

Minnetonka Beach Parks Livingston Strong Playground Task Force

Mission:

Work together to accomplish a new, donated playground at Half Moon Park benefiting Minnetonka Beach children and residents.

Task Force will:

- ▶ represent facts regarding Half Moon Park
- ▶ create supporting documents/packet for future public input forums hosted by council
- ▶ not be taking public input directly

Successful outcome of the task force

Present a factual solution and packet to parks to provide city council recommendations that the proposed playground donation meets:

- Livingston Strong Team (LST) stipulations
- Deliver 3 proposals for drainage and playground with Pros/Cons
- Quantify drainage impact
- Answer questions
 - Drainage impact to nearby residents; better, worse, no impact
 - New equipment and surface will provide users and adjoining residents an experience that is less enjoyable, about the same or better than current and why
- Prepare expense model and production timeline
- Confirm playground meets local, state and federal regulations

Task Force Team:

Lead

Davida Suiter

Team

Lauren Livingston

Jodi Schwendimann

Julia Sharma

Patty Razebek

Teresa Mohr

Kim Petersen

Chip Zawislak

Half Moon Park Current Facts:

Total park: 26,136 sq feet; from city hall records

Playground: 2400 sq feet; measured by Brian, public works director

Task force meeting agenda's:

All task force members present during all 3 meetings

Thursday, July 9

- Meeting held at Half Moon Park (HMP)
- Familiarize task force with HMP
- Review drainage drawing and current terrain/landscape
- Review current playground equipment and condition

Tuesday, July 14 Drainage Review

- Have city engineer, Darren Amundsen present drainage plan
- Q/A with Darren
- Pro/Con quotes

Wednesday, July 15 Playground Review

- Review Gaga Pit & discuss
- Review color schemes & discuss
- Review 3 playground options & discuss
- Overall feedback regarding playground

Drainage Recap

Supplement 1) Half Moon Drainage Drawing



1) Half Moon
Drainage Drawing.p

Darren Amundsen

Experience:

25 years engineering experience

Designed 2018 \$2.5M bond and storm water plan in and around Lafayette Rd.

Working on project Pro bono.

Recap of drainage plan as presented by Darren:

- Create a level area approximately 80x40 feet (3200 sq ft)
- Design meets all Minnehaha Creek Watershed District (MCWD) Restrictions
- French drain will receive credit for filtering water with MCWD
- All water going through new catch basins will be filtered by the new storm water drain installed via the 2018 \$2.5M bond.
- The new design's goal is move the same amount of water that flows through the park today through additional drainage options to allow the park to dry faster
 - Push water towards trees on Lafayette Rd via raised playground to be picked up by French drain vs current system of water sitting in the middle of the park
 - Small rain events (less than 1" in 24 hrs) will see more water go down stream through the system, not impacting residents down stream as current storm sewer can handle it
 - Large rain events will not be impact residents by drainage solution as current city wide storm system is not capable of handling large rain events. Large rain events are 2-3" in 24 hrs (1 year rain event) 3" in 24 hrs (3 year rain event) 5+" in 25 hrs (5-7 year rain event)
 - Extra catch basins will help with water pooling at the NW corner of HMP and adjacent resident's driveway at 2505 Lafayette Road

Task force outcome: Quantifiable solution

- Currently takes 2+ days to mow after rain
- Future: ½ day to mow after rain and unmowable areas are smaller
- More green space will be available vs muddy grass because it is dryer

