

ZONING COMMITTEE STAFF REPORT

1. **FILE NAME:** Premier Storage **FILE #** 14-319-416
 2. **APPLICANT:** Todd Jones, Premier Storage LLC **HEARING DATE:** August 28, 2014
 3. **TYPE OF APPLICATION:** Nonconforming Use Permit – Reestablishment & Change
 4. **LOCATION:** 543 James Ave, NW intersection at Duke
 5. **PIN & LEGAL DESCRIPTION:** 122823230131, Schmidt Brewery Addition Lot 5 Blk 2
 6. **PLANNING DISTRICT:** 9 **PRESENT ZONING:** T3
 7. **ZONING CODE REFERENCE:** §62.109(c); §62.109(e)
 8. **STAFF REPORT DATE:** August 21, 2014 **BY:** Bill Dermody
 9. **DATE RECEIVED:** August 14, 2014 **60-DAY DEADLINE FOR ACTION:** October 13, 2014
-

- A. **PURPOSE:** Reestablishment and change of nonconforming use for an indoor rental storage facility
- B. **PARCEL SIZE:** 78,000 sq. ft. (irregular)
- C. **EXISTING LAND USE:** Vacant warehouse and parking facility
- D. **SURROUNDING LAND USE:**
 - North: Residential (RT1)
 - East: Vacant and railroad (T3, T2, I2)
 - South: Railroad and commercial (T2)
 - West: Schmidt Brewing complex, consisting of residential and vacant uses (T3)
- E. **ZONING CODE CITATION:** §62.109(c) authorizes the planning commission to allow a nonconforming use to change to another use permitted in the district in which the existing nonconforming use is first allowed, or a use permitted in a district that is more restrictive than the district in which the existing nonconforming use is first allowed, or permit another, related nonconforming use at the same location upon making certain findings (see Section H below). §62.109(e) lists the conditions under which the Planning Commission may grant a permit to reestablish a nonconforming use.
- F. **HISTORY/DISCUSSION:** The site is part of the historic Jacob Schmidt Brewing Company campus that housed brewery operations until 2002. From 1998 to 2004, the campus also hosted an ethanol production plant. In 2013, the subject site's western portion received site plan approval for a parking facility, which was subsequently constructed. In 2012, the HPC approved both the parking facility and façade changes related to a proposed brewery in the site's eastern portion, though the brewery concept did not pursue City approvals past this point. The entire Schmidt Brewing campus was rezoned to from I2 General Industrial District to T3 Traditional Neighborhood in 2008.
- G. **DISTRICT COUNCIL RECOMMENDATION:** As of the date of this staff report, the District 9 Council has not provided a recommendation. One neighbor providing an email requesting that weeds and property maintenance be addressed at this site.
- H. **FINDINGS:**
 1. The application requests reestablishment of nonconforming use as warehousing and storage, and a change of nonconforming use to an indoor rental storage facility.
 2. The proposed use would occupy the eastern portion of the subject site and building, and would create two levels of storage within the former warehouse space. No building addition is proposed.
 3. Ingress/egress are proposed via an overhead door north to Palace Drive, and south to the existing parking lot along James Avenue and the railroad tracks.
 4. Section 62.109(e) states: *When a legal nonconforming use of a structure, or structure and land in combination, is discontinued or ceases to exist for a continuous period of more than*

one (1) year, the planning commission may permit the reestablishment of a nonconforming use if the commission makes the following findings:

- (a) *The structure, or structure and land in combination, cannot reasonably or economically be used for a conforming purpose.* This finding is met. The building is constructed of tilt-up concrete and steel with few windows, and placed in the portion of the former Schmidt Brewing property farthest from West Seventh Street with poor visibility – both the building construction and its location make it uneconomical to use for the commercial and residential uses allowed in T3 rather than the proposed reestablished warehousing and storage use.
 - (b) *The proposed use is equally appropriate or more appropriate to the district than the previous legal nonconforming use.* This finding is met. Warehousing and storage are the previous legal nonconforming use.
 - (c) *The proposed use will not be detrimental to the existing character of development in the immediate neighborhood or endanger the public health, safety, or general welfare.* This finding is met. The warehousing and storage use is part of the area's existing development character.
 - (d) *The proposed use is consistent with the comprehensive plan.* This finding is met. The Comprehensive Plan in Figure LU-B designates the entire Schmidt Brewing complex, including the subject site, as both a Neighborhood Center and a Mixed Use Corridor, which call for more dense and compact mixed commercial and residential uses, with only small-scale production or industrial uses, such as warehousing. Viewed in isolation, the proposed use would not meet the aims of a Neighborhood Center or Mixed Use Corridor designation. However, viewed as part of the larger Schmidt Brewing campus project, it contributes to the feasibility of the rest of the site to allow it to meet the aims of a Neighborhood Center or Mixed Use Corridor designation with higher density housing and commercial uses that make use of the established historic buildings and site layout.
 - (e) *A notarized petition of at least two-thirds of the owners of the described parcels of real estate within one hundred (100) feet of the subject property has been submitted stating their support for the use.* This finding is met. The petition was found sufficient on August 14, 2014: 24 parcels eligible; 16 parcels required; 17 parcels signed.
54. Section 62.109(c) states: *The planning commission may allow a nonconforming use to change to another use permitted in the district in which the existing nonconforming use is first allowed, or a use permitted in a district that is more restrictive than the district in which the existing nonconforming use is first allowed, or permit another, related nonconforming use at the same location if the commission makes the following findings:*
- a. *The proposed use is equally appropriate or more appropriate to the neighborhood than the existing nonconforming use.* This finding is met. The indoor rental storage facility use is more appropriate to the neighborhood than the previous warehousing and storage use due to the significantly lesser traffic impact, especially truck traffic. Since the proposed rental storage facility is completely indoors, no significant noise or visual impacts are anticipated, as compared to warehousing and storage with its truck traffic impacts.
 - b. *The traffic generated by the proposed use is similar to that generated by the existing nonconforming use.* This finding is met. The application provides a traffic generation analysis showing that the proposed indoor rental storage facility use will generate an estimated 41 customer trips per day, compared to an industry average for warehouse uses of 283 daily truck trips.
 - c. *The use will not be detrimental to the existing character of development in the immediate*

neighborhood or endanger the public health, safety, or general welfare. This finding is met. The proposed indoor rental storage facility use will not be detrimental to the existing character of development nearby, nor endanger the public health, safety, or general welfare.

