

ZONING COMMITTEE STAFF REPORT

1. **FILE NAME:** Lilydale Park **FILE #:** 13-143-460
 2. **APPLICANT:** Saint Paul Parks and Recreation **HEARING DATE:** January 31, 2013
 3. **TYPE OF APPLICATION:** Conditional Use Permit (CUP) w/ Variance
 4. **LOCATION:** 720 Water St W, area between Smith Avenue bridge and Union Pacific railroad bridge
 5. **PIN & LEGAL DESCRIPTION:** 122823430037, Joys Addition Part Of Govt Lot 8 Beg At Nw Cor Of Blk 3 Grand View Th S 88 Deg 30 Min W 150.12ft Th S 40 Deg 15 Min W 194ft Th S 60 Deg 25 Min E 150ft Th S 29 Deg 35 Min W 160ft To A Pt On Nl Of Blk 38 Banning And Olivers Add 76ft E From Nw Cor Thereof Th
 6. **PLANNING DISTRICT:** 3 **PRESENT ZONING:** R4
 7. **ZONING CODE REFERENCE:** §§ 61.501; 61.601; 61.202(b); 68.601(a); 72.63
 8. **STAFF REPORT DATE:** January 24, 2013 **BY:** Josh Williams
 9. **DATE RECEIVED:** January 10, 2013 **60 DAY DEADLINE FOR ACTION:** March 11, 2013
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- A. **PURPOSE:** Conditional use permit for placement of fill and grading in the flood plain and variance for wetland impact in the River Corridor (Lilydale Regional Park improvements)
- B. **PARCEL SIZE:** 175000 sq. ft.
- C. **EXISTING LAND USE:** G-Parks/Rec. Facility
- D. **SURROUNDING LAND USE:**
 - North: Park (R4)
 - East: Park (R4)
 - South: Park (R4)
 - West: Park (R4)
- E. **ZONING CODE CITATION:** §72.63 permits fill in the floodway as a conditional use; §72.32 lists factors the Planning Commission shall consider in reviewing conditional use permit applications in the FW Floodway district; §72.33 lists conditions that may be attached to any conditional use permits issued in the floodplain; §72.64 list standards for conditional uses in the FW Floodway district; §61.501 lists general conditions that must be met by all conditional uses; §68.402(b)(5)(e) requires that transportation corridors avoid wetlands in the river corridor; §68.601(a) provides for variance of river corridor standards; MN Stat. 462.357, Subd. 6, establishes grounds for the approval of a variance request.
- F. **HISTORY/DISCUSSION:** In 2010, the Planning Commission approved a conditional use permit for grading and filling in the floodway for purposes of environmental remediation.
- G. **DISTRICT COUNCIL RECOMMENDATION:** The District 3 Council has not made a recommendation regarding the application.
- H. **FINDINGS:**
 1. Saint Paul Parks and Recreation has developed a master plan for improvements to Lilydale Regional Park. Long-term improvements include a dog off-leash area, trail improvements, road realignment, a picnic area including pavilion, and clean-up of legacy contamination. The portion of the project for which a conditional use permit and variance is being sought includes additional excavation of contaminated soil from the Lilydale Dump site and backfilling with clean stockpiled material from the former Lilydale Marina to allow construction of the realigned road, trail improvements and construction, and placement of additional fill for a picnic area near Pickerel Lake. This work will be constructed in two phases: spring through fall 2013 and, pending funding, spring through fall 2014.
 2. The proposed project will require grading and fill in the floodway, and wetland impacts within the river corridor. Floodway grading and filling is a conditional use, per §72.63 of the zoning code. Impact of wetlands in the river corridor requires variance of §68.402(b)(5)(e) of the zoning code.

3. The applicant has submitted the following information with the application: A narrative project description, project plans, and phase I construction documents; A revised Response Action Plan (RAP) and Construction Contingency Plan for mitigation of soil contamination associated with the former Lilydale Dump Site (approved by Minnesota Pollution Control Agency (MPCA)); A No-Rise Certification verifying that the proposed project will not impact the 100-year flood elevation of the Mississippi River (reviewed by Minnesota Department of Natural Resources (DNR)); All documentation associated with a voluntary Environmental Assessment Worksheet (EAW) completed by the applicant; Documentation of an approved conditional use permit from the City of Lilydale for the proposed project. The EAW Finding of Facts identifies needed mitigation in the form of wetland replacement for impacted wetlands and accommodation for blundings turtle and bald eagle habitat. The project as proposed includes the required mitigation.
4. Sec. 63.600 of the zoning code specifies that the Planning Commission shall not consider wetland replacement unless the applicant has complied with this sequencing requirement, and that the City may seek the advice of a Technical Evaluation Panel (TEP), as provided for in Minnesota Rules 8420, in making this determination. The TEP has given preliminary approval for wetlands avoidance sequencing and mitigation (replacement) plan, pending final report and notice of decision. DNR and United States Army Corps of Engineers (USACE) approval is also required. DNR approval is pending. USACE has given preliminary approval, pending determination of need for additional cultural resources study of wetlands. Conditional use permit and variance approvals should be conditional upon final approvals from the TEP, DNR, and USACE.
5. A stormwater pollution prevention plan (SWPPP) was submitted as part of site plan review. Pending final approval of this plan by the city's Water Resources Coordinator, the applicant will make application to MPCA for a general construction stormwater permit. City SWPPP approval and MPCA general stormwater construction permit issuance should be conditions of CUP and variance approval.
6. §72.32 lists factors that the Planning Commission shall consider in reviewing conditional use permits applications in the FW Floodway district:
 - (a) *The relationship of the proposed use to the comprehensive plan and floodplain management program for the city.* The proposed use is consistent with the Comprehensive Plan. Two major strategies of the Parks and Recreation Plan (Chapter) are to *Promote Active Lifestyles* and *Promote a Vital Environment*. The proposed project will improve accessibility and facilities for recreational use of Lilydale Regional Park. It is also a net benefit to the environment by removing contaminated soils and providing for replanting with native plants. The proposed project is also consistent with the City's floodplain management program; it will not compromise floodway capacity and does not permit development prone to flood damage.
 - (b) *The importance of the services provided by the proposed facility to the community.* The proposed use will contribute to the improvement of facilities in Lilydale Park. Open space and passive recreational facilities are an important amenity for the community.
 - (c) *The ability of the existing topography, soils and geology to support and accommodate the proposed use.* The proposed project will include replacement of contaminated soils in the proposed road bed with clean, structural sufficient soils. The topography and soils of the remainder of the site are suitable for the proposed park uses.
 - (d) *The compatibility of the proposed use with existing characteristics of biologic and other natural communities.* The propose use will result in the replacement of mixed native and non-native vegetation existing on the site with native vegetation. The proposed road will be built along an existing trail corridor to minimize disturbance. Tree removal will be limited. The plan accommodates blundings turtle and bald eagle habitats as required by the mitigation measure identified in the EAW Findings of Fact.

- (e) *The proposed water supply and sanitation systems and the ability of those systems to prevent disease, contamination and unsanitary conditions.* The proposed project includes extension of water supply and sanitary sewer lines for a planned future picnic shelter and restrooms.
- (f) *The requirements of the facility for a river-dependent location, if applicable.* The facility is already located in the river floodplain.
- (g) *The safety of access to the property for ordinary vehicles.* Road access to, from, and through the park already exists. The proposed project includes a road realignment, which will improve maintain safe access to the property and reduce trail/road conflicts.
- (h) *The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.* Floodway grading will allow realigned and new road and trail segments to be constructed; these segments will not be highly susceptible to flood damage, and any potential damage does not present an unacceptable risk to the facility owner. Interim soil stabilization and restoration of disturbed areas with native vegetation will provide protection from flood-related erosion.
- (i) *The dangers to life and property due to increased flood heights or velocities caused by encroachments.* The project will not result in a net-rise of flood heights or increased flood velocities. A No-Rise Certification from a professional engineer verifying this has been submitted to the City of Saint Paul and the regulatory authority, the Minnesota DNR.
- (j) *The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site.* The property is located within the floodway. However, the proposed use will not increase the susceptibility of the area to damage, nor increase the likelihood of contribution of the area to downstream problems, based on height, velocity, duration, rate of rise, or sediment transport of floodwaters.
- (k) *The danger that materials may be swept onto other lands or downstream to the injury of others.* The proposed use will not result in location of additional materials on the site that may be subject to downstream movement.
- (l) *The availability of alternative locations or configurations for the proposed use.* The proposed realignment of the road, enabled by the proposed use, is the best alternative when considering facility improvement plans, water quality in Pickerel Lake and the Mississippi River, site access, and trail safety.
- (m) *Such other factors as are relevant to the purposes of this chapter.* No other factors suggest alternative conclusions to those above in regard to the purposes of this chapter.

7. §72.33 lists conditions which the Planning Commission may attach to conditional use permits issued in the floodplain:

- (a) *Modifications of design, site planning or site treatment.* No such modifications are suggested.
- (b) *Requirements for implementation of erosion and sediment control, vegetation management, wildlife management and other protective measures.* The applicant has submitted a SWPPP for review by the city's Water Resource Coordinator. Pending approval of the SWPPP, the applicant will apply for a general construction stormwater permit from MPCA. CUP approval should be conditional on SWPPP approval and issuance of a general construction stormwater permit.
- (c) *Modifications of waste disposal and water supply facilities or operations.* The proposed project includes extension of water supply and sanitary sewer lines for a planned future picnic shelter and restrooms.

- (d) *Limitations on period of use and operation, a flood warning system and an evacuation plan.* The proposed project is located within Lilydale Regional Park, which is subject to closure during times of seasonal flooding. The area is not subject to flash flooding.
- (e) *Imposition of operational controls, sureties and deed restrictions.* No such controls or restrictions are needed.
- (f) *Requirements for construction of channel improvements, modifications, dredging, dikes, levees and other protective measures.* No improvements, modifications, or protective measures are needed.
- (g) *Floodproofing measures shall be designed consistent with state-established floodproofing standards in the Minnesota State Building Code and with the flood protection elevation for the particular area including flood velocities, duration and rate of rise, hydrostatic and hydrodynamic forces, and other factors associated with the regulatory flood. The planning commission shall require that the applicant submit a plan or documents certified by a registered professional engineer or architect that the floodproofing measures are consistent with the regulatory flood elevation and associated flood factors for the particular area. The floodproofing measures that may be required include, but are not limited to, the following:*
- (1) *Anchorage to resist flotation and lateral movement.*
 - (2) *Installation of watertight doors, bulkheads and shutters, or similar methods of construction.*
 - (3) *Reinforcement of walls to resist water pressure.*
 - (4) *Use of paints, membranes or mortars to reduce seepage of water through walls.*
 - (5) *Addition of mass or weight to structures to resist flotation.*
 - (6) *Installation of pumps to lower water levels in structures.*
 - (7) *Construction of water supply and waste treatment systems to prevent the entrance of floodwaters.*
 - (8) *Installation of pumping facilities or comparable practice for subsurface drainage systems for buildings to relieve external foundation wall and basement floor pressures.*
 - (9) *Construction to resist rupture or collapse caused by water pressure or floating debris.*
 - (10) *Installation of valves or controls on sanitary and storm drainage which will permit the drains to be closed to prevent backup of sewage and stormwaters into the buildings or structures. Gravity draining of basements may be eliminated by mechanical devices.*
 - (11) *Location of all electrical equipment, circuits and installed electrical appliances such that they are not subject to the regional flood.*
 - (12) *Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials that could be hazardous to public health, safety and welfare (if permissible under the Minnesota State Building Code) above the flood protection elevation or provision of adequate floodproofing to prevent flotation of or damage to storage containers which could result in the escape of toxic materials into floodwaters.*

The proposed project does not include structures. The future planned picnic shelter and restrooms will be located above floodplain elevation.

- (h) *Specifications for building construction and materials, filling and grading, water supply, sanitary facilities, utilities and other work or construction to be submitted to the city department of safety and inspections for review and approval prior to any development.* A site plan for the proposed grading and filling activities and site improvements has been submitted to the Department of Safety and Inspections. Planning Commission approval of the conditional use permit should be conditional on final site plan approval.

8. §72.64 lists standards for conditional use in the FW Floodway district:

- (a) *No structure (temporary or permanent), fill deposit (including fill for roads and levees), obstruction, storage of materials or equipment, or other use may be allowed that will cause an increase in the height of the regional flood or cause an increase in flood damages in the reach or reaches affected. The use shall not adversely affect the hydraulic capacity of the channel or floodway or any tributary to the main stream or of any ditch or other drainage facility or system. For Lake Phalen and Beaver Lake, compensating flood water storage volume shall be provided below the 100-year flood elevation for any obstruction placed in the floodplain.* The project will result in a net import of fill to the project site, which includes areas of floodway, flood fringe, and non-floodplain, but will not cause an increase in height of the regional flood. A signed A No-Rise Certification has been submitted to the City of Saint Paul and the DNR. DNR acceptance of the No-Rise Certificate should be a condition of approval.
- (b) *Fill shall be protected from erosion by vegetative cover, mulching, riprap or other acceptable method.* The SWPPP filed by the applicant includes temporary and permanent stabilization measures for areas of fill. SWPPP is subject to approval by the city's Water Resources Coordinator and should be a condition of approval.
- (c) *Accessory structures shall not be designed for human habitation.* The proposed use does not include any accessory structures.
- (d) *Accessory structures shall be constructed and placed on the building site so as to offer the minimum obstruction to the flow of floodwaters:*
 - (1) *Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flood flow; and*
 - (2) *So far as practicable, structures shall be placed approximately on the same flood flow lines as those of adjoining structures.*

The proposed use does not include any accessory structures.

- (e) *Accessory structures shall be elevated on fill or structurally dry floodproofed in accordance with the FP-1 or FP-2 floodproofing classification in the Minnesota State Building Code. As an alternative, an accessory structure may be floodproofed to the FP-3 or FP-4 floodproofing classification in the Minnesota State Building Code, provided the accessory structure constitutes a minimal investment, does not exceed five hundred (500) square feet in size, and for a detached garage, the detached garage must be used solely for parking of vehicles and limited storage. All floodproofed accessory structures must meet the following additional standards:*
 - (1) *The structure must be adequately anchored to prevent flotation, collapse or lateral movement of the structure and shall be designed to equalize hydrostatic flood forces on exterior walls;*
 - (2) *Any mechanical and utility equipment in a structure must be elevated to or above the regulatory flood protection elevation or properly floodproofed; and*
 - (3) *To allow for the equalization of hydrostatic pressure, there must be a minimum of two "automatic" openings in the outside walls of the structure having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. There must be openings on at least two sides of the structure and the bottom of all openings must be no higher than one foot above the lowest adjacent grade to the structure. Using human intervention to open a garage door prior to flooding will not satisfy this requirement for automatic openings.*

The proposed use does not include any accessory structures.

- (f) *The storage or processing of materials that are, in time of flooding, flammable, explosive, or potentially injurious to human, animal, or plant life is prohibited. Storage of materials or equipment may be allowed if readily removable from the area within the time available after a flood warning and in accordance with a plan approved by the Planning Commission. The proposed use does not include processing or storage of any materials.*
 - (g) *Structural works for flood control that will change the course, current, or cross-section of protected wetlands or public waters shall be subject to the provisions of Minnesota Statutes Chapter 103G. Structural works for flood control intended to remove areas from the regulatory floodplain shall not be allowed in the floodplain. The proposed use does not include any flood control structures.*
 - (h) *A levee, dike or floodwall constructed in the floodway shall not cause an increase to the regional flood and the technical analysis must assume equal conveyance or storage loss on both sides of a stream. Soil grading activities include creation of a small berm at the former Lilydale Marina site; modeling found no net-rise in the regional flood and included the proposed berm as well as the required assumptions.*
 - (i) *No use shall be permitted which is likely to cause pollution of waters, as defined in Minnesota Statutes, §115.01, unless adequate safeguards, approved by the state pollution-control agency, are provided. The proposed use, subject to stabilization of fill and reestablishment of vegetation as outlined in the SWPPP, is not likely to result in pollution of waters.*
9. §61.501 lists five standards that all conditional uses must satisfy:
- (1) *The extent, location and intensity of the use will be in substantial compliance with the Saint Paul Comprehensive Plan and any applicable subarea plans which were approved by the city council. This condition is met. The proposed use is consistent with the Comprehensive Plan. Two major strategies of the Parks and Recreation Plan (Chapter) are to *Promote Active Lifestyles* and *Promote a Vital Environment*. The proposed placement of fill will allow planned development of improved facilities for active recreation in Lilydale Regional Park. It is also a net benefit to the environment by removing contaminated soils and providing for replanting with native plants.*
 - (2) *The use will provide adequate ingress and egress to minimize traffic congestion in the public streets. This condition is met. Current ingress to and egress from the park as a whole is adequate, and the proposed use will not directly impact this access. Road specifications have been reviewed and approved by Public Works staff as part of site plan review.*
 - (3) *The use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare. This condition is met. The use is consistent with the character of the immediate area. Removal of some contaminated soils is part of a larger contamination response plan, and will benefit the public health and safety. The general welfare of the public is also benefitted by the long-term planned park improvements.*
 - (4) *The use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district. This condition is met. The proposed use will allow park facility development to proceed.*
 - (5) *The use shall, in all other respects, conform to the applicable regulations of the district in which it is located. This condition can be met. Subject to the proposed conditions of approval, the proposed use will conform to all applicable regulations for the district in which it as located.*
10. §68.601(a) states: *Applications for variance to the provisions of this chapter may be filed as*

provided in section 61.600. The burden of proof shall rest with the applicant to demonstrate conclusively that such variance will not result in a hazard to life or property and will not adversely affect the safety, use or stability of a public way, slope or drainage channel, or the natural environment; such proof may include soils, geology and hydrology reports which shall be signed by registered professional engineers. Variances shall be consistent with general purposes of the standards contained in this chapter and state law and the intent of applicable state and national laws and programs.