Vendor Pricing

Supplement 2) Drainage Pricing



Half Moon quote
form.pdf

No.	Item	Units	Qty	Bollig & Sons			Mini-Apple			Scherber		
				Unit Price	Total Price	Notes	Unit Price	Total Price	Notes	Unit Price	Total Price	Notes
Part 1 - Removals												
1	Remove Existing Playground	LS	1	\$2,701	\$2,701		\$2,860	\$2,860		\$2,625	\$2,625	
Total Part 1 - Removals					\$2,701			\$2,860			\$2,625	
Part 2 - Site Grading & Restoration												
2	Mobilization	LS	1	\$1,200	\$1,200		\$450	\$450		\$1,500	\$1,500	
3	Temporation Construction Ent	EA	1	\$1,200	\$1,200		\$750	\$750		\$1,050	\$1,050	
4	Silt Fence or Bio Log	LF	875	\$2.00	\$1,750		\$3.15	\$2,756		\$2.00	\$1,750	
5	Inlet Protection	EA	4	\$320	\$1,280		\$100	\$400		\$181	\$725	
6	Strip, Stockpile, Respread Top	LS	1	\$5,445	\$5,445		\$4,160	\$4,160		\$4,250	\$4,250	
7	Common Borrow	CY	500	\$12.00	\$6,000		\$12.50	\$6,250		\$5.50	\$2,750	
8	Site Grading	LS	1	\$10,314	\$10,314		\$2,080	\$2,080		\$6,438	\$6,438	*Added testing compaction \$937.50
9	French Dreaing w w"drain tile	LF	272	\$30	\$8,160	Deduct \$1,944 for 12" Wide Trench	\$4	\$1,088		\$33.00	\$8,975	
10	Catch Basin	EA	2	\$2,350	\$4,700		\$2,000	\$4,000		\$2,125	\$4,250	
11	8" PVC Storm Sewer	LF	40	\$40	\$1,600		\$19	\$750		\$45	\$1,800	
12	Top Soil Borrow	CY	150	\$26	\$3,900		\$27	\$4,050		\$30	\$4,520	
13	Seed & Hydromulch	SY	2700	\$1.50	\$4,050	one trip no additional watering	\$1.25	\$3,375		\$1.69	\$4,556	
Total Part 2 - Site Grading and Restoration					\$49,599			\$30,109			\$42,564	
Part 3 - Site work												
14	4-inch thick concrete sidewalk	SF	600	10.5	\$6,300		11	\$6,600		N/A	N/A	
Total Part 3 - Site work					\$6,300			\$6,600				
Total Part 1 - Removals					\$2,701			\$2,860			\$2,625	
Total Part 2 - Site Grading and Restoration					\$49,599			\$30,109			\$42,564	
Total Part 3 - Site work					\$6,300			\$6,600			\$0	
Total					\$58,600			\$39,569			\$45,189	
Removal of common borrow					\$52,600			\$33,319			\$42,439	

Task force vendor feedback pros/cons;

All vendors do commercial and residential work.

Bollig & Scherber have done numerous homes in the area

Mini Apple has worked with playground installers engaged in the project (Flagship and MN/WI Playground)

No vendor feedback from Kim, Jodi, Lauren, Patty or Jodi. Julia, Patty and Chip questioned why one bid was so much lower than others. Patty not familiar with cost pricing of materials but did question why one was so much lower.

Subsequent vendor follow up and email conversations with the task force, lowest bidder was vetted to be a viable option. It was recommended if lowest bid is chosen proper documentation of insurance and license be provided.

Drainage discussions:

On multiple occasions drainage discussions were turned to resident drainage issues not impacted by HMP, but looking for solutions within the project. The task force is unable to address these concerns but do feel the city should spend time addressing them in the future capital planning process.

Task force outcome: Does the drainage impact nearby residents; better, worse or no impact

Darren, city engineer: No impact to residents.

Kim, Teresa, Jodi and Lauren – Rely on expert knowledge and agree with Darren’s recommendation

Patty – improved if rain is 1” or less in 24 hrs, could impact neighbors downstream depending on the amount of rain and duration of rain when over 1” in 24 hrs

Chip – negative impact due to impact to Patty’s property in small rain events

Julia – worse, then stated “but has no facts to back it up and will look into it further” Julia Sharma has engaged her own engineer to perform a review.

Task force outcome: Does the drainage impact the park; better, worse or no impact

Darren, city engineer: Improve as there will be more usable green space after rains.

Kim, Teresa, Jodi and Lauren – Rely on expert knowledge and agree with Darren’s recommendation

Patty – no impact if the drainage plan does not work as well as configured; dryer if it works well
Chip – park will be dryer
Julia – negative based on her own engineering assessment, see previous comments

Playground

Gaga pit

Consensus was kids will enjoy the game, it is a fun and healthy activity for children
Task force was split between it's a great addition to HMP and it should be placed at Ray Peters.

Those expressing concern for gaga pit at HMP biggest concern was noise as children playing in the park would be loud. Other concern was it would be an eyesore from Julia and poured rubber surface is slippery when wet from Chip. Patty felt it would be better placed at Ray Peters for aesthetics and would allow more green space at HMP.

Splitting younger families up to go to Ray Peters and HMP was expressed as a concern by not having the gaga pit with the playground for the age group it's designated for from Teresa.

