigan Beach, proceed north on I-196/US-31 toward South Haven. | On the east side of South Haven, where BL I-196 ends at I-196/US-31 Exit 20, the route continues north into Allegan County on I-196/US-31.





## Agenda Item 7

### Kid's Corner Play Structure

#### Background Information:

In 1988, the City constructed a large timber play structure in Monroe Park known as Kid's Corner. The play structure was constructed as a community build and utilizing community donations. The play structure was designed and the community build was supervised by Leathers & Associates of Ithaca, New York.

Late last year, City staff contracted with Leathers & Associates to perform a Playground Assessment Report. The purpose of conducting the assessment was to identify any safety issues related to the existing structure and to evaluate the condition of the structure in order to begin the planning process for rehabilitation or replacement.

The report was completed by Leathers & Associates in December and is attached for your review. The report did identify various playground elements that are not in compliance with current safety standards. In addition, the report notes that the structure has exceeded its useful lifespan by approximately 6 years. Due to the issues noted, Leathers & Associates recommends that the playground receive either a major renovation or complete replacement.

Major renovation would include the following work:

- Stain poles and framing with a pigmented stain for protection and increased visual appeal
- Replace decking and handrails with recycled plastic lumber
- Replace handrail posts with recycled structural plastic
- Replace balusters with recycled plastic pipe balusters for increased visibility
- Repair the perimeter boards to adjust use zones to meet safety standards. Replace with plastic if budget permits.
- Replace pea gravel with engineered wood fiber
- Replace slides with manufactured plastic versions
- Replace all swing frames with new manufactured frames
- Paint or stand tower cones
- Replace chain and hoses equipment with cable versions

The renovation would be designed in accordance with the current playground safety standards outlined in ASTM F1487 and CPSC Pub. 325. In addition, every effort would be made to bring the design into compliance with the Americans with Disabilities Act (ADA). However, full ADA compliance may not be technically feasible without full reconstruction. A major renovation is anticipated to cost approximately \$160,000 if it were constructed utilizing a community build. Using a contractor to complete the work would add to the cost. It is anticipated that the major renovation would result in a play structure with a useful lifespan of 10-15 years. The lifespan of

the renovated structure would be limited because the structure would still contain a variety of wood posts and structural framing elements that were installed in 1988. Once the remaining wood elements deteriorate to an unserviceable condition, the play structure would need to be completely removed and replaced.

The second alternative discussed by Leathers & Associates is complete replacement. The complete replacement would be constructed completely of recycled plastic lumber. Utilizing a community build process, a replacement structure could be built for approximately \$200,000 to \$250,000. The finished structure would have an estimated lifespan of 30 years. Leathers & Associates recommends full replacement due to the overall decreased life cycle cost and the ability to create a new play structure that would meet all necessary safety and ADA requirements.

Moving forward, a decision needs to be made between the two alternatives of major renovation or complete replacement. In addition, it is anticipated that the City will not have sufficient funds to complete all of the work in a single fiscal year. Thus, the work will need to be spread across 2-4 fiscal years in order to complete all of the work. Phasing of the work due to fiscal constraints may have an effect on the selected alternative. If complete replacement is the selected option, the new play structure could be constructed adjacent to the current play structure while the current structure remains in place. Once the new structure is completed fully, the old structure would be removed. Phasing of the improvements may make it difficult to complete the work utilizing the community build process. As a result, it may be easier to hire a contractor to construct the improvements with each phase being bid individually.

**Recommendation:**

Select a proposed alternative: major renovation or complete replacement. Once an alternative is selected, it is recommended that Leathers & Associates be contracted to perform design services and solicit community input. Leathers & Associates will be requested to design phased improvements that meet the City's budget and develop an implementation plan.

**Attachments:**

Leathers & Associates – Kid's Corner Assessment Report  
MMRMA – Playground Safety Guidelines



## Playground Assessment Report

**Inspection Date:** 11/4/2014

**Report Date:** 12/17/2014

**Location:** South Haven, MI

**Playground Name:** Kid's Corner

**Report Submitted by:** Marc Leathers

### OVERVIEW:

The playground was built in 1988 and is in poor condition. In general the equipment has been well maintained especially considering its age and location. Adjacent to Lake Michigan, the playground is subjected to severe weatherization.

### GENERAL OBSERVATIONS:

This assessment is based on a site visit and meeting with the client. The playground is **26** years old. The playground should have been expected to last around 20 years with proper maintenance.

It's apparent from its condition that this playground is a well-used attraction in the area. There is a strong connection with the community and the playground.





**SPECIFIC ITEMS:**

**Main support posts**

**Materials:** Wood poles

**Size:** Varies

**Treatment:** CCA

**Comments:**

The poles are in good shape.

**Recommendations:**

Stain/seal with solid body stain.

**Pictures:**



**SPECIFIC ITEMS:**

**Framing**

**Materials:** Wood

**Size:** 2x6

**Treatment:** CCA

**Comments:**

Framing is in medium condition. Has a little splintering but not structural.

**Recommendations:**

Stain/seal exposed surfaces with solid body stain.

**Pictures:**





**SPECIFIC ITEMS:**

**Decking**

**Materials:** Wood

**Size:** 2x6

**Treatment:** CCA

**Comments:**

Decking is in poor condition and has severe splintering

**Recommendation:**

Replace with recycled plastic

**Pictures:**



**SPECIFIC ITEMS:**

**Handrail**

**Materials:** Wood

**Size:** 2x6

**Treatment:** CCA

**Comments:**

Handrails are in poor condition and have severe splintering

**Recommendation:**

Replace with recycled plastic

**Pictures:**





**SPECIFIC ITEMS:**

**Handrail Posts**

**Materials:** Wood

**Size:** 2x4

**Treatment:** CCA

**Comments:**

Handrail posts are in poor condition. They have major splintering and some structural issues.

**Recommendation:**

Replace with recycled structural plastic.

**Pictures:**



**SPECIFIC ITEMS:**

**Balusters**

**Materials & Size:** Pressure treated wood 2x4's.

**Comments:**

Medium condition (minor splintering & wear)

**Recommendation:**

Replace with composite balusters.

