ZONING COMMITTEE STAFF REPORT

1. FILE NAME: Flint Hills Storage Building

FILE # 19-015-902

2. **APPLICANT:** Flint Hills Resources, LLC (FHR)

HEARING DATE: March 28, 2019

3. **TYPE OF APPLICATION:** Conditional Use Permit

4. **LOCATION:** 2209 Childs Road,

5. **PIN & LEGAL DESCRIPTION:** 092822140001, Lot 5 Block 5 of PORT AUTHORITY PLAT NO. 3 SUBJ TO ESMTS LOT 5 AND EX SLY 140 FT LOT 6 BLK 5

6. PLANNING DISTRICT: 1 PRESENT ZONING: 12, FF

7. **ZONING CODE REFERENCE:** §§61.501, 72.73

8. **STAFF REPORT DATE:** March 20, 2019 **BY:** Josh Williams

9. **DATE RECEIVED:** February 25, 2019 **60-DAY DEADLINE FOR ACTION:** April 26, 2019

A. **PURPOSE:** Conditional use permit for storage building below the regulatory flood protection elevation.

B. PARCEL SIZE: 253,083 SF or approx. 5.8 acres

C. **EXISTING LAND USE:** Industrial

D. SURROUNDING LAND USE:

North: Industrial (I2)

East: Industrial (I2)

South: Industrial (I2)

West: Mississippi River

- E. **ZONING CODE CITATION:** §61.501 lists general conditions that must be met by all conditional uses; §72.32 lists factors the Planning Commission shall consider in reviewing conditional use permit applications in flood plain management districts; §72.33 enumerates conditions §72.73 lists standards for conditional use in the flood fringe (FF) district; §72.74 lists standards for all uses in the flood fringe (FF) district.
- F. **PARKING**: Zoning Code § 63.207 requires a minimum of 1 off-street parking space for every 1,000 square feet GFA for industrial uses. The proposed building will be approximately 30'x40', or approximately 1,200 SF. However, the purpose of the building is to consolidate existing storage needs on site, and will be part of an existing large industrial site. Staff recommends deferring determination of parking requirement to site plan review.
- G. HISTORY/DISCUSSION: The proposed building will be part of an existing industrial site, and is intended to consolidate existing storage on site. Numerous conditional use permits have previously been issued for the site, and the site has an existing flood response plan on file with the Department of Safety and Inspections.
- H. **DISTRICT COUNCIL RECOMMENDATION:** The District 1 Council had not provided a recommendation as of the date of this report.

I. FINDINGS:

- 1. The applicant has proposed to construct an approximately 30' x 40'prefabricated engineered metal building, to be elevated on a precast concrete panel foundation. The building will be used for storage in support of existing site operations. The site is located in the flood fringe (FF) district. Grade elevation at the building site is approximately 699', the Base Flood Elevation is 706.4' and the Regulatory Flood Plain Elevation (RFPE) is 708.6'.
- 2. The top of the concrete foundation is proposed to be at or above the RFPE, and is proposed to be constructed to the FP3/FP4 floodproofing standard. The applicant has proposed inclusion of automatic louvers in the foundation, consistent with the requirements of §72.74 (a)(2)(a).
- 3. §72.74 lists standards for conditional uses in the FF flood fringe district. Subsections (a) through (d) are applicable to the proposed project:

- (a) Alternative elevation methods other than the use of fill may be utilized to elevate a structure's lowest floor above the regulatory flood protection elevation. These alternative methods may include the use of stilts, pilings, parallel walls or above grade, enclosed areas such as crawl spaces or tuck-under garages. The base or floor of an enclosed area shall be considered above grade and not a structure's basement or lowest floor if: 1) the enclosed area is above grade on at least one (1) side of the structure; 2) is designed to internally flood and is constructed with flood-resistant materials; and 3) is used solely for parking of vehicles, building access or storage. The above-noted alternative elevation methods are subject to the following additional standards:
 - (1) Design and certification. The structure's design and as-built condition must be certified by a registered professional engineer or architect as being in compliance with the general design standards of the Minnesota State Building Code and, specifically, that all electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities must be at or above the regulatory flood protection elevation or be designed to prevent floodwater from entering or accumulating within these components during times of flooding.
 - (2) Specific standards for above grade, enclosed areas. Above grade, fully enclosed areas such as crawl spaces or tuck-under garages must be designed to internally flood and the design plans must stipulate:
 - a. A minimum area of "automatic" openings in the walls where internal flooding is to be used as a floodproofing technique. There shall be a minimum of two (2) openings on at least two (2) sides of the structure and the bottom of all openings shall be no higher than one (1) foot above grade. The automatic openings shall have a minimum net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding unless a registered professional engineer or architect certifies that a smaller net area would suffice. The automatic openings may be equipped with screens, louvers, valves or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters without any form of intervention.
 - b. That the enclosed area will be designed of flood-resistant materials in accordance with the FP-3 or FP-4 classifications in the Minnesota State Building Code and shall be used solely for building access, parking of vehicles or storage.
- (b)Basements, as defined in §72.14, shall be subject to the following:
 - (1) Residential basement construction shall not be allowed below the regulatory flood protection elevation except as authorized in subsection (e) of this section.
 - (2) Nonresidential basements may be allowed below the regulatory flood-protection elevation, provided the basement is protected in accordance with subsection (c) or (e) of this section.
- (c) All areas of nonresidential structures including basements to be placed below the regulatory flood protection elevation shall be structurally dry floodproofed in accordance with the FP-1 or FP-2 floodproofing classifications in the Minnesota State Building Code. This shall require making the structure watertight, with the walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. Structures floodproofed to the FP-3 or FP-4 classification shall not be permitted.
- (d) The storage or processing of materials that are, in times of flooding, flammable, explosive or potentially injurious to human, animal or plant life is prohibited. Storage of other 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, or if elevated above the regulatory flood protection elevation by alternative methods which meet the requirements of subsection (a) above. Storage of bulk materials may be allowed provided an erosion/sedimentation control plan is submitted which clearly specifies methods to be used

