



Chapter 7

IMPLEMENTATION

INTRODUCTION

This master plan document has outlined a long-term vision for future restoration, features, improvements, and facilities. This vision will not be completed overnight, and will only be accomplished through the collaboration and coordination of many people and agencies. Funding, operations, maintenance, programming, and continued community engagement are all vital components of implementing the plan.

PARTNER ENGAGEMENT, CONFLICT RESOLUTION, PUBLIC SERVICES

This plan was created through a joint effort between the MPRB, the MCWD, and relevant departments at the City of Minneapolis. Implementation will need to occur with continued collaboration with all relevant agencies. As the owner and operator of MPRT, MPRB will take a lead in coordination efforts. Projects that involve direct impact of the Creek and stormwater, daylighting of new waterways, changes to permeable surfaces, and addition of creek access points will require coordination with MCWD. As MCWD identifies projects and priorities for projects that fall within the study area, initiation of coordination may begin with their agency. Where implementation involves re-alignment of local roadways, curb and gutter improvements, signage and wayfinding installation, and stormwater outlet improvements, the City of Minneapolis will serve as a collaborator or project lead. Projects involving county roadways, or transit service will require coordination with Hennepin County, MetroTransit, adjacent municipalities, and/or the Metropolitan Council.



MPRB, MCWD, and City of Minneapolis staff collaborated together with the consultant team to develop the MPRT Master Plan Concepts, November 2018

CONTINUED ENGAGEMENT AND PUBLIC AWARENESS

As MPRB implements projects as funding becomes available, neighborhood organizations and identified stakeholder groups will be engaged by the MPRB to complete the next level of design development or construction. The Vision and the Guiding Principles noted in Chapter 5 serve as a guide for this continued community engagement effort. Projects and general outcomes are identified in this master plan that demonstrate these ideas. As conditions change over the years, some items that seemed like a priority during the master planning process may be replaced by more immediate needs to address, and further detail will need to be determined for implementation of any of the projects identified.

Community engagement will continue to follow the equity standards set forth by MPRB in the Community Engagement Policy, which embeds the use of a racial equity toolkit into the community engagement plan required for every project. Approaches may involve convening neighborhood focus groups or committees, hosting pop-up or open houses, or gathering feedback through online engagement.

Today, public awareness of existing facilities and services is communicated through the MPRB website, posted on MPRB kiosks along Minnehaha Parkway and throughout the Grand Rounds, and through gateway and trail signage. Programs are communicated through similar methods. Future implementation of wayfinding improvements as planned for the Western Creek District and for new activity areas will be designed further with community/neighborhood input and in coordination with the City of Minneapolis and local affected agencies. Collaboration with MetroTransit will continue to occur to raise awareness along bus routes that intersect Minnehaha Parkway.

CONTINUED PROJECT EVALUATION

MPRB, MCWD, and the City of Minneapolis are committed to continued collaboration to implement this plan and projects contained within the plan. Understanding that priorities, funding sources, and opportunities shift to respond to current conditions, it is important to revisit project priorities and plan elements at regular intervals to maintain plan relevance. Representatives and project managers with MPRB, MCWD, and the City of Minneapolis will convene annually (or bi-annually if it is deemed necessary) to review progress and project priorities and continue to identify ways to work together to accomplish plan goals.

STEWARDSHIP PLAN

The MPRB and MCWD will continue to serve as partner agencies to manage the Creek Corridor. Trail, facility, and grounds maintenance will continue to be the responsibility of MPRB, through the direction and operation of the MPRB Environmental Stewardship Division.

Today, there are active neighborhood groups, bicycle and pedestrian advocacy groups, and natural resource stewards that are working to advance their special interests along the Creek Corridor. MPRB is committed to working alongside these groups to promote volunteerism, outreach, and support equitable access to the resources provided through the Regional Trail Corridor, where these interests are in alignment with the vision and guiding principles outlined in Chapter 5.







Experience the Creek participants collect creek samples for water monitoring (October, 2018)

PROJECTS + PRIORITIZATION

The following pages outline identified projects and associated project themes, priorities, project types, related projects and associated costs. The projects are keyed to the master plan segment and focus area concepts presented in Chapter 5.

THEMES

Early on in the planning process, four themes emerged that have been woven into the master plan and implementation plan. These themes are:

-  CONNECTIVITY
-  RECREATION AND ACTIVITIES
-  NATURAL RESOURCES
-  CULTURAL AND HISTORICAL RESOURCES

Each project listed in the tables in the following pages include identification of themes addressed. As funding or collaboration opportunities arise in the future, these themes will provide guidance on how to balance efforts.

RELATED PROJECTS

Where possible, related projects within the Minnehaha Parkway Regional Trail Master Plan have been identified that could be implemented at similar times because they are either close in location, or require similar planning or community engagement efforts.

PROJECT TYPE

Projects have been categorized to indicate level of anticipated collaboration across agencies, as well as to indicate projects that fall within typical maintenance/operations activities at MPRB. The following is a description of each project type, with general characteristics assigned. Project types, along with priorities, will be revisited regularly as part of continued project evaluation.

STAND ALONE

- » Projects that can be completed immediately, or as funding becomes available
- » Projects that don't depend on other projects to be completed first (can be completed anytime)
- » Projects that are primarily MPRB managed and led projects
- » Projects that (generally) require less capital funding to complete
- » These projects may or may not be identified as going beyond Inform level (Spectrum of Public Engagement, IAP2) of engagement

COMPLEX

- » Projects that depend on other projects to be completed first
- » Projects that are larger in scope that will require more significant funding
- » Projects that require further design exploration and likely community engagement beyond Inform level (Spectrum of Public Engagement, IAP2) to determine full scope/design parameters

COLLABORATIVE

- » Projects that are known today to require (or will benefit from) cross-agency collaboration in order to complete; examples include stormwater/BMP projects or projects that involve roadway changes
- » Projects that are larger in scope, possibly requiring multiple funding sources
- » Projects that require further design exploration and likely community engagement beyond Inform level (Spectrum of Public Engagement, IAP2) to determine full scope/design parameters

GENERAL PROJECTS

General Projects that have not been specifically identified in the tables and maps. These projects fall under general maintenance of amenities and facilities along the Creek. Items have been listed separately that will likely pertain to each segment or focus area.

PRIORITY PROJECTS

Priority projects have been identified by MPRB, City of Minneapolis, and MCWD. These projects were identified through a collaborative and iterative process, as each agency identified their specific priority projects based on goals unique to their mission. Likely, projects that are identified across agencies as common priorities are primed for agency collaboration for implementation. The following describes the priorities set forth by each agency, which has guided the identification of priority projects throughout the Minnehaha Creek corridor.

MPRB PRIORITIES

- MPRB priority projects have been identified as those that:
- » Are strongly supported and identified as priorities by the Community Advisory Committee
 - » Address immediate safety or infrastructure needs as identified through the planning process
 - » Address repair of degraded trails throughout the corridor
 - » Address specific activities that have been identified through project or system-wide community engagement as important recreational options

CITY OF MINNEAPOLIS PRIORITIES

- The City of Minneapolis' goals for this effort are infrastructure projects that serve to:
- » Rehabilitate or replace aging stormwater assets
 - » Mitigate localized flooding in upland drainage areas
 - » Protect and improve water quality in receiving waters

MCWD PRIORITIES

MCWD's approach to water resource planning recognizes the environmental, social, and economic value created when the built and natural systems work in harmony. To help guide and focus this approach MCWD has established four strategic goals: water quality, water quantity, ecological integrity, and thriving communities. Understanding these goals and the current water resource issues and drivers for Minnehaha Creek, MCWD's management strategies for the creek focus on stormwater management to reduce runoff volume and pollutant loading, stream restoration to stabilize streambanks and improve riparian buffers and habitat, and the restoration of wetlands and ecological

corridors in ways that reduce nutrient loading to downstream Lake Hiawatha, while improving the ecological integrity and corridor connectivity with the subwatershed.

Applying these management strategies to the projects within this master plan, MCWD has considered how the water resource projects within the master plan could be prioritized. As the first step in its prioritization exercise MCWD identified which projects have the potential to achieve the greatest natural resource benefit. This was done by determining which projects could achieve stacked natural resource benefits (able to achieve water quality, water quantity, and ecological integrity improvements). The second step in this prioritization involved identifying the dependency of a project as it related to other master plan infrastructure projects. For example, projects were identified as either having a critical infrastructure dependency (e.g. requires bridge construction/replacement to happen first) or a proximity infrastructure dependency (e.g. trail relocation).

COSTS

Costs are based on previous cost estimates and recent, similar project work performed locally. Linear foot costs have been used to determine rough cost estimates for trail construction and creek remeander projects. Costs per square foot or acre have been used to approximate creek restoration projects. 'Soft costs' have been included in the totals, with architecture/engineering/design costs factored at 30% of the estimated construction costs and a construction contingency of 20% of the estimated construction costs added.

Roadway or intersection re-alignment project costs include full utility replacements, sidewalk replacements, and full street reconstruction. These costs do not include property acquisition, small utility relocations, street lighting or signalization (unless specified in the project extents).

Costs shown are intended to serve as a baseline for project planning and reflect generalities based on known information as of Spring 2020. Nearly all projects will require further design, engineering, or study, and all projects are subject to MPRB standard bidding procedures. Total costs for all projects is estimated to be approximately \$1.8M.