**Pictures:**





**SPECIFIC ITEMS:**

**Mazes**

**Materials:** Wood framing and decking.

**Size:** 25-1/2"

**Comments:**

Bad condition (severe splintering & wear)

**Recommendation:**

Repalce decking with composite.

**Pictures:**





**SPECIFIC ITEMS:**

**Safety Surfacing**

**Type of surfacing:** Pea gravel

**Comments:**

Safety surfacing is in poor condition. Lots of areas not at sufficient depth.

**Recommendations:**

Add additional Pea gravel to a total depth of 10" throughout.

Make sure the finished safety surfacing meets all safety requirements. Recommend that you replace with engineered wood fiber.

**Pictures:**





**Specific Equipment:**

**Equipment type/name:** Low perimeter

**Comments:**

The low perimeter is in medium shape. Some loose and splintered pieces. Some adjustments need to be made for changes in the use zones to meet current safety standards.

**Recommendations:**

Make sure all pieces are secure and even with each other. Long term replace with a new plastic version

**Pictures:**





**Specific Equipment:**

**Equipment type/name:** Slides

**Comments:**

The slides are metal and have several safety compliance and maintenance issues.

**Recommendations:**

Replace all slides with manufactured plastic version.

**Pictures:**





**Specific Equipment:**

**Equipment type/name:** Swings

**Comments:**

There are several safety compliance and maintenance issues. The use zones need to be increased on ends.

**Recommendations:**

Replace all hardware, with only 2 swings per bay. Expand the perimeter around the ends of the swings to meet today's safety standards

**Pictures:**





**Specific Equipment:**

**Equipment type/name:** Hose and chain climbing equipment

**Comments:**

The chain bridge is missing.

**Recommendations:**

Replace with cable versions and new equipment

**Pictures:**





**Specific Equipment:**

**Equipment type/name:** Tire bridges.

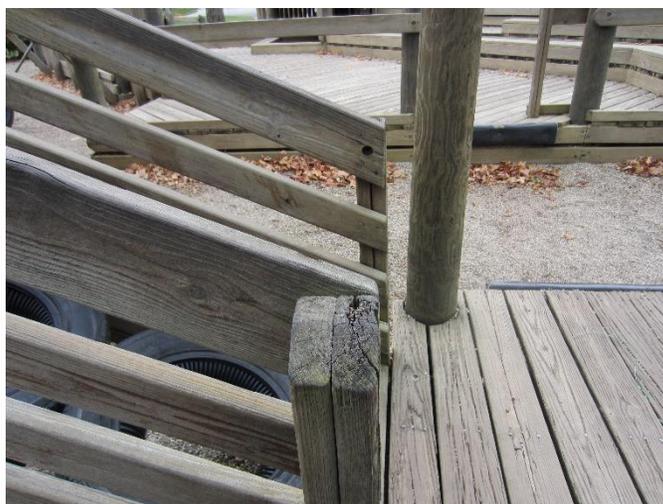
**Comments:**

There are several safety compliance and maintenance issues.

**Recommendations:**

Replace with new equipment.

**Pictures:**





**Specific Equipment:**

**Equipment type/name:** Bouncer

**Comments:**

There are several safety compliance and maintenance issues.

**Recommendations:**

Replace with new equipment

**Pictures:**





### **SUMMARY RECOMMENDATIONS:**

The playground has been well cared for over the years and has lasted longer than originally estimated. The poles and framing are still in good structural condition. This allows for the possibility of the playground to be renovated. Due to its age and current condition this would be a major renovation. It would cover all maintenance issues and safety non-compliances. It would also entail replacing some portions to allow for newer equipment and safety standards.

The proposed scope of work outlined below will help reduce overall maintenance needs, bring the playground back into safety compliance and ensure the structure lasts an additional 10-15 years. The finished work will comply with the current version of ASTM F1487 and CPSC Pub.325.

ADA would also be addressed as part of the scope of work for a renovation. Due to the current design full compliance may not be achievable without major renovation work.

When re-building or replacing, recycled plastic and low maintenance materials will be utilized as much as possible.

### **PROPOSED SCOPE OF WORK:**

- Stain poles with a pigmented stain for protection and increased visual appearance
- Stain framing with a pigmented stain for protection and increased visual appearance
- Replace decking with recycled plastic lumber
- Replace handrail with recycled plastic lumber
- Replace handrails 2x posts with recycled structural plastic
- Replace balusters with recycled plastic and pipe balusters
  - Increase visibility
- Re-deck maze platforms with recycled plastic lumber
- Low perimeter replace: Fix the areas that need to be adjusted for increased use zones. Leave the rest for now. If budget allows replace with new plastic version
- Replace pea gravel with engineered wood fiber
- Slides: Replace all slides with manufactured plastic versions
- Replace all of the swing frames and swings with manufactured ones
- Cones - leave as is stain or paint
- Chain and hose equipment: Replace with cable versions

### **CONSTRUCTION OPTIONS:**

The majority of our projects are constructed through community volunteers. This process is L&A's heart and soul. The community built method not only saves money but empowers communities with limitless potential and benefits. At the same time we understand that the community built model is not always an option or the best choice. In those situations we also can work with contractors, city workers, volunteers and a variety of combinations. In many cases L&A can also be the contractor for the project. Our goal is to find the right solution for your community and situations.



### **ASSOCIATED COST:**

An estimate for the proposed scope of work above including L&A (design, project management and construction consultation) and all materials is estimated at around \$160,000. This cost estimate is based on utilizing our community built model. It's anticipated that the work can be completed in five days. For comparative purposes a new custom designed playground built from today's material (no wood all recycled plastic lumber) would cost around \$200,000 to \$250,000. These playgrounds are expected to last a minimum of 30 years. As a reminder these are just an estimates until we define the final scope of work and get actual quotes for the materials.

### **CONCLUSION:**

The playground has been well cared for over the years, but it is time to rebuild or replace. Replacement would address accessibility concerns that rebuilding could not, as well as further reduce maintenance.