- to stabilize the materials on site for a regional flood event. The plan must be prepared and certified by a registered professional engineer or other qualified individual acceptable to the planning commission.
- (e) When the Federal Emergency Management Agency has issued a letter of map revision-fill (LOMR-F) for vacant parcels of land elevated by fill to the one (1) percent chance flood elevation, the area elevated by fill remains subject to the provisions of this chapter. A structure may be placed on the area elevated by fill with the lowest floor below the regulatory flood protection elevation provided the structure meets the following provisions:
 - (1) No floor level or portion of a structure that is below the regulatory flood protection elevation shall be used as habitable space or for storage of any property, materials, or equipment that might constitute a safety hazard when contacted by floodwaters. Habitable space shall be defined as any space in a structure used for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, storage rooms, laundry or utility space, and similar areas are not considered habitable space.
 - (2) For residential and nonresidential structures, the basement floor may be placed below the regulatory flood protection elevation subject to the following standards:
 - a. The top of the immediate floor above any basement area shall be placed at or above the regulatory flood protection elevation.
 - b. Any area of the structure placed below the regulatory flood protection elevation shall meet the "reasonably safe from flooding" standards in the Federal Emergency Management Agency (FEMA) publication entitled "Ensuring that Structures Built on Fill In or Near Special Flood Hazard Areas Are Reasonably Safe From Flooding," Technical Bulletin 10-01, a copy of which is hereby adopted by reference and made part of this chapter. In accordance with the provisions of this chapter, and specifically section 72.33(g), the applicant shall submit documentation that the structure is designed and built in accordance with either the "Simplified Approach" or "Engineered Basement Option" found in FEMA Technical Bulletin 10-01.
 - c. If the ground surrounding the lowest adjacent grade to the structure is not at or above the regulatory flood protection elevation, then any portion of the structure that is below the regulatory flood protection elevation must be floodproofed consistent with any of the FP-1 through FP-4 floodproofing classifications found in the Minnesota State Building Code.

These standards can be met. The applicant has submitted a Saint Paul Flood Plain application, and is proposing to construct the building on concrete foundations floodproofed to the FP-3 or FP-4 standard up to the RFPE, with automatic openings to allow free movement of flood waters. As a condition of approval, the applicant should provide building and foundation plans and record of as-built condition for the proposed structure signed by a registered professional engineer or architect and verifying consistency with the requirements of §72.74(a)(1), a Saint Paul Floodplain Certification, and an Elevation Certificate.

- 4. §72.32 lists thirteen (13) factors to be considered in evaluating applications for conditional use permits in the FF flood fringe district:
 - (a) The relationship of the proposed use to the comprehensive plan and floodplain management program for the city. Subject to meeting the standards listed in §72.74, this proposed use is in compliance with the Saint Paul Comprehensive Plan and the city's floodplain management program. Policy 5.1.3 of the river corridor chapter of the comprehensive plan supports continuation of and additions to industrial uses in the Childs Road industrial area if said additions will not have significant adverse impacts on air or water quality nor impair river valley views. The proposed additions are to an existing facility located in a large industrial area, and will not significantly alter river valley views. The project will not significantly impact air or water quality.
 - (b) The importance of the services provided by the proposed facility to the community. The

- proposed facilities will allow continued use of industrial land. The primary importance of the facility to the community is economic activity and tax base.
- (c) The ability of the existing topography, soils, and geology to support and accommodate the proposed use. The topography, soils, and geology of the site are similar to those of the general Child Roads industrial area, and are sufficient to support and accommodate the proposed use.
- (d) The compatibility of the proposed use with existing characteristics of biologic and other natural communities. The area of the proposed use is industrial in character, and does not contain significant biological communities; impacts of the proposed use will not extend beyond the immediate area.
- (e) The proposed water supply and sanitation systems and the ability of those to prevent disease, contamination, and unsanitary conditions. The area is already served by adequate water supply and sanitation systems. The proposed addition will not create significant additional demand for water supply or sanitation capability.
- (f) The requirements of the facility for a river-dependent location, if applicable. The proposed structure is part of an existing industrial facility that includes intermodal transfer to and from barges.
- (g) The safety of access to the property for ordinary vehicles. Safe access to the site is available via Childs Road.
- (h) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner. The proposed building will be of floodproof construction, and the applicant should be required to submit a flood response plan to the Department of Safety and Inspections as a condition of approval.
- (i) The dangers to life and property due to increased flood heights or velocities caused by encroachments. The proposed encroachments are of limited footprint and located in the flood fringe where impacts on flood flows are negligible.
- (j) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site. The proposed facility is located in the flood fringe, where the velocity of flood flow is generally minimal.
- (k) The danger that materials may be swept onto other lands or downstream to the injury of others. The proposed facility will be located in the flood fringe, where water velocities are generally minimal.
- (I) The availability of alternative locations or configurations for the proposed use. The proposed structure must be located within the existing facility, and the proposed location is no less reasonable than other potential locations within the facility.
- (m) Such other factors as are relevant to the purposes of this chapter. The factors and findings enumerated and described herein adequately evaluate the proposed use for the purposes of this chapter.
- 5. §61.501 lists five standards that all conditional uses must satisfy:
- (a) 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. Subject to meeting the standards listed in §72.74, this proposed use is in compliance with the Saint Paul Comprehensive Plan and the city's floodplain management program. Policy 5.1.3 of the river corridor chapter of the comprehensive plan supports continuation of and additions to industrial uses in the Childs Road industrial area if said additions will not have significant adverse impacts on air or water quality nor impair river valley views. The proposed additions are to an existing facility located in a large industrial area, and will not significantly alter river valley views. The project will not significantly impact air or water quality.

Zoning Committee Staff Report, Zoning File #19-015-902 March 20, 2019 Page 5 of 5

- (b) The use will provide adequate ingress and egress to minimize traffic congestion in the public streets. This condition is met. The proposed facility will be served by Childs Road. The use is not expected to generate additional traffic.
- (c) 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 proposed facility is consistent with the existing industrial character of the immediate neighborhood.
- (d) 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 use is industrial in nature, and will not impeded improvement of surrounding properties for allowed uses.
- (e) The use shall, in all other respects, conform to the applicable regulations of the district in which it is located. This condition is met.
- J. **STAFF RECOMMENDATION:** Based on the above findings, staff recommends approval of the conditional use permit for storage building below the regulatory flood protection elevation. subject to the following additional condition(s):
 - 1. The applicant shall provide building and foundation plans and record of as-built condition for the proposed structure signed by a registered professional engineer or architect and verifying consistency with the requirements of §72.74(a)(1), a Saint Paul Floodplain Certification, and an Elevation Certificate.
 - 2. Final plans approved by the Zoning Administrator for this use shall be in substantial compliance with the plan submitted and approved as part of this application.
 - 3. Acceptance by the Department of Safety and Inspections of an updated flood response plan.

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 Fee: Tentative Hearing Date:

APPLICANT

Name	Flint Hills R	esource	s Pine Bend, LL	.C _{Email} <u>Jeremy.Birkeland@fhr.com</u>
Addre	_{ss} <u>2209 Chil</u>	lds Roa	d	
City _	St. Paul	State_MI	J _{Zip} 55106	
Name of Owner (if different) Jeremy Birkeland				
Conta	ct Person (if differ	ent) _	***************************************	Phone

PROPERTY LOCATION

Address/Location	2209 Childs Road, St. Paul, MN 55106		
Legal Description Lat 44°56'00" Long 93°02'30"			
	Current Zoning I-2, RC-2		
(attach additional s	sheet if necessary)		

TYPE OF PERMIT:	Application is hereby made for a Conditional Use Permit under provisions of			
	Chapter 68 , Section 222 , Paragraph, 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.