The Lynnhurst Focus Area notes where costs have been transferred directly from the recently completed draft Southwest Service Area Master Plan (SWSAMP) cost estimate, to provide consistency between the two projects. These costs also include soft costs such as construction contingencies and design or engineering fees.

SEGMENT 1 PROJECTS

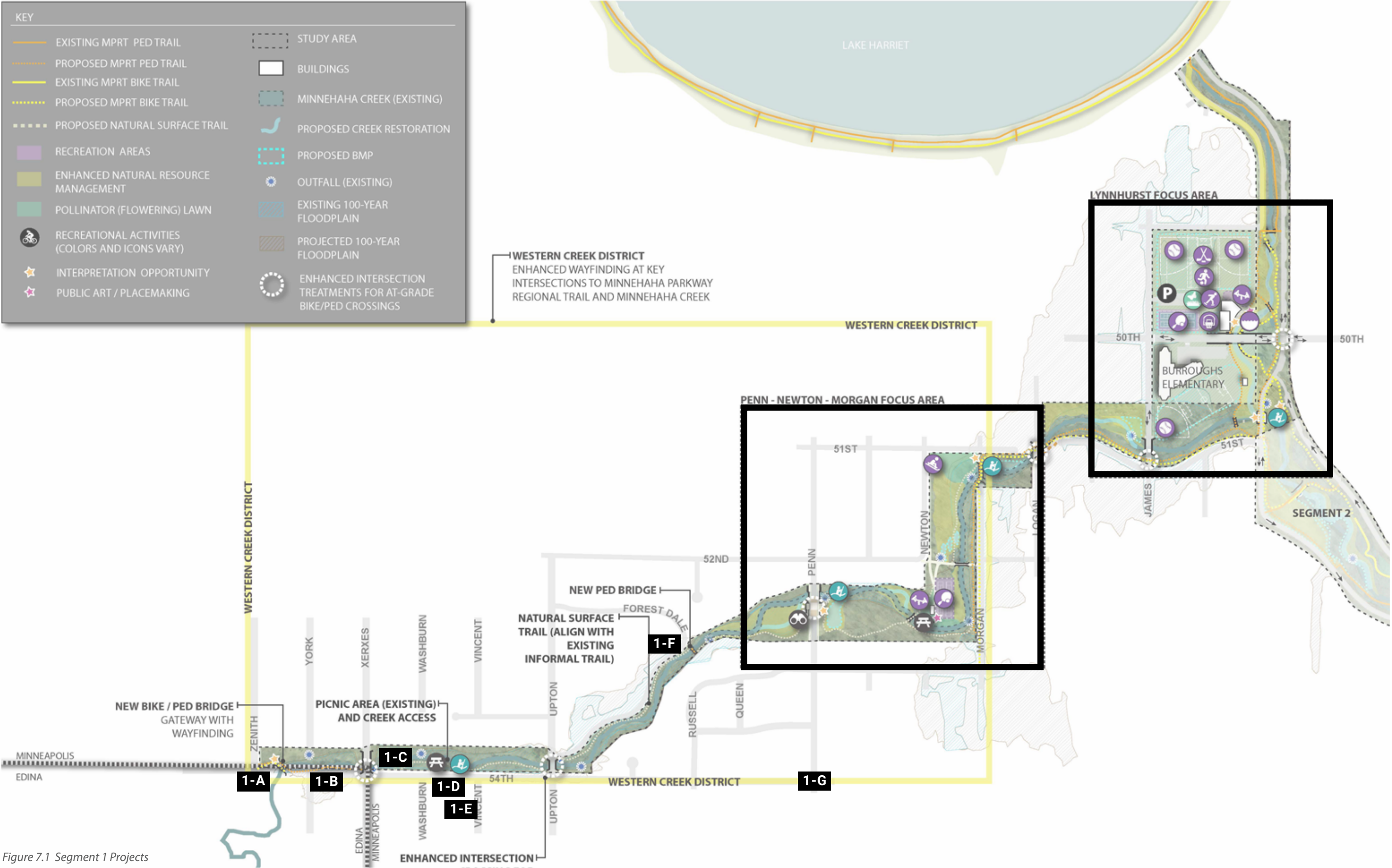


Figure 7.1 Segment 1 Projects















TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCW	CITY OF MPLS	
1-A	Bike/Ped Bridge at Zenith	Bike/Ped bridge over Creek, approx. 100' in length, including wayfinding/interpretation	Collaborative (City of Edina)	1-B								\$375,000
1-B	Ped Trail at Zenith	Pedestrian trail connection from Zenith Ave (Edina) to Xerxes Ave (Mpls), approx. 600' in length, including wayfinding	Complex	1-A								\$102,000
1-C	Natural Surface Trail Xerxes to Penn	Natural surface trail from Xerxes to Upton, Upton to Forest Dale (approx. 3,000LF total) across new pedestrian bridge, Russel to Penn	Complex	1-F, Creek restoration west of Penn, Intersection Treatments at Xerxes and Upton					X			\$22,500
1-D	Picnic area at Washburn/Vincent	Picnic table(s), trash receptacles	Stand Alone	1-E								\$30,000
1-E	Creek Access at Washburn/Vincent	Walk-in creek access; low-impact/natural design	Stand Alone	1-D								\$20,000
1-F	Pedestrian bridge at Forest Dale/Russel	Ped bridge over Creek, approx. 80' in length	Complex	1-C								\$405,000
1-G	Creek District Wayfinding	Wayfinding plan, design, and installation throughout Western Creek District to direct pedestrians and bicyclists to Minnehaha Creek and nearby destinations	Collaborative	All projects in Segment 1								\$150,000
SEGMENT 1 TOTAL												\$1,104,500

Table 7.1 Segment 1 Projects

SEGMENT 1

GENERAL PROJECTS

- » Outfall repairs (especially addressing overland spillways/concrete flumes), in coordination with City of Minneapolis outfall repair schedule
- » Intersection Treatments (likely to be completed in coordination with adjacent trail installation or repair projects)
- » Native plant community restoration and transition areas for pollinator lawns
- » Trail repair or maintenance of existing facilities throughout



Existing Grand Rounds Signage could be expanded for Western Creek District wayfinding