Construction of the proposed re-aligned roadway will require impacting approximately 21,000 square feet of wetlands, in violation of §68.402(b)(5)(e) which states that *transportation, utility, and other transmission service facilities and corridors shall avoid wetlands* in the river corridor. The applicant has requested variance of this development standard. Pursuant to the Minnesota Wetland Conservation Act, projects must seek to first avoid wetland impacts, then minimize, and finally mitigate any unavoidable wetland impacts. Sec. 63.600 of the zoning code specifies that the Planning Commission shall not consider wetland replacement unless the applicant has complied with this sequencing requirement, and that the City may seek the advice of a Technical Evaluation Panel, as provided for in Minnesota Rules 8420, in making this determination. The Technical Evaluation Panel, staffed by the City's Water Resources Coordinator, has found that sequencing requirement has been met, and has approved of the Department of Parks and Recreation's proposed wetland replacement (mitigation) plan, subject to United States Army Corps of Engineers (USACE) approval of proposed wetland impacts. The USACE has issued preliminary approval, subject to the determination whether or no additional cultural resources survey of wetlands is required. Final approval from USACE and compliance with all USACE requirements should be a condition of approval.

The proposed wetland impacts will not result in a hazard to life or property, and will not affect the safety or use of any public way, slope or drainage channel. The TEP has determined, as supported by modeling performed for the no-net rise determination, that proposed wetland impacts will not impact flood storage capacity. Plans have also been reviewed for impacts by city staff through the site plan review process.

11. MN Stat. 462.357, Subd. 6 was amended to establish new grounds for variance approvals effective May 6, 2011. Required findings for a variance consistent with the amended law are as follows:
 - (a) *The variance is in harmony with the general purposes and intent of the zoning code.* This finding is met. The proposed wetland impacts have undergone significant review, and are consistent with the general purpose and intent of the zoning code.
 - (b) *The variance is consistent with the comprehensive plan.* This finding is met. The proposed project is consistent with the comprehensive plan, and the proposed wetland impacts are an unavoidable aspect of the project.
 - (c) *The applicant has established that there are practical difficulties in complying with the provision, that the property owner proposes to use the property in a reasonable manner not permitted by the provision. Economic considerations alone do not constitute practical difficulties.* This finding is met. The sequencing process required by the Minnesota Wetland Conservation Act has demonstrated that wetland impacts were unavoidable, as confirmed by the preliminary findings of the TEP. The proposed use of the property is reasonable.
 - (d) *The plight of the landowner is due to circumstances unique to the property not created by the landowner.* This finding is met. Wetlands are naturally occurring.
 - (e) *The variance will not permit any use that is not allowed in the zoning district where the affected land is located.* This finding is met. The proposed use is allowed in the zoning

district where the affected land is located.

- (f) *The variance will not alter the essential character of the surrounding area.* This finding is met. The area is largely natural in area, with limited development to create access and allow passive recreation. The variance will not alter this character.

I. STAFF RECOMMENDATION: Based upon the findings set forth above, staff recommends approval of a conditional use permit to allow grading and fill in the floodway with variance of the standard that transportation corridors in the river corridor avoid wetlands, subject to the following conditions:

- 1) Applicant receives final site plan approval.
- 2) Applicant receives approval of its SWPPP and abides by any conditions imposed in the SWPPP by the Department of Safety and Inspections.
- 3) Applicant receives approval of its NPDES permit and abides by any conditions imposed under that permit.
- 4) Applicant receives final approval from the TEP, DNR, and USACE for wetlands impacts and replacement plan, and abides by any conditions of those approvals.
- 4) Applicant receives acceptance of No Rise Certification from DNR.
- 5) Applicant abides by the RAP and Construction Contingency Plan approved by MPCA.
- 6) Applicant abides by the CUP issued by the City of Lilydale.
- 7) Applicant abides by mitigation measures for wildlife habitat and wetland impacts identified in the EAW Findings of Fact.



CONDITIONAL USE PERMIT APPLICATION

Department of Planning and Economic Development
Zoning Section
1400 City Hall Annex
25 West Fourth Street
Saint Paul, MN 55102-1634
(651) 266-6589

Zoning office use only
File # 13-113460
Fee:
Tentative Hearing Date
1-31-13

PD = 3

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APPLICANT

Name City of St. Paul Parks & Recreation
 Address 25 W. 4th Street, 400 City Hall Annex
 City St. Paul St. no Zip 55102 Daytime Phone 266-6412
 Name of Owner (if different) Michael Hahn, Director
 Contact Person (if different) Alice Mason Phone 266-6412

PROPERTY LOCATION

Address / Location Lakdale Regional Park, see attached
 Legal Description see attached
 Current Zoning R4, FW, FF, RCI, RCR
 (attach additional sheet if necessary)

TYPE OF PERMIT: Application is hereby made for a Conditional Use Permit under provisions of Chapter 72, Section 63, Paragraph a, e of the Zoning Code.

SUPPORTING INFORMATION: Explain how the use will meet all of the applicable standards and conditions. If you are requesting modification of any special conditions or standards for a conditional use, explain why the modification is needed and how it meets the requirements for modification of special conditions in Section 61.502 of the Zoning Code. Attach additional sheets if necessary.

Required site plan is attached

Applicant's Signature [Signature] Date 1.10.13 City Agent A. J. Mason



CITY OF SAINT PAUL

Mayor Christopher B. Coleman



300 City Hall Annex
 25 West Fourth Street
 Saint Paul, Minnesota 55102
 www.ci.stpaul.mn.us/depts/parks

Telephone: 651-266-6400
 Facsimile: 651-292-7405
 TTY: 651-266-6378

January 10, 2013

LETTER OF TRANSMITTAL

To: Department of Planning and Economic Development
 Zoning Section Attn: Paul Dubriel
 1400 City Hall Annex
 25 West 4th Street
 Saint Paul, MN 55101

Fr: Alice Messer
 400 City Hall Annex
 25 West 4th Street.
 St. Paul MN 55102

RE: Conditional Use Permit Application – Lilydale Regional Park Roadway and Trail Improvements

With this letter, for your use/reference in the project we transmit the following:

- Shop Drawings Prints Plans Samples
 Specifications Copy of Letter Spreadsheet _____

Item	Copies	Description	Type
1	1	Conditional Use Permit Application	
2	1	Overall Site Map	
3	1	Construction Document Set – Phase I	
4	1	City of Lilydale Conditional Use Permit	
5	1	No Rise Certificate	
6	1	Wetland Permit Submittal	

- For your Approval Approved as Submitted Re-Submit () copies for approval.
 For your Use Approved as Noted Submit () copies for Distribution
 As Requested Approved as Noted Return () Corrected Prints
 For Review and Comment _____

Paul,

Please find the Conditional Use Permit Application and associated information attached for Phase I Roadway and Trail Improvements in Lilydale Regional Park.

A Conditional Use Permit from the City of Lilydale was obtained for all work associated with master plan improvements occurring within City of Lilydale limits. A copy of the permit is attached.

A Site Plan Review of the project was completed in May 2012. Comments received during Site Plan Review have been implemented in the attached documents.

Fee for Conditional Use Permit to be determined by Josh Williams and will be provided later. Please contact me if you need any additional information.

Thank you,

A handwritten signature in cursive script that reads "Alice Messer".

Alice Messer
651-266-6412

DEPARTMENT OF PARKS AND RECREATION
DESIGN AND CONSTRUCTION



CITY OF SAINT PAUL
Mayor Christopher B. Coleman

400 City Hall Annex
25 West 4th Street
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Roadway, Trail and Environmental Clean Up work in Lilydale Regional Park

Project Description

The City of Saint Paul Parks and Recreation is requesting a Conditional Use Permit (CUP) for placement of fill in the floodway and wetland impacts associated with construction of a roadway, trails and environmental remediation in Lilydale Regional Park. Implementation of this project will occur in two phases. Phase I will begin at the existing DNR boat launch road and extend to the existing Union Pacific railroad. Phase II will begin at the existing Union Pacific railroad and conclude at the Smith Avenue High Bridge, near the western edge of Harriet Island Regional Park. Future phases will include construction of public restroom, picnic shelter and other associated park improvements addressed in the master plan for Lilydale Regional Park. Future improvements are not included in this CUP.

The approved Master Plan amendment for Lilydale Regional Park addresses the need for a new roadway alignment and associated trail connections to protect and enhance Lilydale Regional Park. A portion of this work began with environmental cleanup work in 2010/2011. A CUP for environmental cleanup work was approved August 27, 2010.

Since 2010, the City has continued to work on implementation of the master plan. The next step in implementation of the plan is to complete environmental remediation work at the Marina Demolition Site and Lilydale Park Dump Site and to construct the new roadway and trails within the park.

To insure the next step of improvements in the park will not result in a rise in flood elevations, a No Rise Certificate was completed for the entire project by Stantec on December 11, 2012. The No Rise Certificate, included in the CUP, concludes that the proposed improvements to Lilydale Regional Park will not raise the 100-year flood elevation of the Mississippi River.

On November 19 2012, the City of Saint Paul also submitted an application for impacts to existing wetlands. The City of Saint Paul followed the process of "avoid, minimize, mitigate" for all delineated wetlands within Lilydale Regional Park. Existing site constraints result in impacts to Wetland D and Wetland H. The City is mitigating impacts to these wetlands through wetland banking since existing site conditions and presence of invasive species would preclude proper maintenance and management of wetlands if they were created on -site.

It was requested that all perceived wetland impacts in Lilydale Regional Park be permitted together. Impacts to Wetland H will occur with Phase I construction and impacts to Wetland D will occur with Phase II construction. However, wetland mitigation for the entire project will occur with Phase I. The City of Saint Paul is currently waiting for final approval on the wetland permit. A Public Waters Permit Application was submitted on December 3, 2012, to the Minnesota DNR for Wetland D since it is connected to a public waterway; the Mississippi River. The City is waiting for approval.



CAPRA Accreditation

An Affirmative Action Equal Opportunity Employer



National Gold Medal Award

In August 2012, the City of Saint Paul completed a discretionary Environmental Assessment Worksheet for proposed plan improvements. The Record of Decision was filed on August 10, 2012 and determined that no significant environmental effects are associated with the project.

Finally, the City of Saint Paul is completing a Response-Action Plan (RAP) to address how construction will cap the existing Lilydale Park Dump Site to recreational standards. The RAP will be submitted to the MPCA for their review January 2013. Final approval is anticipated late February 2013.

Additional project details for overall roadway, trail, bridge construction and environmental cleanup work are provided below. As stated earlier, at this time, the City of Saint Paul has funding to implement Phase I of the proposed improvements which are included in with the CUP application. Phase II has been preliminary designed in order to complete the No Rise Certificate and wetland permit.

Roadway

The proposed road is intended to introduce a variety of traffic calming measures intended to reduce speed and increase safety. It has been designed as a rural roadway with two-way traffic on bituminous pavement. The roadway will provide roadside shoulder trails, gravel shoulders, and stormwater management BMPs.

The proposed 1.69-mile roadway alignment for Phase I and Phase II construction will be:

- 1.0 miles on in-place roadway
- 0.35 miles on in-place trail corridor
- 0.33 miles new alignment through existing parkland
- Timber bridge over existing creek to provide regional trail and roadway separation

A 12-foot wide bituminous trail will run semi-parallel on the north side of the roadway in portions of the alignment. Where existing trail is being removed for new road, trails will be replaced in other interior park areas to make critical connections for a usable trail system.

Roadway construction will require clearing and grubbing of existing vegetation and earth moving including import and export of excavated materials and structural fill to provide appropriate roadway elevations. Revegetation, as planned within the construction boundary, is designed to enhance the natural community cover types.

Trail Enhancements

New road construction would leave a disconnected regional trail system requiring various segment connections to be made. Road abandonment was identified as a key opportunity to remove and reclaim much of the road corridor while at the same time providing needed trail connections with limited impact to existing woodland cover. Trail segments will be provided riverside and lakeside of the proposed road reconnecting the existing trail system.

The majority of the trail system is located along the new roadway as an on-road trail, converts old roadway into trail, uses existing trail corridor, is over the remediation site, or is located over existing gravel parking lots. The overall trail improvements cover 11,433 ln ft of trail as follows:

- 2,564 ln ft of reclaimed road
- 525 ln ft of reclaimed parking or graded areas
- 1,456 ln ft over the remediated dumpsite
- 1,223 ln ft of rebuilt trail
- 5,683 ln ft of new trail alignment

These trails were planned as connected segments into the existing 12-foot wide shared use trail system in the park. The proposed section is a 12-foot bituminous trail at or slightly above existing grades. Phase I trail construction will occur from DNR boat launch to existing Union Pacific railroad. Phase II will begin at the Union Pacific rail line and conclude at Harriet Island.

Bridge

The roadway and regional trail currently cross an existing creek together at an existing 20-foot wide Mendota Heights historic bridge. Elimination of this pinch point and separation of modes of travel will be accommodated by realigning this segment of roadway away from the Mississippi River, and maintaining the trail traffic over the historic bridge. The new roadway will require a way to span the creek.

The new bridge, located approximately 120 feet inland from the existing historic bridge, will have a clear width of 36 feet and an overall width of 38 feet, wide enough to accommodate two-way traffic as well as on-road commuter bicycle lanes. It will be located approximately 120 feet inland from the existing bridge with a 38-foot single span timber slab bridge (Mn/DOT Structure Code 709) with a bituminous wearing course. The bridge is supported with timber abutments utilizing steel pipe piling that will be filled with concrete after driving.

Bridge construction will occur in an existing delineated Wetland D. The historic bridge and new roadway alignment both cross a creek that provides a connection between Pickerel Lake and the Mississippi River. Surrounding low areas are often inundated with water from the Mississippi River resulting in the wetland. Filling within the wetland was minimized to the greatest extent possible and impacts to Wetland D are included in the wetland permit. Bridge construction will occur with Phase II.

Trailhead Development at Fossil Grounds

The fossil grounds trailhead provides improvements to the existing trailhead parking area. The current parking lot is a poorly defined gravel lot with above ground power, fragmented wetland, eroded areas, and various areas with debris and other construction materials. The proposal reduces the paved parking area and introduces bituminous paving. The proposed road realignment will also run through the current parking lot. New spur trail connections link to the riverside trail providing Americans with Disabilities Act (ADA) access to the main trail system. Parking for 19 vehicles is provided with one ADA stall.

The plan avoids any impact to two delineated wetlands at the base of the bluff. The site will be revegetated with 20-plus native species trees and native species seeding, all to be consistent with the prevailing natural communities. Overhead power will be buried. Water service allows for the opportunity to provide potable water to the trailhead. Trailhead construction will occur with Phase II construction.

Environmental Remediation

The 6¼-acre Lilydale Dump Site is irregularly shaped rising about 10 to 16 feet above surrounding terrain, primarily covered by herbaceous vegetation with some rubble protruding in several areas of the landfill.