The intent is to install a pre-engineered metal building (PEMB) on an engineered reinforced concrete foundation for the use of storage. The installation of the PEMB storage facility will be at elevations similar to the existing infrastructure at the site. These elevations are recognized to be below the 100-year flood level and the proposed location of the storage facility is recognized as being in the River Corridor Flood Fringe Overlay District. We are requesting conditional use due to the complications and in-feasibility of elevating the PEMB storage facility above the 100-year regulatory FEMA floodplain elevation of approximately 707 feet. The existing ground surface at the location of the proposed facility is approximately 699 feet. Thus, to meet requirements, the storage facility would need to be raised on fill approximately eight feet above existing grade and the fill would need to extend at least 15 feet on all sides of the storage facility. We will ensure that our plans for the storage facility align with the requirements outlined in St. Paul code Chapter 72.74, which include that (1) the facility must be design to internally flood, (2) the facility must be constructed with flood-resistant materials, and (3) the facility must be solely used for storage, parking of vehicles, or building access. Furthermore, we will incorporate previously-approved CUP conditions into the design and construction of the storage facility. These include, (1) certifying the facility is meeting appropriate FP flood-proofing standards by a registered engineer/architect, (2) submitting an as-built elevation certification to the zoning administrator, (3) complying with regulations with respect to filling/grading in the River Corridor, and (4) complying with electrical, plumbing, heating, and ventilation requirements in the flood fringe.

Required Site Plan is attached

Applicant's Signature Jeremy Birkeland Digitally signed by Jeremy Birkeland Date: 2019.02.13 11:33:20 -06'00'

Date 2/13/19

City Agent

(2018-01)



CITY OF SAINT PAUL

DEPARTMENT OF SAFETY AND INSPECTIONS 375 JACKSON STREET, SUITE 220 SAINT PAUL, MINNESOTA 55101-1806 Phone: 651-266-8989 Fax: 651-266-9124 Visit our Web Site at www.stpaul.gov/dsi

FLOODPLAIN APPLICATION

SAINT PAUL LEGISLATIVE CODE CHAPTER 72 AND THE NATIONAL FLOOD INSURANCE PROGRAM

This is an application for a floodplain permit addendum. Its purpose is to convey requirements for projects in the floodplain in accordance with the National Flood Insurance Program (NFIP). The NFIP aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners and by encouraging communities to adopt and enforce floodplain management regulations that meet minimum floodplain standards. These efforts help mitigate the effects of flooding on new and improved structures. This application is a tool to ensure that the minimum standards are met.

As a participant in the NFIP, under 44 CFR 60.3(a)(2) Saint Paul is required to ensure, prior to issuing a building or grading permit for a development in the "Special Flood Hazard Area," that an Applicant is in compliance with local and NFIP regulations. As defined in Section 60.205 of the City of Saint Paul Zoning Code, developments in the floodplain include any change in the use or appearance of any structure or land including, but not limited to, structural changes to buildings or alterations to the shore or bank of a body of water. Site plan review is necessary for any development in the floodplain regardless of the change. Flood maps can be reviewed at the City of Saint Paul Department of Safety and Inspections zoning office or online at the FEMA website (www.fema.gov).

INSTRUCTIONS: The applicant completes **Sections I, III, IV, VIII, and IX** of this form with contact information, description of the proposed activity and flood proofing to be implemented, and professional certification. City staff reviews the submission and completes **Sections II, V, VI, and VII**, determining whether or not additional information is required such as a Flood Response Plan or an Elevation Certificate. Staff will make a final determination after all required pre-construction information has been submitted.

SECTION I - APPLICANT CONTACT INFORMATION				
Applicant Name: Nathan Campeau, Barr Engineering, Co. Phone Number: 952.832.2854 Email: ncampeau@barr.com Address: 4300 MarketPointe Dr., Edina, MN 55435 Applicant Signature:	Owner (if different): Jeremy Birkeland, Flint Hills Resources Pine Bend, LLC Phone Number: 651.774.9763 Email: Jeremy.Birkeland@fhr.com Address: 2209 Childs Road, Saint Paul, MN 55106			
SECTION II – COMMUNITY OFFICIAL RESPONSIBLE FOR	FLOODPLAIN MANAGEMENT ACTION/DETERMINATION			
FP#: SR#:				
Special Flood Hazard Area: □ Zone A □ Zone AE	Other Flood Hazard Area: □ Zone X			
□ The proposed development is in conformance with applicable floodplain standards. Floodplain permit addendum is approved conditioned on receiving as-built certificates. □ The proposed development is not in conformance with applicable floodplain standards (explanation attached). Floodplain permit addendum is denied. □ The proposed development is not within SFHA, is not a substantial improvement, or is a historic structure. Floodplain permit addendum is not required.				
Name:				
Signature:	Date:			

SECTION III - PROPOSED ACTIV	/ITY	Staff Use Only: FP#:	SR#:
Property Address/Location:	Flint Hills Resources 2209 Childs Road, Sa		
Structural Development Addition/Alteration* Rehabilitation/Repair* Demolition	□ Other ☑ Accessory Structur ☑ Minimal in	of and a wall to utilities aid storage tanks	Other Development Grading and/or paving Drainage improvement Linear construction (e.g. street) Watercourse alteration
Material/equipment storage?	⊠ Yes □ No Hi	storic Structure? □ Yes □ N	No
Any structural change to a nonconforming structure that increases the potential for flood damage to the structure or use shall be protected to the regulatory flood protection elevation using any allowable fill method. If the improvement is determined to be substantial, the building addition must meet the requirements for the Flood Way or Flood Fringe Overlay Districts. If the substantial improvement includes the interior of the existing nonconforming structure, this structure must meet the requirements of these Overlay Districts as well. (City of Saint Paul Ordinance 72.41)			
*Is the proposed developmen			
ii yes, what is the esti	mated market value of	the structure?	_
SECTION IV - REQUIRED FLOO	D PROOFING (to be co	mpleted before or with Bu	ilding Permit application)
City of Saint Paul Ordinance 72.74: "Alternative elevation methods other than the use of fill may be utilized to elevate a structure's lowest floor above the regulatory flood protection elevation. These alternative methods may include the use of stilts, pilings, parallel walls or above grade, enclosed areas such as crawl spaces or tuck-under garages. The base or floor of an enclosed area shall be considered above grade and not a structure's basement or lowest floor if: 1) the enclosed area is above grade on at least one side; 2) is designed to internally flood and is constructed with flood-resistant materials; and 3) is used solely for parking of vehicles, building access or storage". Additional standards apply.			
Is structure elevated on fill? □ Yes ⋈ No			
If no, what is the proposed alternative elevation method? □ Tuck -under garage □ Parallel walls ⋈ Other (describe here): The proposed PEMB storage facility would be constructed at elevations comparable to the infrastructure currently located at the site. A Conditional Use Permit is being submitted concurrently with this application outlining the protective measures that will be incorporated into the building. Under 44 CFR 60.3(a)(3) and 44 CFR 60.3(d)(1), the City of Saint Paul shall "review all permit applications to determine whether proposed building sites will be reasonably safe from flooding." To facilitate this review, the designer must submit certification satisfying requirements as shown in Figure 1 of FEMA Technical Bulletin 10-01. See Section VIII at the end of this application for certification form.			
Is any area of the structure below the Regulatory Flood Protection Elevation (RFPE)? \boxtimes Yes \square No If yes, provide evidence of conformance with <i>FEMA Technical Bulletin 10-01</i> . Structural flood proofing method:			
□ Dry flood proofing (☑ Wet flood proofing □ Other method(s) (de	(FP-3 or FP-4) escribe here):	from DHS-FEMA a Letter of Ma	p Revision Based on Fill (LOMR-F), Conditional
LOMR-F, or Letter of Map Amendme			