PENN-NEWTON-MORGAN FOCUS AREA PROJECTS

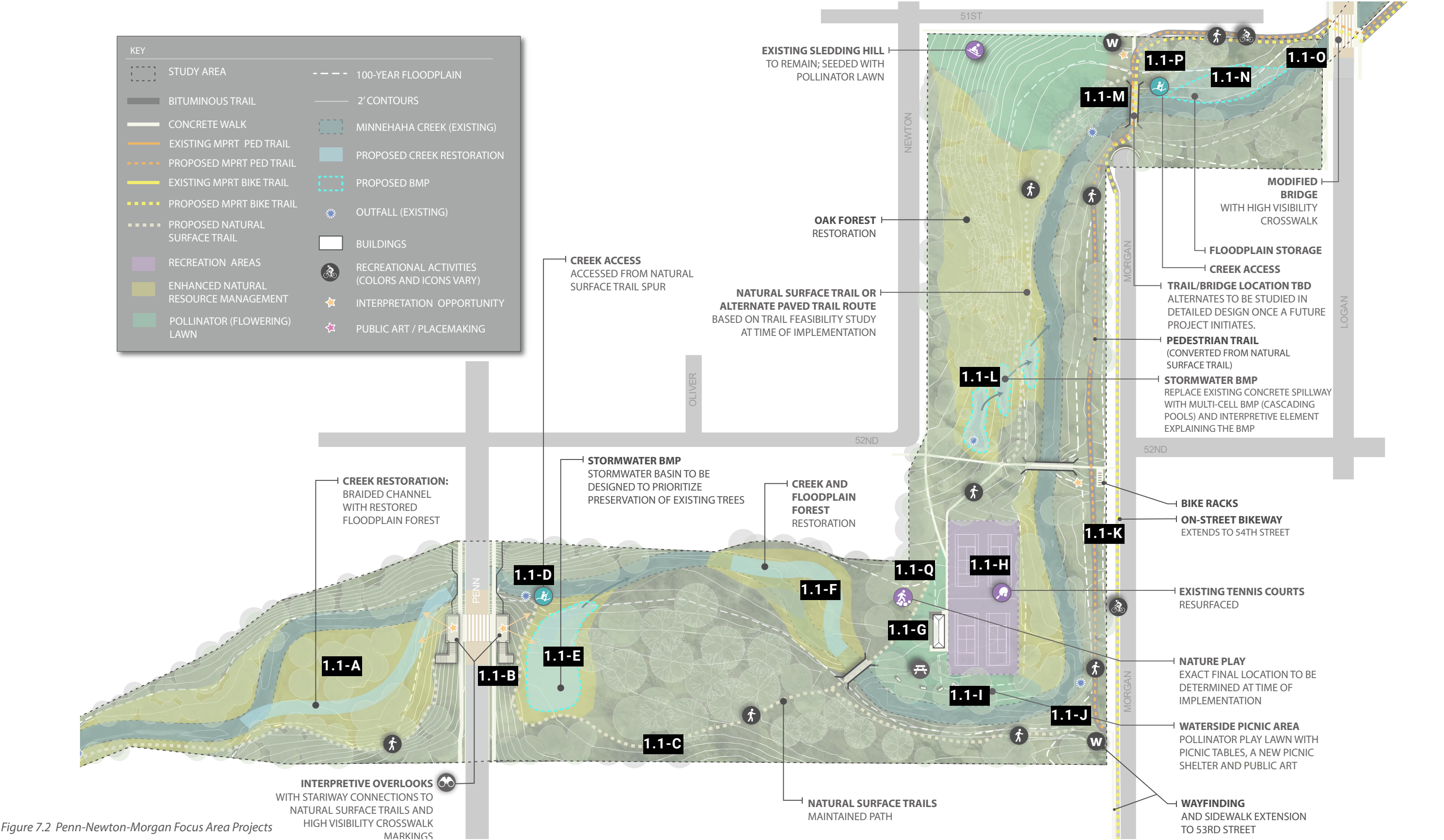


Figure 7.2 Penn-Newton-Morgan Focus Area Projects

TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
1.1-A	Creek Restoration West of Penn	Creek remeander (400LF) with braided channel and floodplain forest restoration (1.72acres)	Collaborative	1.1-C						X		\$437,400
1.1-B	Interpretive Overlooks at Penn	Interpretive overlooks with stairway connections down to trails, including high visibility crosswalk markings	Complex	1-C, 1.1-C								\$225,000
1.1-C	Natural Surface Trail Penn to Morgan	Natural surface trail (1500 LF) from Penn Ave east to tennis courts and to Morgan Ave.	Stand Alone	1,1-A, 1.1-B								\$15,000
1.1-D	Creek Access at Penn	Walk-in creek access; low-impact/natural design	Stand Alone	1.1-C					X	X	X	\$15,000
1.1-E	Stormwater BMP East of Penn	Stormwater BMP: Stormwater basin approx. 0.33 acres with moved outlet	Collaborative	1.1-D, 1.1-C								\$180,000
1.1-F	Creek Restoration West of Newton	Creek remeander (275LF) with floodplain forest restoration (23,700SF)	Collaborative	1.1-E								\$272,300
1.1-G	Picnic Shelter	Picnic shelter at tennis court, including pedestrian walk access to existing 52nd Street bridge	Stand Alone	1.1-H, 1.1-I								\$328,800
1.1-H	Morgan Ave Tennis Court Renovation	Renovation of tennis courts at Morgan Avenue	Stand Alone	1.1-G								\$300,000
1.1-I	Waterside Picnic Area	Picnic tables and/or lounge seating along waters edge, including interpretive art and pollinator play lawn	Stand Alone	1.1-G, 1.1-H								\$61,500
1.1-J	Wayfinding and Sidewalk Extension at Morgan Ave	Wayfinding at south terminus of new pedestrian trail and sidewalk extension from new trail south to 53rd Street.	Complex	1.1-K, 1.1-M								\$30,000

Table 7.2 Penn-Newton-Morgan Focus Area Projects

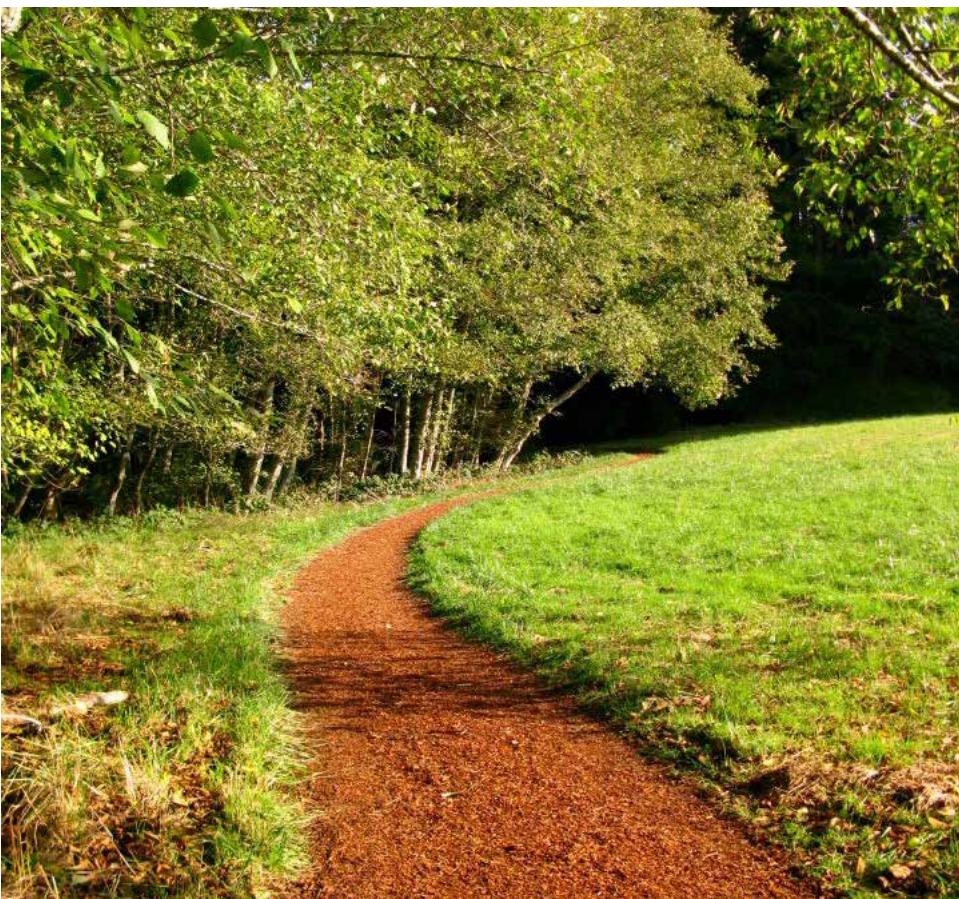
TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
1.1-K	Bike and Ped Trail Extension from Logan	Extents to be determined with further design; pedestrian and trail connection from southeast corner of park boundaries on Morgan Ave to Logan Avenue trail crossing. Includes bike racks, interpretation at 52nd Street Creek bridge.	Complex	1.1-M								\$150,000
1.1-L	Stormwater Treatment at 52nd Street Outfall (to replace concrete flume)	Replace existing concrete spillway with multi-cell BMP (10,000SF) and associated interpretation	Collaborative							X	X	\$366,000
1.1-M	Bike/Ped Bridge at Morgan Ave	Extents/project to be defined with further design and community engagement. Bike Ped Bridge crossing of Creek at Morgan Avenue, includes wayfinding, interpretation	Complex	1.1-K., 1.1-P								\$450,000
1.1-N	Floodplain storage at Morgan/Logan	Floodplain storage at Morgan and Logan Ave on north side of creek (7,000SF)	Complex	1.1-K, 1.1-M								\$85,000
1.1-O	Bridge Reconstruction at Logan Ave	Reconstruction of Logan Avenue Bridge for enhanced pedestrian and bicycle trail crossing	Collaborative	1.1-K								\$5,600,000
1.1-P	Creek Access at Morgan	Walk-in creek access; low-impact/natural design	Stand Alone	1.1-M, 1.1-K								\$20,000
1.1-Q	Penn-Newton-Morgan Play Area	Nature-based play area	Stand Alone									\$800,000
PENN-NEWTON-MORGAN FOCUS AREA 1.1 TOTAL												\$8,735,600

Table 7.2 (continued) Penn-Newton-Morgan Focus Area Projects

PENN-NEWTON-MORGAN FOCUS AREA

GENERAL PROJECTS

- » Outfall Repair
- » Intersection Treatments (where treatments don't directly influence another project)
- » Native plant community restoration and transition areas for pollinator lawns
- » Trail repair or maintenance of existing facilities to remain as-is