- d. *The use is consistent with the comprehensive plan.* This finding is met. As stated in Finding 4(d), the Comprehensive Plan designates the entire Schmidt Brewing complex, including the subject site, as both a Neighborhood Center and a Mixed Use Corridor, which call for more dense and compact mixed commercial and residential uses, with only small scale industrial-type uses such as storage. However, if the proposed indoor storage facility use is viewed as part of the larger Schmidt Brewing campus project, it contributes to the feasibility of the rest of the site to allow it to meet the aims of a Neighborhood Center or Mixed Use Corridor designation with higher density housing and commercial uses that make use of the established historic buildings and site layout. The proposed use serves as an effective transition from the more dense uses envisioned for the rest of the Schmidt Brewery campus and the adjacent neighborhood to the north.

6. The subject site is located within the Jacob Schmidt Brewing Company Historic District.

- I. **STAFF RECOMMENDATION:** Based on the above findings, staff recommends approval of the application for re-establishment and change of nonconforming use for an indoor rental storage facility subject to the following additional condition(s):
1. Substantial compliance with the site plan and floor plan submitted as part of this application, including the lack of building expansion.
 2. Heritage Preservation Commission (HPC) approval or HPC staff approval of any changes within their purview.



NONCONFORMING 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 #: 14-319416
 Fee: 700⁰⁰
 Tentative Hearing Date: 8-28-14

PD = 9
 Ward = 2
 # 122823230131
 ZM = 21

APPLICANT

Name Todd Jones, Premier Storage, LLC
 Address 206 N. Chestnut Street
 City Chaska St. MN Zip 55318 Daytime Phone _____
 Name of Owner (if different) Bhgdn Llc
 Contact Person (if different) William C. Griffith Phone 952-896-3230

PROPERTY LOCATION

Address/Location 543 James Avenue
 Legal Description Lot 5, Block 2, SCHMIDT BREWERY ADDITION
 Current Zoning T3 District
 (attach additional sheet if necessary)

TYPE OF PERMIT: Application is hereby made for a Nonconforming Use Permit under provisions of Chapter 62, Section 109 of the Zoning Code:

- The permit is for: Establishment of legal nonconforming use status for use in existence at least 10 years (para. a)
 Change of nonconforming use (para. c)
 Expansion or relocation of nonconforming use (para. d)
 Reestablishment of a nonconforming use vacant for more than one year (para. e)

SUPPORTING INFORMATION: Supply the information that is applicable to your type of permit.

Present/Past Use Warehousing and Storage
 Proposed Use Storage Facility, Rental

Attach additional sheets if necessary

CK 1425
 700⁰⁰

Attachments as required Site Plan Consent Petition Affidavit

Applicant's Signature Todd Jones, Chief Manager Date 8-7-14 City Agent pdd

8-7-14



8-7-14

Bill Dermody, City Planner
City of St Paul
1400 City Hall Annex
25 West Fourth Street
St Paul, MN 55102

RE: Application by Premier Storage relating to the property at 543 James Ave

Dear Bill,

Please accept our Nonconforming Use Permit Application. We are submitting the following attached items:

1. Nonconforming Use Permit Application Form signed by the Applicant on 8-7-14.
2. Copy of letter dated 7-2-14 from BHGDN, LLC, the current property owner, to Bill Dermody, discussing previous uses and tenants at the subject building. I understand this letter was previously provided to Mr. Dermody.
3. Letter from William C. Griffith of Larkin Hoffman Daly & Lindgren Ltd to Bill Dermody, City Planner dated 8-7-14 as a narrative to this application.
4. NCHRP Report 365; Traffic Generation Analysis.
5. Copies of Signed Consent of Adjoining Property owners for a Nonconforming Use Permit (17 provided, 16 of 24 were required).
6. Affidavit of Petitioner for a Conditional Use Permit or a Nonconforming Use Permit signed and notarized on 8-6-14.
7. One plan each in 11"x17" print size as follows:

<u>Sheet</u>	<u>Dated</u>	<u>By</u>
A-1.0 1 st Floor Plan and Site Plan	8-7-14	Welsh Architecture
A-2.0 2 nd Floor Plan	8-7-14	Welsh Architecture
A-3.0 South Exterior Elevations	8-7-14	Welsh Architecture
A-3.1 North Exterior Elevations	8-7-14	Welsh Architecture

8. (5) Copies of photos of the applicants similar Internalized Community Storage Projects in the Twin Cities area, (5) copies of each.
9. Check #1425 payable to the City of St Paul in the amount of \$700.00 as the application fee.

Please let us know if you have any questions.

Yours truly,

Todd C. Jones
President

August 7, 2014

Bill Dermody, City Planner
City of St. Paul
1400 City Hall Annex
25 West Fourth Street
St. Paul, MN 55102

Re: 543 James Avenue (Schmidt Bottle Warehouse Annex) – Reestablishment and Change of Nonconforming Use; Our File #28,882-06

Dear Bill:

This firm represents Premier Storage, LLC with regard to the attached application for reestablishment and change of nonconforming use at 543 James Avenue (the “Property”) in the City of St. Paul (the “City”). The purpose of this letter is to provide the required findings and background information for the attached application.

Background

The Property is part of the historic Jacob Schmidt Brewing Company (the “Schmidt Brewery”) site. The structure on the Property has been referred to as the bottle warehouse annex by the City, and consists of approximately 78,000 square feet of vacant warehouse space. The last tenants of the Property were Northern States Power (NSP) and Dedicated Logistics Inc., both of which occupied the Property from 2005 to 2008/2009. Both tenants used a portion of the Property for warehousing and storage purposes. The Property has been vacant for the last five years and has been listed for either lease or sale during that time. In 2012-2013, the Property received approvals for two phases of alterations associated with a proposed microbrewery and a restaurant. Approvals included a site plan and Historic Preservation Commission (HPC) approvals for exterior alterations. While the majority of the first phase of exterior improvements was constructed in compliance with City approvals, the restaurant and microbrewery uses were never completed. The Property continues to be vacant.

Proposed Use

The proposed reuse of the modern warehouse would be internalized community storage. Internalized community storage is a fully-enclosed, climate controlled, secured access, self-storage facility. Premier Storage, LLC’s principal has successfully developed internalized community storage throughout the Twin Cities metropolitan area. The proposed use would most likely be

classified as “storage facility, rental” under the City code, although neither use is defined. Nor is either use permitted in the T3 Traditional Neighborhood District. The proposed use would include use of the majority of the warehouse for internalized community storage, and the remainder of the Property will be reused consistent with the T3 District. Given the good condition of the existing warehouse building, the size of the structure, and the impracticable costs of demolishing the structure, the proposed use is an appropriate reuse to ensure ongoing investment and maintenance of the Property, while adding an amenity for the surrounding neighborhood, including the 260 new dwelling units constructed on the remainder of the Schmidt Brewery site.