SECTION V - FLOOD INSURANCE RATE MAP (FIRM)	Staff Use Only: FP#:	SR#:		
Consult FEMA Map Service Center at https://msc.fema.gov				
FIRM No. 27123C: 0116H Effective Date: 09/16/2015				
Special Flood Hazard Area: □ Zone A Zone AE Other Flood Hazard Area: □ Zone X				
Floodplain Management Overlay District: © FF Flood Fringe FW Flood Way City of Saint Paul Ordinance 72.16: Decisions on floodway and flood fringe overlay district boundaries shall be based on the regional flood profile; examination of the floodway delineation on the flood insurance rate map and other supporting technical data in the flood insurance study as adopted in section 72.15, and the ground elevations that existed on the site on the date of the first National Flood Insurance Program map, dated February 9, 1973, showing the area in the floodplain.				
Flood Insurance Study (FIS) cross-section: <u>D - 70</u> 6.3 fe	Flood Insurance Study (FIS) cross-section: D - 706.3 feet			
Base Flood Elevation (BFE*): _706.4 feet (NAVD) *If Zone A, describe on separate sheet how BFE was derived Regulatory Flood Protection Elevation (RFPE): 706.6 feet (NAVD) Use Ramsey County FIS Table 4, 'With Floodway' column				
SECTION VI - SUPPLEMENTAL REVIEWS FOR SITE PLA	AN			
City of Saint Paul Ordinance 72.22: A site plan shall be submitted to and approved by the planning commission in accordance with section 61.402 before a permit is issued for any development on property wholly or partially located within the floodplain management overlay districts. The site plan shall include the regulatory flood protection elevation; the proposed elevation of fill; the proposed elevation of the lowest floor of new structures, altered structures and additions to existing structures; and the proposed elevation to which structures will be floodproofed. Is a Conditional Use Permit required? (Department of Planning and Economic Development) ⋈ Yes □ No If yes, has a Flood Response Plan (FRP) been submitted? ⋈ Yes □ No If yes, has it been accepted? □ Yes Date: CUP submitted concurrently with this permit application Is a No-Rise Certificate required? (for projects in FW District) □ Yes ⋈ No If yes, has a No-Rise analysis been submitted? □ Yes □ No* If yes, has it been accepted? □ Yes Date: □ Is a Levee Permit required? (Department of Public Works) □ Yes ⋈ No If yes, has a levee analysis been submitted? □ Yes □ No*				
SECTION VII - REQUIRED ADDITIONAL MATERIALS				
⊠ Conditional Use Permit	lding Permit EMA TB 10-01 1T-1 form ther:	Final Certificate of Occupancy		
*If required, must be submitted prior to Site Plan Review				

(2018-01)



CITY OF SAINT PAUL

DEPARTMENT OF SAFETY AND INSPECTIONS 375 JACKSON STREET, SUITE 220 SAINT PAUL, MINNESOTA 55101-1806

Phone: 651-266-8989 Fax: 651-266-9124 Visit our Web Site at www.stpaul.gov/dsi

FLOODPLAIN CERTIFICATION

SAINT PAUL LEGISLATIVE CODE CHAPTER 72 AND THE NATIONAL FLOOD INSURANCE PROGRAM

SECTION VIII - PROFESSIONAL CERTIFICATION	Staff Use Only: FP#:	SR#:		
Project Name and Address:				
I, certify that the design for the aforementioned development is reasonably safe from flooding and in accordance with accepted professional practices.				
Signature:		Date:		
Title:	Type of License:	·		
License Number:License Expiration Date:		<u>Professional Seal</u>		
Address:				
Phone Number:	_			
SECTION IX - AVAILABLE TECHNICAL BULLETINS (as o	of October 2008)			
Technical Bulletin 0 – User's Guide to Technical Bulletins Provides a list of available technical bulletins, a key word/subject reference index for all of the bulletins, and information about how to obtain copies of the bulletins.				
Technical Bulletin 1, 2008 – Openings in Foundation Walls and Walls of Provides guidance on the NFIP regulations concerning the requirement: elevation (BFE) and located in Special Flood Hazard Areas (SFHAs) show	s for openings in foundation wa			
Technical Bulletin 2, 2008 – Flood Damage Resistant Materials Required Provides guidance on the NFIP regulations concerning the required use the BFE in SFHAs in both A and V zones.		truction materials for building components located below		
Technical Bulletin 3-93 – Non-residential Floodproofing – Requirements and Certification Provides guidance on the NFIP regulations concerning watertight construction and the required certification for floodproofed non-residential buildings in Zones A, AE, A1-A30, AR, AO, and AH whose lowest floors are below the BFE.				
Technical Bulletin 4-93 — Elevator Installation Provides guidance on the NFIP regulations concerning the installation o	f elevators below the BFE in SFI	HAs in both A and V zones.		
Technical Bulletin 6-93 – Below-Grade Parking Requirements Provides guidance on the NFIP regulations concerning the design of bel AH.	ow-grade parking garages bene	ath buildings located in Zones A, AE, A1-A30, AR, AO, and		
Technical Bulletin 7-93 — Wet Floodproofing Requirements Provides guidance on the NFIP regulations concerning wet floodproofin	g of certain types of structures	located in Zones A, AE, A1-A30, AR, AO, and AH.		
Technical Bulletin 10-01 — Ensuring that Structures Built on Fill in or Nea Provides regulatory and technical guidance concerning the constructior from the SFHA through the placement of fill and in areas near the SFHA	of buildings with various types			
 Technical Bulletin 11-01 — Crawlspace Construction for Buildings Locate	d in Special Flood Hazard Areas			

Provides interim guidance on minimum NFIP requirements as well as best practices for crawlspace construction in SFHAs.