The playground has been well cared for over the years and while it could be renovated it's probably the right economic choice. Spending \$160,000 might gain you 10-15 years. This equals \$10,666 - \$16,000 cost per year. A new playground would be around \$6,600 to \$8,333 per year with much lower maintenance cost. A new playground also would meet all Safety and ADA requirement. There are things that can be addressed in a new design that would be hard in the renovation. Some of these things are ages separated areas and more age appropriate play events. Our professional recommendation would be to replace the existing playground with a new custom designed modern version still keeping the uniqueness that made the existing playground so popular.

### **NEXT STEPS:**

- Work with L&A to develop a final scope of work based on your budget and our recommendations.
  - Determine if a renovation or replacement best suites your current and future needs
- Review when you would want the work completed by and develop a timeline from there

Please contact us if you have any questions. We truly appreciate the opportunity to work with your community again.

Sincerely,

*Marc Leathers*

Marc Leathers  
President

**RISK**

# ***Playing It Safe***

**Spring  
2009**

## **Playground Safety Guidelines**



**Michigan Municipal Risk  
Management Authority  
Parks & Recreation Advisory Committee**

# PLAYGROUND SAFETY GUIDELINES

**Recent trends have led to the creation of more innovative and inclusive play spaces.**

## INTRODUCTION

Parks and Recreation departments share a complex variety of liability exposures. There are many kinds of public parks and recreation areas in use today across Michigan, and exposures are no longer limited to the traditional equipment of swings, slides, and climbers. Recent trends have led to the creation of more innovative and inclusive play spaces. Playgrounds and parks have more contact with members of the public than almost any other municipal departments, and your community must offer these facilities to remain attractive to existing and potential residents.

Michigan law PA 16-34 requires compliance with the Consumer's Product Safety Commission's (CPSC) *Handbook for Public Playground Safety*, the American Society for Testing and Materials (ASTM) *F 1487 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use*, and the Americans with Disabilities Act (ADA) *Accessibility Guidelines for Play Areas*. If your community provides, maintains, and/or uses playgrounds for recreational programming, these guidelines will provide additional information to help your community eliminate playground hazards while controlling the inherent element of risk in children's play environments.

Michigan Municipal Risk Management Authority's Parks & Recreation Advisory

Committee invites MMRMA Members' recreation departments to incorporate these guidelines into their own playground safety programs. This brochure includes suggestions on how to create safe play environments for children and all users of your community's playgrounds. The public expects no less.

These guidelines are not meant to be all-encompassing. Each playground has its own unique characteristics, and each community has its own needs, policies, and limitations. These guidelines advocate the use of sound risk management techniques such as planning, organizing, directing, and controlling the



resources and activities of your community in order to minimize the adverse effects of accidental loss. Although these guidelines may be sufficient for your community's needs, the committee suggests that you consult with your MMRMA Risk Consultant should additional assistance be needed.

## STARTING AT THE BEGINNING

Most public agencies are familiar with the challenge of meeting current playground safety guidelines. When the 1991 Consumer Product Safety Commission's Playground Safety Guidelines were released, many municipalities began removing certain existing playground equipment that was not in compliance. Unfortunately, some public entities went to the extreme measure of removing all existing playground equipment. Although total removal should only be a last resort, public agencies must take necessary action to minimize hazards on existing equipment that is known to cause serious injuries or death. To that end, it is critical that the public entity administration provide support and backing to the total operation of its parks department.

Below are recommended steps that can be taken to evaluate playground equipment and available resources to determine the best approach to your playground safety program. These suggestions represent a multi-year process that can address all your playground safety needs now and well into the future. Adoption of these guidelines will not exempt your agency from liability, but it should help minimize the exposure and the likelihood of an accident to some unsuspecting child.

It is essential that the department take two steps: conduct an audit and prepare written guidelines for playground operations.

Conduct a comprehensive playground safety audit of each site to determine if it is compliant with the CPSC Handbook for Public Playground Safety.

This audit will assist agencies in developing playground equipment guidelines by identifying

and prioritizing serious hazards in existing playground equipment and park/playground sites. The audit will also identify specific conditions that are correctable by agency staff, as well as those that may be abated by contacting manufacturers for retrofit upgrades. The audit should also identify any equipment within the agency jurisdiction that is known to have caused a reported injury because of poor maintenance or lack of repairs or that is not in compliance with CPSC and ASTM guidelines. If the causes of these injuries have not been corrected, they should be. If correction is not possible, the specific piece(s) of equipment should be removed.

It is necessary to remove any existing playground equipment no longer recommended for use on public playgrounds. These include animal figure swings, multiple occupancy swings (excluding tire swings), rope swings, and swinging exercise rings and trapeze swings. Furthermore, CPSC guidelines require the covering or replacement of exposed concrete footings and the removal of cement landing pads in use zones.

When conducting the playground safety audit, it is essential to insure that adequate depths of surfacing material exist below each piece of playground equipment (See Table 1). A majority of all playground injuries can be avoided or minimized by providing soft landing materials of sufficient depth below playground equipment. Also identify any tall equipment that would require a landing surface that exceeds the maximum fall height of your underlying protective surfacing material.

It is also important to adjust playground borders and/or relocate equipment to accommodate CPSC Layout and Spacing Guidelines (Use

***It is necessary to remove any existing playground equipment no longer recommended for use on public playgrounds.***

**TABLE 1 – CRITICAL HEIGHTS (in feet) OF TESTED MATERIALS**

MATERIAL	UNCOMPRESSED DEPTH			COMPRESSED DEPTH
	6 inch	9 inch	12 inch	9 inch
Wood Chips*	7	10	11	10
Double Shredded Bark Mulch	6	10	11	7
Engineered Wood Fibers**	6	7	>12	6
Fine Sand	5	5	9	5
Coarse Sand	5	5	6	4
Fine Gravel	6	7	10	6
Medium Gravel	5	5	6	5
Shredded Tires***	10-12	N/A	N/A	N/A

\* This product was referred to as Wood Mulch in previous versions

\*\* This product was referred to as Uniform Wood Chips in previous versions

\*\*\* Persons seeking to install shredded tires as a protective surface request test data from the supplier showing the critical height of the materials when it was tested in accordance with ASTM F1292

program. Perhaps a pre- and post-season equipment check is needed. Inadequate maintenance inspections and follow-up on corrective procedures are not only a common cause of playground accidents, they often are a basis for legal action against a public agency. Formalize your playground maintenance policies and procedures. Establish a long-term action plan to upgrade playground sites that addresses your agency capital equipment replacement program, existing staff resources, and maintenance/repair funds. Be sure to document everything.