Required Findings

The application proposes to reestablish a nonconforming use, warehousing and storage, a commercial use, and change the use to a rental storage facility, also a commercial use. The proposed use will occupy the majority of the warehouse building in the location of the previously operated warehousing and storage. The Property has been vacant for a continuous period of more than one year and, therefore, must comply with the requirements of City Code Sections 62.109(e) and 62.109(c) to reestablish and change the nonconforming use. The proposed use meets the required findings as follows:

City Code Section 62.109(e) Reestablishment of a Nonconforming Use Findings:

1. The structure, or structure and land in combination, cannot reasonably or economically be used for a conforming purpose;

The building, which has been vacant for approximately five years, is a modern warehouse, constructed of tilt up concrete and steel. The structure is in good condition and was constructed for commercial industrial purposes, as opposed to the light commercial and residential purposes allowed in the T3 District. The size of the warehouse and the construction materials are inconsistent with any type of adaptive reuse and repurposing for any other use would be costly and uneconomical. Demolishing the structure, which is in good condition, would be cost-prohibitive and create significant amounts of unnecessary construction waste.

2. The proposed use is equally appropriate or more appropriate to the district than the previous legal nonconforming use;

The previous use, warehousing and storage, and the proposed use, a rental storage facility, are both classified as commercial uses under the City Code. Warehousing and storage, is first allowed with a conditional use permit in the I2 District, whereas the proposed use, a rental storage facility, is first permitted as of right in the IT District. With regard to traffic, the prior warehousing use received deliveries from heavy trucks to the loading docks along James Avenue frequently, with industry estimates of approximately 283 vehicle trips per day; whereas, the proposed is expected to only have an estimated 41 light vehicle customer trips per day, with all loading and unloading operations occurring in an entirely enclosed area. (See attached NCHRP Report 365; Traffic Generation Analysis.) The entire use will operate inside of the building with no exterior operations. Moreover, internalized community storage offers a necessary service to adjacent multifamily development by providing safe and accessible storage.

3. The proposed use will not be detrimental to the existing character of development in the immediate neighborhood or endanger the public health, safety, or general welfare;

The proposed use will not be detrimental to the existing character of development in the neighborhood. The existing neighborhood is and has historically been an industrial area with warehouse facilities. While the current multifamily development has changed the character of the vicinity, the neighborhood's appeal is derived from its residential/industrial character. The proposed use is consistent and complementary to the newly constructed artist lofts on the rest of the Schmidt Brewery site and the enclosed nature of the storage operations will ensure limited off-site impacts. Any exterior alterations or improvements will comply with the City's historic preservation requirements for the Schmidt Brewery Preservation District. The low-impact use will not be detrimental to the neighborhood or endanger the public health, safety, or general welfare. Surrounding neighbors support the application to reuse the warehouse for internalized community storage, including Dominion, the developer of the balance of the Schmidt Brewery site.

4. The proposed use is consistent with the comprehensive plan;

The Property is designated by the Comprehensive Plan as an Opportunity Site on a Mixed-Use Corridor. Both designations guide the Property for a mix of uses, which includes commercial uses. City Comprehensive Plan LU-1; LU-21. Allowing the commercial reuse of the existing warehouse as internalized community storage will allow the Property to become a viable contributing part of the larger Schmidt Brewery mixed-use development. The internalized community storage will be entirely enclosed within the warehouse on the Property, which will create an opportunity to establish an active use, consistent with the T3 District, on the remaining portion of the Property, which has ample parking. The commercial reuse of the Property is consistent with the comprehensive plan.

5. A notarized petition of at least two-thirds of the owners of the described parcels of real estate within one hundred (100) feet of the subject property has been submitted stating their support for the use.

The notarized petition of the property owners within one hundred feet of the Property has been signed by 17 of the 24 adjacent property owners. This number exceeds the required signature of two-thirds minimum.

62.109(c) Change of Nonconforming Use Findings.

1. The proposed use is equally appropriate or more appropriate to the neighborhood than the existing nonconforming use;

This finding is met. See finding #2 above.

2. The traffic generated by the proposed use is similar to that generated by the existing nonconforming use;

The traffic generated by the proposed use will be significantly less than the traffic generated by the previous uses. The last known tenants, NSP and Dedicated Logistics Inc. used the Property for warehousing and storage, and experienced significant truck traffic. The previous use operated with eleven (11) loading docks. The proposed use will have two drive-in garage doors and will only be accessed occasionally by customers who will drive into the building.

3. The use will not be detrimental to the existing character of development in the immediate neighborhood or endanger the public health, safety, or general welfare; and

This finding is met. See finding # 3 above.

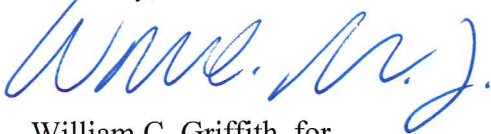
4. The use is consistent with the comprehensive plan.

This finding is met. See finding # 4 above.

In conclusion, internalized community storage provides the City with a great opportunity to reuse a long vacant site, while serving the immediate area with convenient and safe storage options. In terms of trip generation, internalized community storage has one of the lowest trip generation rates of any commercial or residential use. Residential neighbors support the application, including Dominion.

Please let me know if you have any questions. Thank you.

Sincerely,



William C. Griffith, for
Larkin Hoffman Daly & Lindgren Ltd.

Direct Dial: 952-896-3290
Direct Fax: 952-842-1729
Email: wgriffith@larkinhoffman.com

Enclosures

WELSH ARCHITECTURE

4839 E. Lake Park - Suite 400
 Minneapolis, MN 55449
 952.897.7874 Fax: 952.897.7740

THE DRAWINGS AND/OR SPECIFICATIONS CONTAINED HEREIN ARE THE EXCLUSIVE PROPERTY OF WELSH ARCHITECTURE AND SHALL NOT BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT PRIOR WRITTEN CONSENT.