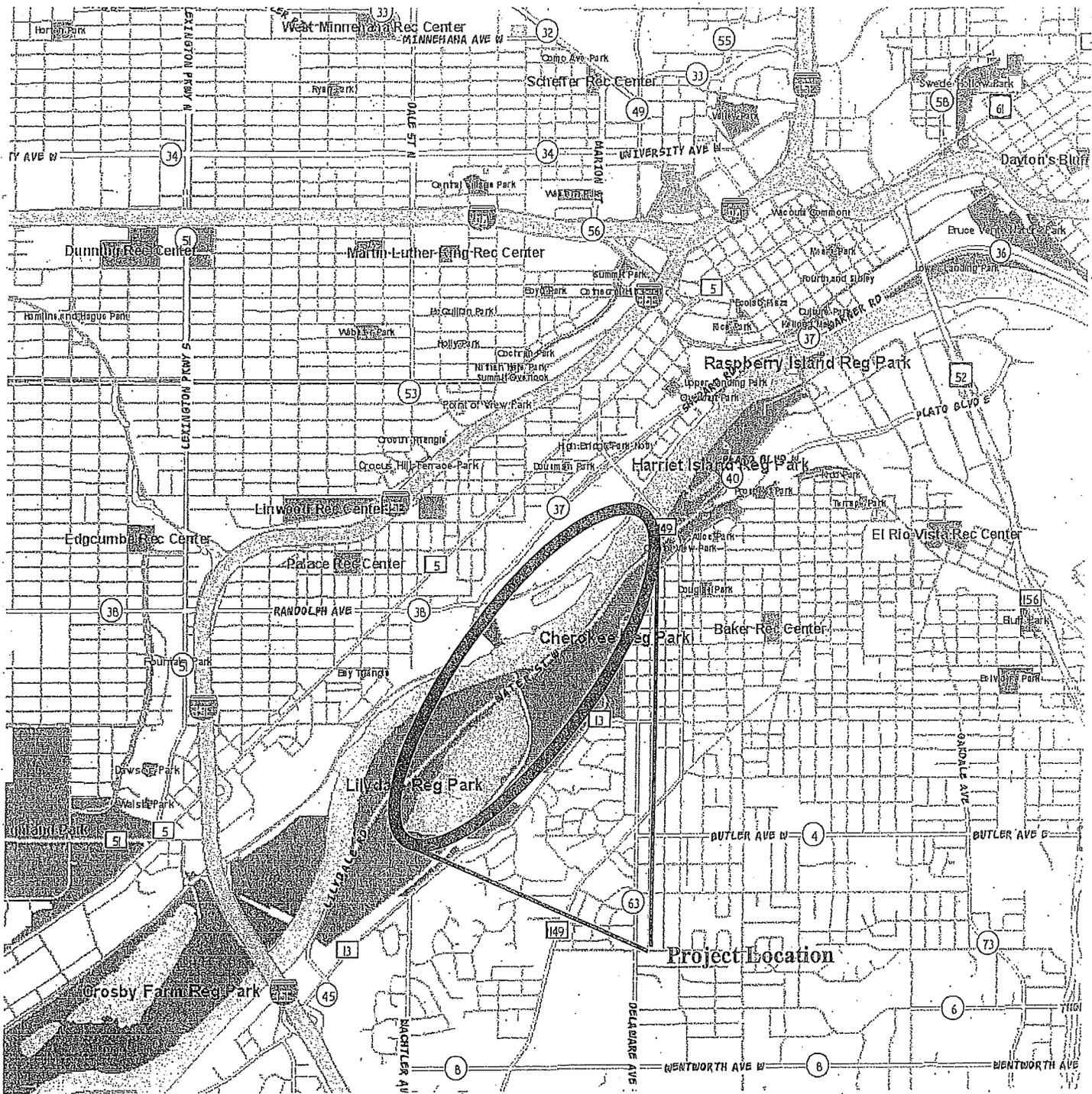
Limited investigations were conducted at the Park Site in 1988 (Braun), 2010 (Bonestroo) and 2011 (Liesch/AET), respectively. Debris observed within the waste mass includes concrete, brick, metal piping and wood. Contaminants of concern identified at the Lilydale Dump Site include asbestos, metals and SVOCs.

Proposed future development for the Lilydale Dump Site includes the addition of a picnic shelter and restrooms in connection with the construction of the road realignment and walking/bicycle paths in the surrounding park area. This will require that future users of the proposed picnic area be protected from contact with the waste materials disposed of at the Lilydale Dump Site. The Lilydale Park Dump Site is enrolled in the Minnesota Pollution Control Agency (MPCA) Voluntary Investigation and Cleanup (VIC) Program as a site currently under investigation and remediation. A common MPCA-approved method to prevent exposure of the general public to buried waste and/or contaminants of concern is constructing a soil buffer layer.

The Dump Site is an existing open grassland area and the proposed short grass prairie restoration will enhance the site biodiversity and serve as additional habitat for wildlife. For a portion of the remediation site, we will initiate re-forestation that transitions from an upland forest condition to floodplain forest at lower elevations. Despite requiring a 4-foot fill cap over all of the remediation, all specimen cottonwood trees have been preserved.

The City has completed a Response Action Plan (RAP) that will be submitted for approval by the MPCA. The RAP is for Phase I construction only as environmental remediation is not anticipated with Phase II construction. However, if a RAP is required for Phase II construction, this will be completed separately with Phase II.

Lilydale Regional Park - Location Map



Conditional Use Permit - Roadway and Trail Improvements
January 10, 2013

**City of Saint Paul
Technical Evaluation Panel
Meeting Summary**

Project: Lilydale Regional Park Project
Date: Thursday, January 4, 2013
Time: 1:30 p.m.
Location: Department of Safety and Inspections, Conf Rm 2e
Attendees: Wes Saunders-Pearce, City of Saint Paul (WSP)
Molly Shodeen, Dept. of Natural Resources
Dennis Rodacker, Board of Water and Soil Resources
Andy Beaudet, Army Corps of Engineers
Ryan Johnson, Ramsey Conservation District
Alice Messer, City of Saint Paul, Parks and Recreation
CJ Fernandez, LHB Consultants
Absent: Brian Watson, Dakota County SWCD

Summary

The purpose of the meeting was to review and discuss the November 19, 2012 wetland replacement application for Lilydale Regional Park improvements. The goal was to discuss sequencing and alternatives analysis, and mitigation approach.

The following items were noted during the meeting:

1. The wetland replacement plan is a comprehensive application to address the entire project. The project will be constructed in two phases.
 - a. Phase I will result in impacts to wetlands H and I.
 - b. Phase II will result in impacts to wetland D.
2. A brief summary of previous wetland reviews and approvals for the project area was provided.
3. Parks and Recreation and LHB Consultants discussed the overall design approach, tree preservation and tree design considerations.
4. Parks and Recreation provided a supplemental narrative describing in more detail the sequencing and alternatives analysis efforts for the project. The constraints limiting on-site wetland replacement as described in the narrative were discussed.
 - a. The site context (frequently floods, invasive vegetation) creates a very challenging environment to realize a successful restoration effort.
 - b. Flood storage capacity loss is not a significant concern. Separate analysis for floodplain considerations indicates there is no-rise in the 1% chance annual flood.
 - c. LGU indicated these constraints were acceptable for considering banking.
5. Wetland D is a Public Water Wetland due to connection with the Mississippi River. DNR will take jurisdiction over wetland D and issue a permit. The DNR will not require replacement for impacts because it is not a DNR requirement. Corps of Engineers will require 2:1 replacement. LGU concurred with this ratio.

6. BWSR noted Minnesota statute changed for WCA which affects the spatial / geographic approach for procuring wetland bank credits. Applicant (Parks) needs to re-assess if full amount of credits are available in the watershed where impacts will occur.
7. Discussion regarding the timing of construction relative to permit authorization window.
 - a. Phase II currently not funded so project may not occur until 2018.
 - b. WCA decisions are good for 5 years, unless the TEP determines a different period is warranted.
 - c. Corps General Permit would expire January 31, 2017.
 - d. DNR permit would expire in 5 years.
 - e. BWSR suggested the Notice of Decision include language indicating that banking credits for the whole project were procured and approved, so that if a re-issuance of permits is required, it is clear that credits are already addressed.
8. ACTION ITEMS
 - a. Parks and Recreation to elaborate their supplemental narrative to better articulate why on-site mitigation is not an alternative.
 - b. If full amount of credits are available in the watershed where impacts will occur, Parks and Recreation to revise the banking form to better reflect Minnesota statute's required spatial / geographic approach.

**Additional Information Sheet for Local/State/Federal Water & Wetlands Permit Application
City of St. Paul MN, Department of Parks & Recreation
Lilydale Regional Park Roadway Improvements Project: December 31, 2012**

The Technical Evaluation Panel (TEP) has requested additional information regarding sequencing and project alternatives that would further minimize wetland impacts. Below is a summary specifying why the proposed road alignment was selected, reasoning for its location, along with sketches illustrating physical constraints and site features that were preserved.

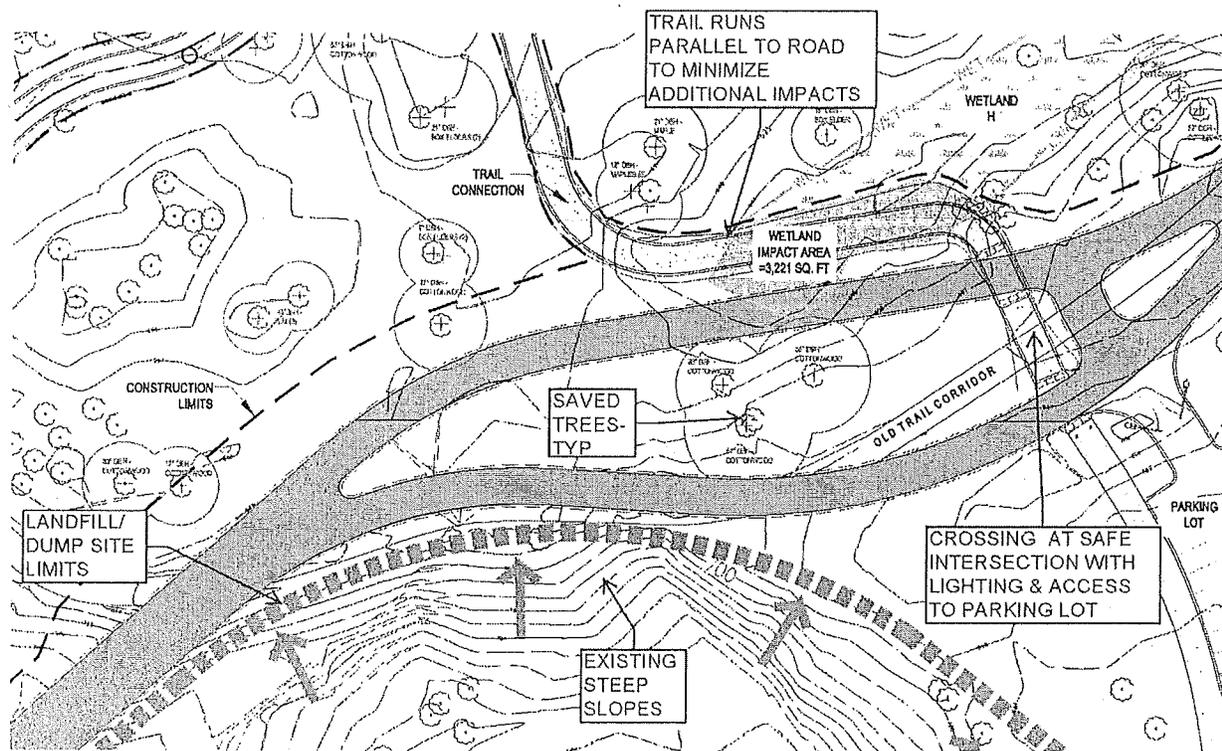
1. SUSTAINABLE & SENSIBLE DEVELOPMENT REASONING FOR WETLAND H IMPACTS

While the proposed road design disturbs 3,814 square feet of Wetland H, it was chosen as the best alignment with sustainable and sensible development in mind. The basic objectives of *sustainability* are to reduce consumption of nonrenewable resources, limit development footprint, minimize waste, re-cycle/re-use, and to protect/conservate natural resources. To be specific, the preferred road alignment was selected because of the following reasons:

- The road is routed through a soil correction area, re-using a cleanup area of the Lilydale Landfill/dump site.
- The road avoids steep grades along the existing dump site. This will reduce the overall footprint for construction activity, will result in less erosion, reduce energy and material waste, and provide a significant costs savings for the project.
- The road utilizes an existing 12' trail corridor. Re-using the existing corridor will minimize tree clearing through mature forestlands and reduce the amount of materials needed for the project. In addition, re-using the corridor will prevent creating a significant amount of new impervious surface, which will result in less stormwater runoff, and will conserve water quality and ground water resources.
- The road splits in two and has been routed as such to save very large specimen trees (note trees preserved in island area and along road corridor). This wooded area is providing many environmental benefits including stabilizing microclimate temperatures, cleaning the air, cleaning ground water, and providing wildlife habitat for many birds, mammals, and amphibians. Forested areas also provide screening, promote plant biodiversity and add to the aesthetic value of the surrounding landscape.
- At the east end of Wetland H, additional large specimen trees were saved by routing the road between trees and elevating the road to minimize tree root disturbance. A deep sand section is used below paving surfaces and ensures the

movement of water into root zones. By raising the road, additional wetland impacts could not be avoided.

- Based on the location of existing wetlands, the dump site and large specimen trees, the road geometrics have been revised to the fullest extent possible to minimize impacts, but does not allow for the complete avoidance of Wetland H. However, other on-site wetlands have been preserved in their entirety (see Exhibit Map 2 for Wetland I location). If the road alignment was designed to avoid Wetland H, impacts to Wetland I would result, along with other natural resources mentioned above.



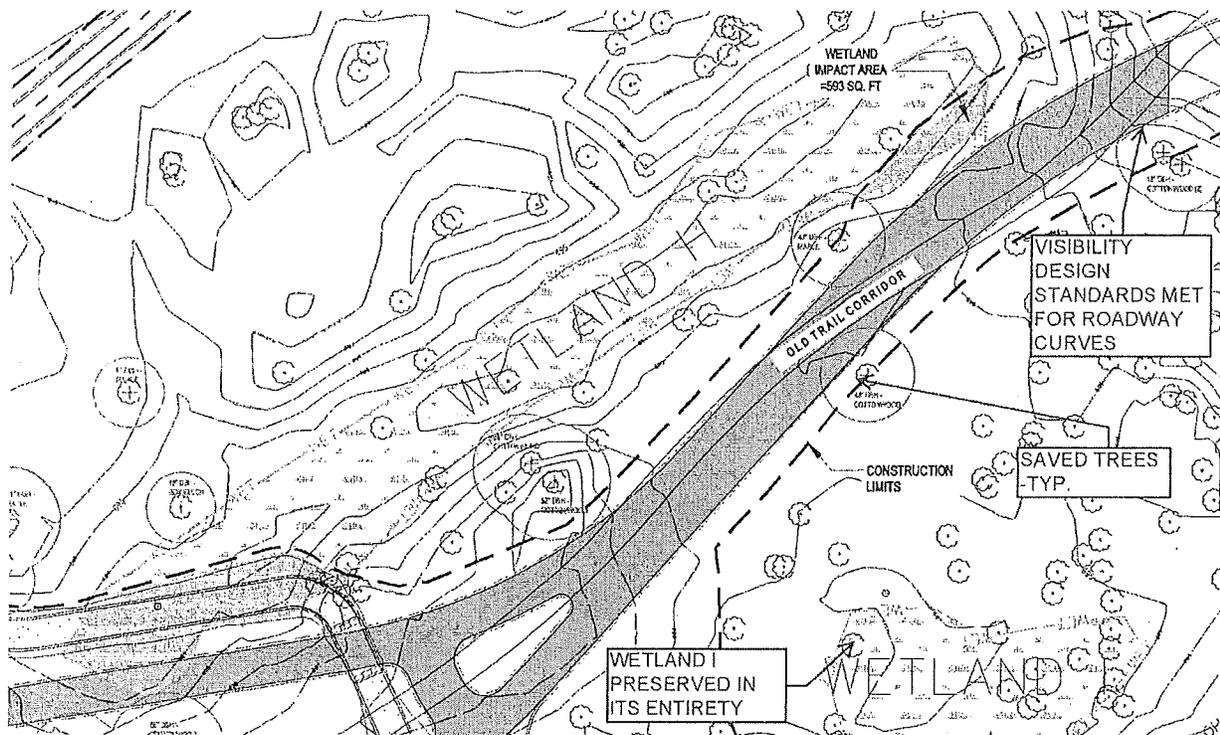
ROAD ALIGNMENT ADJACENT TO WETLAND H: EXHIBIT MAP 1

2. SAFETY & CIRCULATION REASONING FOR WETLAND H IMPACTS

Vehicular and pedestrian safety, along with mindful circulation were also important factors when siting the preferred road and trail alignments. Design decisions made with safety and circulation in mind include the following:

- A perpendicular (90 degree) trail crossing, the safest way to move pedestrians through traffic, is placed at an intersection where there is ample site lighting, a viewshed and access to the public parking lot.
- The road and trail do not exceed 5% longitudinal slopes.

- There is a buffer of green space between the trail and road, which provides a small safety zone for bike and pedestrian traffic.
- The road alignment has been designed with appropriate curves that ensure good visibility and sight lines throughout the corridor.



