PROJECT DESCRIPTION

Organization: City of Duluth Project Name: Lincoln Park Project Scope:

The City of Duluth's restoration of Lincoln Park will focus funds on:

- Restoration of the Works Progress Administration (WPA) pavilion
- Restoration of the Upper Terrace, including a new parking lot, basketball court, nature playscape and picnic pavilion
- ADA trail connections
- Resurfacing of multi-use play field
- Relocation and construction of new structured playground, repaired picnic pavilion, new parking lot and site furnishings on Lower Terrace
- New park entrance gates and signage/wayfinding
- Repaved and stabilized (Reclaim) Lincoln Park Drive

General Project Components Described:

<u>Signage and Wayfinding</u>: Signs throughout the park to direct visitors to trails, parking, restrooms, access points. All signage and wayfinding elements will conform to a new City-approved Gate, Wayfinding, and Signage Design Plan. These new standards, having been bid and installed in other Duluth parks, provide the City with more accurate estimates on manufacturing and installation for this project.

<u>Park Entrance Gates</u>: Throughout the park, three gates total: one located at Lincoln Park Drive & W. 10th Street; one located at Lincoln Parkway & W. 7th Street, one located in the interior of the park on Lincoln Park Drive near the turnaround/bridge at approximately W. 6th Street. The purpose of the gates is to enable occasional temporary short-term closure of Lincoln Park Drive for major events, with emergency vehicle access maintained.

LOWER TERRACE IMPROVEMENTS:

<u>Structured Playground</u>: The existing playground will be removed and a new structure of approximately 4,600 SF (75' x 65') will be installed. The surface material will be poured rubber and the primary age groups this equipment will serve is 2-12 years of age, with

seven elevated and ten ground play opportunities. The playground will have accessible surface and half the elements will be fully accessible. Inclusive play elements will be added to the playground area to accommodate multi-generational play.

<u>Picnic Pavilion</u>: The existing structure will be refurbished. This pavilion is located adjacent to the new structured playground.

<u>Site Furnishings</u>: Picnic tables and chairs, trash cans and bike racks for picnic area. Benches, table, and chairs for families visiting playgrounds, bike racks, trash cans.

<u>Works Progress Administration (WPA) Pavilion Restoration</u>: This facility has been closed for over ten years and then suffered from a devastating fire more recently. The original scope has changed due to the fire. Project will now restore and upgrade the 70' x 20' pavilion and restrooms to ADA accessibility and working order. It will replace the leaking roof and be upgraded to energy efficient lighting and water saving facilities. The roof type is asphalt shingle and the siding is stone. The pavilion capacity is 25 and will serve as seasonal restrooms and event rental once restoration is complete. Final design conforms to accessibility and historic preservation standards. The restoration will meet the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.

Lower Parking Lot: New parking facility with green infrastructure for storm water management.

<u>Lincoln Park Drive</u>: Reclaim Lincoln Park Drive. This process removes the asphalt layers, grinds them and mixes with the aggregate road base. This allows some reshaping of the read bed to improve drainage and storm water management. A new asphalt wear course is then laid on top of the base.

<u>Retaining Wall Removal</u>: Wall adjacent to Lincoln Park Drive is damaged and it has been determined cost prohibitive to repair or replace. Remove retaining wall and re-grade with a 3:1 slope.

UPPER TERRACE IMPROVEMENTS:

Basketball Court: Construct one full-court, separable into two half courts on Upper Terrace.

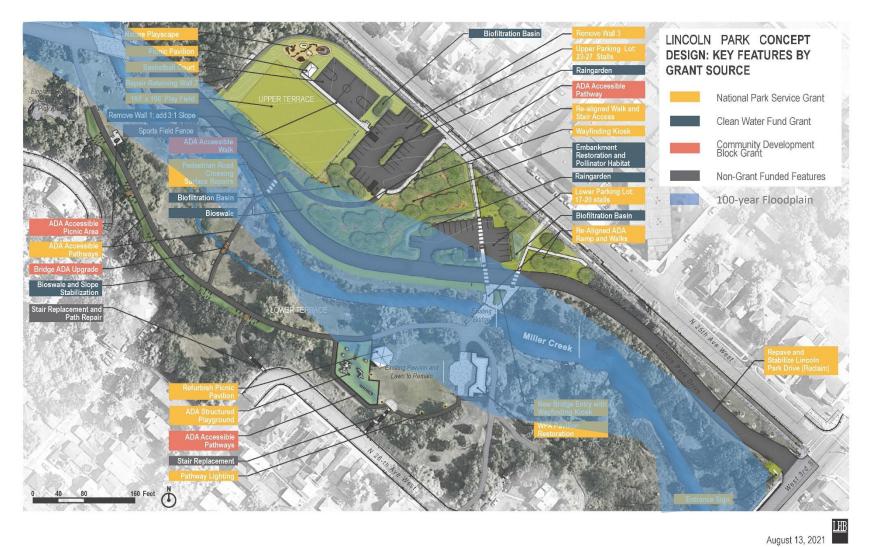
<u>Nature Playscape</u>: Create a natural play area on Upper Terrace that stimulates nature based play and appreciation, in order to form a gateway to natural areas of the park.