PROJECT: PREMIER STORAGE - INTERNALIZED COMMUNITY STORAGE
 543 JAMES AVE. WEST ST. PAUL, MN
 SHEET: BUILDING / SITE PLAN - 1st FLOOR PLAN

NO.	REVISION	DATE

DATE FOR CITY PLANNING: 05-27-14

SCALE: 1/8" = 1'-0"

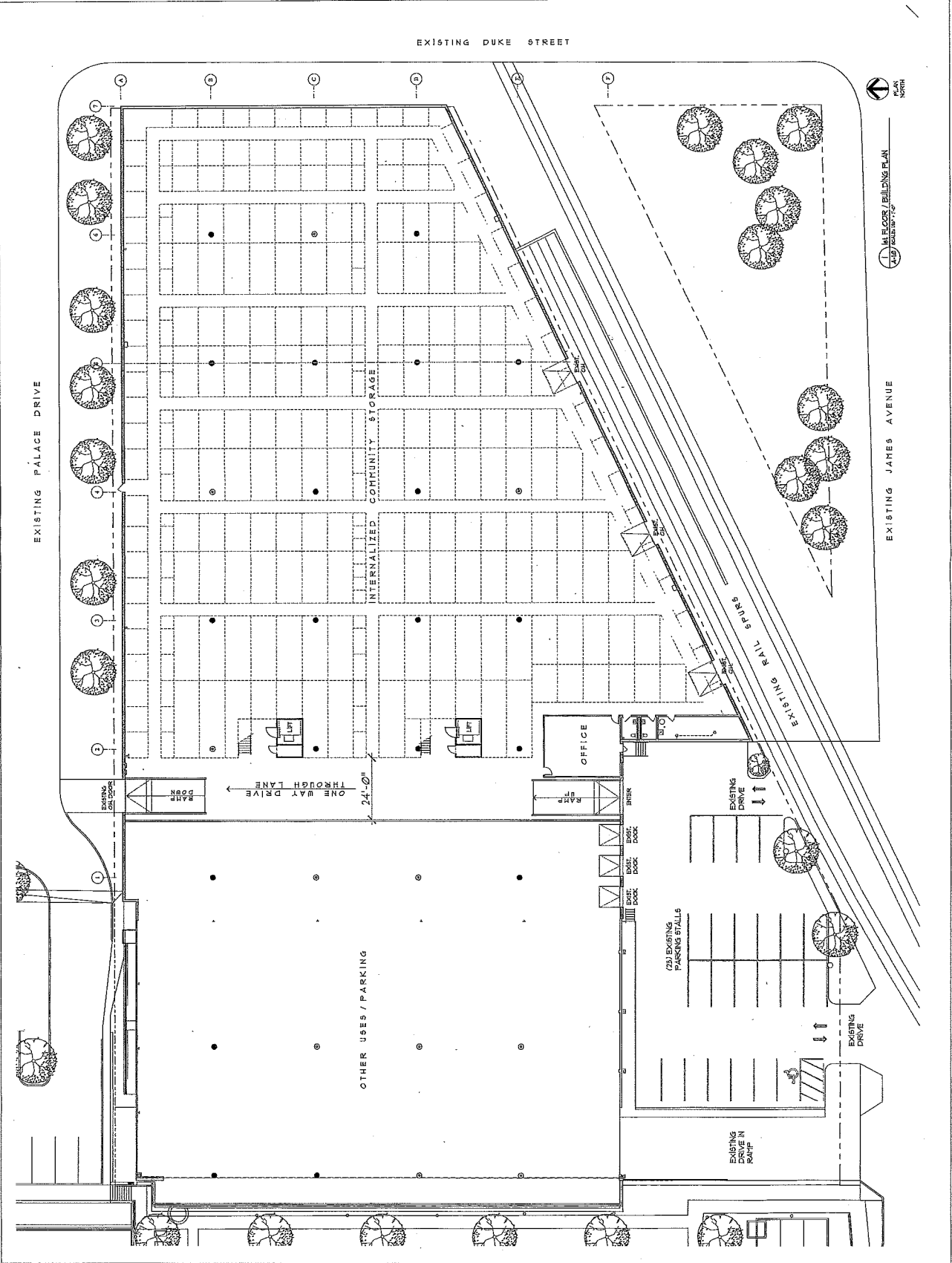
DATE: 05-27-14

DESIGNER: MRS. J. B. WELSH

ARCHITECT: WELSH ARCHITECTURE

CHECKED BY: J. B. WELSH

PROJECT NO.: A-1.0





4359 Baker Road - Suite 400
Afton, MN 55853
321.897.7874 Fax: 321.897.7740

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PROJECT:
**PREMIER STORAGE -
INTERNALIZED
COMMUNITY STORAGE**

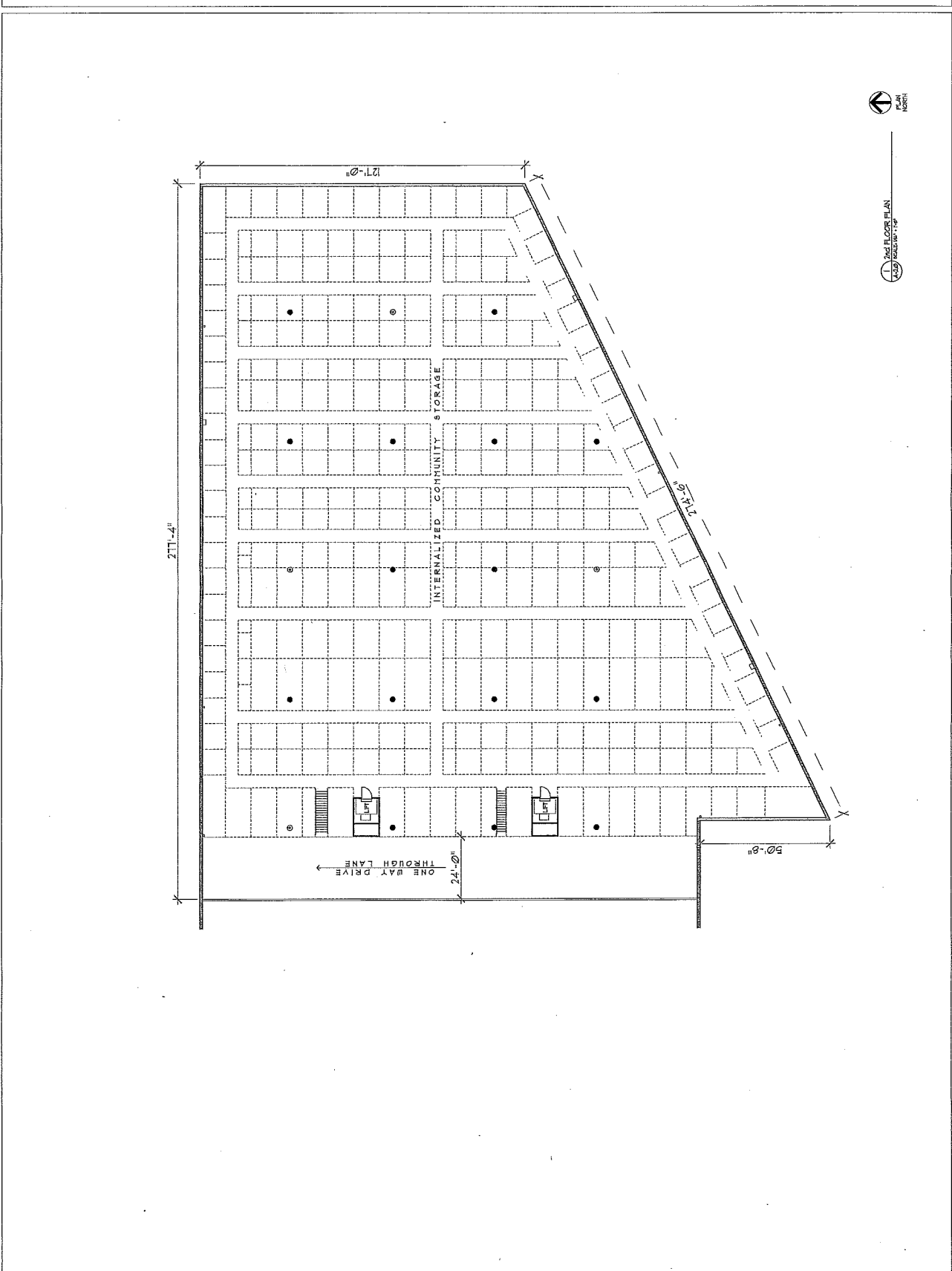
543 JAMES AVE. WEST
ST. PAUL, MN

SHEET:
2nd FLOOR PLAN

DATE / REVISION	DATE
BASE FOR CITY PLANNING	08/26/24

JOB:
DRAWN BY: CMV CHECKED BY: LDB
241-1654.0

A-2.0





4501 Baker Road, Suite 400
 St. Paul, MN 55116
 952.897.7674 Fax: 952.897.7740

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**PREMIER STORAGE -
 INTERNALIZED
 COMMUNITY STORAGE**

543 JAMES AVE.
 ST. PAUL, MN

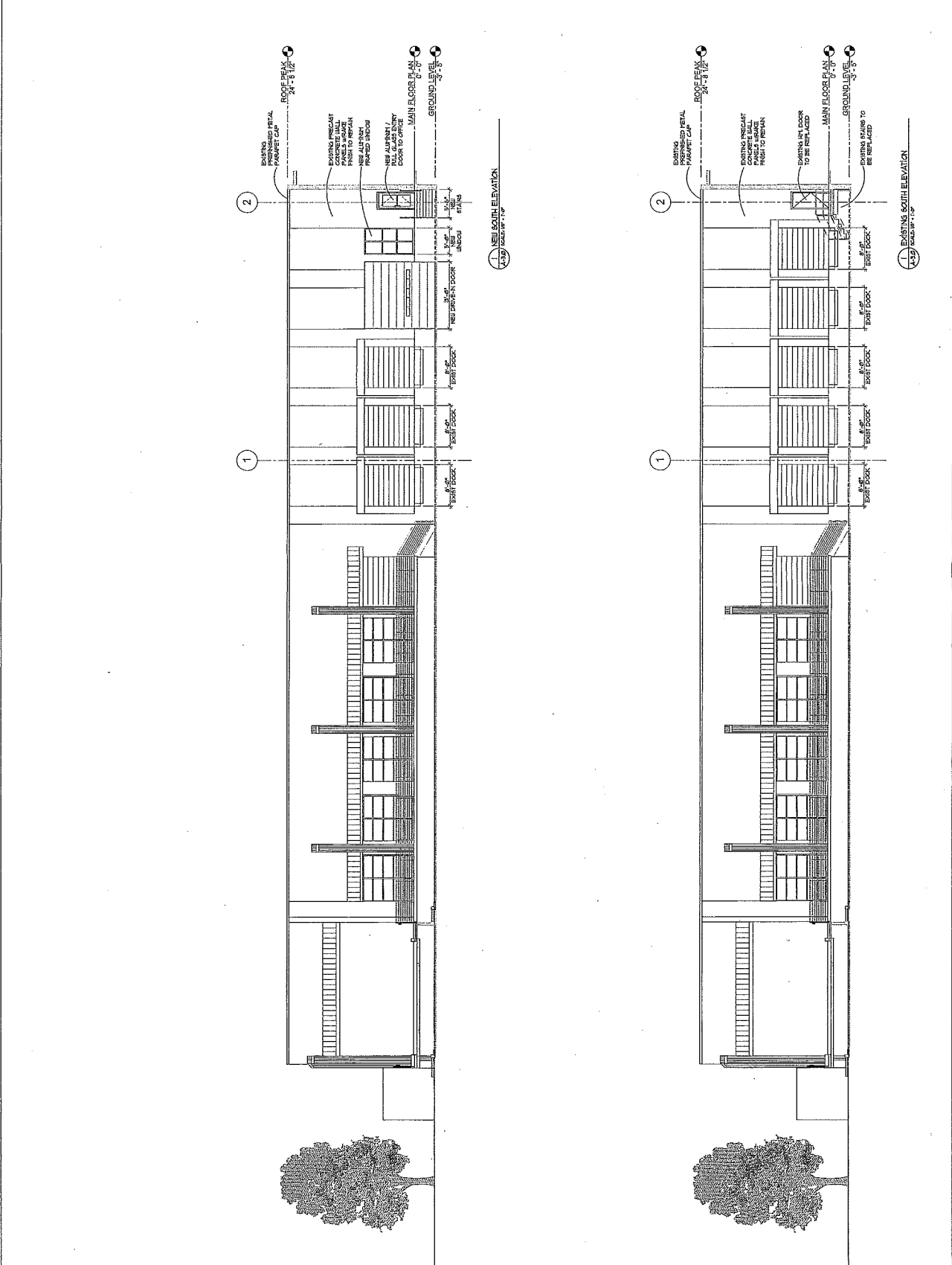
**EXTERIOR SOUTH
 ELEVATIONS**

SHEET

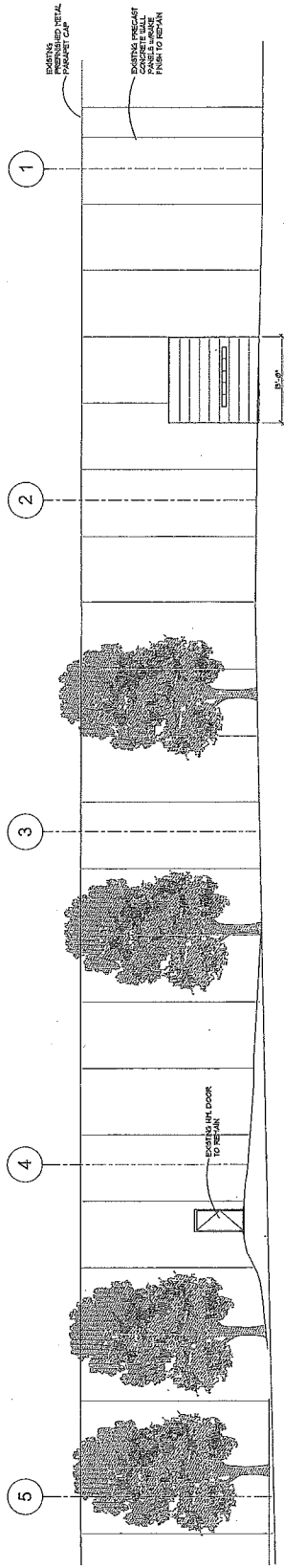
NO.	REVISION	DATE
001	ISSUED FOR CITY PLANNING	08-23-14

JW
 DWG BY: JWB
 CHECKED BY: LDB