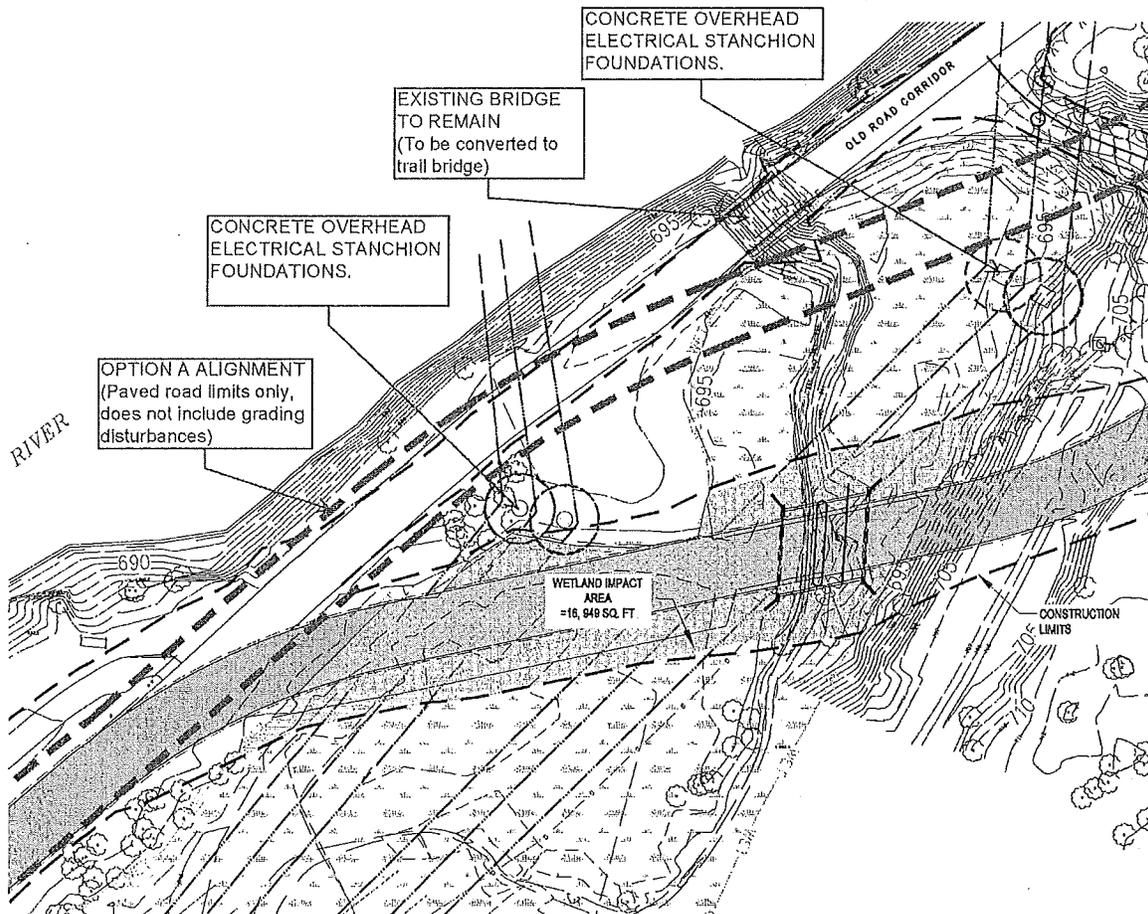
ROAD ALIGNMENT ADJACENT TO WETLAND H: EXHIBIT MAP 2

3. SITE CONSTRAINTS FOR WETLAND D

Because of existing electrical stanchions, a bridge, and narrow configuration of upland, the site conditions around Wetland D leave a very limited space for the construction of a new roadway. Option A alignment (see Exhibit Map 3) attempts to thread the road between two existing electrical stanchion lines; Xcel Energy high power lines cross the Mississippi River from these stanchions and represent some of the largest stanchions in the area, and the existing bridge. The result was 11-foot and 4-foot offset from the side of the road to the stanchions and an 8-foot offset from the bridge. The grades and embankments from the proposed edges of the road would partially bury both the stanchions and the existing bridge, therefore option A alignment was not feasible.

The selected alignment allows the road to maintain safe off-sets from both stanchions and the existing bridge. The road was designed to minimize wetland impacts by swinging north back to

the existing road alignment as soon as the road was past the stanchion setback. In doing this the road actually passes, partially, over upland conditions minimizing impacts on wetland areas. Although the new roadway will disturb 16,949 square feet of Wetland D, this alignment appears to be the best solution for vehicle safety while avoiding existing on-site utility structures and the bridge.



ROAD ALIGNMENT AT WETLAND D CROSSING: EXHIBIT MAP 3

4. OVERALL ROAD DESIGN AND CONSTRUCTION METHODS

Best Management Practices (BMPS) have been specified on the construction documents and will be used to minimize disturbances throughout the entire site. They include:

- Silt fence will be placed along toe slopes to prevent sedimentation entering wetlands and other downstream areas.
- The road bed will be raised to minimize excavation and grading activities within the trees' dripline.

- The road will have a deep granular sand subgrade below to facilitate infiltration to the root zones.
- Sides slopes of 3:1 have been utilized to minimize wetland disturbances while maintaining safe side slopes adjacent to roads and trails.

5. REASONING FOR PURCHASING CREDITS AS WETLAND REPLACEMENT PLAN

Lilydale Regional Park has a relatively flat terrain, but is heavily wooded throughout, leaving little space for potential on-site mitigation. In addition, most of the on-site wetlands are degraded, contain invasive species and/or have little to no plant biodiversity. The requirements of maintaining mitigated wetlands surrounded by invasive species will be extremely difficult for the City of St. Paul Parks and Recreation Department to maintain due to lack of staff and budget to keep invasive species at bay.

Due to the above cited reasons, the City of St. Paul prefers to purchase credits for their replacement plan. At an informational TEP meeting spring 2012, the City expressed their desire to purchase credits and TEP members concurred that purchasing credits was the appropriate method for replacement considering the existing site conditions.

6. WETLAND BANK CREDITS SUMMARY

The City of St. Paul understands that wetland bank credits provided as compensation for the wetland impacts must follow the replacement guidelines of the Wetland Conservation Act (WCA), more specifically Minnesota Rules, Chapter 8420.0522, Subpart 7. The City has made an effort to obtain wetland credits per the WCA requirements, however this cannot be met in its entirety for the following reasons:

- 1.) The proposed project cannot meet Subpart 7.A.1, due to the fact that no wetland banks are located in the same minor watershed as the proposed wetland impact.
- 2.) The proposed project cannot meet Subpart 7.A.2 for the following reasons:
 - a) The proposed wetland impacts are COE-jurisdictional and therefore wetland credits must be provided from a COE-approved wetland bank. Of the nine wetland banks located in the Mississippi River – Metro (#20) major watershed, only seven are COE-approved.
 - b) Wetland banks #116 and #1469 are owned and managed by a government body and are not selling the wetland credits for projects to private developments.

- c) Wetland bank #1171 is owned and managed by a developer and is not willing to sell the wetland credits to another private party.
 - d) Wetland bank #119 only has approximately 200-SF of wetland credits, which does not meet the required amount of wetland credits to satisfy the needs of the project.
 - e) Wetland banks #1346, #1412, and #1138 have pending Purchase Agreements that make the remaining wetland credits unavailable for additional projects.
- 3.) The proposed project cannot meet Subpart 7.A.1, due to the fact that no additional wetland banks are located within Ramsey County.
- 4.) The City of St. Paul has contacted wetland bank #1410 for remaining credits that cannot be obtained in the Mississippi River – Metro (#20) major watershed. Wetland bank #1410 is located in the North Fork Crow (#18) major watershed and Hennepin County. The wetland bank is located in a less than 50% area, which satisfies Subpart 7.A.4. Wetland bank #1410 meets Subpart 7.C.2 of the WCA.

Minnesota Wetland Conservation Act

Notice of Application

— copy —

Local Government Unit (LGU) City of Saint Paul	Address 375 Jackson Street, Suite 220 Saint Paul, MN 55101
----------------------------------------------------------	-----------------------------------------------------------------------------------

1. PROJECT INFORMATION

Applicant Name City of Saint Paul Department of Parks and Recreation	Project Name Lilydale Regional Park	Date of Application 11/19/0212	Application Number
---------------------------------------------------------------------------------------------	-----------------------------------------------	------------------------------------------	--------------------

Type of Application (check all that apply):

<input type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input checked="" type="checkbox"/> Sequencing
<input checked="" type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Summary and description of proposed project (attach additional sheets as necessary):

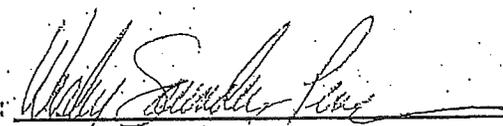
NOTE: Original application for replacement (March 30, 2012 with revised submittal May 23, 2012) has been withdrawn by applicant.

This project is part of the City of St. Paul's, Department of Parks and Recreation Park Enhancements plan and will include reconstructing a 1.69-mile roadway within the Lilydale Regional Park. Approximately 0.3-miles of road will be constructed along new alignment through wooded parkland with some wetlands.

2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person Wes Saunders-Pearce Water Resource Coordinator	Comments must be received by (minimum 15 business-day comment period): December 28, 2012
Address (if different than LGU)	Date, time, and location of decision: Upon completion of TEP findings.
Phone Number and E-mail Address 651-266-9112 wes.saunders-pearce@ci.stpaul.mn.us	Decision-maker for this application: <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Governing Board or Council

Signature:  Date: 12/3/12

3. LIST OF ADDRESSEES

<input checked="" type="checkbox"/> SWCD TEP member: Ryan Johnson, 1425 Paul Kirkwold Drive, Arden Hills, MN 55112 <div style="text-align: center; padding: 5px;">Brian Watson, Dakota County SWCD</div>
<input checked="" type="checkbox"/> BWSR TEP member: Dennis Rodacker, 520 Lafayette Road North, Saint Paul, MN 55155 <input checked="" type="checkbox"/> LGU TEP member (if different than LGU Contact): City of Lilydale <input checked="" type="checkbox"/> DNR TEP member: Molly Shodeen <input type="checkbox"/> DNR Regional Office (if different than DNR TEP member) <input type="checkbox"/> WD or WMO (if applicable): <input checked="" type="checkbox"/> Applicant (notice only) and Landowner (if different) <input type="checkbox"/> Members of the public who requested notice (notice only):
<input checked="" type="checkbox"/> Corps of Engineers Project Manager (notice only) <input type="checkbox"/> BWSR Wetland Bank Coordinator (wetland bank plan applications only)

4. MAILING INFORMATION

- For a list of BWSR TEP representatives: www.bwsr.state.mn.us/contact/WCA_areas.pdf
- For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf
- Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.
Div. Ecol. Resources	Div. Ecol. Resources	Div. Ecol. Resources	Div. Ecol. Resources
2115 Birchmont Beach Rd. NE	1201 E. Hwy. 2	1200 Warner Road	261 Hwy. 15 South
Bemidji, MN 56601	Grand Rapids, MN 55744	St. Paul, MN 55106	New Ulm, MN 56073

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

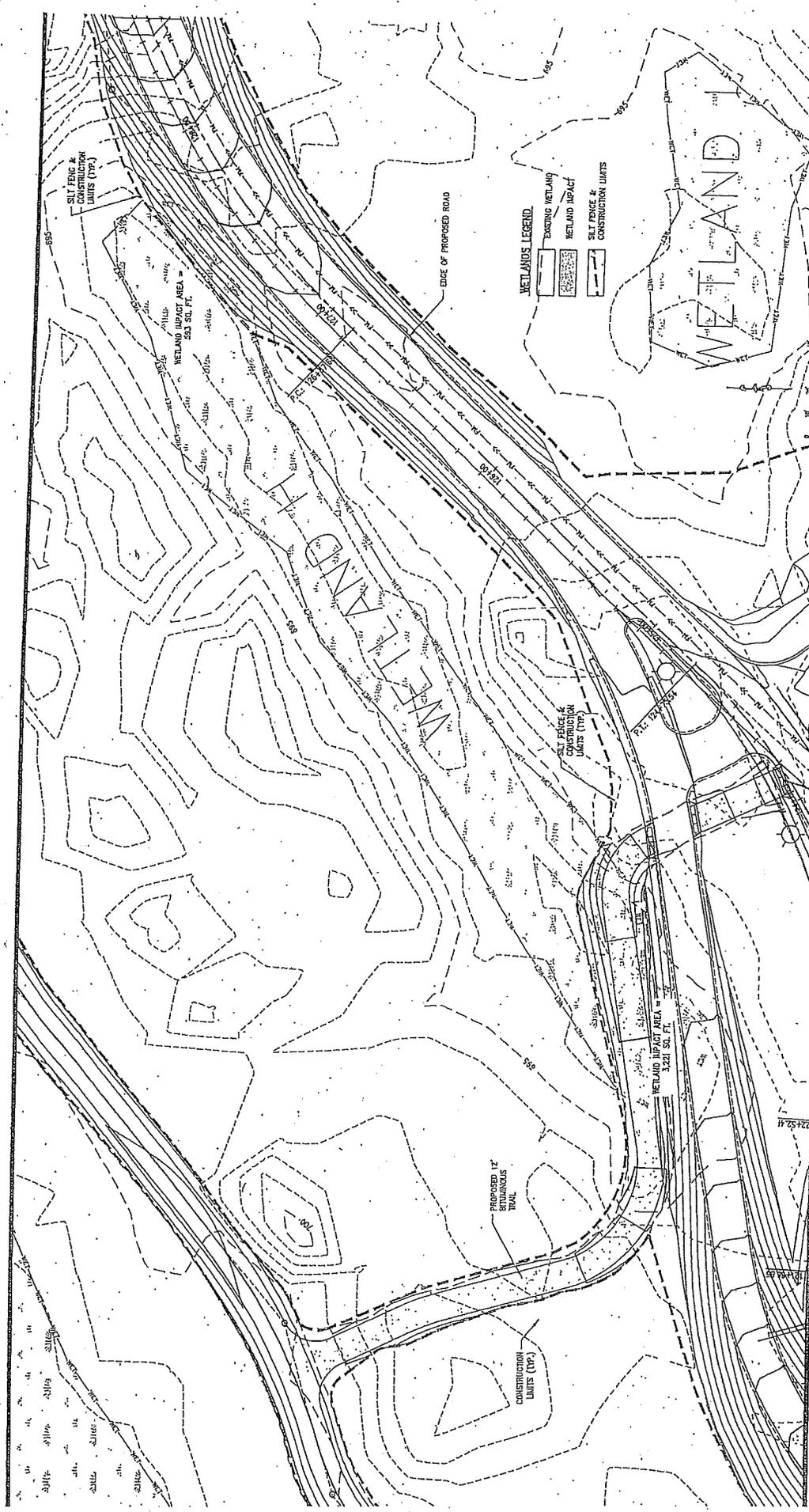
- For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687
or send to:

US Army Corps of Engineers
 St. Paul District, ATTN: OP-R
 180 Fifth St. East, Suite 700
 St. Paul, MN 55101-1678

- For Wetland Bank Plan applications, also send a copy of the application to:
 Minnesota Board of Water and Soil Resources
 Wetland Bank Coordinator
 520 Lafayette Road North
 St. Paul, MN 55155

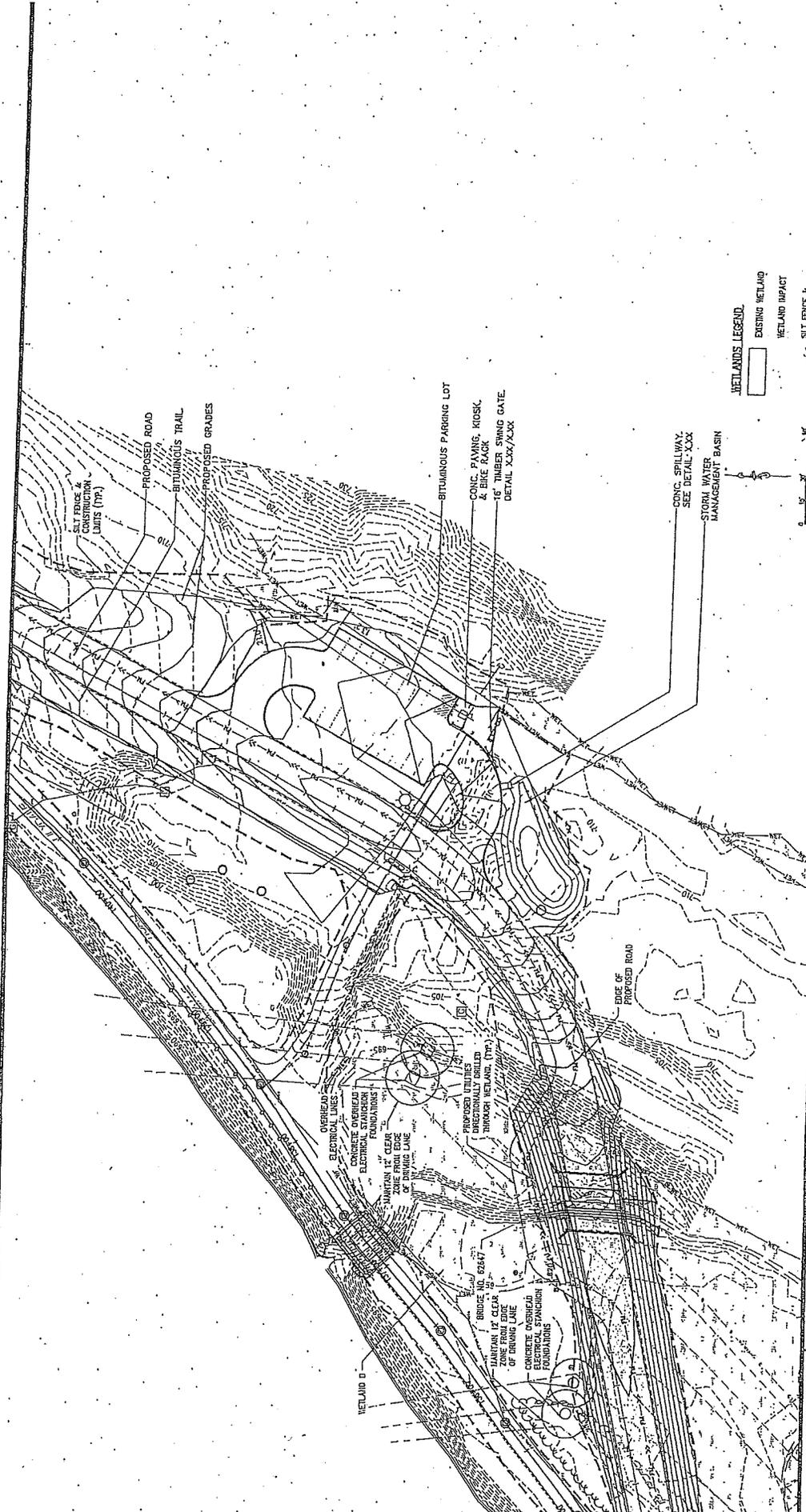
5. ATTACHMENTS

In addition to the application, list any other attachments:
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