Precedent examples of proposed features in the Penn-Newton-Morgan Focus Area

LYNNHURST FOCUS AREA PROJECTS

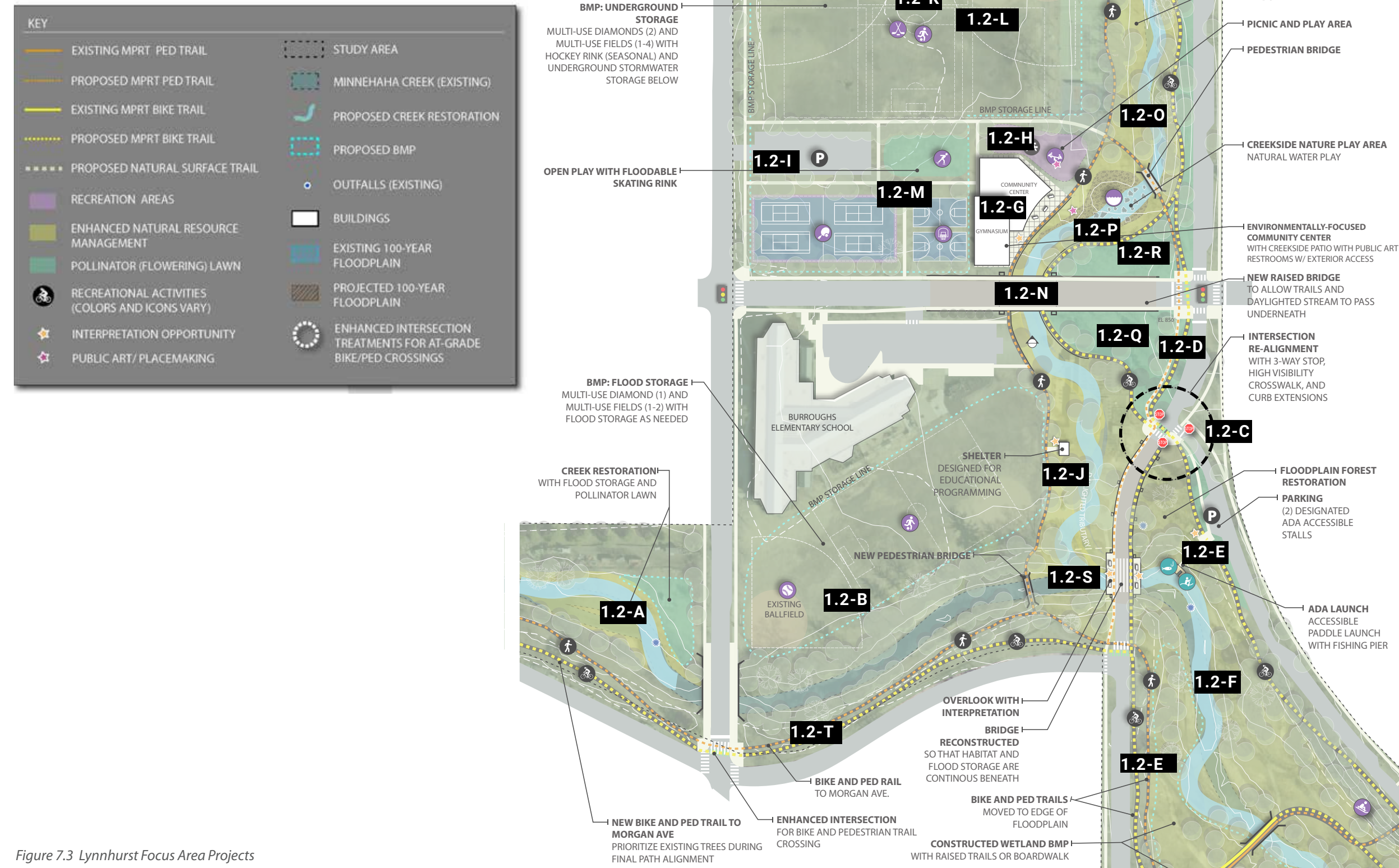


Figure 7.3 Lynnhurst Focus Area Projects

TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			
									MPRB	MCWD	CITY OF MPLS	EST. COST
1.2-A	Creek Restoration West of James Ave	Remeander of Creek (450LF) - with integrated flood storage/pollinator lawn/restoration area (1.4acres) west of James Ave.	Collaborative	1.2-T						X	X	\$670,000
1.2-B	Flood Storage at Burroughs	Flood storage (type TBD, 2.6acres) in field south of Burroughs Elementary with multi-use diamond, multi-use fields	Collaborative									\$8,200,000
1.2-C	Re-design of Minnehaha Parkway & Minnehaha Parkway	Realignment of Minnehaha Parkway and Minnehaha Parkway, including high visibility crosswalks, curb extensions and 3-way stop.	Collaborative	1.2-D								\$495,000
1.2-D	Bike and Ped Trail Realignments at Lynnhurst	Bike and ped trail realignments (5700 LF) including connection to bike/ped bridge at Humboldt, bike and ped trail and sidewalk connections at 50th Street, bike trail and bike bridge north of 50th Street, ped connection east of Burrough's Elementary and new pedestrian bridge. Includes renovated walking paths per SWSAMP.	Complex	1.2-F, 1.2-J								\$1,900,000
1.2-E	ADA Creek Access + Fishing Pier	ADA kayak/canoe Launch and fishing pier, accessible path to launch and ADA parking stalls, including interpretation	Stand Alone	1.2-F								\$375,000
1.2-F	Creek Restoration South of ADA Launch	Streambank and wetland restoration (4.5acre), along with creek remeander (650 LF) south of ADA launch to Humboldt/Girard (the Flats). Potential for boardwalk construction to maintain path connections through area.	Collaborative	1.2-D, 1.2-E								\$1,088,000
1.2-G	Community Center at Lynnhurst	Construction of a new environmentally-focused community/recreation center with gymnasium, creekside patio with public art and exterior-accessed restrooms. Includes removal of existing rec center. Cost includes \$5,218,460 as shown in estimate for SWSAMP, plus additional costs for gymnasium.	Collaborative	1.2-H,1.2-M, 1.2-O, 1,2-P								\$10,000,000
1.2-H	Traditional Play in New Containers with Public Art	Traditional play area; cost transferred directly from SWSAMP estimate.	Complex	1.2-G								\$867,320
1.2-I	Parking Lot	Construction of new parking lot, to be accessed from James Avenue; cost transferred directly from SWSAMP estimate.	Complex	1.2-G								\$734,671
1.2-J	Education Shelter at Burroughs	Open-air shelter designed for educational programming along the daylighted tributary, including interpretation	Collaborative	1.2-D, 1.2-E, 1.2-O								\$375,000
1.2-K	Underground Flood Storage	Underground flood storage (6 acres)	Collaborative	1.2-G, 1.2-L								\$18,800,000
1.2-L	Athletic Field Renovations	Athletic Field Renovation including (2) multi-use diamonds and multi-use fields with seasonal hockey rink; cost transferred directly from SWSAMP estimate.	Complex	1.2-K								\$1,928,511
1.2-M	Courts and Open Playfield/Skating Rink at Lynnhurst	Tennis courts, basketball courts and open playfield (to be floodable skating rink in winter), along with sidewalk connections (1600LF) from James Avenue to the new community center. Costs include SWSAMP estimates for Basketball Court (\$265,298) and Tennis Courts (\$530,596).	Complex	1.2-G, 1.2-K, 1.2-L,								\$940,000
1.2-N	Bridge at 50th Street	Construction of 50th Street bridge with clearance for trails and daylighted tributary below. Includes trail connections under bridge (900 LF).	Collaborative	1.2-O								\$5,672,000

Table 7.3 Lynnhurst Focus Area Projects

LYNNHURST FOCUS AREA PROJECTS
(CONTINUED)
















TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
1.2-O	Daylighted Tributary from Lake Harriet	Daylighted Tributary (1500 LF) and associated streambank restoration (4acres) between 49th Street and the new ADA Creek Access. Project scope will include naming of the Tributary, preferably with collaboration with Native communities.	Collaborative	1.2-E, 1.2-N, 1.2-P, 1.2-S,							X	\$900,000
1.2-P	Creekside Nature Play Area	Construction of Creekside Nature Play Area with natural features for water access (boulders, wading, etc.); cost transferred directly from SWSAMP estimate.	Complex	1.2-G, 1.2-O								\$714,263
1.2-Q	Naturalized Areas	Naturalized areas including pollinator lawn and enhanced natural resource management; cost transferred directly from SWSAMP estimate.	Stand Alone									\$32,854
1.2-R	Misc. Signs, Trees, Furniture	Installation of miscellaneous signs, trees, furniture; cost transferred directly from SWSAMP estimate.	Stand Alone	1-G								\$95,244
1.2-S	Bridge Reconstruction North of 51st Street	Reconstruction of bridge along Minnehaha Parkway north of 51st Street to be raised above restored floodplain for wildlife habitat continuity. Includes integrated overlook areas with interpretation and high visibility crosswalk at overlook.	Collaborative	1.2-F, 1.2-O								\$5,875,000
1.2-T	Bike and Ped Trail Extensions on 51st St	Separate bike and ped trails (2,400 LF) on north side of 51st Street west Minnehaha Parkway to Logan Avenue	Stand Alone	1.2-A, 1.2-D, Intersection Treatment at James and 51st Street								\$288,000
LYNNHURST FOCUS AREA 1.2 TOTAL												\$59,950,863

Table 7.3 (continued) Lynnhurst Focus Area Projects

LYNNHURST FOCUS AREA

GENERAL PROJECTS

- » Outfall Repair
- » Intersection Treatments (where treatments don't directly influence another project)
- » Native plant community restoration and transition areas for pollinator lawns
- » Trail repair or maintenance of existing facilities to remain as-is