Colors

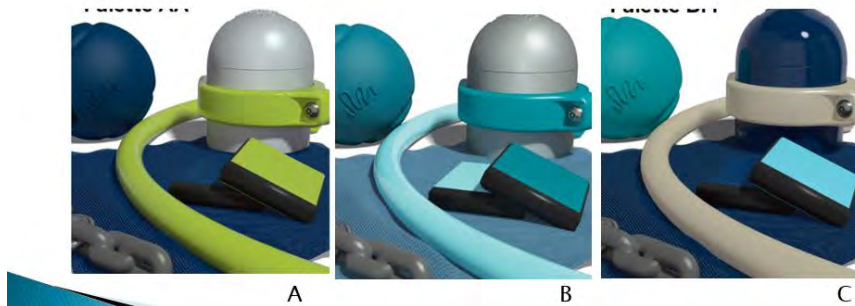
Team was presented with color pallet being reviewed by LST. Colors were presented as to blend in with the current signage in Minnetonka Beach.

Poured rubber was presented as black from LST.

Task force feedback included:

- Prefer softer, neutral colors in B & C options – Teresa, Kim & Jodi
- Stay away from green in A (Teresa and Kim)
- Colors should blend in; Patty & Julia
- No objection to colors; Jodi and Lauren

Color Themes



Playground

Task force was presented with 3 different playground options being evaluated by LST. Colors below are conceptual and not actual colors. Task force was to look at design & functionality of equipment.

Option #1: TreeTop by manufacture Landscape Structures and represented by Flagship, 2641 total square feet; current swing structure would be refurbished.

- 0.9% green space impacted
- 2-4 week lead time



Task Force Feedback;

Shades were not received well by task force for looks and height concerns, rest of playground received no feedback.

Height concern - would run up/in to tree canopy there now

Option #2: Nature by manufacture Landscape Structures and represented by Flagship, 2840 total square feet; current swing structure would be refurbished.

- 1.7% green space impacted
- 2-4 week lead time
- Maximum height from ground is 189 inches (15.75 feet)



Task Force Feedback;

Concern it would run up/in to tree canopy there now

Blends well with natural aesthetics and appeal of Minnetonka Beach

Provides more ADA options

Most preferred option of task force members

CAD Drawing attached



MinnetonkaBeach_
HalfMoonPark Natu

Option #3: Modern City by manufacture Gametime and represented by Minnesota Wisconsin Playground, 2679 total square feet

- 1.1% green space impacted
- Minnesota Wisconsin Playground is owned by Minnetonka Beach resident and Parks Commissioner Harlan Lehmann.



Task Force Feedback;
Does not fit the aesthetics of Minnetonka Beach

Task Force Outcome: New equipment and surface will provide users and adjoining residents an experience that is less enjoyable, about the same or better than current and why

Chip: Likes the idea of a new playground, not a gaga pit

Patty: Little kids really enjoy the playground, initially others will be interested in new playground but assumes it will wear off. Would like to keep equipment in same placement/area and place Gaga pit at Ray Peters.

Julia: Concerned about noise from children playing, concerned about poured rubber and heights. Prefers to keep swings, replace equipment with same footprint

Teresa: Provides more enjoyable experience. It will appeal to more children

Kim: Options open up the age categories to up to elementary (prefers tree top and nature). Current system does not get used because it lacks appeal, the new equipment will be utilized well

Jodi: will provide more enjoyable experience due to appeal

Task Force Outcome: Expense Model

Livingston Strong Team will present expense model to council at the appropriate time. Task Force assisted in evaluating 3 playground options.

Task Force Outcome: Confirm playground meets local, state and federal regulations

Livingston Strong Team will present to council at the appropriate time and have city administration evaluate. All quote providers are certified with regulated officials.

Residents are invited to Half Moon Park, Sunday July 19 from 930-1030 AM to see the park marked with the new playground dimensions. Representatives of the Livingston Strong Team will be available. This is a come and go event, residents are encouraged to drop by to see first hand the size variance of the new playground structure.