 21 N. Superior Street South, MN 55002 TEL 218/777-3146 FAX 218/777-4168 http://www.jlbcorp.com	CLIENT NAME LILYDALE PARK
	PROJECT NAME LILYDALE PARK
CITY OF ST. PAUL MINNESOTA DEPARTMENT OF PARKS & RECREATION	DRAWING TITLE WETLAND IMPACTS
NOVEMBER 2012, SUBMITTAL COPYRIGHT 2012 BY JLB, INC. ALL RIGHTS RESERVED.	FILE: J:\00000000\Drawings\10\100000\Wetland\100000\Wetland Layouts.dwg DRAWING NO. DRAWN BY: SHH CHECKED BY: RSH PLOT DATE: 10/29/12

WETLAND MAP 1



**CITY OF ST. PAUL MINNESOTA
DEPARTMENT OF PARKS & RECREATION**

CLIENT NAME: **LILYDALE PARK**
DRAWING TITLE: **WETLAND AVOIDANCE**

NOVEMBER 2012 SUBMITTAL

21 W. Superior Street
Suite 500
Duluth, MN 55802
TEL 218/775-4146
FAX 218/775-4146
http://www.dpr.com

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DRAWING NO.: 5018
CHECKED BY: NSB
PROJECT NO.: 10036

FILE: \\00036\00\Design\10036\10036\Wetland_Avoidance.dwg DRAWING NO.:
10036\WETLAND_AVOIDANCE.dwg

WETLAND MAP 3



Stantec

Memo

To: CJ Fernandez
LHB, Inc.

From: Dan Edgerton, PE
Stantec Consulting Services Inc.

File: 193802292

Date: December 11, 2012

Reference: Lilydale Regional Park Improvements No-Rise Certification

This memo summarizes the technical analysis performed to verify the absence of any impact to the Mississippi River's 100-year Base Flood Elevation (BFE) due to floodway fill within a portion of Lilydale Regional Park in Saint Paul, MN.

Description of Project

The project consists of capping an environmentally-sensitive area, expansion of the trail system, and general park improvements within Lilydale Regional Park. This project will disturb an area within the park between River Station (RS) 165 and 184. The area being disturbed is 31.7 acres. Approximately 59,500 cubic yards of additional fill will be used during the capping process.

Technical Background

Federal Emergency Management Administration (FEMA) floodplain information for the City of Saint Paul consists of floodplain maps used for flood insurance purposes called Flood Insurance Rate Maps (FIRMs). The effective maps for Saint Paul are dated between June 4, 2010 and December 2, 2011. These maps represent the current maps used by FEMA and other State agencies in evaluating flood boundaries for the City of Saint Paul. The FIRMs for Saint Paul show Lilydale Regional Park within the floodplain and floodway of the Mississippi River.

Procedure

A HEC-RAS model created for the updated 2003 Mississippi River Floodplain Study was used to determine the effects of the proposed improvements within the floodway. The HEC-RAS model was selected for this analysis, rather than the HEC-2 model created in the early 1970s, as the RAS model incorporates the most current available information.

The cross sections within the project boundary (RS 165 -184) were modified to reflect the existing conditions from 2009 survey data. The HEC-RAS model was run using the existing conditions to determine existing water surface elevations at each cross section. The cross sections (RS 165-184) were then modified to reflect the proposed grading for the project area. The HEC-RAS model was then run using the proposed conditions to determine the 100-year flood water surface elevations throughout the project area.

Results

The modeled results for both the existing and proposed conditions are shown in a table found in the supporting documents. The model shows that the water surface elevations do NOT rise through the modeled cross sections as a result of the proposed park improvements.

Therefore, the proposed improvements at Lilydale Regional Park will not raise the 100-year flood elevation of the Mississippi River.

One Team. Infinite Solutions.

MINNESOTA "NO-RISE" CERTIFICATION

This is to certify that I am a duly qualified professional engineer licensed to practice in the State of Minnesota.

It is further to certify that the attached technical data supports the fact that the grading improvements to Lilydale Regional Park proposed by the City of Saint Paul for 2013 between River Stations 165 and 184 will not impact the floodway width or 100-year flood elevation (will not raise by more than 0.00 feet) on the Mississippi River at published sections in the Flood Insurance Study for the City of Saint Paul dated April 2, 2003, and will not impact the 100-year flood elevation (will not raise by more than 0.00 feet) at unpublished cross-sections in the vicinity of the proposed development / project.

Attached are the following documents that support my findings:

A technical findings memo, project grading plans, current FIRM maps, modeled river cross sections, and HEC-RAS output.

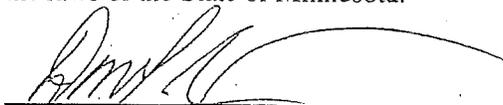
Date: December 11, 2012

Name: Dan Edgerton

Signature: 

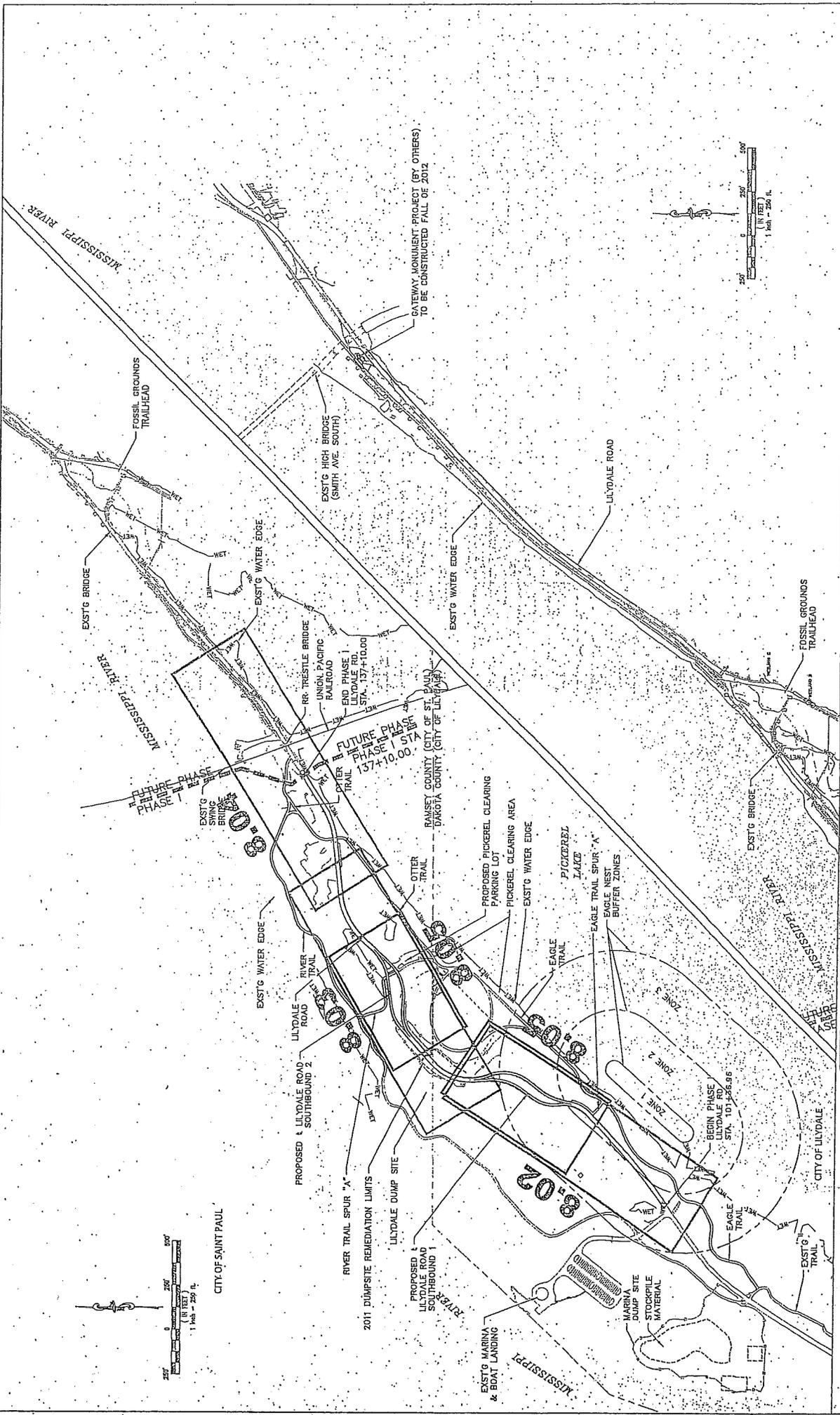
Title: Senior Associate

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.



Dan Edgerton, PE

Date: December 11, 2012 Registration No. 19206



PRELIMINARY
NOT FOR CONSTRUCTION
06.27.2012

DESIGNED BY: C.E./MUR/BFS/ANJ/JNH
DRAWN BY: SMH/MRW

UHB, Inc. MINNEAPOLIS, MN 55425
1000 SOUTH WASHINGTON AVE. SUITE 200
TEL: 612.339.7500 FAX: 612.339.7504
www.uhb.com

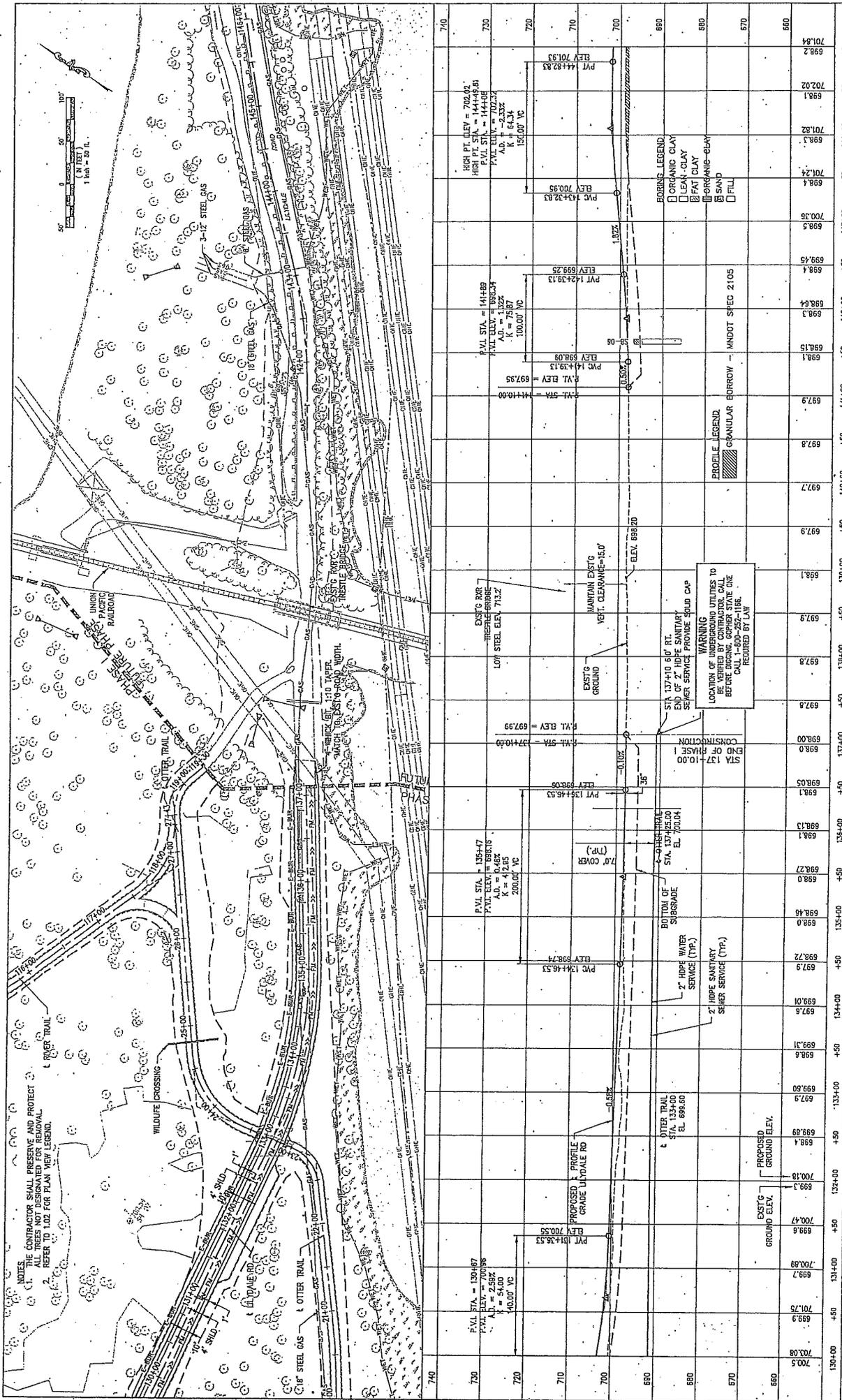
ROAD PLAN & PROFILE
LULLYDALE REGIONAL PARK
SAINT PAUL, MINNESOTA

SHEET 8.01 of 8.05

DATE: _____ LIC. NO. _____

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

10/03/2012
100399-000.dwg
100399-rd



NOTES:
 1. CONTRACTOR SHALL PRESERVE AND PROTECT ALL UTILITIES AND STRUCTURES SHOWN ON THIS PLAN.
 2. REFER TO L02 FOR PLAN VIEW LEGEND.

WARNING
 LOCATION OF UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR. CALL BEFORE YOU DIG. STATE ONE CALL 1-800-252-8583 REQUIRED BY LAW.

STATION	ELEVATION	DESCRIPTION
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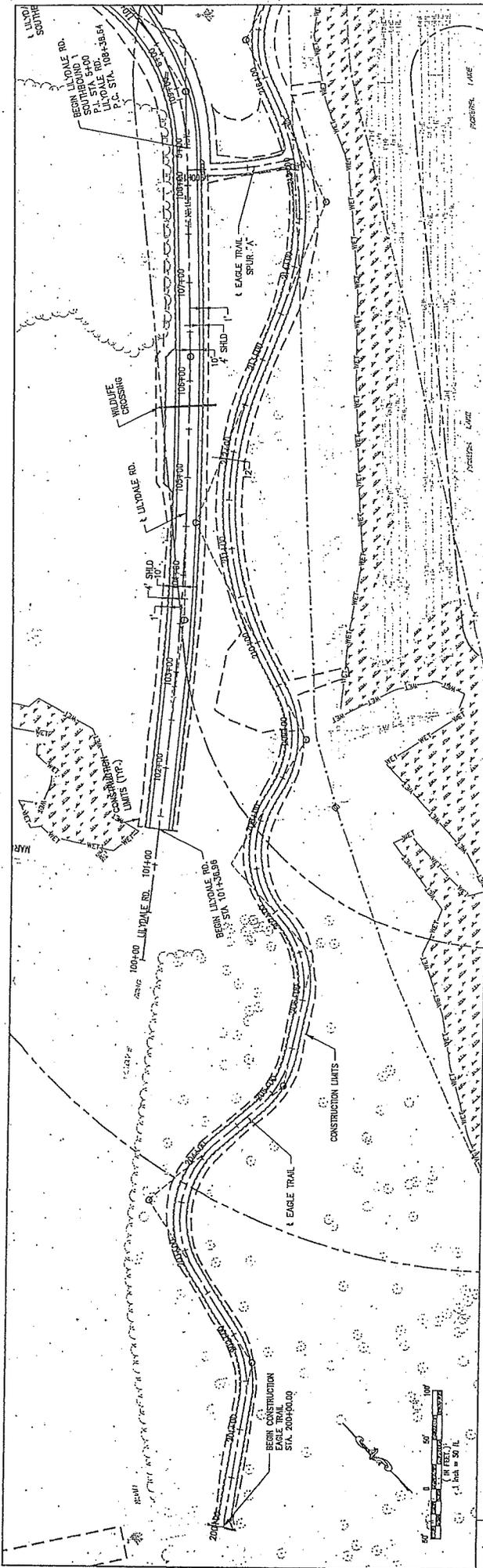
PROJECT: ROAD PLAN & PROFILE
 LOCATION: LLYDALE REGIONAL PARK, SAINT PAUL, MINNESOTA