The ongoing commitment of everyone who is actively involved in providing safe

Zone Requirements). MMRMA's Risk Control Department can provide your agency with a sample playground audit form.

Prepare written guidelines and an inspection checklist for playground operations, defining goals and procedures.

The development of a written inspection program is essential in order to ensure that all playground equipment is maintained in safe, proper condition. It is important to evaluate current practices used to identify and repair existing hazards on playground equipment. This could result in improving the regular playground inspection and maintenance

playgrounds in your community is essential. Without the commitment of your municipality resources and the support of the policymakers and administrative staff, a public playground safety program cannot reach its full potential for safety or enjoyment.

## **PLAYGROUND DEVELOPMENT AND OPERATIONS**

There are four primary variables to consider in the prevention and mitigation of playground injuries: design, installation, maintenance, and supervision.

## DESIGN

Among the four variables, equipment design is generally the easiest for purchasers and operators to resolve. The ideal scenario, of course, is to purchase the best, safest equipment from the most reputable and safety-conscious manufacturers. Unfortunately, all too frequently, the selection and purchase of equipment is based solely on price or tradition.

The typical bidding standard for purchasing equipment is to accept the lowest bid. Design quality, manufacturing specifications, evidence of physical soundness, and quality of service receive little consideration.

The initial step in purchasing equipment should be preparing detailed bid specifications, and that involves locating and using the highest quality design specifications available. They should cover: materials of manufacture (such as fasteners and coatings); equipment parts (such as decks and posts); and play apparatus (such as slides, climbers, and swings). Specifications should require that the equipment design and playground layout comply with the CPSC Guidelines, ASTM Standards, and ADA requirements, and should also require documentation of compliance after installation. If you are doing the installation as a community build, you should have a thorough audit performed and documented to assure compliance with the regulations.

To further ensure safety on the playground and thwart litigation, select manufacturers with:

- large liability insurance policies, which indicate that the company meets or exceeds national safety guidelines and standards;
- staff and consultants in both engineering and child development;

- full-time field representatives in the geographical area of purchase; and
- long-term warranties.

Because manufacturers are usually held responsible for injuries due to faulty equipment design, it is unwise for playground operators to modify equipment without the manufacturer's written approval. Modifications normally involve interaction with manufacturer reps, including first-hand inspection of equipment and consultation with the manufacturer's engineering staff for specific instructions.

In both design and installation, the playground's layout and zoning must be carefully selected. Poor locations include, but are not limited to,



areas near water, parking lots, roadways, or utility services; low visibility or undesirable locations; and areas un-shaded from sun exposure. Equipment design must provide adequately sized fall zones of resilient surfacing.

## INSTALLATION

In all cases, the manufacturer's installation instructions should be followed strictly and installation documentation filed. If equipment malfunctions and injuries occur,

***In both design and installation, the playground's layout and zoning must be carefully selected.***

***By developing a comprehensive playground safety audit, agencies can identify the most serious existing playground hazards and spend available funds to eliminate them.***

documentation of proper installation mitigates the municipality's liability. Most manufacturers provide detailed guidelines for installation, preparation of surfaces, accommodation for children with disabilities, and the needs of different age groups. As a precaution, the manufacturer's assembly and installation instructions should be kept in a permanent file.

Prior to use, municipalities should conduct a safety inspection by a qualified professional to ensure that installation specifications meet CPSC guidelines and ASTM 1487 standards and that all of these, including ADA requirements, have been met.

## **MAINTENANCE**

Maintaining playgrounds is a municipality's first step in preventing injuries. By developing a comprehensive playground safety audit, agencies can identify the most serious existing playground hazards and spend available funds to eliminate them. In the interim, if accidents occur at "lower hazard" sites (not updated to current safety standards due to lack of funds), the audit serves as a positive plan of action, demonstrating a municipality's good faith in responding to known hazards.

Scheduled routine maintenance should be performed on equipment and site, including mowing grass, removing litter and debris, repairing damage, and maintaining loose surface materials at proper depths. Preventative maintenance is also important and should be documented.

In the event of injury or any other incident in which there is potential for a claim, a comprehensive report should be written. Reports should include names, addresses, and



phone numbers of all parties involved (including witnesses); date, time, and precise description of incident; police and medical reports; and descriptions and photographs of the accident site (including implicated equipment, surfacing, and other physical elements).

Should litigation ensue, written reports and inspection checklists will be secured and used by opposing attorneys. Poor recordkeeping shows a pattern of negligence and can be used against the entity. Detailed, complete, and accurate inspection, repair, and accident reports should be filed and ready for future access.

## **SUPERVISION**

Municipalities that provide day camps during the summer are responsible for supervising playgrounds use by the campers. The usual ratio for supervision during camp hours is one adult for every 10-15 children ages four and five.

Most injuries sustained on playgrounds are the result of falls, primarily falls to the ground

beneath the equipment. Usually it is not the equipment that fails; rather it is the child's behavior that causes an injury.

Supervisors should undergo training that consists of techniques for interacting with children, supporting encouraging play, resolving disputes, and identifying dangerous activities. Supervisors should also be versed in playground safety: dealing with injuries, first aid, reporting injuries, and emergency procedures. The ability to develop, implement, and enforce reasonable playground rules is also a supervisory function and responsibility.

It may be beneficial to have a staff member train and become a Certified Playground Safety Inspector (CPSI) through the National Playground Safety Institute (NPSI) offered by the National Recreation and Parks Association (NRPA).