BIDDER: _____

HALF MOON PARK SITE WORK

CITY OF THE VILLAGE OF MINNETONKA BEACH, MINNESOTA

No.	Item	Units	Qty	Unit Price	Total Price
Quote					
PART 1 - REMOVALS					
1	REMOVE EXISTING PLAY GROUND	LS	1	\$ _____	\$ _____
	TOTAL PART 1 - REMOVALS				\$ _____
PART 2 - SITE GRADING AND RESTORATION					
2	MOBILIZATION	LS	1	\$ _____	\$ _____
3	TEMPORARY CONSTRUCTION ENTRANCE	EA	1	\$ _____	\$ _____
4	SILT FENCE OR BIO LOG	LF	875	\$ _____	\$ _____
5	INLET PROTECTION	EA	4	\$ _____	\$ _____
6	STRIP, STOCKPILE, RESPREAD TOPSOIL	LS	1	\$ _____	\$ _____
7	COMMON BORROW	CY	500	\$ _____	\$ _____
8	SITE GRADING	LS	1	\$ _____	\$ _____
9	FRENCH DRAIN W 4" DRAIN TILE	LF	272	\$ _____	\$ _____
10	CATCH BASIN	EA	2	\$ _____	\$ _____
11	8" PVC STORM SEWER	LF	40	\$ _____	\$ _____
12	TOPSOIL BORROW	CY	150	\$ _____	\$ _____
13	SEED & HYDROMULCH	SY	2700	\$ _____	\$ _____
	TOTAL PART 2 - SITE GRADING AND RESTORATION				\$ _____

No.	Item	Units	Qty	Unit Price	Total Price
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PART 3 - SITE WORK

14	4- INCH THICK CONCRETE SIDEWALK	SF	600	\$ _____	\$ _____
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TOTAL PART 3 - SITE WORK					\$ _____
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TOTAL PART 1 - REMOVALS					\$ _____
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TOTAL PART 2 - SITE GRADING AND RESTORATION					\$ _____
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TOTAL PART 3 - SITE WORK					\$ _____
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TOTAL					\$ _____
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To: City Council/Task Force From: Darren Amundsen
File: Half Moon Park Drainage Date: July 17, 2020

Reference: Drainage

The city is considering accepting a donation for a new playground at Half Moon Park. The park's greenspace currently can be wet and has limited uses. Working with parks, I put together a preliminary drainage plan for use to obtain costs for the project's site work. This plan is based on my professional experience, direct knowledge of the storm sewer system and park. The plan is not based on extensive engineering and geotechnical study. The strategy behind this approach was to help determine the remaining budget for the playground equipment.

The drainage plan is based on the following design parameters

1. Improve the usability of the park's greenspace.
2. The overland drainage patterns do not change outside of the park. Offsite runoff draining to the park still drains to the park from neighboring properties and Lafayette Rd. Drainage from the park exits to the northwest now and in the plan.
3. Drainage through the park is pushed north from the middle of the park where it flows today to the area just south of the trees.
4. A French drain (drintile in a trench with pea rock around it) is installed in the area south of the trees. This helps eventually dry this area up.
5. The drintile is connected to a new small catch basin near the northwest side of the park. This catch basin and another proposed catch basin connect to an existing storm sewer now draining the park.
6. Drainage along the south side of the park is and will be directed to the west/northwest along the existing and planned trail/sidewalk to the playground area.

Overall stormwater design considerations apply to this plan and system but have not been studied in detail.

1. Modern neighborhood storm sewer system designs are typically based on 5-year storm events. The current park and downstream storm sewer system is estimated to be designed to the 0.5 to 1-year storm event. Once a design storm event is exceeded, runoff is assumed to flow overland and the piped storm sewer is at capacity. Runoff patterns and rates are not effectively managed by pipes in large rain events. The pipes do help dry up the area once the heavy rain stops.
2. Storm events are statistically based and compare the chance of a certain amount of rain occurring in a given year. For perspective here are some numbers and rainfall durations.
 - a. 1-year storm event – 2.49 inches over 24 hours or 1.59 inches over 3 hours
 - b. 100-year storm event 7.32 inches over 24 hours or 5.29 inches over 3 hours

July 17, 2020

City Council/Task Force

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Reference: Drainage

3. 1-year storm events or larger likely would not see significant downstream changes in runoff from the park.
4. Smaller storm events may produce slightly more downstream runoff but would need study to confirm.

Should the city council see the need for detailed study on park drainage, I would be happy to discuss the scope of work and associated fees.

Stantec Consulting Services Inc.

Darren Amundsen

Principal

Phone: 651-775-5623

Darren.Amundsen@stantec.com

LAFAYETTE RD

Approx. Existing Drainage →
Modified Drainage →

4" DRAINTILE/FRENCH DRAIN, 2-3' DEEP, 2' WIDE

SILT FENCE/BIOLOG

CONSTRUCTION ENTRANCE

RELOCATED/NEW 24" DIA
CB, 2' DEEP

8" PVC STORM SEWER

NEW CB OVER EX 12" PIPE, 2.5' DEEP

approximate property line

× 941.00

940
941

NO DEEP PLAYGROUND FOUNDATIONS
IN HATCHED AREA

HALF MOON PARK

6-23-2020