DESIGNED BY: C/F MAA/RFPS/ALB/AJH
 DRAWN BY: SHW/ARV
 DATE: _____

UC. NO. _____
 NAME _____

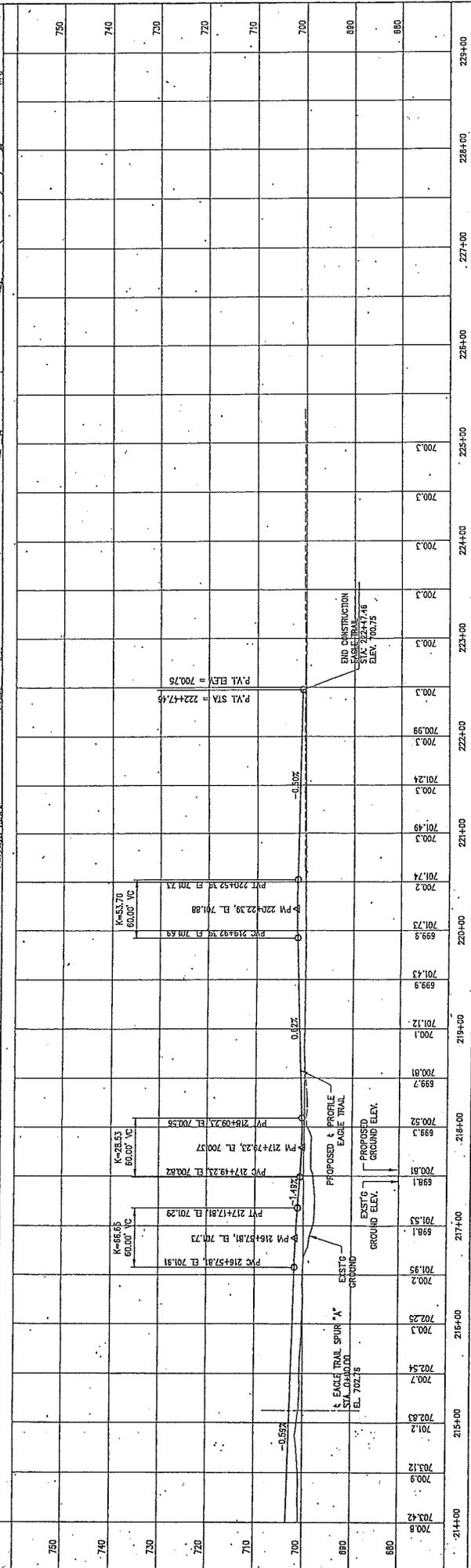
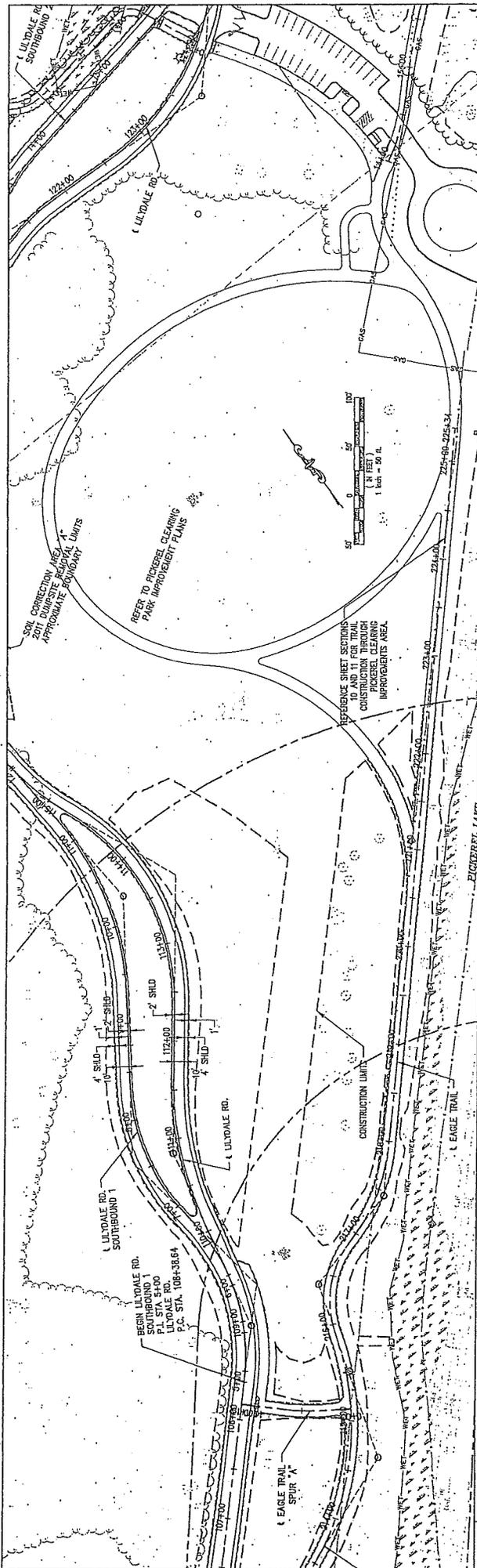
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
 THESE NOTES ARE PRELIMINARY AND NOT FOR CONSTRUCTION
 09.27.2012

DATE: _____
 IUC. NO. _____
 NAME _____



Station	Elevation	Notes
200+00	702.35	P.V.L. STA = 200+00.00
702.35	702.35	P.V.L. ELEV = 702.35
701.7	703.32	P.C. 200+138.25, E. 703.11
703.32	703.32	P.M. 200+82.29, E. 703.71
703.55	703.55	H.V.T. 200+98.29, E. 703.56
702.1	702.1	BEGIN CONSTRUCTION EAGLE TRAIL STA. 200+00.00 ELEV. 702.35
702.82	702.82	P.C. 202+38.84, E. 702.86
701.6	702.82	P.M. 202+68.88, E. 702.71
703.07	703.07	P.V.T. 202+98.84, E. 703.08
703.68	703.68	P.C. 204+10.38, E. 704.32
704.25	704.25	P.M. 204+40.38, E. 704.72
704.46	704.46	H.V.T. 204+80.22, E. 704.82
702.1	704.46	P.V.T. 204+88.07, E. 703.96
703.64	703.64	P.C. 206+16.84, E. 703.00
701.38	703.64	P.M. 206+46.84, E. 703.12
699.0	703.64	H.V.T. 206+76.84, E. 701.03
700.3	703.64	P.C. 206+90.02, E. 701.35
701.57	703.64	P.M. 207+20.02, E. 702.06
700.3	703.64	H.V.T. 207+50.02, E. 702.21
702.21	703.64	P.C. 207+85.84, E. 702.39
700.6	703.64	P.M. 208+15.84, E. 702.54
702.43	703.64	H.V.T. 208+45.84, E. 702.17
702.11	703.64	P.C. 208+81.58, E. 701.83
700.6	703.64	P.M. 208+84.59, E. 701.58
701.77	703.64	H.V.T. 209+24.58, E. 701.97
702.2	703.64	P.C. 209+31.14, E. 702.06
702.29	703.64	P.M. 209+61.14, E. 702.47
702.8	703.64	H.V.T. 209+91.14, E. 702.62
702.57	703.64	P.C. 209+91.14, E. 702.47
703.42	703.64	P.M. 209+91.14, E. 702.47
701.8	703.64	H.V.T. 209+91.14, E. 702.47
703.67	703.64	P.C. 212+54.84, E. 703.94
703.92	703.64	P.M. 212+54.84, E. 703.94
703.98	703.64	H.V.T. 213+44.84, E. 703.92
703.71	703.64	P.C. 213+44.84, E. 703.92
702.2	703.64	P.M. 213+44.84, E. 703.92
703.42	703.64	H.V.T. 213+44.84, E. 703.92
210+00	703.42	EXISTING GROUND
211+00	703.17	PROPOSED & PROFILE EAGLE TRAIL
212+00	703.42	EXISTING GROUND
213+00	703.92	PROPOSED GROUND ELEV.
214+00	703.42	EXISTING GROUND
215+00	702.83	PROPOSED & PROFILE EAGLE TRAIL

SHEET 9.02 OF 9.07
 TRAIL PLANS & PROFILES - EAGLE TRAIL
 LILYDALE REGIONAL PARK
 SAINT PAUL, MINNESOTA
 DESIGNED BY: LHB, Inc. MINNEAPOLIS
 C/F/ALR/PBS/PJ/B/A/H
 DRAWN BY: SMH/ARV
 DATE: _____
 LIC. NO. _____
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRELIMINARY
 NOT FOR CONSTRUCTION
 09.27.2012



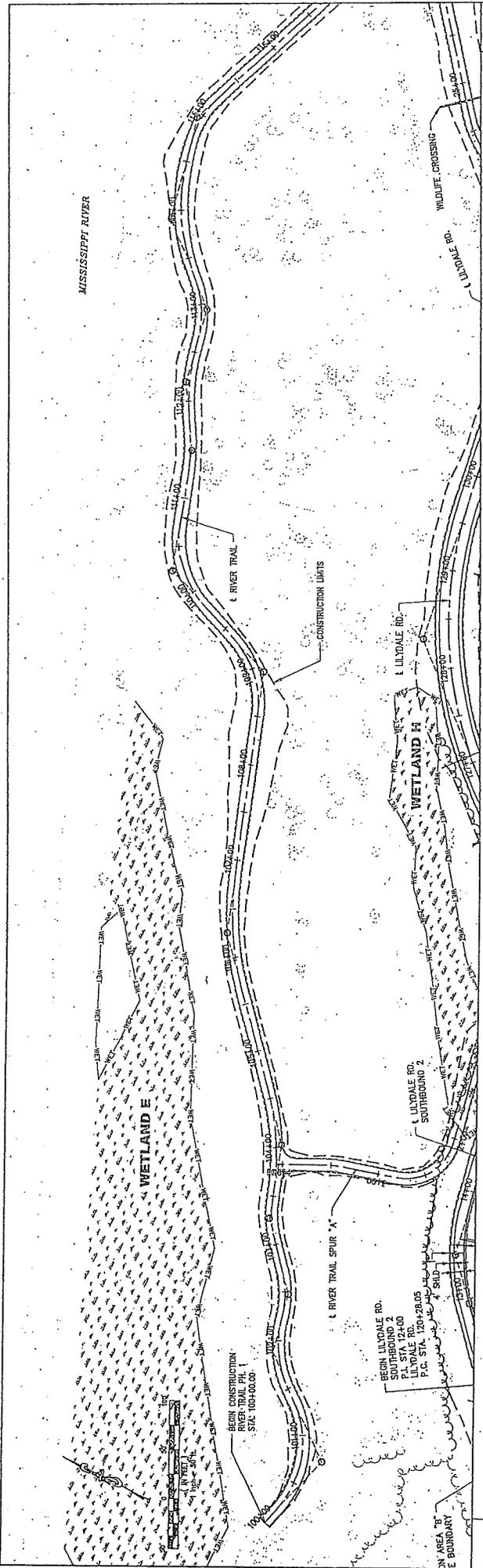
STATION	ELEVATION	DESCRIPTION
2144+00	700.8	EXIST GROUND
2144+00	700.42	PROPOSED GROUND
2150+00	700.9	EXIST GROUND
2150+00	703.12	PROPOSED GROUND
2155+00	702.63	EXIST GROUND
2155+00	702.54	PROPOSED GROUND
2160+00	702.23	EXIST GROUND
2160+00	702.3	PROPOSED GROUND
2165+00	702.54	EXIST GROUND
2165+00	702.7	PROPOSED GROUND
2170+00	701.95	EXIST GROUND
2170+00	701.53	PROPOSED GROUND
2174+00	698.1	EXIST GROUND
2174+00	698.1	PROPOSED GROUND
2177+00	701.53	EXIST GROUND
2177+00	701.53	PROPOSED GROUND
2181+00	700.81	EXIST GROUND
2181+00	700.81	PROPOSED GROUND
2185+00	700.52	EXIST GROUND
2185+00	700.52	PROPOSED GROUND
2191+00	699.3	EXIST GROUND
2191+00	699.3	PROPOSED GROUND
2194+00	699.9	EXIST GROUND
2194+00	699.9	PROPOSED GROUND
2200+00	701.43	EXIST GROUND
2200+00	701.43	PROPOSED GROUND
2204+00	701.73	EXIST GROUND
2204+00	701.73	PROPOSED GROUND
2208+00	702.2	EXIST GROUND
2208+00	702.2	PROPOSED GROUND
2211+00	701.74	EXIST GROUND
2211+00	701.74	PROPOSED GROUND
2214+00	700.3	EXIST GROUND
2214+00	700.3	PROPOSED GROUND
2218+00	701.49	EXIST GROUND
2218+00	701.49	PROPOSED GROUND
2221+00	700.3	EXIST GROUND
2221+00	700.3	PROPOSED GROUND
2224+00	700.3	EXIST GROUND
2224+00	700.3	PROPOSED GROUND
2228+00	700.3	EXIST GROUND
2228+00	700.3	PROPOSED GROUND
2231+00	700.3	EXIST GROUND
2231+00	700.3	PROPOSED GROUND
2234+00	700.3	EXIST GROUND
2234+00	700.3	PROPOSED GROUND
2238+00	700.3	EXIST GROUND
2238+00	700.3	PROPOSED GROUND
2241+00	700.3	EXIST GROUND
2241+00	700.3	PROPOSED GROUND
2244+00	700.3	EXIST GROUND
2244+00	700.3	PROPOSED GROUND
2248+00	700.3	EXIST GROUND
2248+00	700.3	PROPOSED GROUND
2251+00	700.3	EXIST GROUND
2251+00	700.3	PROPOSED GROUND
2254+00	700.3	EXIST GROUND
2254+00	700.3	PROPOSED GROUND
2258+00	700.3	EXIST GROUND
2258+00	700.3	PROPOSED GROUND
2261+00	700.3	EXIST GROUND
2261+00	700.3	PROPOSED GROUND
2264+00	700.3	EXIST GROUND
2264+00	700.3	PROPOSED GROUND
2268+00	700.3	EXIST GROUND
2268+00	700.3	PROPOSED GROUND
2271+00	700.3	EXIST GROUND
2271+00	700.3	PROPOSED GROUND
2274+00	700.3	EXIST GROUND
2274+00	700.3	PROPOSED GROUND
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2281+00	700.3	PROPOSED GROUND
2284+00	700.3	EXIST GROUND
2284+00	700.3	PROPOSED GROUND
2288+00	700.3	EXIST GROUND
2288+00	700.3	PROPOSED GROUND
2291+00	700.3	EXIST GROUND
2291+00	700.3	PROPOSED GROUND
2294+00	700.3	EXIST GROUND
2294+00	700.3	PROPOSED GROUND
2298+00	700.3	EXIST GROUND
2298+00	700.3	PROPOSED GROUND
2301+00	700.3	EXIST GROUND
2301+00	700.3	PROPOSED GROUND
2304+00	700.3	EXIST GROUND
2304+00	700.3	PROPOSED GROUND
2308+00	700.3	EXIST GROUND
2308+00	700.3	PROPOSED GROUND
2311+00	700.3	EXIST GROUND
2311+00	700.3	PROPOSED GROUND
2314+00	700.3	EXIST GROUND
2314+00	700.3	PROPOSED GROUND
2318+00	700.3	EXIST GROUND
2318+00	700.3	PROPOSED GROUND
2321+00	700.3	EXIST GROUND
2321+00	700.3	PROPOSED GROUND
2324+00	700.3	EXIST GROUND
2324+00	700.3	PROPOSED GROUND
2328+00	700.3	EXIST GROUND
2328+00	700.3	PROPOSED GROUND
2331+00	700.3	EXIST GROUND
2331+00	700.3	PROPOSED GROUND
2334+00	700.3	EXIST GROUND
2334+00	700.3	PROPOSED GROUND
2338+00	700.3	EXIST GROUND
2338+00	700.3	PROPOSED GROUND
2341+00	700.3	EXIST GROUND
2341+00	700.3	PROPOSED GROUND

DESIGNED BY: C.F. MAURY/SPS/ALB/AWH
 DRAWN BY: SMH/AJRW
 DATE: _____
 D.C. NO. _____

PROJECT: TRAIL PLANS & PROFILES - EAGLE TRAIL
 LOCATION: LLYDALE REGIONAL PARK
 CITY: SAINT PAUL, MINNESOTA

INTEGRITY ENGINEERING, INC.
 1000 W. WASHINGTON AVENUE, SUITE 200
 MINNEAPOLIS, MN 55408
 TEL: 612.338.4444 / FAX: 612.338.4444
 WWW.INTEGRITYENGINEERING.COM