## SIGNAGE

Many playground injuries are the result of young children playing on equipment designed for older or more mature children. Warning signs should be placed at playground entrances noting:

- the age-appropriateness for which the playground area was designed;
- that children should be supervised by adults at all times; and
- any special or unusual features that warrant special attention.

Be aware of ADA requirements for playground signage, make sure signs are sensitive to other ethnic groups or minorities, and consider using universal signs or graphics.

Signs do not eliminate playground liability for injuries, but they are evidence of care and support for the overall safety of the program. Since all types, sizes, and styles of play equipment cannot possibly be covered here, common sense and good judgment are encouraged.

To ensure that these requirements are met, the critical factors to consider are: design, placement, operation, maintenance, and uniformity. The following should be considered in the design of signs:

- bold print is essential
- do not use long sentences
- use mainly short words
- use simple statements that can be easily understood
- avoid excessive wording
- do not use fancy lettering or script

Playground rules should be posted at main entrance areas and should be specific to that play environment. General rules to post would include, for example:

- adult supervisor is required
- sale, use or possession of alcohol or drugs is prohibited
- no pets permitted
- no glass containers or bottles
- emergency 911 information
- hours of operation (dawn to dusk or other park hours)
- request and instructions for reporting damaged or defective equipment

***Many playground injuries are the result of young children playing on equipment designed for older or more mature children.***

**MMRMA recommends that at least one of your employees take the National Playground Safety Inspector certification course.**

If you use symbols in place of words, keep in mind that symbols should never be used alone where they might not communicate the full nature of the dangers involved. Signs should, wherever possible, contain both symbols and statements. Beware of warning overload. Excessive warnings or too many warnings in one setting could confuse users. Consolidate as many signs as possible.

Under the General Requirements section of ASTM F 1487, manufacturers are required to have their identification labels on all play structures they manufacture (5.4) and are required to make available signs and labels regarding age appropriateness and supervision (5.4.1). For additional signage and labeling information, see Section 14 and Section 15 of ASTM F 1487.

Lastly, under Section 15, subsection 15.5 states, “Owners/Operators of playgrounds shall be responsible for obtaining, installation, maintenance and replacement of signs or labels.”

## MUTUAL USE OF A PLAYGROUND

If your community uses a school playground, other community’s playground, or private playground for recreational programming, day care, etc., a written agreement should outline responsibilities for inspection and maintenance as well as other responsibilities and duties associated with that use. Consult your MMRMA Risk Consultant if questions arise regarding any special use applications of your park or recreation facility.

## TRAINING

Training gives employees the necessary skills

to fulfill their positions’ demands in the most confident manner, so that programs, services, and facilities can operate at the highest levels. An untrained employee, or even a partially trained one, can become an expensive exposure risk. **MMRMA recommends that at least one of your employees take the National Playground Safety Inspector certification course.**

The following are some suggestions for employee training:

- General training should include park rules and regulations, safe and proper use of playground equipment, safety and emergency procedures, and foul weather policies.
- First aid training should include the dangers and precautions relating to blood-borne pathogens as well as treatment procedures for common playground injuries such as scrapes, bruises, and injuries to ankles, knees, elbows, hands, face, and head.
- Safety audits are time consuming and technical. Training a full-time employee in the proper procedures will reduce your annual training time and provide consistency in your safety program. Seasonal staff can be trained to perform more routine (low-hazard) playground safety inspections. (See Model Playground Inspection Report.)
- Employees involved with playgrounds, i.e., playground monitors, play leaders, maintenance staff, etc., should be trained to perform regular inspections and provide proper reporting and recordkeeping.

**Training is an important aspect of playground safety. Having trained staff inspect your playground equipment will result in the reduction of potential hazards.**

## PLAYGROUND INSPECTIONS

Good playground management requires the adoption and use of a formal, consistent and documented playground inspection program. The benefits of such a program to your municipality, combined with continuous, timely maintenance, include:

**A safe playground environment.** Regular inspections will identify damage resulting from vandalism or needed maintenance caused by material fatigue, loose or missing parts, and/or inadequate safety surfacing material.

**An effective risk management tool.** If faced with a personal injury lawsuit based on claimed negligence, the municipality will be able to demonstrate in a court of law that a reasonable standard of care was provided to playground users.

**A favorable public image.** Regular inspections demonstrate that the managing entity cares about the safety of playground users and is a responsible steward of the resources entrusted to its management.

**A long-lasting public investment.** The service life of playground equipment is extended when damage or defects are quickly discovered and returned to original design and installation specifications.

## SAFETY INSPECTION FORM

A good inspection form should identify the maintenance items and other needs that are likely to occur in the operation of your entity's playground(s). It is important that the inspection form you use reflects the specific types of play equipment, safety surfacing, and other components of your community's playgrounds. The inspection form should provide areas for the following information: person notified regarding conditions, date of notification, action taken, date of action taken, signature and printed name of the person completing the inspection, and signature and name of the person verifying completion of corrective action.

This publication includes a model playground inspection checklist. MMRMA's Risk Control department can supply a variety of other sample playground inspection forms and formats used by other public entities.

## INSPECTION FREQUENCY

Frequency of inspection should be based on each playground's own unique factors, including the facility's age, the complexity and material composition of equipment, the level of use, the age of the users served, the natural environment, the frequency

*Good playground management requires the adoption and use of a formal, consistent and documented playground inspection program.*



***A hazardous situation on the playground is one in which the problem causing the accident cannot be seen and evaluated by the user.***

and severity of vandalism, and the frequency of reported incidents and/or accidents. It is recommended that your public entity consider inspections at two frequency intervals:

High Frequency (HF) – HF inspections are frequent and take a short time to complete. HF inspections concentrate on surfacing problems, vandalism detection, and maintenance needs resulting from high use levels. HF inspections are generally conducted on a daily or weekly basis, depending on each playground's own unique factors.