Precedent examples of potential projects in the Lynnhurst Focus Area

SEGMENT 2 PROJECTS

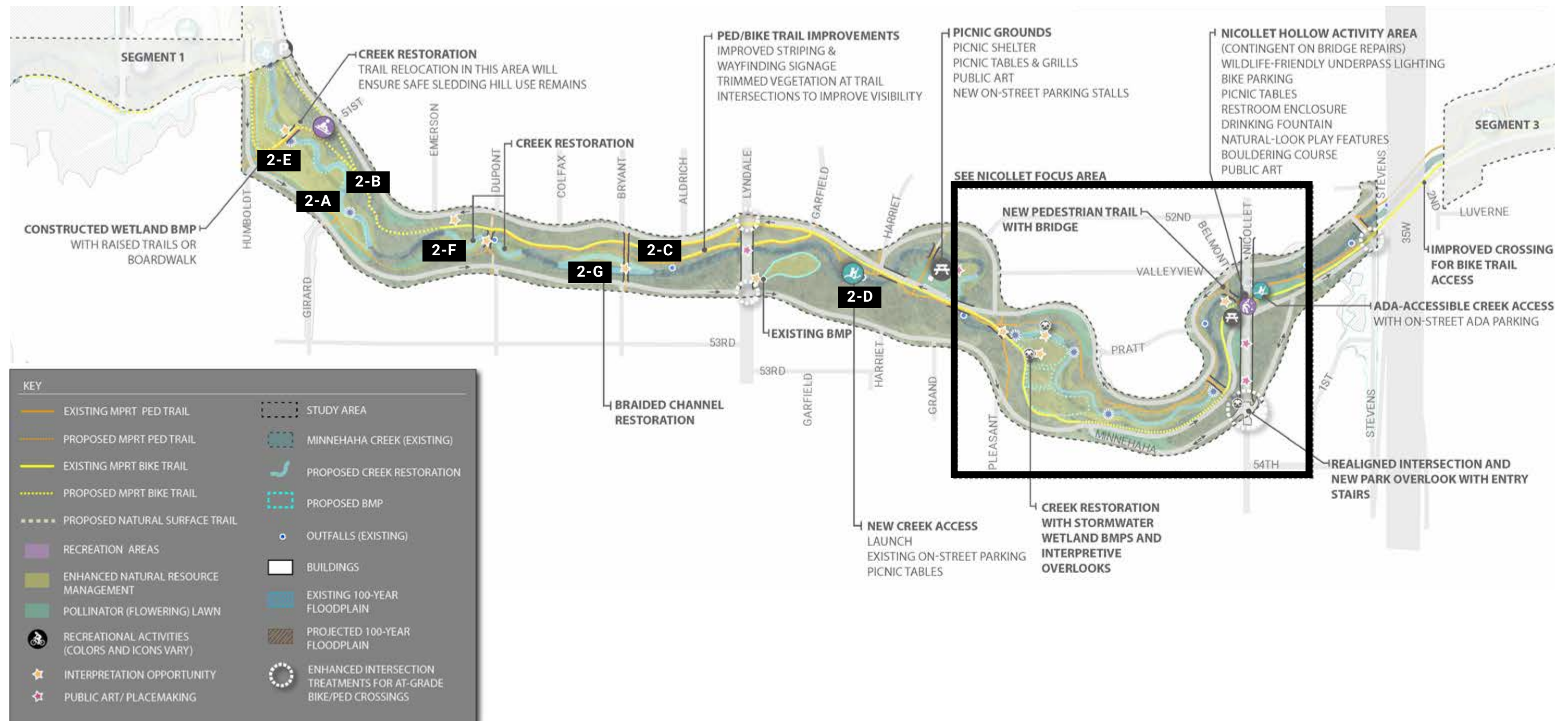


Figure 7.4 Segment 2 Projects



















TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
2-A	Pedestrian Trail from Humboldt to Dupont, South of Creek	Re-alignment of pedestrian trail (1,100LF) west of Dupont Ave bridge, including adjacent pollinator play lawn, (58,800SF/1.4ac) to provide room for future creek restoration	Stand Alone	2-E								\$176,000
2-B	Bike Trail from 51st Street to Emerson, North of Creek	Re-alignment of bike trail (1,400LF) north of Creek between 51st Street and Emerson, to provide room for future creek restoration	Stand Alone	2-E								\$168,000
2-C	Bike and Ped Trail Connections at Bryant and Aldridge	Bike and Ped trail connections at Bryant and Aldrich to provide room for future creek restoration	Stand Alone	2-G								\$132,600
2-D	Creek Access at Harriet	New creek access (launch) on north side of Creek between Harriet Ave and Garfield Ave. Includes picnic table(s).	Stand Alone									\$98,000
2-E	Creek Restoration at Humboldt/Girard (The Flats)	Creek remeander (1,400LF) and associated restoration (5.5ac) in the area known as the Flats (Humboldt Ave to Girard). Includes interpretive elements.	Collaborative	2-A, 2-B					X		X	\$1,400,000
2-F	Creek Restoration at Dupont	Remeander (420LF) and restoration (1.1ac) at Dupont Ave Bridge, including interpretation.	Collaborative	2-A								\$457,500
2-G	Creek Restoration at Bryant	Remeander (470LF) and restoration (0.81ac) at Bryant Ave (braided channel restoration). Includes interpretation.	Collaborative	2-C								\$490,000
SEGMENT 2 TOTAL												\$2,922,100

Table 7.4 Segment 2 Projects

SEGMENT 2

GENERAL PROJECTS

- » Outfall Repair
- » Intersection Treatments (where treatments don’t directly influence another project)
- » Native plant community restoration and transition areas for pollinator lawns
- » Trail repair or maintenance of existing facilities to remain as-is

NICOLLET FOCUS AREA PROJECTS

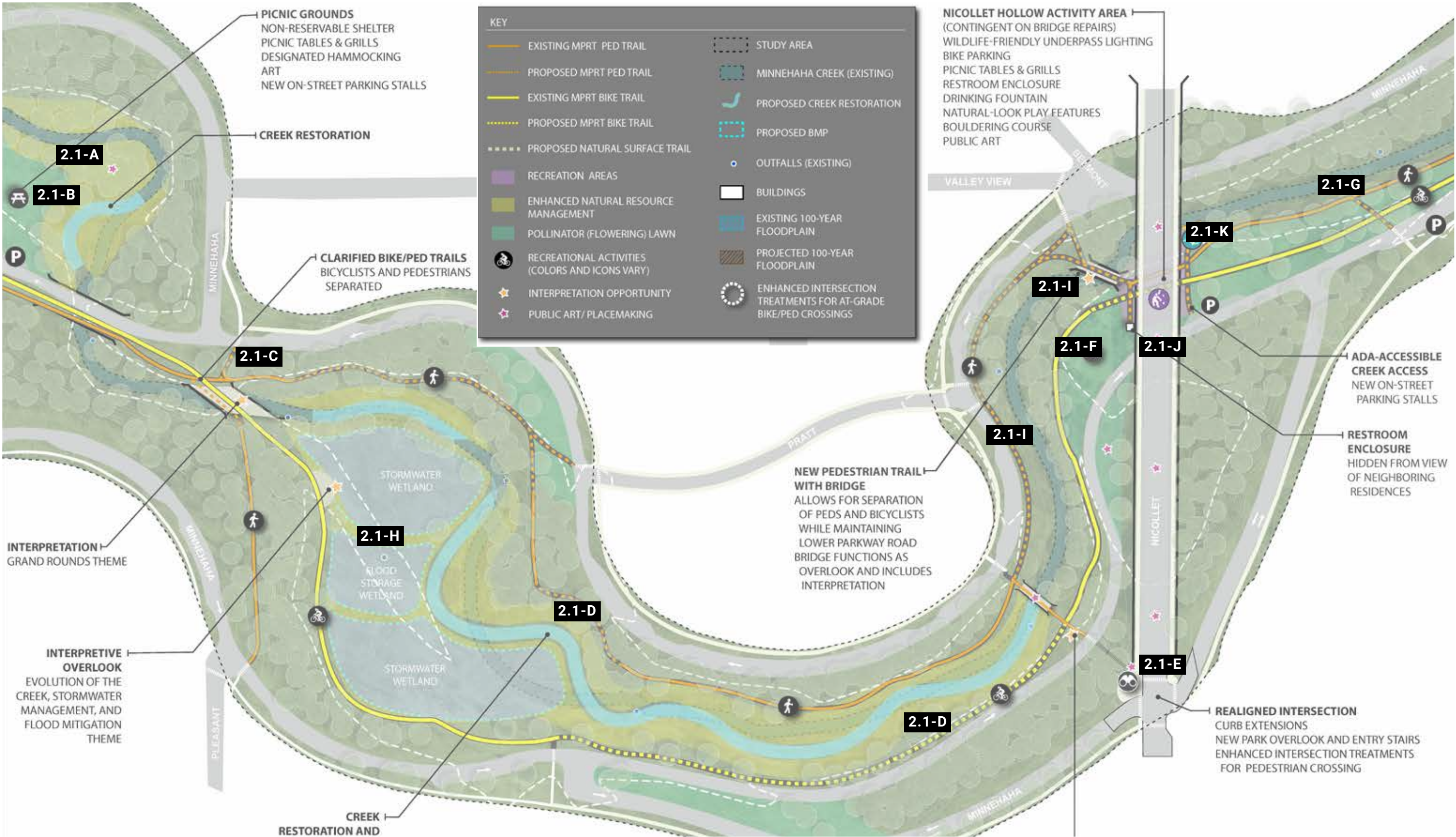


Figure 7.5 Nicollet Focus Area Projects

TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
2.1-A	Creek Restoration Near Valleyview Drive	Restoration (1 acre) and remeander (175LF) of Creek west of Valleyview Drive	Collaborative	2.1-B								\$202,500
2.1-B	Picnic Area near Valleyview Drive	Picnic area including new shelter, on-street parking and public art/interpretation	Stand Alone	2.1-A								\$525,000
2.1-C	Pedestrian Trail Connections at Pleasant Ave	Pedestrian trail connections north of creek to bridge at Pleasant Ave (50LF total) and pedestrian trail markings across bridge. Includes interpretive element at bridge.	Stand Alone									\$66,000
2.1-D	Bike and Ped Trail Realignments West of Nicollet Ave	Re-alignment of pedestrian trails north of Creek and bike trail south of creek to provide room for future restoration area, west of Nicollet Ave to Pleasant Ave. bridge (1500LF total). Includes interpretation and overlook near Pleasant.	Stand Alone	2.1-H, 2.1-I								\$270,000
2.1-E	Intersection Treatment at Nicollet Ave	Re-alignment of roadway intersection at Nicollet Ave for improved sight lines. Includes overlook, stair connection and public art, and any pedestrian crossing treatments.	Collaborative									\$1,118,000
2.1-F	Picnic Area at Lower Parkway Road	Picnic area at Lower Parkway Road, west of Nicollet Ave Bridge, includes picnic area on west side of roadway, drinking fountain, pollinator play lawns on both sides of bridge, and public art	Stand Alone									\$192,000
2.1-G	Pedestrian Connection East of Nicollet Ave	Pedestrian connection and pedestrian crossing at Minnehaha Parkway east of Nicollet Ave	Stand Alone									\$39,000
2.1-H	Creek Restoration, Remeander and Constructed Wetlands, Nicollet Hollow	Creek restoration (4.5acres) and remeander (1500LF) in Nicollet Hollow, including all associated streambank and wetland restoration and constructed wetlands. Includes interpretation.	Collaborative	2.1-D					X	X		\$1,598,000
2.1-I	Pedestrian Trail and Bridge West of Nicollet Ave	Construction of new separated pedestrian trail north of the creek from existing pedestrian bridge at Nicollet to Belmont. Includes new bridge crossing with interpretation at Belmont.	Complex	2.1-D					X			\$507,000
2.1-J	Nicollet Ave Bridge Renovation	Repair/renovation of Nicollet Ave Bridge, including integrated public art elements	Complex	2.1-K								TBD
2.1-K	Nicollet Hollow Activity Area	Construction and installation of activity area features, such as ADA accessible creek access, on-street ADA parking, restroom enclosure, bouldering course, natural-themed play features, public art and associated ped and bike trail connections under the Nicollet Ave Bridge.	Complex	2.1-J					X			\$758,000
NICOLLET FOCUS AREA TOTAL												\$5,275,500