 DATE: 08-23-14

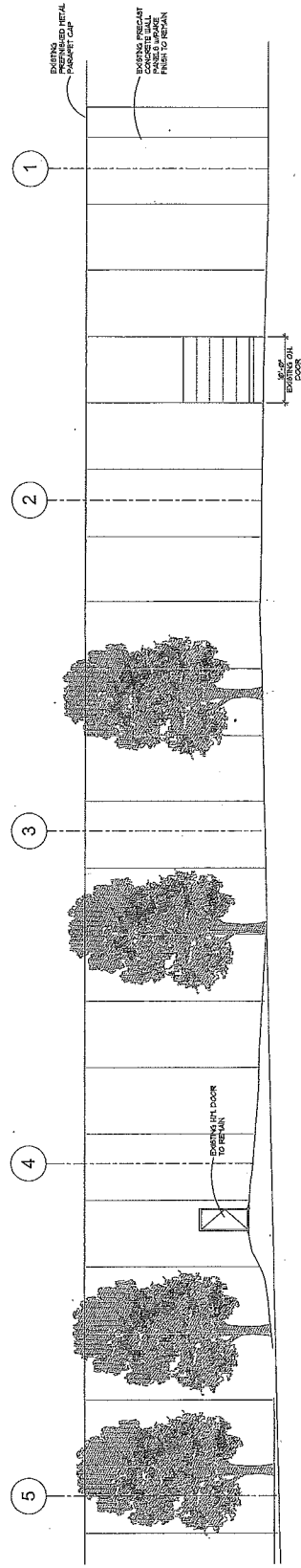
A-3.0



DATE	BY	DESCRIPTION
09-24-14	CPB/PLA	543 JAMES AVE. COMMUNITY STORAGE



(1) NEW PARTIAL EAST ELEVATION
(3) SCALE: 1/8" = 1'-0"



(1) EXISTING PARTIAL NORTH ELEVATION
(3) SCALE: 1/8" = 1'-0"

BHGDN, LLC
301 Carlson Parkway
Suite 275
Minnetonka, MN 55305

7/14/14
Letter Provided to City

7/2/2014

Bill Dermody, City Planner
City of St. Paul
1400 City Hall Annex
25 West Fourth Street
St. Paul, MN 55102

Re: 535 James Ave
St Paul, Mn 55318

Dear Mr. Dermody,

Bhgdn LLC is the current property owner of the warehouse located at 535 James Avenue (the "Property") in St. Paul. The Property is currently vacant and under contract to be purchased by Premier Storage, LLC subject to the City of St Paul approvals for their proposed use. The Property was last used by two tenants concurrently: Dedicated Logistics ("DL") and Northern States Power ("NSP").

DL occupied a portion of the Property from July 2005 to July 2009. DL used the Property as a warehousing and distribution center for materials primarily intended for delivery to the Ford plant in St. Paul. DL's use of the Property included receiving, warehousing, and distribution of bulk tires, transmissions, engines and other automotive components. Shipments were delivered via semi-truck and rail for eventual delivery by semi-truck trailers to the Ford plant. It is estimated that, on average, approximately 25 truck trips departed per day from the DL's operations.

NSP also occupied a portion of the Property from June 2005 to May 2008. NSP used the receipt, warehousing, assembly, repair, and fabrication of a number of parts and components relating to operations and construction at the St Paul Power plant. Parts were generally delivered by semi-truck.

The building is presently vacant and, other than some recent temporary uses of a portion of the building for material storage by contractors building the Artists lofts, has been vacant since July 2009.

Yours truly,

David Kreitzer

David Kreitzer
BHGDN Board Member

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Report 365

Travel Estimation Techniques for Urban Planning

WILLIAM A. MARTIN
NANCY A. MCGUCKIN
Barton-Aschman Associates, Inc.
Washington, DC

Subject Areas

Planning and Administration

Research Sponsored by the American Association of State
Highway and Transportation Officials in Cooperation with the
Federal Highway Administration