DATE: 10/03/2012



Station	Elevation	Profile Description	Notes
100+00	696.1		
100+10	696.7		
100+20	697.5		
100+30	697.8		
100+40	697.8		
100+50	697.8		
100+60	697.8		
100+70	697.8		
100+80	697.8		
100+90	697.8		
101+00	697.8		
101+10	697.8		
101+20	697.8		
101+30	697.8		
101+40	697.8		
101+50	697.8		
101+60	697.8		
101+70	697.8		
101+80	697.8		
101+90	697.8		
102+00	697.8		
102+10	697.8		
102+20	697.8		
102+30	697.8		
102+40	697.8		
102+50	697.8		
102+60	697.8		
102+70	697.8		
102+80	697.8		
102+90	697.8		
103+00	697.8		
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103+60	697.8		
103+70	697.8		
103+80	697.8		
103+90	697.8		
104+00	697.8		
104+10	697.8		
104+20	697.8		
104+30	697.8		
104+40	697.8		
104+50	697.8		
104+60	697.8		
104+70	697.8		
104+80	697.8		
104+90	697.8		
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105+80	697.8		
105+90	697.8		
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112+90	697.8		
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113+80	697.8		
113+90	697.8		
114+00	697.8		
114+10	697.8		
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114+80	697.8		
114+90	697.8		
115+00	697.8		

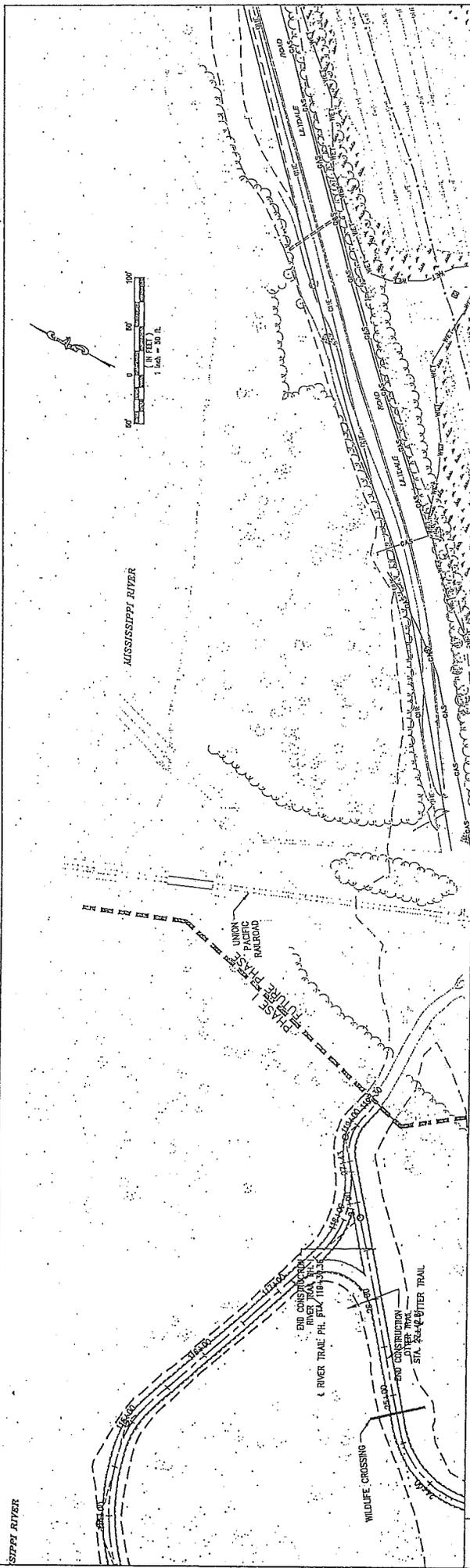
PRELIMINARY
 NOT FOR CONSTRUCTION
 09.27.2012

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DESIGNED BY: **SMH/ARW**
 DRAWN BY: **SMH/ARW**

PROJECT: **TRAIL PLANS & PROFILES - RIVER TRAIL PHASE 1**
 LOCATION: **ULYDALE REGIONAL PARK, SAINT PAUL, MINNESOTA**

SHEET: **9.04** OF **9.07**



STATION	ELEVATION	DESCRIPTION	DATE
114+00	698.8	P.C. 114+17.70, EL. 700.79	
114+00	698.8	P.M. 114+77.00, EL. 701.94	
115+00	699.5	P.P.T. 114+77.00, EL. 701.94	
115+00	700.3	P.C. 115+57.62, EL. 702.32	
115+00	701.0	P.M. 115-87.62, EL. 702.69	
116+00	702.22	P.P.T. 115+17.62, EL. 702.38	
116+00	702.06	P.C. 116+38.42, EL. 702.16	
117+00	702.4	P.M. 116+38.42, EL. 701.84	
117+00	702.24	P.P.T. 116+38.42, EL. 702.22	
117+00	700.8	P.C. 117+11.78, EL. 702.44	
118+00	700.57	P.M. 117+48.46, EL. 702.85	
118+00	700.3	P.P.T. 117+48.46, EL. 702.20	
118+00	701.88	OTHER TRAIL STA. 117+48.46, EL. 700.74	
118+00	700.94	END CONSTRUCTION STA. 117+48.46, EL. 698.42	
119+00	700.00	P.Y.L. STA. 119+30.36	
119+00	699.2	P.Y.L. ELEV. 699.42	
120+00	699.3		
121+00	698.2		
122+00			
123+00			
124+00			
125+00			
126+00			
127+00			
128+00			
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198+00			
199+00			
200+00			

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

NAME: _____ DATE: _____

LIC. NO. _____

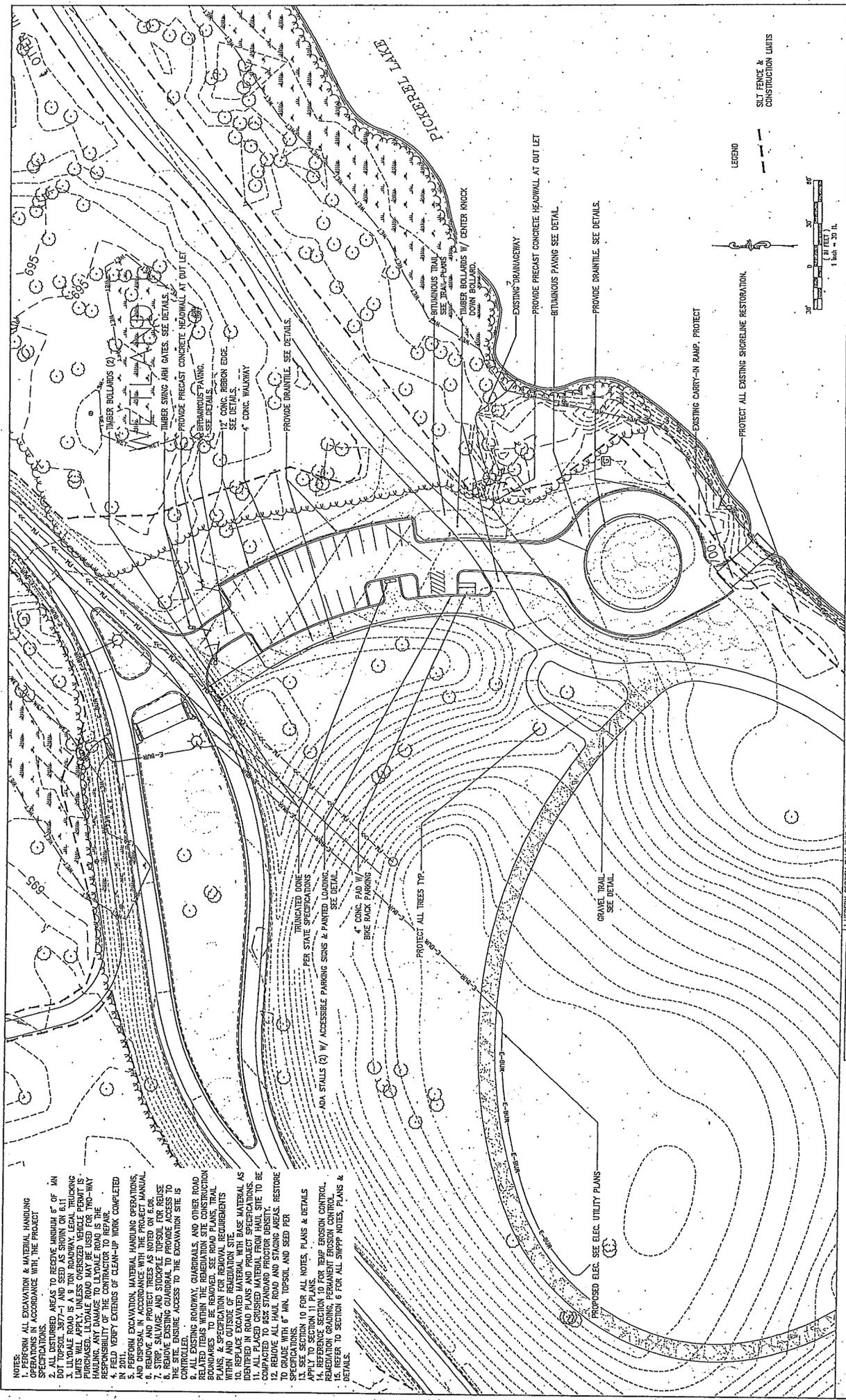
DESIGNED BY: URB, Inc. MINNEAPOLIS
 C.E./M.R./B.P.S./A.B./J.A.H.

DRAWN BY: SHH/HRW

TRAIL PLANS & PROFILES - RIVER TRAIL PHASE 1
 LILYDALE REGIONAL PARK
 SAINT PAUL, MINNESOTA

SHEET 9.05 OF 9.07

PRELIMINARY
 NOT FOR CONSTRUCTION
 03.27.2012



- NOTES:
1. ALL EXCAVATION & MATERIAL HANDLING OPERATIONS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
 2. ALL DISTURBED AREAS TO RECEIVE MINIMUM 6" OF WA DOT TOPSOIL 387-1 AND SEED AS SHOWN ON 6.11.
 3. LIME SHALL BE APPLIED TO ALL DISTURBED AREAS PURCHASED, LIME SHALL BE APPLIED TO ALL DISTURBED AREAS PURCHASED, LIME SHALL BE APPLIED TO ALL DISTURBED AREAS PURCHASED.
 4. HAULING ANY DAMAGE TO LILYDALE ROAD IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.
 5. VERIFY EXISTING OF CLEAN-UP WORK COMPLETED IN 2012.
 6. ALL EXISTING ROADWAY, GUARDRAILS, AND OTHER ROAD AND STRUCTURE TO REMAIN SHALL BE RECONSTRUCTED IN ACCORDANCE WITH THE PROJECT MANUAL, PER STATE SPECIFICATIONS.
 7. REMOVE AND PROTECT TREES AS NOTED ON 6.08.
 8. REMOVE EXISTING, AND STOCKPILE TOPSOIL FOR REUSE TO THE SITE. ENSURE ACCESS TO THE EXCAVATION SITE IS CONTROLLED.
 9. ALL EXISTING ROADWAY, GUARDRAILS, AND OTHER ROAD AND STRUCTURE TO REMAIN SHALL BE RECONSTRUCTED IN ACCORDANCE WITH THE PROJECT MANUAL, PER STATE SPECIFICATIONS.
 10. REPLACE EXCAVATED MATERIAL WITH BASE MATERIAL AS IDENTIFIED IN ROAD PLANS AND PROJECT SPECIFICATIONS.
 11. REPAIR AND PROTECT ALL EXISTING UTILITIES TO BE COMPLETED TO 60% FORWARD PROTECTION AREAS. RESTORE TO GRADE WITH 6" MIN. TOPSOIL AND SEED PER SPECIFICATIONS.
 12. REFER TO SECTION 10 FOR ALL NOTES, PLANS & DETAILS.
 13. REFER TO SECTION 11 FOR TEMP EROSION CONTROL.
 14. REFER TO SECTION 12 FOR PERM EROSION CONTROL.
 15. REFER TO SECTION 6 FOR ALL SWPPP NOTES, PLANS & DETAILS.

PRELIMINARY
NOT FOR CONSTRUCTION
09-27-2012

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DESIGNED BY: C.F./A.R./B.P.S./A.S.B./J.A.H.
DRAWN BY: S.H.H./A.R.W.

LIB, Inc. MINNEAPOLIS, MN 55402
1111 Hennepin Ave. Suite 1000
Tel: (763) 737-6444 / Fax: (763) 737-6488
www.libinc.com

PICKEREL CLEARING PARK IMPROVEMENTS
SITE PLAN
LILYDALE REGIONAL PARK
SAINT PAUL, MINNESOTA

SHEET 11.01 OF 11.05

DATE: _____

LIC. NO. _____

NAME: _____



NOTES:
 1. PERFORM ALL EXCAVATION & MATERIAL HANDLING OPERATIONS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
 2. ALL DISTURBED AREAS TO RECEIVE MINIMUM 5' OF AN 80% SANDY SILT AND USED AS SHOWN ON 611 LLYDALE ROAD. ALL DISTURBED AREAS TO RECEIVE 12" OF LAYERS OF 2" MAXIMUM SIZE GRANULAR FILL. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS TO RECEIVE 12" OF LAYERS OF 2" MAXIMUM SIZE GRANULAR FILL. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS TO RECEIVE 12" OF LAYERS OF 2" MAXIMUM SIZE GRANULAR FILL.
 3. LLYDALE ROAD MAY BE USED FOR TWO-WAY TRAFFIC. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS TO RECEIVE 12" OF LAYERS OF 2" MAXIMUM SIZE GRANULAR FILL.
 4. ANY DAMAGE TO LLYDALE ROAD IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.
 5. ALL NOTES TO THIS PLAN, NOTES, PLANS & DETAILS APPLY TO SECTION 11 PLANS.

SHEET 11.03 of 11.05
PICKEREL CLEARING PARK IMPROVEMENTS GRADING PLAN
 LLYDALE REGIONAL PARK
 SAINT PAUL, MINNESOTA

DESIGNED BY: JIB, Inc. MINNEAPOLIS, MN
 C/F: MARY/SPS/AUS/JAH
 4700 727-AWS / Tel: (612) 22-5405
 www.jibinc.com