Table 7.5 Nicollet Focus Area Projects

NICOLLET FOCUS AREA

GENERAL PROJECTS

- Outfall Repair
- Intersection Treatments (where treatments don't directly influence another project)
- Native plant community restoration and transition areas for pollinator lawns
- Trail repair or maintenance of existing facilities to remain as-is



Precedent examples of features in the Nicollet Focus Area Master Plan



SEGMENT 3 PROJECTS

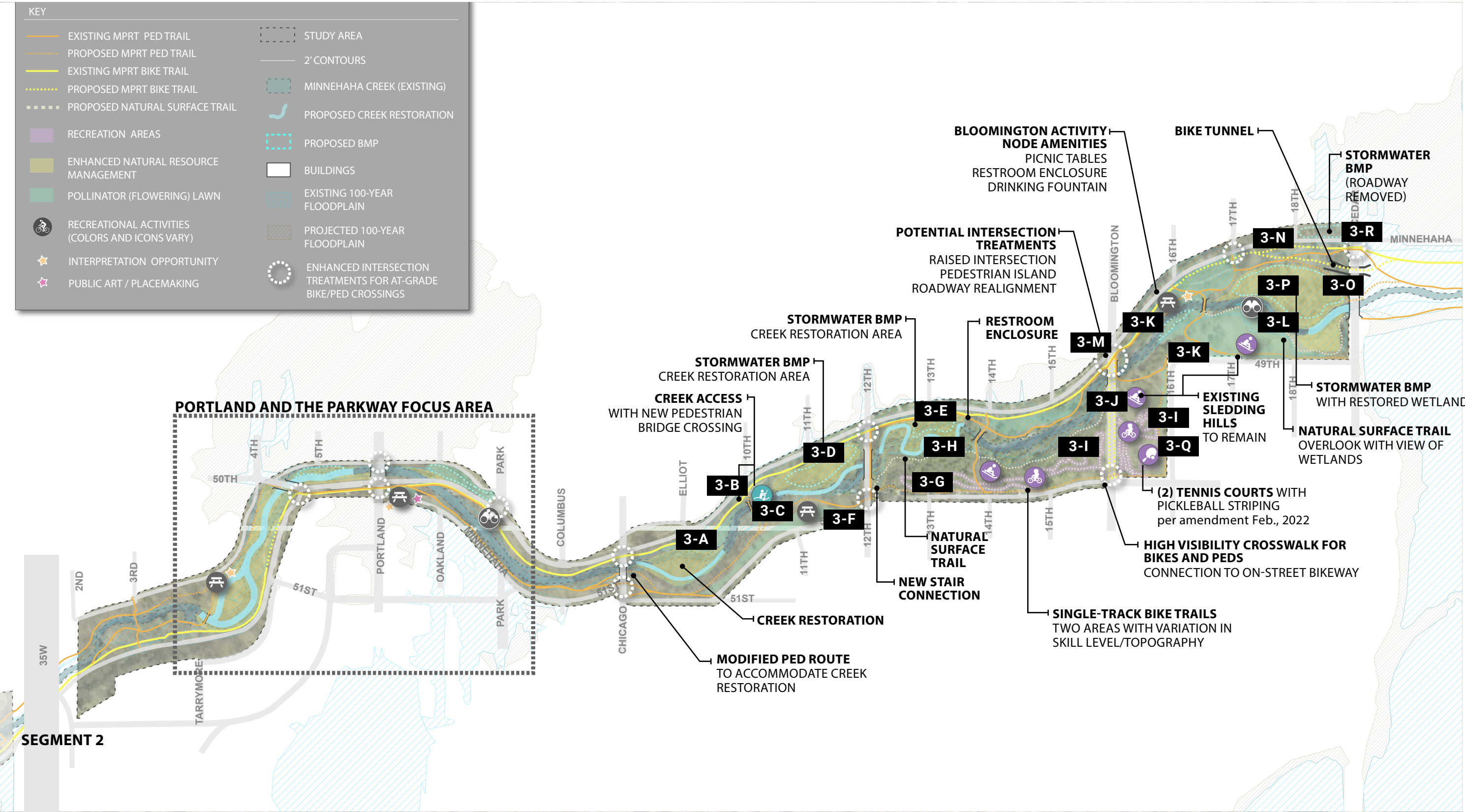


Figure 7.6 Segment 3 Projects

















TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
3-A	Creek Restoration at Elliot	Remeander (560LF) and restoration (2.2ac) at Elliot Ave.	Collaborative	3-B								\$375,000
3-B	Pedestrian Trail and Bridge at 10th Ave	Reconstructed pedestrian trail connections at Chicago Ave, Elliot to 11th Ave, (1,430LF total) and new pedestrian bridge crossing at 10th Ave.	Complex	3-A 3-C, 3-F								\$471,600
3-C	Creek Access at 10th Ave	Walk-in creek access; low-impact/natural design	Stand Alone	3-B, 3-D								\$30,000
3-D	Remeander/ Stormwater BMP at 11th Ave	Creek restoration, remeander (533LF) with stormwater BMP feature / outfall repair and associated streambank restoration (1.5ac) at 11th Ave	Collaborative	3-C, 3-F						X		\$922,200
3-E	Remeander/ Stormwater BMP at 13th Ave	Creek restoration (2.2ac), remeander (880LF) with stormwater BMP feature / outfall repair and associated streambank restoration at 13th Ave.	Collaborative	3-L						X		\$1,266,000
3-F	Picnic Area at 11th Ave	Picnic area, including pollinator play lawn (75,000SF / 1.7ac)	Stand Alone	3-B, 3-D								\$87,000
3-G	Pedestrian Trail 12th Ave to Bloomington Ave	Pedestrian trail connection from 12th Ave to Bloomington Ave (1,350LF), including new stair connection east of 12th Ave.	Stand Alone	3-H, 3-H-3-I								\$267,000
3-H	Natural Surface Trail 12th Ave to Bloomington Ave	Natural surface trail (1,650LF) connection from 12th Ave to Bloomington Ave	Stand Alone	3-G, 3-I								\$14,000
3-I	Single Track Bike Trail 12th Ave to 16th Ave	Single-track biking trail course from 12th Ave to Bloomington, Bloomington to 16th Ave	Stand Alone	3-G, 3-H, 3-J					X			\$222,000

Table 7.6 Segment 3 Projects

TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
3-J	On-Street Bikeway on Bloomington	On-Street Bike Trail on Bloomington Ave bridge between Minnehaha Parkway and 50th Street. Includes intersection crossing treatments at 50th Street and Bloomington Ave.	Complex	3-I								\$150,000
3-K	Pedestrian Trail along 16th Ave, 49th Ave	Pedestrian Trail from Bloomington Ave east along 16th Ave, 17th Ave east to Cedar Ave. (1,830LF)	Stand Alone	3-I, 3-E								\$220,000
3-L	Natural Surface Trail from 16th Ave Pedestrian Bridge to Cedar Ave	Natural surface trail from 16th Ave pedestrian bridge east to Cedar Ave tunnel (1,640LF), including overlook and interpretive element	Complex	3-P								\$155,000
3-M	Intersection Treatment at Bloomington Ave. (North)	Re-alignment of intersection and adjacent trail crossing, and bus stop improvements at Bloomington Ave.	Collaborative	3-J					X			\$1,245,000
3-N	Bike and Pedestrian Trails from 16th Ave to Cedar Ave	Bike trail reconstructed outside of the floodplain, pedestrian trail connection to existing tunnel at Cedar Avenue (2,600LF total)	Stand Alone	3-O								\$312,000
3-O	Bike Tunnel at Cedar Ave	Bike tunnel under Cedar Avenue and associated bike trail connection from 17th Ave	Collaborative	3-N								\$1,500,000
3-P	Stormwater BMP	Creek restoration, remeander (270LF) with stormwater BMP (restored wetland) (2.3acres)	Collaborative	3-L						X	X	\$346,600
3-Q	Tennis Courts	Refurbish existing tennis courts and stripe for pickleball (amendment Feb., 2022)	Stand Alone	3-I					X			\$300,000
3-R	Roadway Removal / Stormwater BMP	Roadway removal of redundant Parkway segment between Cedar Ave and 18th Ave; conversion to stormwater BMP	Collaborative	3-P								TBD
SEGMENT 3 TOTAL												\$7,883,400