TRANSPORTATION RESEARCH BOARD
NATIONAL RESEARCH COUNCIL

NATIONAL ACADEMY PRESS
Washington, D.C. 1998

TABLE 3 Site-specific vehicle trip generation rates

Land Use	Daily Vehicle-Trip Rate	per	Percent of Total Daily Vehicle Trips		ITE Code
			A.M. Peak	P.M. Peak	
Residential					
Single-Family	9.55	DU	8.0%	10.7%	210
Apartment	6.47	DU	8.6	10.7	220
Condo/Townhouse	5.86	DU	7.5	9.2	230
Mobile Home Park	4.81	Occupied DU	8.9	12.1	240
Planned Unit Development	7.44	DU	7.8	9.7	270
Retail¹					
Shopping Center					
Under 100,000 sq. ft.	70.7	1,000 sq. ft. GFA	2.3%	9.2%	820
100,000 to 1,000,000 sq. ft.	38.7	1,000 sq. ft. GFA	2.1	9.5	820
500,000 to 1,000,000 sq. ft.	32.1	1,000 sq. ft. GFA	2.0	9.3	820
More than 1,000,000 sq. ft.	28.6	1,000 sq. ft. GFA	1.8	9.1	820
Office					
General ²	11.85	1,000 sq. ft. GFA	13.8%	13.1%	710
Medical	34.17	1,000 sq. ft. GFA	10.0	13.0	720
Office Park	11.42	1,000 sq. ft. GFA	16.1	13.2	750
Research and Development Center	7.70	1,000 sq. ft. GFA	16.0	13.9	760
Business Park	14.37	1,000 sq. ft. GFA	11.3	10.3	770
Restaurant³					
Quality Restaurant	96.51	1,000 sq. ft. GFA	6.6%	10.1%	831
High Turnover (Sit Down)	205.36	1,000 sq. ft. GFA	8.7	15.5	832
Fast Food without Drive-Through	786.22	1,000 sq. ft. GFA	9.7	13.7	833
Fast Food with Drive-Through	632.12	1,000 sq. ft. GFA	9.5	7.3	834
Bank					
Walk-In	140.61	1,000 sq. ft. GFA	13.7%	0.4%	911
Drive-Through	265.21	1,000 sq. ft. GFA	13.3	19.3	912
Hotel/Motel					
Hotel	8.7	Occ. Room	7.5%	8.7%	310
Motel	10.9	Occ. Room	6.7	7.0	320
Parks and Recreation					
Marina	2.96	Berth	5.7%	7.1%	420
Golf Course	37.59	Hole	8.6	8.9	430
City Park	2.23	Acre	NA	NA	411
County Park	2.99	Acre	NA	NA	412
State Park	0.50	Acre	NA	NA	413
Hospital					
General	11.77	Bed	10.0%	11.6%	610
Nursing Home	2.6	Occupied Bed	7.7	10.0	620
Clinic (one data point)	23.79	1,000 sq. ft. GFA	NA	NA	630

(continued on next page)

TABLE 3 (Continued)

Land Use	Daily Vehicle-Trip Rate	per	Percent of Total Daily Vehicle Trips		ITE Code
			A.M. Peak	P.M. Peak	
Educational					
Elementary School	10.72	1,000 sq. ft. GFA	25.6%	23.2%	520
High School	10.90	1,000 sq. ft. GFA	21.5	17.8	530
Junior/Community College	12.57	1,000 sq. ft. GFA	17.2	8.2	540
University/College	2.37	Student	8.4	10.1	550
Airport					
Commercial	104.73	Average Flights/Day	7.8%	6.6%	021
General Aviation	2.59	Average Flights/Day	10.4	12.7	022
Industrial					
General Light Industry	6.97	1,000 sq. ft. GFA	14.5%	15.5%	110
General Heavy Industry	1.5	1,000 sq. ft. GFA	34.0	45.3	120
Warehouse	4.88	1,000 sq. ft. GFA	11.7	12.3	150
Manufacturing	3.85	1,000 sq. ft. GFA	20.3	19.5	140
Industrial Park	6.97	1,000 sq. ft. GFA	11.8	12.3	130

Note: Rates are often given for other factors, such as acres, employees, or sq. ft. of gross floor area. Weekend rates are also given for many uses. For some, like shopping centers, the weekend rates are higher than weekday rates.

- ¹ Rates given are for high end of indicated range. ITE's *Trip Generation* details rates for 15 sizes. Weekend rates for shopping centers are significantly different from the weekday rates given here. *Trip Generation* also details rates by time of day, day of week, and month of year.
- ² ITE details rate for 11 size categories, from 10,000 sq. ft. to 800,000 sq. ft. The rate given here is for a 200,000-sq. ft. general office.
- ³ Rates are given for the number of seats in the restaurant.

specific site characteristics. When appropriate, local data should be collected and rates developed as in Table 3.

Please note that the site-specific trip generation rates utilize the number of dwelling units as a key data input. This is because site-specific planning relies on the size and number of physical structures in a study area. Transportation modeling techniques, on the other hand, rely heavily on census information as a data source. Therefore, regional trip generation models use households, or the number of family units, as the primary data source for estimating home-based trip generation.

Model Trip Rates

The data presented in Tables 4 through 9 were derived from available home interview surveys taken since 1985 and from the 1990 NPTS. The data from both sources were strat-

ified into the population subgroups listed. These subgroups are different from those used in *NCHRP Report 187* because of federally mandated planning requirements that specify population stratification groups. The small urban size is now consistent with requirements specified in ISTEA.

Population stratification groups are as follows:

- 50,000 to 199,999 persons,
- 200,000 to 499,999 persons,
- 500,000 to 999,999 persons, and
- More than 1,000,000 persons

Original home-interview surveys for the 50,000 to 199,999 category were limited. In addition, variations in survey design, definitions, collection methodologies, and the expansion of the data made it difficult to develop conclusive find-



APPENDIX 3: TRAFFIC GENERATION ANALYSIS

TRAFFIC GENERATED BY SELF STORAGE FACILITIES

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OVERVIEW

Economic Consulting Associates, Inc. conducted a study to determine how much traffic is generated by self storage. The study was performed under the sponsorship of the Self Storage Association.

Questionnaires were prepared and made available to members. An independent analysis of the results was performed. Respondents ranged from very small to very large facilities throughout the United States.

Details of our study report follow.

PURPOSE

The aim of this study is to accurately measure and determine how much traffic is generated by self storage facilities. To this end, the Self Storage Association (SSA) contracted with Economic Consulting, Tempe, AZ, a firm with experience in this field, to conduct an independent study.

APPROACH

The SSA prepared a standard questionnaire that self storage operators could use to record traffic data. The form was delivered to all members of the SSA and was also publicized on the Internet, in meetings with operators, and through other distribution channels (see form in Appendix B, Page B-1).

Completed questionnaires were returned to the association and were provided to us for analysis. ECA inspected the questionnaires, obtained additional

information by calling respondents when data were incomplete or required clarification, checked the addition on the forms, assembled and analyzed the data and provided this report of the results.

Certain questionnaires were not used in the study for a variety of reasons, which included illegibility, they were incomplete or the respondent's facility was not a typical self storage business. The latter included a combination self storage and office warehouse and another which was primarily an RV storage, for example. Since only one questionnaire was received for Canada, it was also excluded. Only facilities that had seven day a week access were included in the analysis, since nearly all of the respondents were open for business Sunday through Saturday. To include others that did not operate seven days a week would have been inconsistent, in our opinion. Finally, data was based on computerized gate entries during the months of April through June of 2001.

RESPONDENT PROFILE

This study contained 158 usable responses. While this is a small fraction of the 35,000 plus facilities in the U.S., it is the second largest response of any publicly available study on this subject. ECA conducted a prior self storage traffic analysis on behalf of the Mini-Storage Messenger magazine in February 1996 ("Dispelling the Self-Storage Traffic Myth") that was based on data from over 250 facilities. The SSA study is believed to be more representative of the industry, because this current data is based on the average sized facility of 45,000 square feet from over 90 cities in the United States. The response in the earlier study was based on information from facilities smaller than the average project.