February 13th, 2019
City of St. Paul – Zoning Section
Department of Planning and Economic Development
City Hall Annex
25 West 4th Street
1300
St. Paul, Minnesota 55102

Regarding: Condition Use Permit Application
Flint Hills Resources Pine Bend, LLC – St. Paul Terminal Facility

Dear Review Board,

Attached is a completed Conditional Use Permit (CUP) application with supporting documentation for construction work at Flint Hills Resources Pine Bend, LLC (FHR's) Terminal facility at 2209 Childs Road. A check for the amount of \$1,030 is also included (amount based on base fee of \$840 and \$190 for river corridor conditional use permit).

The application covers our intent to install a pre-engineered metal building (PEMB) storage facility on engineered reinforced concrete foundation. The PEMB storage facility will have a footprint of 30 feet by 40 feet. The storage facility installation will be at a similar elevation as the existing infrastructure on the site. The base of the structure will be below the 100-year flood level and is located in the River Corridor Flood Fringe Overlay District.

The design and installation of the PEMB storage facility will conform to the flood fringe conditional use requirements as outlined in St. Paul code Chapter 72.74. Additionally, the design and installation of the storage facility will incorporate previously-approved CUP conditions for the storage tank installations that occurred in 2001, 2008, and 2014.

FHR's goal is to provide quality products in an efficient manner to minimize cost, improve productivity, and minimize public road closures. We provide road maintenance products to State, County, and City agencies as well as to general road construction contractors. Our ability to provide services to these clients is driven by our plant capabilities and through growing demands within and around the Twin Cities area. FHR aspires to continue providing road maintenance materials in an effective and efficient manner; thus, we request approval and the required permits to construct a PEMB storage facility at our St. Paul Terminal Facility.

Sincerely,

Jeremy Birkeland

Flint Hills Resources Pine Bend, LLC

Dercemy Birkeland

Enclosures



Flint Hills Resources Pine Bend LLC – St. Paul Emulsion Plant 2209 Childs Rd. St. Paul, MN 55106

Statement for stored contents:

The storage facility (30'x40') we are proposing to construct will not store any new materials or equipment that we don't currently have on-site. With all the spare equipment, parts, and materials we have at the facility we are running out of room for dry storage. Having this enclosed structure will allow us to keep equipment, parts, and materials out of the elements of the summer heat and winter cold. The materials or equipment stored in the building would be readily removable from the area within the time available after a flood warning.

Sincerely,

Jeremy Birheland

Flint Hills Resources Pine Bend, LLC - St. Paul Emulsion Plant

Flint Hills Resources Pine Bend, LLC 2209 Childs Road – Saint Paul, MN

Project Overview

To continue serving regional demands for high quality, advanced paving materials, Flint Hills Resources Pine Bend, LLC (FHR) has determined a need to install an additional storage facility at the Saint Paul Terminal facility in Saint Paul, Minnesota. The installation consists of installing a pre-engineered metal building (PEMB) on a reinforced concrete foundation. The PEMB storage facility will have a footprint of 30 feet by 40 feet.

FHR wishes to continue to provide state of the art paving base materials at competitive prices and in an efficient manner for our clients; therefore, we request approval and the required permits to construct the PEMB storage facility at our Saint Paul facility.

The proposed PEMB storage facility would be constructed at elevations comparable to the infrastructure currently located at the site. The approximate elevations of the existing features are to 699 to 700 feet. The 100-year regulatory FEMA floodplain elevation within the proposed area of the storage facility is approximately 707 feet. Therefore, to meet requirements, the storage facility would need to be raised on fill approximately eight feet above existing grade and the fill would need to extend at least 15 feet on all sides of the storage facility. Alternatively, methods other than fill could be used to raise the facility (e.g., stilts or pilings), but this would make access to the storage facility infeasible. For operational, safety, and environmental reasons we cannot practically install the PEMB storage facility so that the bottom floor elevation exceeds the 100-year flood plain elevation to adhere to the River Corridor Flood Fringe Overlay District ordinances.

We realize that conditional uses in the flood plain fringe (FF) district must comply with the standards outlined in Saint Paul code Chapter 72.74. Thus, the installation of the PEMB storage facility will include:

- 1) Designing and constructing the storage facility to internally flood during times of high water levels in the river.
- 2) Designing and constructing the storage facility with flood-resistant materials.
- 3) Ensuring the facility is solely used for storage, building access, or parking of vehicles.

Furthermore, we will incorporate previously-approved CUP conditions into the design and construction of the PEMB storage facility. These past conditions have included:

1) The design shall be certified by a registered engineer or architect as meeting the appropriate FF flood-proofing standards (FP-3 or FP-4 classifications in the Minnesota State Building Code).

- 2) After construction completion, an elevation certification stating the as-built elevation of the PEMB storage facility will be submitted to the zoning administrator.
- 3) Complying with regulations associated with grading and filling activities in the River Corridor.
- 4) Complying with electrical, plumbing, heating, ventilation, and air-conditioning requirements for the flood fringe.

As part of the CUP requirements, FHR has updated our emergency action plan in the event of an oncoming flood. This emergency plan update has been submitted along with this permit application.

Section 68.225 Standards for all RC2 Flood Fringe Uses

- (a) <u>Vehicular Access</u>: The Childs Road FHR Saint Paul facility is approximately six (6) to seven (7) feet below the 100-year flood plain elevation and is closed when river levels reach 700 feet at the Saint Paul datum measure. The facility is closed and not occupied during this time.
- (b) <u>Commercial Uses:</u> The Childs Road FHR Saint Paul facility is approximately six (6) to seven (7) feet below the 100-year flood plain elevation and is closed when river levels reach 700 feet at the Saint Paul datum measure. The facility is closed and not occupied during this time.
- (c) Manufacturing and Industrial Uses: The Childs Road FHR Saint Paul facility has been in operation for about 50 years and has utilized the river for barge access in the past. The barge dock is currently in caretaker's status with the United States Corps of Engineers.
- (d) <u>Standards Pertaining to Fill:</u> Not applicable, as the storage facility will not be constructed on fill.
- (e) <u>Developments not to affect hydraulic capacities</u>: With the facility located in the Flood Fringe RC2 District, according to the zoning map, the storage facility will be constructed without impact to hydraulic capacity of the channel. The storage facility will be constructed entirely outside of the FEMA regulatory floodway.
- (f) Manufactured Homes: Not applicable.
- (g) Travel Trailers: Not applicable.
- (h) <u>Pollution of Waters:</u> The proposed storage facility will not store any new materials or equipment that is not already stored onsite. The materials or equipment stored in the facility would be readily removable from the area within the time available after a flood warning.

Please see the attached permit application, site plans, statement for stored contents, and flood contingency plan.

Flint Hills Resources Pine Bend, LLC 2209 Childs Road – St. Paul, MN

Flood Contingency Plan

The purpose of this plan is to protect the Environment, Health, and Safety of the Employees and Public, and the integrity of company assets.