Low Frequency (LF) – LF inspections are periodic and require ample time for more thorough inspection. LF inspections concentrate on structural integrity of the play

equipment and a comprehensive review of the total playground environment.

LF inspections are generally conducted on a weekly, monthly, or seasonal basis, depending on each playground's own unique factors.

### **PLAYGROUND INSPECTORS**

HF inspections are normally and easily conducted by personnel with limited inspection training. LF inspections should be conducted by trained, knowledgeable and experienced personnel, since they will be evaluating equipment for structural integrity and potentially hazardous conditions.

Playground inspectors shall be qualified to perform the appropriate level of inspection, be capable of prioritizing and of acting to remedy hazards to life and limb, and be reliable in their documentation of the inspection process.



### **INSPECTION RECORD RETENTION**

Playground inspection and maintenance reports should be kept on file for three years. Whenever a personal injury occurs, it is vital that all records (e.g., playground inspection reports, accident/incident reports, medical records, photographs and other associated documents) be kept for three years following the date of injury (for injured adults), or until one year following the injured party's 18th birthday (for injured minors). The availability of accurate and complete records are important should your governmental entity have to defend itself against a charge of gross negligence following a playground-related personal injury.

There are many benefits to a formal, consistent and documented playground inspection program. The safety and enjoyment of playground users are enhanced. Your public entity's exposure to personal injury lawsuits based on negligence is reduced. When lawsuits are filed, the best defense is one that demonstrates your public entity provided its citizens with a reasonable and consistent standard of care. These and other benefits are outcomes of a well-thought-out and applied playground inspection program.

#### **NOTE:**

***Always closely follow manufacturer's maintenance instructions and never modify any playground parts in-house without the written permission of the manufacturer.***

*Adopting an inspection form is only addressing a part of the solution. Determining how often it should be used is a decision for each individual community. The deterioration and/or wear of various play components can be predicted*

*when certain factors are known. On the other hand, vandalism has a major influence on the inspection frequency and cannot be as predictable. The rationale for frequency of playground inspections should make efficient use of the resources available to your agency by providing a timely, cost-effective service for ensuring the safety of the children who use playgrounds. Merely providing resources for timely safety inspections does not ensure a safe play environment. Proper training for agency personnel responsible for playground inspections is of the utmost importance.*

## CONCLUSION

Injuries on playgrounds will sometimes occur, and whenever there are injuries, lawyers and lawsuits are not far behind. Although some accidents are caused by poor judgment, most accidents and injuries are caused by the existence of hazards on the playground. A hazardous situation on the playground is one in which the problem causing the accident cannot be seen and evaluated by the user. A public entity should do as much as it can to reduce the number of hazards and, therefore, the number of injuries and resultant claims and lawsuits. This, in turn, will reduce liability costs.

By properly planning the design, installation, maintenance, and supervision of playground equipment and sites, municipalities can save considerable time and money while, at the same time, improving community goodwill.

For more information, contact the Office of Public Affairs, U.S. Consumer Product Safety Commission, 4330 East-West Highway, Suite 502, Bethesda, Maryland, 20814, [www.cpsc.gov](http://www.cpsc.gov), or by calling (800) 638-2772. Copyrighted

## TYPES OF SWINGS NOT RECOMMENDED FOR PUBLIC PLAYGROUNDS

*This list has been compiled from the CSPC Handbook.*

**Animal Figure Swings** – These are not recommended because their rigid metal framework is heavy, presenting a risk of impact injury.

**Multiple Occupancy Swings** – With the exception of tire swings, swings that are intended for more than one user are not recommended because their greater mass, as compared to single occupancy swings, presents a risk of impact injury.

**Rope Swings** – Free swinging ropes that may fray or otherwise form a loop are not recommended because they present a potential strangulation hazard.

**Stationary Wheelchair Swings** – Stationary wheelchair swings for adults and children are not recommended for use on public playgrounds.

**Swinging Dual Exercise Rings and Trapeze Bars** – These are rings and trapeze bars on long chains that are generally considered to be athletic equipment and are not recommended for public playgrounds. *NOTE:* The recommendation against the use of exercise rings do not apply to overhead hanging rings such as those used in a ring trek or ring ladder.

**Trampolines** – Trampolines are not recommended for use on public playgrounds.

ASTM Standards are available for purchase from the American Society for Testing and Materials; contact ASTM at 100 Barr Harbor Drive, West Conshohocken, Pennsylvania, 19428-2959, [www.astm.org](http://www.astm.org), or by calling (610) 832-9500.

Copies of the CPSC Playground Safety Standards, ADA accessibility, and other resources and assistance in risk reduction are available through MMRMA's Risk Control department. These resources include training videos and sample audit and inspection forms. Specialized consultation is also available to MMRMA Members. Please contact the Risk Control department for more information or assistance.

## GENERAL PLAYGROUND INSPECTION FORM

The following checklist may be used to determine the condition of a playground. (Please refer to the corresponding sections in the handbook for further information on resolving matters that are non-compliant.) Place a check mark to each of the following items that apply:

### SURFACING

- The equipment has adequate protective surfacing under and around it and the surfacing materials have not deteriorated.
- Loose-fill surfacing materials have no foreign objects or debris.
- Loose-fill surfacing materials are not compacted and do not have reduced depth in heavy use areas such as under swings or at slide exits.

### GENERAL HAZARDS

- There are no sharp points, corners or edges on the equipment.
- There are no missing or damaged protective caps or plugs.
- There are no hazardous protrusions and projections.
- There are no potential clothing entanglement hazards, such as open S-hooks or protruding bolts.
- There are no pinch, crush, or shearing points or exposed moving parts.
- There are no trip hazards, such as exposed footings on anchoring devices, rocks, roots, or any other environmental obstacles in the play area.

### DETERIORATION OF THE EQUIPMENT

- The equipment has no rust, rot, cracks, or splinters, especially where it comes into contact with the ground.
- There are no broken or missing components on the equipment (e.g. handrails, guardrails, protective barriers, steps, or ladder rungs) and no damaged fences, benches, or signs on the playground.
- All equipment is securely anchored.