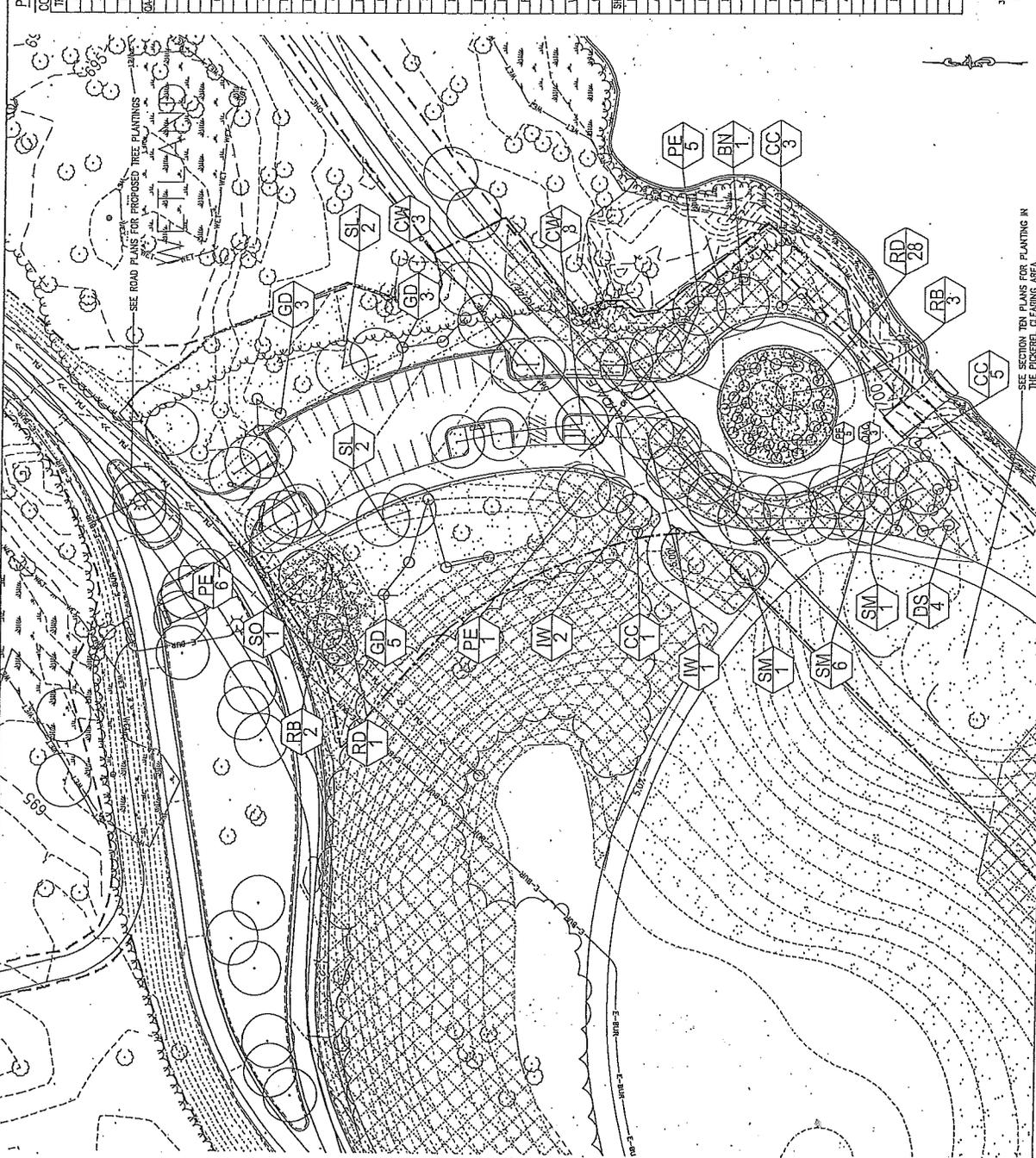
DRAWN BY: SMH/MRW

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

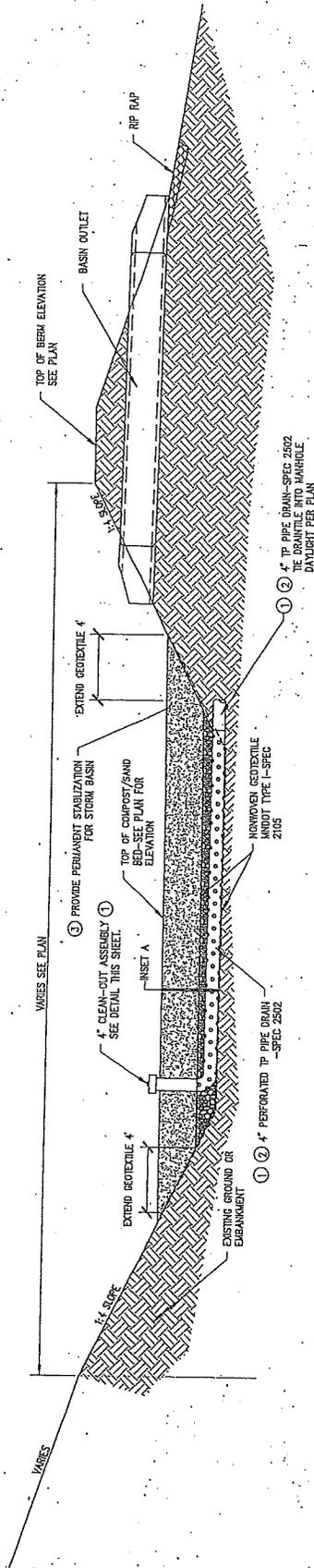
NAME _____ UC. NO. _____ DATE _____

PRELIMINARY
 NOT FOR CONSTRUCTION
 08.27.2012

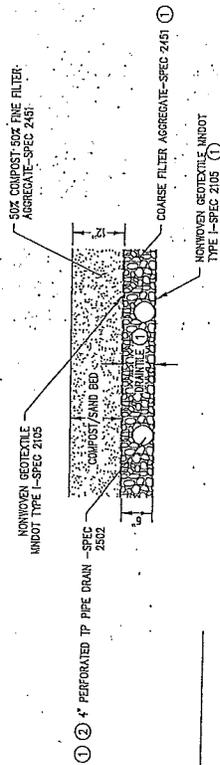
NOTES:
 1. FERRIS ALL EXCAVATION & MATERIAL HANDLING OPERATIONS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
 2. ALL DISTURBED AREAS TO RECEIVE MINIMUM 6" OF 1N 0N 10L GSEAL 3077-1 AND SEED AS SHOWN ON 6.11. SEED LISTS WILL APPLY UNLESS OTHERWISE NOTED. SEED LISTS PURCHASED, ULTRADALE ROAD MAY BE USED FOR TWO-WAY HAULING. ANY DAMAGE TO ULTRADALE ROAD IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.
 3. APPLY TO SECTION 6 FOR NOTES, PLANS & DETAILS CONTROL REQUIREMENTS.
 4. SEE SHEET XXX FOR SPECIFIC PERMANENT EROSION CONTROL REQUIREMENTS.
 5. SEE SECTION 6 FOR NOTES, PLANS & DETAILS FOR SIFT & EROSION CONTROL.



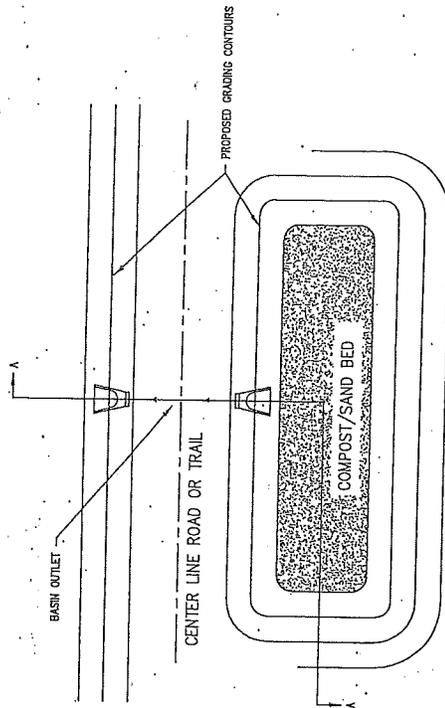
CODE	QTY	COMMON NAME/LATIN NAME	SIZE
AB	0	AUTUMN BLAZE MAPLE	3" DB
AC	2	ACEPACHA	2" DB
AD	0	ADAM'S ELM	2" DB
AE	0	ACEPACHA	3" DB
AG	0	AGAVE	2" DB
AL	0	ALBANY	2" DB
AM	0	AMERICAN	2" DB
AN	0	AMERICAN	2" DB
AO	0	AMERICAN	2" DB
AP	0	AMERICAN	2" DB
AR	0	AMERICAN	2" DB
AS	0	AMERICAN	2" DB
AT	0	AMERICAN	2" DB
AV	0	AMERICAN	2" DB
AW	0	AMERICAN	2" DB
AX	0	AMERICAN	2" DB
AY	0	AMERICAN	2" DB
AZ	0	AMERICAN	2" DB
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BB	0	BALSA	2" DB
BC	0	BALSA	2" DB
BD	0	BALSA	2" DB
BE	0	BALSA	2" DB
BF	0	BALSA	2" DB
BG	0	BALSA	2" DB
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BO	0	BALSA	2" DB
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BQ	0	BALSA	2" DB
BR	0	BALSA	2" DB
BS	0	BALSA	2" DB
BT	0	BALSA	2" DB
BV	0	BALSA	2" DB
BW	0	BALSA	2" DB
BX	0	BALSA	2" DB
BY	0	BALSA	2" DB
BZ	0	BALSA	2" DB
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CB	0	CALIFORNIA	2" DB
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CM	0	CALIFORNIA	2" DB
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OH	0		



STORM BASIN CROSS SECTION A-A
NTS

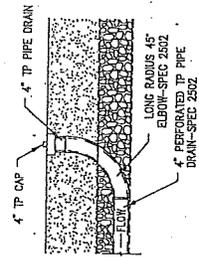


INSET A
NTS



STORM BASIN PLAN
NTS

- KEY NOTES:
- 1 PROVIDE BRANTILE AND CLEANOUTS IN STORM BASIN WHERE SHOWN ON PLANS.
 - 2 SEE STORM BASIN DETAILS FOR BASIN SUBDRAIN LAYOUT AND ELEVATIONS
 - 3 PERMANENT STABILIZE WITH SEED MIX 428, FERTILIZER TYPE 3, AND EROSION CONTROL BLANKET CATEGORY 4



4\"/>

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

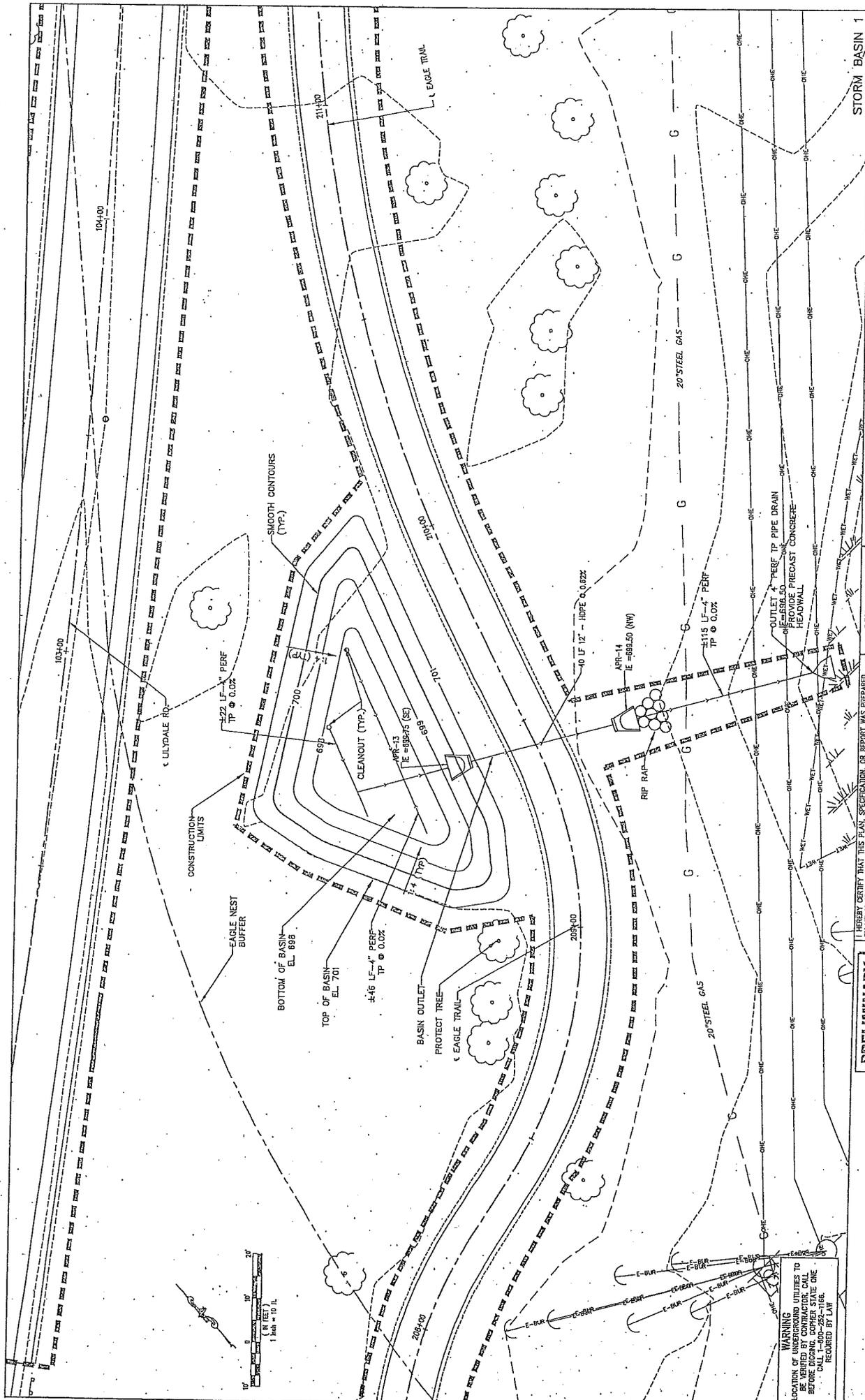
PRELIMINARY
NOT FOR CONSTRUCTION
09.27.2012

NAME _____ LIC. NO. _____ DATE _____
DESIGNED BY: C.E./M.P./B.P.S./N.J.B./J.A.H.
DRAWN BY: S.H.H./M.R.W.

U.H.G. Inc.
DULUTH • MINNEAPOLIS
11100 1st Avenue South, Suite 200, Duluth, MN 55802
Tel: (218) 264-1414 Fax: (218) 729-9168
www.uhg.com

STORM BASIN DETAILS
SHEET 13.01
OF 13.03

STORM WATER MANAGEMENT PLANS
LILYDALE REGIONAL PARK
SAINT PAUL, MINNESOTA



PRELIMINARY
NOT FOR CONSTRUCTION
09.27.2012

WARNING: LOCATION OF UTILITIES TO BE VERIFIED BY CONTRACTOR ON SITE BEFORE BEGINNING CONSTRUCTION. CALL 1-800-252-7166. REQUIRED BY LAW.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

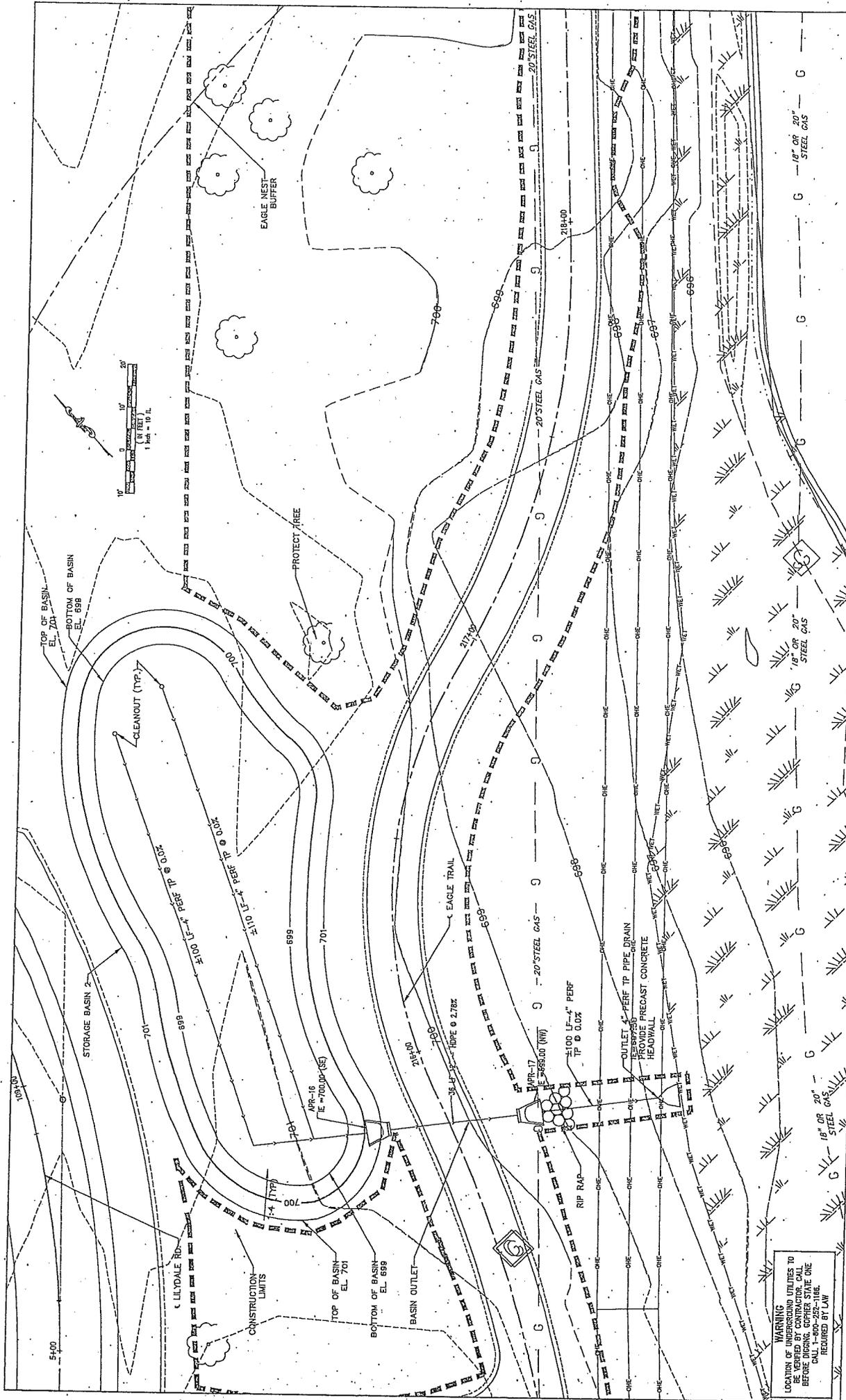
DESIGNED BY: HR, INC. MINNEAPOLIS
C/F: AHR/BPS/ANB/AH
DRAWN BY: SMH/AHW

PROJECT: STORM WATER MANAGEMENT PLANS
LILYDALE REGIONAL PARK
SAINT PAUL, MINNESOTA

SHEET 13.02 OF 13.03

DATE: _____ LIC. NO. _____ NAME: _____

10/03/2012 10:39:50 AM \\p0p1\100389\600 drawings\100389\600.dwg



WARNING
 LOCATION OF PROPOSED UTILITIES TO
 BE VERIFIED BY GROUND PENETRATING
 RADAR (GPR) BEFORE DIGGING. Gopher State One
 CALL 1-800-252-1186.
 REQUIRED BY LAW

PRELIMINARY
 NOT FOR CONSTRUCTION
 08.27.2012

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED
 BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED
 PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DESIGNED BY:
 C.F. MAJZ/BJP/S/MB/JAH
 DRAWN BY:
 SMH/MRW

HB, Inc.
 MINNEAPOLIS
 DULUTH
 215 W. Superior Street, Suite 200, Duluth, MN 55812
 Tel: 763.278.4100 / Fax: 763.278.4104
 www.hbinc.com

STORM WATER MANAGEMENT PLANS
 LLYLUDALE REGIONAL PARK
 SAINT PAUL, MINNESOTA

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