All flood stages are measured from the U.S. Geological Services St. Paul Datum.

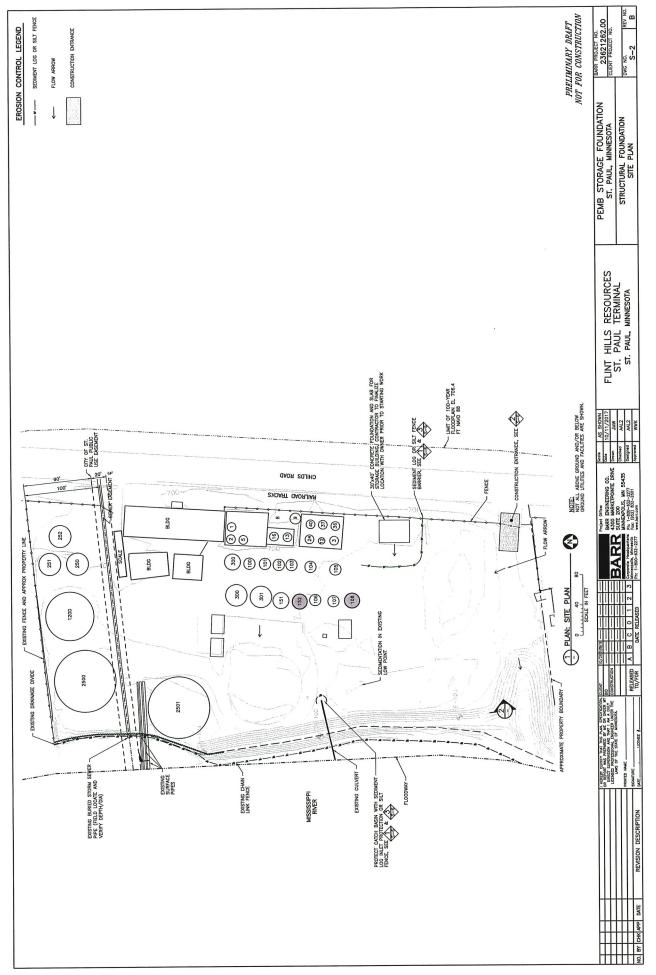
When water rises sixteen (16) feet above flood stage Childs Road closes, sewer lift stations are shut down, and the access to the Metropolitan Waste Treatment Facility is closed. If the projected crest is to exceed eighteen (18) feet above the flood stage, implementation of the following plan becomes essential for the Flint Hills Resources Pine Bend, LLC (FHR) facility.

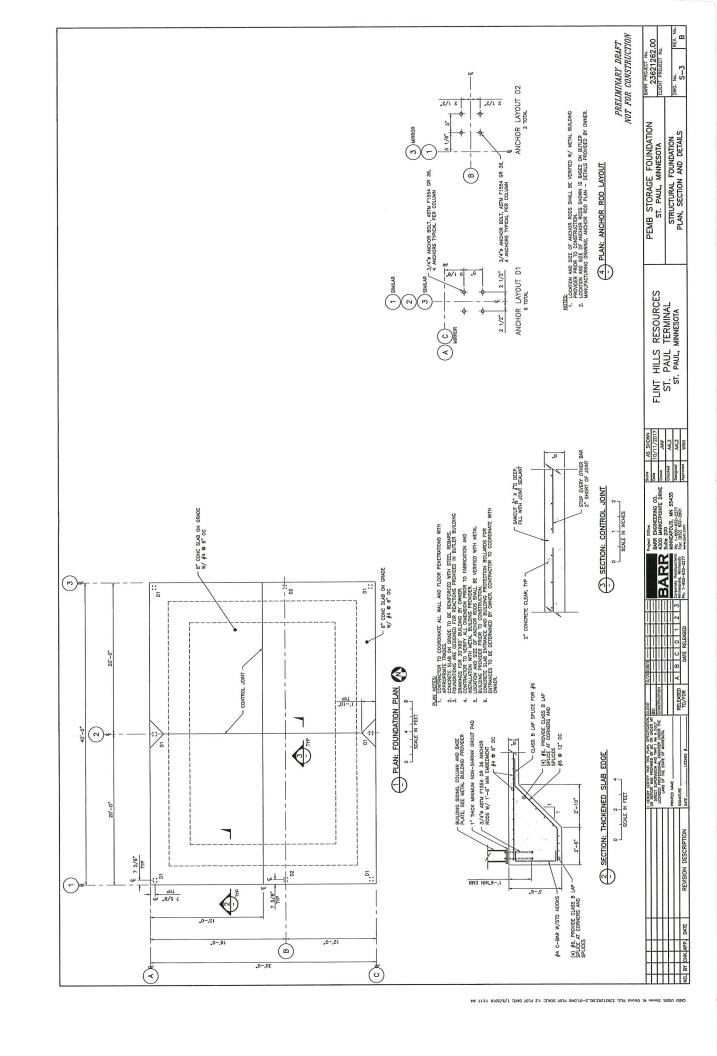
Water begins to enter the plant at eighteen (18) feet above flood stage. Prior to reaching this level all hazardous substances and petroleum based products, not contained in storage tanks, will be removed from the plant.

- All electric motors and service disconnects will be removed.
- Office supplies and lab equipment will be removed.
- Tanks contents will be either pumped out or cooled to solidification. Any tank not already full of product will be filled with city water. Valves will be closed to ensure tank isolation.
- Pipelines that are empty will also be filled with water to at least one (1) foot above expected flood crest. Pipeline valves will also be closed to prevent spills in the event of a pipe break.
- All gear driven tank mixers and pump drives will be drained and sealed to prevent contamination of water.
- Storage of materials or equipment in the shop will be readily removable from the area within the time available after a flood warning.

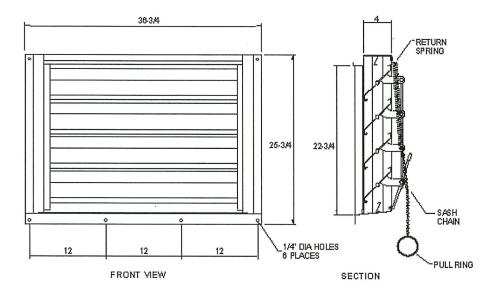
Emergency Contacts:

•	Fire and Medical	911
•	Daniel Clemens, Area Operation Manager	612-385-9346
•	Jeremy Birkeland, Plant Manager	612-325-1833
•	Monty Dershem, Operations Manager	651-438-5873





Louver - Steel 3'x2'



This top quality louver is especially designed for Butlerib® II wall system installations.

The louver is made of steel and is adjustable to 45° open position. In the closed position the louver blades form a tight tongue and groove seal.

The louver is completely self-flashing. Vertical window posts provide structural support and can be located at any elevation.