The mode of respondent facilities in this current study contained 500 to 599 spaces and nearly one-third (31.65 %) had 600 or more spaces, for example (see Table 1).



TABLE 1
RESPONDENTS BY
NUMBER OF SPACES

SPACES	NUMBER	% OF TOTAL
100-199	4	2.53
200-299	7	4.43
300-399	22	13.92
400-499	34	21.52
500-599	41	25.95
600-699	23	14.56
700-799	12	7.59
800-899	4	2.53
900-999	4	2.53
1,000-1099	2	1.27
1,100-1,199	2	1.27
1,200-1,299	2	1.27
1,300-1,399	0	0
1,400-1,499	0	0
1,500-1,599	0	0
1,600-1,699	0	0
1,700-1,799	1	0.63
Total	158	100.0%

Source: Total and percentage computed by Economic Consulting Associates.

The average size of respondents was 59,451 rentable sq. ft. (see Table 2).

TABLE 2
AVERAGE SIZE OF RESPONDENTS
(In Rentable Sq. Ft.)

Total Rentable Sq. Ft.	9,279,113
No. of Respondents	156*
Average Size	59,481

*Two did not provide rentable sq. ft.

Source: Average computed by Economic Consulting Associates.

Respondents facilities ranged in size from 13,000 rentable sq. ft. to over 160,000. An analysis of respondents by rentable sq. ft. is shown in Table 3. It

shows that the mode was between 50,000 and 59,999 rentable sq. ft. The greatest concentration of respondents were in the 40,000 to 70,000 range.

TABLE 3
AVERAGE SIZE OF RESPONDENTS
(In Rentable Sq. Ft.)

	NUMBER	% OF TOTAL
10,000-19,999	3	1.92
20,000-29,999	6	3.85
30,000-39,999	18	11.54
40,000-49,999	29	18.59
50,000-59,999	33	21.15
60,000-69,999	27	17.31
70,000-79,999	13	8.33
80,000-89,999	12	7.69
90,000-99,999	8	5.13
100,000-109,999	4	2.56
110,000-119,999	1	0.64
120,000-129,999	1	0.64
160,000-169,999	1	0.64
Total	156	99.99%*

*Does not total 100% due to rounding.

The Western Region of the Self Storage Association had the largest number of respondents, followed by the Southeast region (see Table 4). This is consistent with fact that the former is the largest, in terms of membership. A list of states by SSA Region is provided in Appendix 2

TABLE 4
RESPONSE BY REGION

	NUMBER	% OF TOTAL
Northeast	25	15.82
Central	29	18.35
Southeast	48	30.38
West	56	35.44
Total	158	99.99%*

*Does not total 100% due to rounding.



There were some differences in by region in the average size of respondents in rentable sq. ft. when compared to the total response. The Central and Western Region respondents were larger than those in the Northeast and Southeast Regions (see Table 5).

TABLE 5
RESPONDENT SIZE BY REGION

(In Rentable Sq. Ft.)

	SQ. FT.	NO. RESPONSES	AV. SIZE
Northeast	1,402,884	25	56,115
Central	1,797,708	29	61,990
Southeast	2,694,203	47*	57,323
West	3,384,318	55*	61,533
Total	9,279,113	156	59,481

*One respondent from each of these regions did not list sq. ft.

Source: Totals and percentages computed by Economic Consulting Associates.

They also had more spaces (see Table 6).

TABLE 6
RESPONDENT SIZE

(In Number of Spaces)

	SPACES	NO. OF RESPONSES	AV. SIZE IN SPACES
Northeast	12,489	25	500
Central	15,736	29	543
Southeast	25,182	48	525
West	34,006	56	607
Total	87,413	158	553

Source: *Ibid.*

TRAFFIC GENERATION

An average of 6.82 vehicles per day entered these facilities for every 100 self storage spaces, according to our study results (see Table 7).

TABLE 7
TRAFFIC GENERATED BY SELF STORAGE

Vehicles Entering Facilities/Day	5,965
Total Spaces In Facilities	87,413
Average R/T's Per Space/Per Day	.0682
Av R/T's Per Day/Per 100 Storage Spaces	6.82

This means that if a facility had 500 storage spaces, it would generate an average of 34 cars per day. For 700, it would average 48 (see Traffic Generator Calculator in Table 8).

TABLE 8
TRAFFIC GENERATOR CALCULATOR

(Based On 6.80 vehicles per 100 self storage spaces)

NUMBER OF SPACES	AV. VEHICLES GENERATED
100	7
200	14
300	20
400	27
500	34
600	41
700	48
800	55
900	61
1,000	68
1,100	75
1,200	82
1,300	89
1,400	95
1,500	102
1,600	109
1,700	116

This is less than the 8.33 vehicles per day per 100 spaces that we found in our 1996 study performed for the O.



There is little difference among three regions in traffic generated per 100 vehicles. The fourth, Central Region, shows somewhat higher vehicular traffic generated (see Table 9). But, the overall amount of traffic generated for any region is small.

Another factor that can affect traffic generation is the size of spaces offered. It is generally recognized in the industry that small spaces turnover more often, therefore generating more traffic. The reverse can also be said about larger spaces (10x20 and larger). Those who rent them normally stay longer and there is less

TABLE 9
TRAFFIC GENERATED BY REGION

	CAR/DAY	SPACES	AV. CARS/SPACE/DAY	AV./CARS/DAY/100 SPACES
Northeast	805	12,489	.0644	6.44
Central	1,273	15,736	.0809	8.09
Southeast	1,619	25,182	.0643	6.43
West	2,268	34,006	.0665	6.65
Total	5,965	87,413	.0682	6.82

It should be noted that data should be considered in total despite the previous regional analysis. This is because the number of questionnaires for individual some regions are relatively small.

turnover of these spaces.

FACTORS AFFECTING TRAFFIC GENERATION

Several factors can influence the amount of traffic generated by self storage. They include whether businesses are operated from a storage facility, their type and size of spaces offered, for instance.

CONCLUSION

The data shows that self storage generates little traffic and is consistent with a prior studies.

Certain businesses can affect the volume of traffic through a self storage facility. They include auto body shops and those selling merchandise directly to the public from a storage space. However, they normally do not operate from these facilities, because of storage operator restrictions on storing hazardous materials and local zoning ordinances prohibiting such customers from operating from these facilities.

⁵ Proprietary research conducted by Economic Consulting Associates, Tempe, AZ.