<u>Picnic Pavilion</u>: Construct small picnic pavilion adjacent to new natural playscape in Upper Terrace.

<u>Repair Retaining Wall</u>: Repair existing natural stone retaining wall above proposed basketball court, 25th Avenue West, play field and nature playscape not to be confused or combined with the retaining wall between the play field and Lincoln Drive.

Natural Resource Restoration: Grade and reestablish turf on Upper Terrace play field.

Parking Lot: Construct parking lot in Upper Terrace ("Upper Parking Lot" on concept plan) adjacent to active use area.



Project location in floodplain: Determine whether the Proposed Action is located in the 100- year floodplain, or whether it has the potential to affect or be affected by a floodplain.

The proposed project location is the southern portion of Lincoln Park. The proposed project included many components, some of which are located within the 100-year floodplain. The proposed project does not include any alteration of Miller Creek, nor does it impact any wetlands. Altogether, the amount of floodplain impacted is approximately 1.5 acres, however, no new buildings or other structures that are prone to flood damage are proposed, nor do any project components create or increase any flood hazards.

- 1. Project elements located within or partially within 100-year floodplain:
 - A. Refurbish existing WPA Pavilion: This historic structure is not vulnerable to flooding. It is constructed with a stone exterior and interior brick walls. It has wood ceilings and roof framing. These were not impacted in the last 100 year flood. It will be refurbished in the same footprint, and made more accessible, by enlarging door openings and remodeling the restrooms to meet ADA standards. There will be no increase or decrease in flood vulnerability with this element. This project element will not impact the floodplain.
 - B. New Playground: we are replacing the existing playground with new equipment in a different location. Current and new locations are both within the 100-year floodplain. New playground will be constructed with poured –in-place rubber fall zones with drainage system in ground. This type of recreational equipment is not typically susceptible to damage from flooding, as it is made to withstand the natural elements. This project is not anticipated to affect the floodplain.
 - C. New Lower Terrace Parking Lot: To be constructed in the location of the current playground, this parking lot will be located within the 100year floodplain. It will incorporate green infrastructure to treat and store runoff. In the event of a large flooding event, this type of infrastructure is not susceptible to significant damage.
 - D. Reclaim Lincoln Park Drive: This will include a reclaim in place of LP drive in its current location. With the reclaim process, we are able to make some improvements to drainage. This component is not anticipated to affect the floodplain other than to generally improve storm water management in the park.
 - E. Removal of Upper Terrace retaining wall: The wall adjacent to the upper terrace, along LP drive, is damaged and will be removed and replaced with a 3:1 sloped bank. This component eliminates a built asset that is susceptible to flood damage with a natural feature that promotes better drainage and better directs runoff to the desired locations.
 - F. Park Amenities: Benches, picnic tables, trash and recycling bins, signage and grills may be placed within the 100-year floodplain. These amenities will be placed on poured concrete pads or embedded in concrete. These items will be made out of durable composite materials rather than wood, making them more resilient and resistant to flood damage. Placement of these amenities will not affect the floodplain.
 - G. Trails and Lighting: Throughout the park, we are refurbishing or replacing existing foot paths with added pedestrian level lighting. These will be paved, accessible trails. Some of them will intersect with the 100-year floodplain. The lighting will be placed on

concrete footings. This infrastructure will be built in a manner that will not negatively affect the floodplain, other than adding a small amount of impervious surface.

H. Refurbish Existing Picnic Pavilion: The existing pavilion will be updated with new roofing, paint and other cosmetic improvements. This project will not affect the floodplain.

3. Evaluate alternatives:

Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain or wetland.