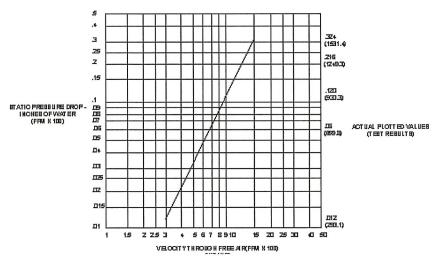
The louver blades are held in the closed position by a return spring, operated by a pull chain and held in variable open positions with the thumb screw operator or chain stay.

Specifications:

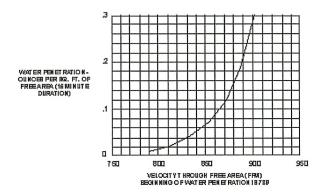
- Louver shall be designed to fit the Butlerib II wall panel.
- Louver shall be fabricated from 18 gauge G-90 galvanized steel, finish painted to match the Butlerib II wall system panel's Cool Ivory White color.
- Louver dimensions shall be 3' wide x 2' high.
- Louver depth shall be 4".
- Louver blade shall be center pivot adjustable type and variable blade angle of 0° to 45°.
- Louver shall be the self-flashing frame type.
- Louver blades shall operate in unison and shall form a uniformly tight closure through use of blade and jamb seals.
- Lava fiberglass insect screen shall be 16-18 mesh removable/ rewireable bronze anodized frame secured to exterior side of louver with swivel clips.
- All support posts, clips, sealant, fasteners and 10' pull chain shall be furnished.
- Louver shall have a free air flow area of 2.18 square feet when in the full open position.

Test Results:

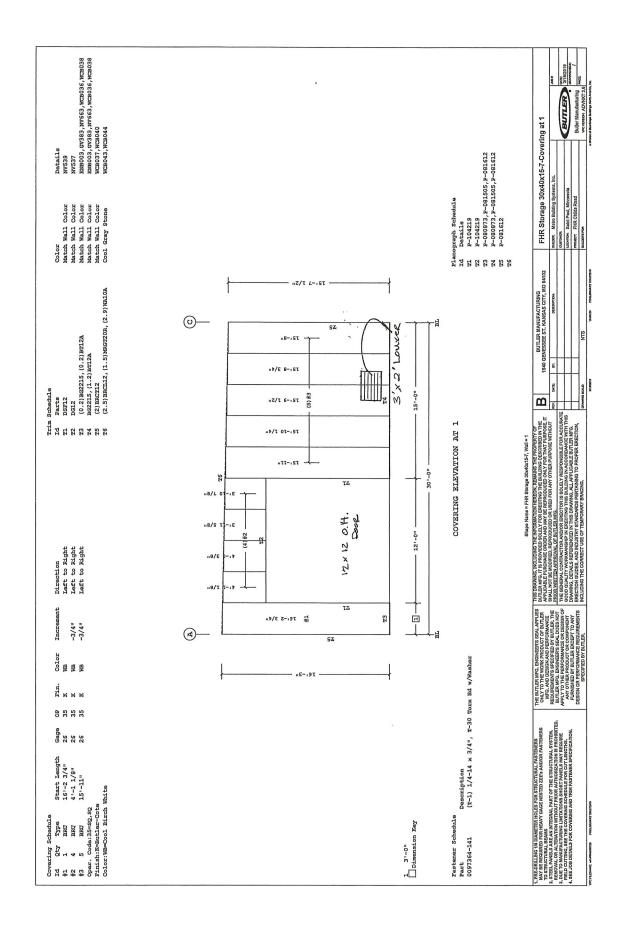
Test results below are based on tests performed by TRIMCO, Inc. on a 48" x 48" louver size without the insect screen installed.

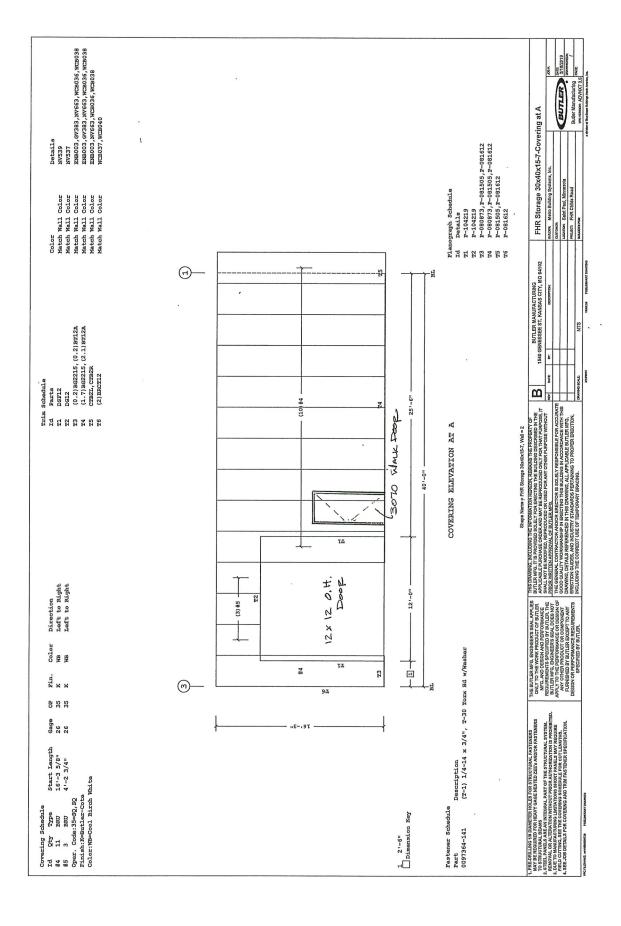


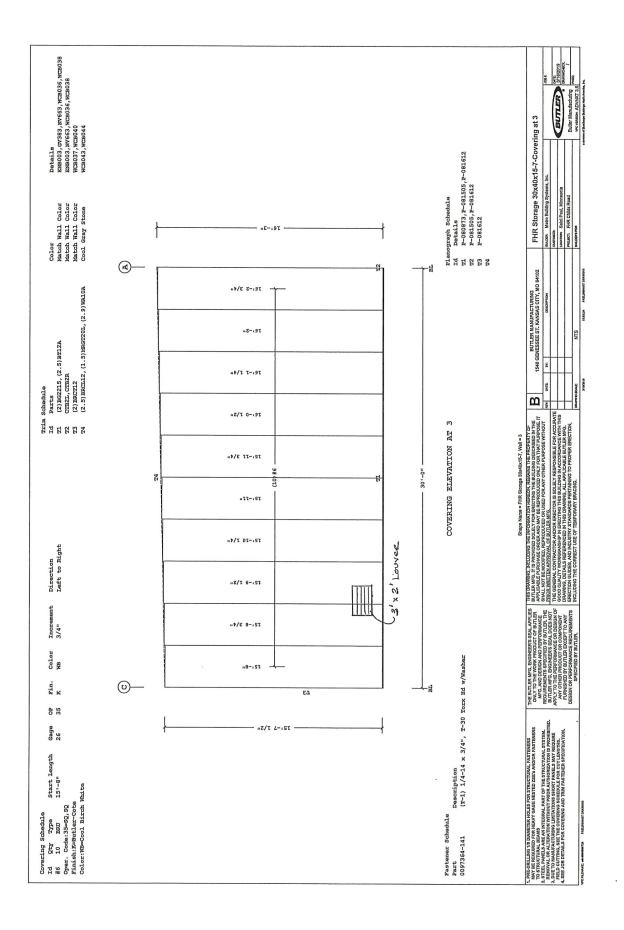
AIR PERFORMANCE (INTAKE)