### SECURITY OF HARDWARE

- There are no loose fastening devices or worn connections, such as S-hooks.
- Moving components, such as swing hangers or merry-go-round bearings, are not worn.

### DRAINAGE

- The entire play area has satisfactory drainage, especially in heavy use areas such as under swings and at slide exits.

### LEADED PAINT

- The leaded paint used on the playground equipment has not deteriorated and there is no peeling, cracking, chipping, or chalking.
- There are no areas of visible leaded paint chips or accumulation of lead dust.

### GENERAL UPKEEP OF PLAYGROUNDS

- The entire playground is free from miscellaneous debris or litter such as tree branches, soda cans, bottles, glass, etc.
- There are no missing trash receptacles.
- Trash receptacles are not full.

### NOTES:

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## ACCESSIBILITY TO INDIVIDUALS WITH DISABILITIES

All planned, newly constructed (since 1991), or altered play areas fall under the requirements of the Americans with Disabilities Act (ADA). The ADA requires state and local government facilities, places of public accommodation, and commercial facilities be readily accessible to, and usable by, individuals with disabilities. This section provides a brief overview of the regulations. A complete copy is available online at HYPERLINK "<http://www.access-board.gov>" [www.access-board.gov](http://www.access-board.gov).

An accessible route that meets the ADA requirements – firm, stable and slip resistant and at least 60 inches wide – is required leading to the play area and connecting to amenities such as drinking fountains and restrooms. If any part of the access route is in the play equipment's use zones, it must also meet the fall requirements of the American Society for Testing and Materials (ASTM).

Surfacing within the use zones of accessible play components must be both accessible (firm, stable and slip resistant and allowing for the maneuvering of a wheelchair) and meet ASTM fall requirements. Ask your playground surfacing provider for documentation of compliance with ASTM standards F 1292 (Impact Attenuation of Surfacing) and F 1951 (Accessibility of Safety Surfacing for Playgrounds) for your files.

The ADA requires looking at play areas as a collection of individual play components. Several factors must be considered for compliance: the number of elevated play components; how they are accessed; if transfer or ramps are used; and the number of ground-based components included in the play area. An online training course explaining all sections of the guidelines is available on the Access Board website: [www.access-board.gov/play/course/1-0.htm](http://www.access-board.gov/play/course/1-0.htm).

## MICHIGAN LEGISLATES PLAYGROUND EQUIPMENT SAFETY ACT

Head entrapment and clothing entanglement are two serious hazards on playground equipment that have resulted in the deaths of children. A child in Michigan was strangled to death when the drawstring on her hood caught in the gap at the top of a school playground slide, leading to the enactment of safety legislation of playground equipment in Michigan.

Michigan House Bills 4101 and 4102, signed into law in 1997 as Public Act 34 and Public Act 16, respectively, went into effect May 1, 1998. The laws require that all persons involved in, and compensated for, the manufacture or assembly of public playground equipment, on property owned and operated by a local unit of government, school district, or other government agency, comply with standards set forth in two publications:

Handbook for Public Playground Safety, published by the U.S. Consumer Product Safety Commission (CPSC), and

Standard Consumer Safety Performance Specifications for Public Use, ASTM F1487, published by the American Society for Testing and Materials (ASTM).

Under the laws, municipalities and other governmental entities that own and operate playground equipment are responsible for the maintenance, repair, and upkeep of the equipment in accordance with the CPSC and ASTM Standards identified in Public Act 16. Both publications are incorporated by reference.

Public Act 16 "grandfathers" public playground equipment that existed before the law's effective date. Grandfathered playground equipment requires applications of the new standards only in instances not requiring replacement or substantial alteration of such equipment.

Public Act 16 specifies that CPSC and ASTM Standards identified in the law would be used to determine responsibility for state civil infractions only. The standards set forth in the law would not establish liability on separate civil actions brought to recover damages caused by the maintenance, repair, upkeep, manufacture, or assembly of public playground equipment.

In such civil actions for damages, state civil infractions under Public Act 16 would be inadmissible as evidence. The law further specifies that governmental immunity is not expanded, restricted, or otherwise altered by the new legislation. Further, the act would not limit or alter – and would be in addition to – any other defenses, remedies, or rights a person may have by law.

Copies of Public Act 16 and Public Act 34, as well as additional resource information relating to playground safety inspections specific to protrusions and entrapments, can be obtained from the MMRMA Risk Control Department.

## CHEMICALS IN THE PLAYGROUND

### LEAD

Ingestion of lead paint is a major source of lead poisoning for children aged six and under. Lead poisoning causes learning disabilities, hearing problems, and growth retardation. Priority should be given to equipment painted or repainted prior to 1978, when the CPSC banned lead paint.

Conduct a visual inspection of the playground and equipment. Look for areas that are cracking or peeling. Lead paint that is intact and in good condition is not believed to be a hazard until it starts to deteriorate.

If the paint is chipping, flaking or otherwise deteriorating, samples should be tested for the presence of lead. Laboratory testing is the most accurate way to determine the presence and amount of lead in the sample. (Test kits available at the local hardware store are not considered accurate or reliable enough to assure lead is NOT present, but can be an inexpensive way to determine the presence of lead on your playground). Because the playground equipment is used by children, if lead is detected, MMRMA recommends permanent control measures, such as replacement of the equipment or removal of the lead paint. Interim control measures, such as covering the paint with nonleaded paint or an encapsulant, may be appropriate if the playground is slated for repair or the equipment is expected to be replaced within a few years.

### CHROMATED COPPER ARSENATE (CCA)

CCA was developed in the 1940s as a pesticide and wood preservative. There is concern that arsenic can leach from the wood, contaminating playgrounds. EPA and CPSC studies have shown that applying penetrating coatings (e.g., oil-based, semi-transparent stains) once a year can prevent leaching. DO NOT use "film-forming" or non-penetrating stains (e.g., latex semi-transparent, latex opaque, or oil opaque stains) on outdoor surfaces because peeling, flaking, and cracking may provide exposure to the preservative.