Table 7.6 (continued) Segment 3 Projects

SEGMENT 3

GENERAL PROJECTS

- » Outfall Repair
- » Intersection Treatments (where treatments don’t directly influence another project)
- » Native plant community restoration and transition areas for pollinator lawns
- » Trail repair or maintenance of existing facilities to remain as-is



Precedent examples of proposed features in Segment 3

PORTLAND AND THE PARKWAY FOCUS AREA PROJECTS

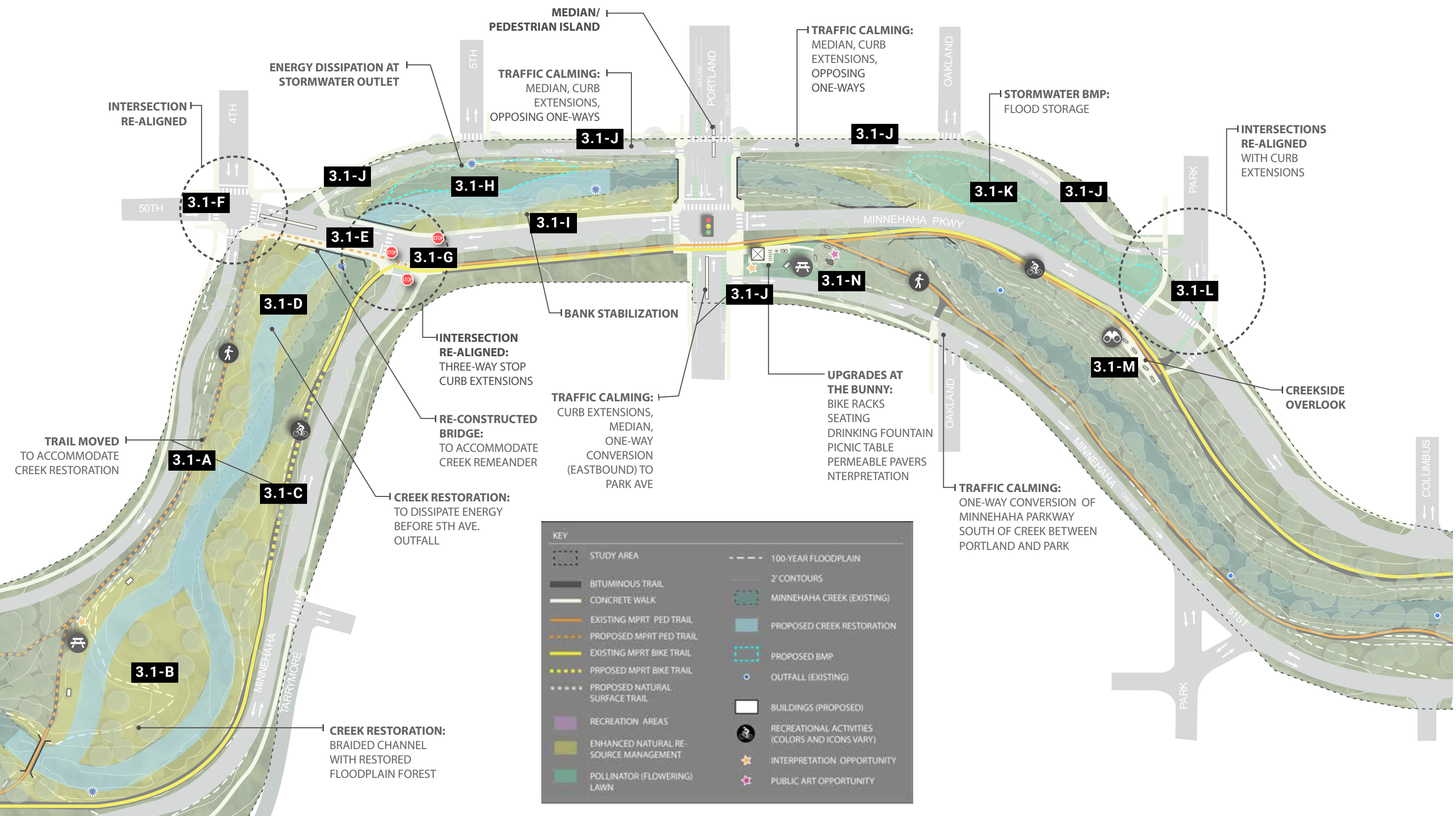


Figure 7.7 Portland and the Parkway Focus Area Projects

TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			EST. COST
									MPRB	MCWD	CITY OF MPLS	
3.1-A	Ped Trail 4th Ave to 3rd Ave, North side of Creek	Pedestrian trail moved out of the floodplain between 4th Ave and 3rd Ave on the north side of the Creek (1,300LF)	Stand Alone	3.1-B								\$156,000
3.1-B	Braided Channel at 51st Street/Tarrymore	Creek restoration (2.6ac) and remeander (1,050LF) at 51st Street / Tarrymore. Shown as a braided channel. Includes picnic area and interpretive element.	Collaborative	3.1-A								\$1,137,000
3.1-C	Bike Trail at 51st Street	Bike trail reconstructed out of the floodplain and creek restoration area (300LF).	Stand Alone	3.1-D, 3.1-E								\$36,000
3.1-D	Creek Restoration at 50th Street Bridge	Creek remeander (700LF) and associated restoration(1.5ac) in the area around the 50th Street Bridge.	Collaborative	3.1-C, 3.1-E							X	\$698,000
3.1-E	Bridge Reconstruction at 50th Street	Bridge reconstruction to accommodate creek remeander and restoration	Collaborative	,3.1-D								\$5,800,000
3.1-F	Intersection Realignment at 4th Ave and 50th Street	Intersection re-alignment and intersection treatments to improve pedestrian connections at 4th Ave and 50th Street	Collaborative	3.1-E								\$413,000
3.1-G	Intersection Treatment at 50th Street and Minnehaha Parkway	Intersection realignment, including addition of 3-way stop and associated intersection treatments for improved pedestrian and bicycle safety. Includes medians on 50th Street east of 4th Ave	Collaborative	3.1-E					X			\$660,000
3.1-H	Stormwater BMP at 5th Avenue Outlet	Restoration / BMP to repair outlet and dissipate energy at 5th Avenue. Includes associated restoration work in this area (0.32ac).	Collaborative	3.1-E					X	X	X	\$450,000

Table 7.7 Portland and Parkway Focus Area Projects

TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITIES			EST. COST
									MPRB	MCWD	CITY OF MPLS	
3.1-I	Sidewalk West of Portland Ave	Sidewalk construction on north side of Minnehaha Parkway between Portland Ave and 50th Street Bridge (400LF)	Stand Alone	3.1-E								\$48,000
3.1-J	Traffic Calming on Minnehaha Parkway (North and South), 4th Ave to Park Ave	Traffic calming measures between 4th Ave and Park Ave on Minnehaha Parkway (north), including curb extensions, high visibility crosswalks, medians with pedestrian islands on Portland, and one-way conversions.	Collaborative	3.1-F, 3.1-L, 3.1-N					X			\$368,000
3.1-K	BMP at Oakland and Park Ave	Stormwater BMP between Oakland and Park Ave, including transition to pollinator lawn (0.5ac)	Collaborative							X		\$175,890
3.1-L	Intersection Treatment at Park Ave	Intersection realignment at Park Ave to reduce roadway width. Includes intersection treatments for increased pedestrian safety at roadway crossings	Collaborative	3.1-J								\$825,000
3.1-M	Overlook at Park Ave	Creekside overlook with interpretive element at Park Ave	Stand Alone	3.1-L								\$90,000
3.1-N	Upgrades at the Bunny	Trail amenities at the Bunny (Portland Ave) to include bike racks, seating, drinking fountain, picnic table, permeable pavers, and interpretation	Stand Alone	3.1-J								\$270,000
PORTLAND AND PARKWAY FOCUS AREA 3.1 TOTAL												\$11,126,890

Table 7.7 (Continued) Portland and Parkway Focus Area Projects

PORTLAND AND THE PARKWAY FOCUS AREA

GENERAL PROJECTS

- » Outfall Repair
- » Intersection Treatments
- » Native plant community restoration and transition areas for pollinator lawns
- » Trail repair or maintenance of existing facilities to remain as-is



Precedent imagery of proposed features in the Portland and the Parkway Focus Area