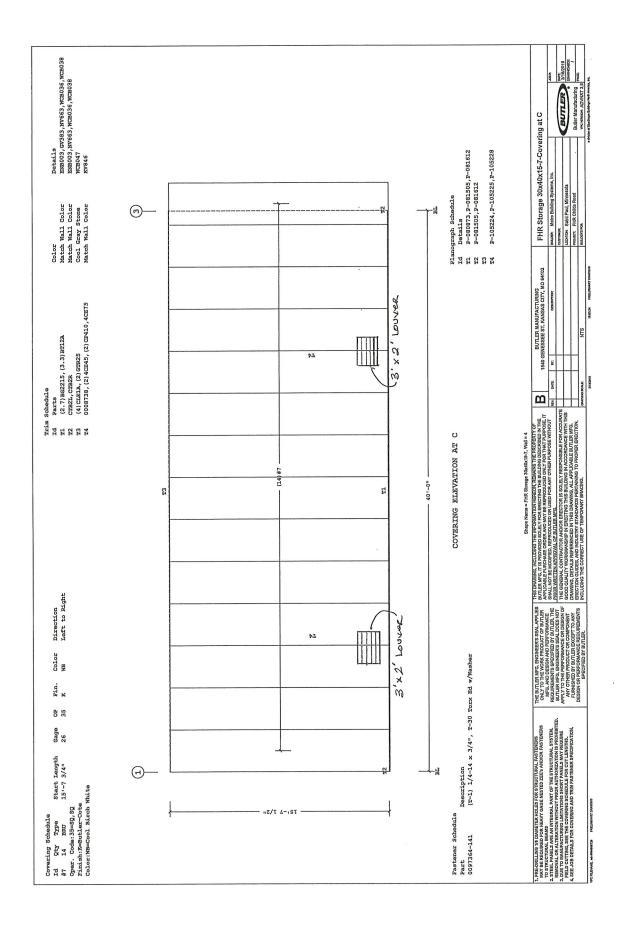


WATER PENETRATION









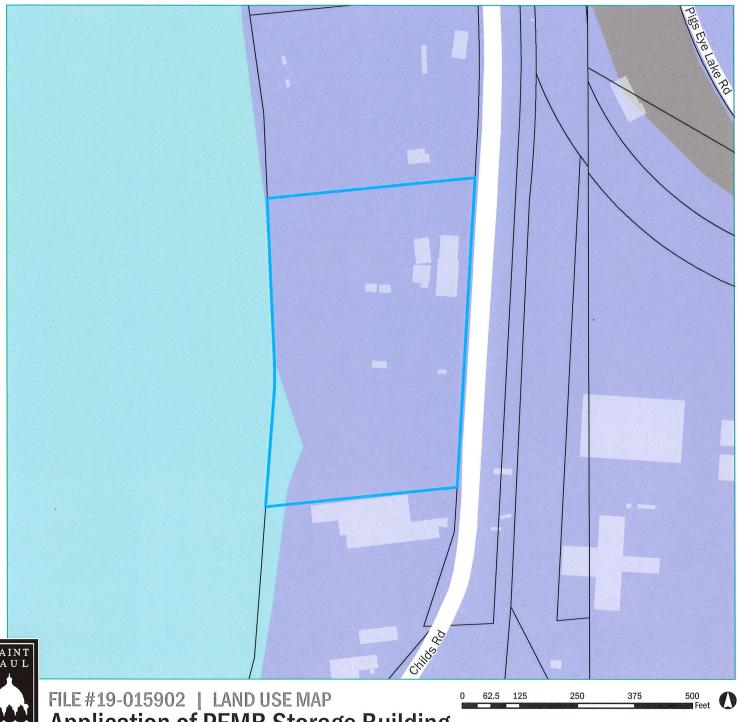


FILE #19-015902 | AERIAL MAP Application of PEMB Storage Building

Application Type: CUP Application Date: February 25, 2019 Planning District: 1

Subject Parcel Outlined in Blue

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Application of PEMB Storage Building

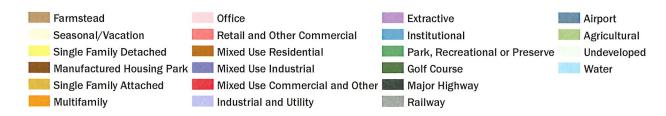
Application Type: CUP

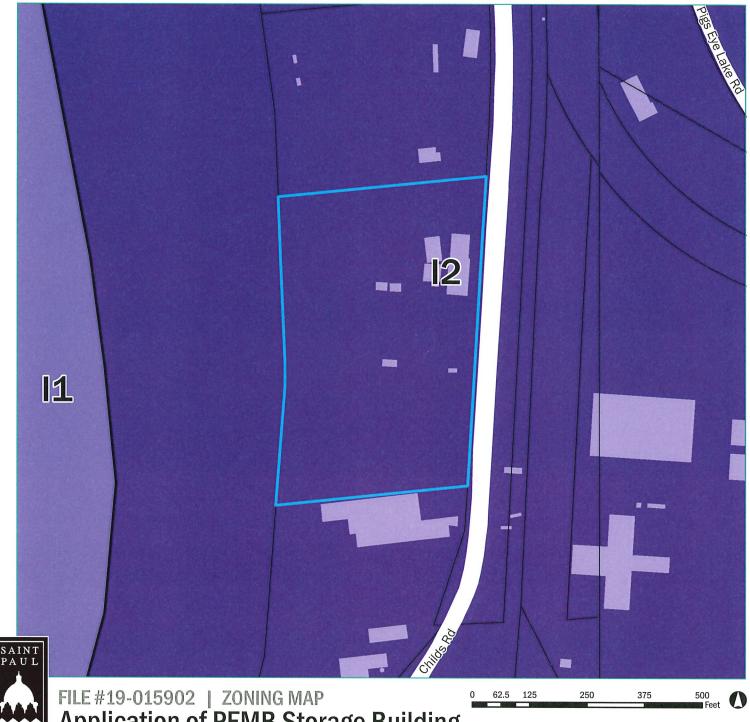
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Application of PEMB Storage Building

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