Do not burn CCA-treated wood. Wash hands after coming into contact with CCA.

Two wood treatments have been approved for use on playgrounds: alkaline copper quaternary (ACQ types A and B) and copper azole (CBA-A, CA-B). However, these new preservatives are much more corrosive on metal fasteners and connections than CCA-treated lumber. You should only use hot-dipped galvanized or stainless steel hardware. DO NOT use ordinary galvanized, common steel, or Dacrotized, electroplated or aluminum fasteners, as these may corrode or rust as much as five times faster.

Sodium borate salts should be used only in protected areas. Wood treated with borates leaches boric acid when it comes into contact with moisture.

### CREOSOTE AND PENTACHLOROPHENOL

Creosote is the most widely used wood preservative in the U.S. It is used to treat railroad ties and utility poles and shows up in parks as landscape timbers, loose fill containment, and parking bumpers. Exposure to creosote can cause rash or severe irritation of the skin, chemical burns of the surface of the eyes, convulsions and mental confusion, kidney or liver problems, unconsciousness, and even death.

Pentachlorophenol is a man-made chemical used as an herbicide, defoliant, bactericide, molluscicide, and wood preservative. Used for railroad ties, utility poles, and wharf pilings, it has been a restricted chemical since 1984. It is still available for industrial use by certified chemical applicators. It causes increased body temperature, liver effects, damage to the immune system, reproductive effects, and developmental effects.

### POLYVINYL CHLORIDE (PVC)

PVC is used as insulation for electrical wires, water and sanitation pipes, and as coating for decks and steps for playground equipment. To soften PVC, plasticizers such as phthalates and lead are used. There is some concern that these may leach into the playground over time.

PVC poses its most serious danger to humans and the environment when it is burned, releasing dioxins and hydrochloric acid. If your playground is vandalized by fire, you should contact your fire department and/or haz-mat team for cleanup guidance, as the debris may contain toxic wastes.

## THE DIRTY DOZEN CHECKLIST.....

### Are they hiding in your child's playground?

#### 1. IMPROPER PROTECTIVE SURFACING

The surface or ground under and around playground equipment should be soft enough to cushion a fall. Improper surfacing material under playground equipment is the leading cause of playground related injuries. Hard surfaces such as concrete, blacktop, packed earth or grass are not acceptable under play equipment.

#### 2. INADEQUATE FALL ZONE

A fall zone or use zone is the area under and around the playground equipment where a child might fall. A fall zone should be covered with protective surfacing material and extend a minimum of six feet in all directions from the edge of stationary play equipment such as climbers with chin up bars. Swings require a much greater area for the fall zone.

#### 3. PROTRUSION & ENTANGLEMENT HAZARDS

A protrusion hazard is a component or piece of hardware that might be capable of impaling or cutting a child if a child should fall against the hazard. Some protrusions are also capable of catching strings or items of clothing, which might be worn around a child's neck. This type of entanglement is especially hazardous because it might result in strangulation.

#### 4. ENTRAPMENT IN OPENINGS

Enclosed openings on playground equipment must be checked for head entrapment hazards. Children often enter openings feet first and attempt to slide through the opening. If the opening is not large enough it may allow the body to pass through the opening and entrap the head. Pay special attention to openings at the top of slides, openings between platforms, and openings on climbers where the distance between the rungs might be less than nine inches.

#### 5. INSUFFICIENT EQUIPMENT SPACING

Improper spacing between pieces of play equipment can cause overcrowding of a play area, which may create several hazards. There should be a minimum of twelve feet between any two play structures. Swings and other pieces of moving equipment should be located in an area away from other structures.

#### 6. TRIP HAZARDS

Trip hazards are created by play structure components or items on the playground. Exposed concrete footings, abrupt changes in surface elevations, containment borders, tree roots, tree stumps, and rocks are trip hazards that are often found in play environments.

#### 7. LACK OF SUPERVISION

The supervision of a playground environment directly relates to the overall safety of the environment. A play area should be designed so that it is easy for a parent or caregiver to observe the children at play.

#### 8. AGE-INAPPROPRIATE ACTIVITIES

Children's developmental needs vary greatly from age two to age twelve. In an effort to provide a challenging and safe play environment for all ages, it is important to make sure that the equipment in the playground setting is appropriate for the age of the intended users. Areas for preschool age children should be separate from areas intended for school age children.

#### 9. LACK OF MAINTENANCE

In order for playgrounds to remain in safe condition, a program of systematic, preventive maintenance must be in place. There should be no missing, broken or worn out components. All hardware should be secure. The wood, metal, or plastic should not show signs of fatigue or deterioration. All parts should be stable, with no apparent signs of loosening. The surfacing material must also be maintained. Check for signs of vandalism.

#### 10. PINCH, CRUSH, SHEARING, AND SHARP EDGE HAZARDS

Components in the play environment should be inspected to make sure that there are no sharp edges or points that could cut skin. Moving components such as suspension bridges, track rides, merry-go-rounds, seesaws, and some swings should be checked to make sure that there are no moving parts or mechanisms that might crush or pinch a child's finger.

#### 11. PLATFORMS WITH NO GUARDRAILS

Elevated surfaces such as platforms, ramps, and bridge-ways should have guardrails to prevent falls. Preschool age children are more at risk from falls, and equipment intended for this age group should have guardrails on elevated surfaces higher than twenty inches. Equipment intended for school age children should have guardrails on elevated surfaces higher than thirty inches.

#### 12. EQUIPMENT NOT RECOMMENDED FOR PUBLIC PLAYGROUNDS

Accidents associated with the following types of equipment have resulted in the Consumer Product Safety Commission recommending that they not be used on public playgrounds:

- Heavy swings such as animal figure swings & multiple occupancy/ glider type swings
- Free swinging ropes that may fray or form a loop
- Swinging exercise rings and trapeze bars are considered athletic equipment and not recommended for public playgrounds. Overhead hanging rings that have a short amount of chain and are intended for use as a ring trek (generally four to eight rings) are allowed on public playground equipment
- Trampoline

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*A publication for Members of*



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