1. The Lower Terrace of Lincoln Park is where most of the current park assets are located, and are anticipated to be refurbished or replaced. Most of the Lower Terrace is located within the 100-year flood plan, which limits the alternatives to siting this park infrastructure.

A. WPA Pavilion: Since there is refurbishment in-place, there is no effective alternate site or action for this component.

B. Playground: The community input determined that the playground needed to be placed on the same side of Lincoln Park Drive as Miller Creek and the bathrooms (in the WPA Pavilion). The playground in its current location is entirely within the floodplain. The new proposed location only 25% of the playground area will intersect with the 100-year floodplain. Other locations were not considered, due to steep slopes, proximity to parking, restrooms and the picnic pavilion.

C. New Lower Terrace Parking Lot: This parking lot is partially within the 100-year floodplain. At one time we had considered a second parking lot on the lower terrace and it also would have intersected with the 100-year floodplain, however it has been removed from the scope. There were no other viable alternatives, as vehicle access is limited to the north side of Miller Creek, and topography cold not accommodate parking. Further, and any alternative site would have required constructing a bridge or bridges across the creek, and those sites would also be located in the floodplain.

D. LP Drive: this is a reclaim in its current location. There were no viable alternatives due to the topography.

E. Upper Terrace Retaining Wall: We considered many alternatives including refurbishing the existing wall, partial removal/partial repair. Ultimately, these options were cost prohibitive. The final decision on removal actually removes a manmade asset susceptible to damage & liability, improves connectivity between the east & west sides of the park, and also restores the area to a more natural setting.

F. Park Amenities: These items will be placed near active use areas such as the playground and pavilions. Signage is to be placed throughout the park for wayfinding and informational purposes. We will locate these outside the floodplain when possible, but in some cases there are no alternatives.

G. Trails and Lighting: This is another case where existing trails and footpaths are primarily being refurbished in-place, and much of which is located outside the floodplain, or intersections are minimal. No alternatives were considered as they do not exist.

H. Picnic Pavilion: Since there is refurbishment in-place, there is no effective alternate site or action for this component.

4. **Assess impacts:** Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands, and the potential direct and indirect support of floodplain and wetland development that could result from the Proposed Action.

This project preserves and enhances much of the historic features of the park. There are over 3000 linear feet of historic stone walls that will be preserved, two historic bridges preserved, the historic WPA pavilion will be refurbished and enhanced with historically appropriate ADA access improvements. We conducted significant cultural and historic studies and inventories. The only potential adverse impact to historic or cultural features is the removal of the upper terrace retaining wall, which was deemed beyond repair.

Overall, the impact to floodplain for this project is minimal. No new building structures are proposed for the lower terrace, other than the playground moving from one location to another, and the placement of a new parking lot where the current playground is.

Trails, Lincoln Park Drive, WPA Pavilion, Picnic Shelter and park amenities already exist and are being either replaced or refurbished in the same spaces. This scope of work will not have an adverse effect on the floodplain.

5. **Minimize impacts:** Minimize the potential adverse impacts from work within floodplains and wetlands (identified under Step 4), restore and preserve the natural and beneficial values served by wetlands.

A major component of this project is green Infrastructure improvements. Several years ago, the park experienced flooding and some improvements were made to improve storm water management, including bio swales, cutting in a new water channel for when Miller Creek overtops its banks, and streambank restoration and armoring. In this plan, we do incorporate additional bio swales, drainage improvements associated with trails, rain gardens and storm retention incorporated into the both parking facilities. Some project elements, particularly the new parking lot and retaining wall removal, will require tree removal. All trees and shrubs added as a part of this project will be native species.

6. **Practicability:** Evaluate the Proposed Action to determine: 1) if it is practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain and wetland values.

The proposed scope of work and project components are determined to have no adverse effects on the floodplain. Alternative siting of project elements is severely limited by topography, the Miller Creek channel. The proposed project maximizes the improvements to existing facilities by refurbishing them, or replacement in the same space/footprint.

The exceptions are relocating the playground, the new parking lot, and the removal of the upper Terrace retaining wall. The new playground only intersects with the floodplain by about 15% of its footprint and will have no adverse impact on it. The parking lot is designed with green infrastructure to effectively deal with storm water. The removal of the retaining wall removes a built structure from the floodplain that is prone to flood damage with a natural slope that will more effectively deal with storm water flow.

Altogether, with the findings herein, the proposed plan and scope of work for Lincoln Park is deemed appropriate and practical.