SEGMENT 4 PROJECTS

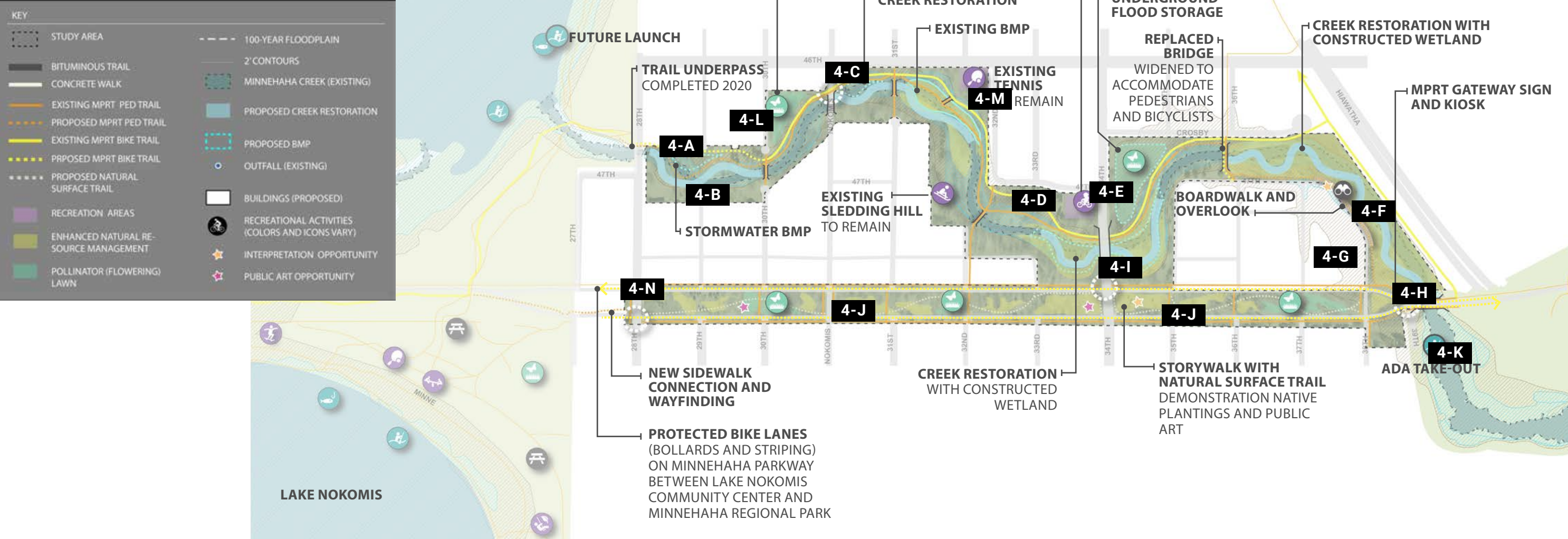


Figure 7.8 Segment 4 Projects

SEGMENT 4

GENERAL PROJECTS

Projects that are not included in the above project list are considered 'General'

- Outfall Repair
- Intersection Treatments
- Native plant community restoration and transition areas for pollinator lawns
- Trail repair or maintenance of existing facilities to remain as-is
- Bridge repair at 36th Avenue



Precedent examples of proposed features in Segment 4























TAG	PROJECT NAME	EXTENTS / DIMENSIONS	PROJECT TYPE	RELATED PROJECTS	THEMES				PRIORITY PROJECTS			
									MPRB	MCWD	CITY OF MPLS	EST. COST
4-A	Ped and Bike Trail 28th Ave to 30th Ave	Reconstruction of bike and ped trails to accommodate restoration/BMP areas (1800LF)	Complex	4-B					X			\$216,000
4-B	Remeander and BMP 28th Ave to 30th Ave	Remeander (710LF) and stormwater BMP (0.5ac) between 28th Ave to 30th Ave	Collaborative	4-A						X		\$662,000
4-C	BMP and Creek Restoration Nokomis to 32nd Ave	Remeander (885LF) and stormwater BMP between Nokomis and 32nd Ave and restoration area (1.7ac)	Collaborative							X	X	\$962,000
4-D	Bike Park at 34th Ave	Conversion of existing tennis court at 34th Ave into Bike Skills Course	Stand Alone						X			\$300,000
4-E	Underground Flood Storage at 34th Ave	Underground flood storage BMP (1.5ac) with pollinator lawn at grade	Collaborative									\$4,792,000
4-F	Creek Restoration 36th Ave to Hiawatha	Creek restoration with constructed wetland (5.8ac with 1,635 LF remeander)	Collaborative	4-H								\$1,733,000
4-G	Pedestrian Trail and Boardwalk 39th Ave	Trail reconstruction (635 LF) and boardwalk (500 LF) with wetland overlook to accommodate adjacent restoration work	Complex	4-F, 4-H								\$316,200
4-H	MPRT Gateway Sign and Kiosk at 39th Ave	Gateway sign and MPRB Kiosk at 39th Avenue	Stand Alone	4-G, 4-K								\$50,000
4-I	Restoration at 34th Ave	Creek restoration (3.5ac) and remeander (1040 LF) at 34th Avenue	Collaborative									\$1,094,000
4-J	Storywalk 28th Ave to 39th Ave	Natural surface trail (4,000 LF) with interpretation, public art, pollinator lawn and native landscape restoration (up to 9.6ac) throughout the Parkway boulevard.	Stand Alone									\$687,000
4-K	ADA Creek Takeout	Takeout for paddlers at 39th Avenue with ADA accessibility and nearby parking. Last takeout before Minnehaha Falls.	Stand Alone	4-H								\$120,000
4-L	Tennis Court Removal and Pollinator Lawn at 30th Ave	Removal of existing tennis court and seeding for pollinator lawn (0.82 acres) at field along 30th Avenue north of the Creek. Separate pedestrian and bicycle trails to remove pinch point.	Stand Alone						X			\$177,000
4-M	Renovation of Tennis Court at 32nd Avenue	Renovation (resurfacing) of existing tennis courts at 32nd Avenue (3 courts)	Stand Alone									\$195,000
4-N	Protected Bikeway on Minnehaha Parkway	On-street protected bikeway (using bollards and striping) on both the north (westbound) and the south (eastbound) Minnehaha Parkway roadway (1.9 mile total length)	Stand Alone									\$82,800
SEGMENT 4 TOTAL												\$11,387,000

Table 7.8 Segment 4 Projects

OVERALL ESTIMATED COSTS

The following is a summary of estimated project costs shown on the previous pages. It is important to note that not all of these costs will be borne by MPRB. This master plan includes costs for a variety of elements that may be jointly implemented with partner agencies. Examples of such projects include road modifications, creek re-eanders, and stormwater BMPs. The master plan and its cost estimates are meant to guide the efforts of multiple agencies. These costs are also beneficial when seeking outside grants for specific work. MPRB recognizes that total estimated costs of a 30-year master plan can seem high. The costs represented below represent an “all-in” \$3.6 million investment per year by all parties.

SEGMENT OR FOCUS AREA	ESTIMATED COST
Segment 1	\$1,104,500
Penn-Newton-Morgan Focus Area	\$8,735,600
Lynnhurst Focust Area	\$59,950,863
Segment 2	\$2,922,100
Nicollet Focus Area	\$5,275,500
Segment 3	\$7,883,400
Portland & Parkway Focus Area	\$11,126,890
Segment 4	\$11,387,000
TOTAL ESTIMATED COSTS	\$108,385,853

Table 7.9 Overall Estimated Costs for 30-Year Plan



Streambank restoration projects taking place along the Creek

PROJECT IMPLEMENTATION

BOUNDARIES AND ACQUISITION

There are no new property acquisitions necessary by MPRB to implement this master plan. At Lynnhurst Park, MPRB may propose a boundary change to the Regional Trail, though additional land to be added to the regional facility will be land owned by MPRB. Such a change would accommodate future development of the proposed environmental-themed community center, the construction of a new bridge/overpass at 50th Street, and the daylighting of the tributary from Lake Harriet.

OPERATIONS AND MAINTENANCE COSTS

Minnehaha Parkway Regional Trail is maintained and operated by the MPRB, which supplies equipment and staffing resources necessary to maintain and operate the park year-round. Annual operations, maintenance, and public safety costs are funded through MPRB’s budget and Metropolitan Council’s operations and maintenance funds, as funding allows. The budget is administered by the MPRB’s Superintendent and approved annually by the MPRB Board of Commissioners. It is important to note that by state statute, 40% of MPRB operations costs for this park—being a regional facility—should be borne by the State of Minnesota. This obligation has never been met, thereby shifting maintenance burden to local taxpayers. This will continue to result in level of service shortfalls and a likely backlog of maintenance projects throughout this park and the regional system as a whole.

Some of the recommended improvements—such as trail rehabilitation, wall removal, and the decommissioning of courts—may reduce maintenance costs in the near term for ongoing repairs. Other improvements, such as increased naturalized plantings and new recreational facilities, may require adjustments to maintenance staffing and additional training of staff. As implementation of near-term recommendations is realized over time, alterations to staffing and funding should be considered in order to accommodate the maintenance of new park features. Because the many improvements identified in the plan will be implemented across the entire 30-year time horizon of the master plan, a simple annual maintenance estimate is not possible. Some park improvements, such as those addressing stormwater management, will likely be funded and maintained in coordination or collaboration with partners, such as the City of Minneapolis and the Minnehaha creek Watershed District, who have been active partners in this planning effort.

CAPITAL IMPROVEMENTS

The MPRB, MCWD, and the City of Minneapolis share responsibility for improving the environmental quality within the Minnehaha Creek corridor in Minneapolis and recognize that their mutual goals are best achieved through integrated land and water resource planning. As such, in the 2017 MOU, the three agencies memorialized their commitment to work together in pursuit of a balanced urban ecology that integrates goals and plans for the natural and built environments. To help accomplish this, the agencies have utilized the Minnehaha Parkway Regional Trail project to outline how the three agencies will work together to coordinate and align policies, plans, and capital improvements to improve the natural and built environments within the Minnehaha Creek corridor. Wherever possible, all three agencies are working to integrate natural resource goals across disciplines to intersect with planned recreational improvements, infrastructure improvements, and development, to reduce cost and maximize public benefit. To help facilitate this, the agencies are working to develop a joint short and long-term capital improvement plan that will outline project planning, cost-sharing, and investment strategies for implementation.



A recently constructed trail segment at Lyndale Avenue

