### CITY OF SAINT PAUL HERITAGE PRESERVATION COMMISSION STAFF REPORT

ILE NAME: 244 East 4 <sup>th</sup> Street (used 240 East 4 <sup>th</sup> Street for Pre-Application Review)			
APPLICANT: Ryan DuPuis, Kaas	Wilson Architects		
OWNER: Norman P. Bjornnes, J	r.		
ARCHITECT: same as applicant			
DATE OF APPLICATION: Septem	ıber 29, 2016		
DATE OF PUBLIC HEARING: Oct	ober 20, 2016		
HPC SITE/DISTRICT: Lowertown	Heritage Preservation Distri	ct	
CATEGORY: new construction	<b>WARD:</b> 2	DISTRICT COUNCIL: 17	
INVENTORY NUMBER:	N/A		
CLASSIFICATION: Building Permit			
BUILDING PERMIT #: 16-08896	1 (footing and foundation on	ly)	
STAFF INVESTIGATION AND RE	PORT: Amy Spong		
DATE OF REPORT: October 13, 3	2016		

A. SITE DESCRIPTION: The site is located on the southeast corner of Wacouta and Fourth streets and occupies roughly a quarter of the block. An alley runs east-west in the middle of the block. The site is currently a vacant lot that has been used for surface parking. The parking surface is fairly level but the Wacouta public sidewalk slopes down from the north to the south, and the east and south (alley) sides have retaining walls. The walls have a mix of stone, concrete and wood railroad ties. Some of the historic stone remaining are believed to be the foundation(s) of earlier building(s) that were located here, based on Sanborn Insurance Maps. To the east of the site are a sunken surface parking lot and the contributing Master Framer's (common name) building. To the south of the alley is a surface lot with the Depot Bar (common name).

**B. PROPOSED CHANGES:** The applicant is proposing to construct a six-story building with a mezzanine, and two levels of parking below grade. The project will allow for 70 apartment units, amenity spaces, and 54 parking spaces below grade that will be accessed from the alley. Key design features include a base, shaft, and capital. Primary building materials consist of cast stone, brick, and metal panel cladding. Custom mechanical louvers are integrated into the facades and will be finished to match the metal panel siding. An aluminum storefront and fiberglass windows will have a dark bronze finish.

**C. BACKGROUND:** Staff met once with the architects and developer in April 2016 and discussed the overall proposal, making some suggestions for revisions. The HPC conducted a Pre-Application Review during their business meeting on June 9, 2016 and the summary of that discussion is included as an attachment. During the Pre-Application, the project had a larger footprint with 89 proposed apartment units but the current proposal's footprint does not include the adjacent parcel to the east. The applicant responded to many of the findings noted in the staff report during the Pre-Application Review and the HPC discussion.

# D. GUIDELINE CITATIONS:

## The Secretary of the Interior's Standards for Rehabilitation (excerpt):

**1.** A property will be used as it was historically or be given a new use that requires minimal changes to its distinctive materials, features, spaces, and spatial relationships.

**9.** New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize a property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

**10.**New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

### Sec. 74-112. - Preservation program.

*The preservation program for this heritage preservation district is stated as follows:* 

### Lowertown Heritage Preservation District

The following guidelines for design review will serve as the basis for the heritage preservation commission's permit review decisions in the Historic Lowertown Heritage Preservation District. The guidelines define the most important elements of the Lowertown District's unique physical appearance and state the best means of preserving and enhancing these elements in rehabilitation or new construction. These guidelines are not hard and fast regulations. They are flexible criteria. Their purpose is to provide assurance to property owners that permit review will be based on clear standards rather than the taste of individual commission members. The guidelines will be interpreted with flexibility depending on the particular merit of the building or site under review. Consideration will also be given to availability of historical materials. When applying the guidelines the commission will also be considerate of clearly defined cases of economic hardship of deprivation of the owner or reasonable use of his/her property.

## Guidelines for Design Review

- I. New construction. The basic principle for new construction in the Lowertown area is to maintain the scale and character of present buildings. New construction refers to totally new structures, moved in structures, and new additions to existing structures undergoing restoration and rehabilitation. Architectural diversity is characteristic of Lowertown. When first confronted with this variety, it is easy to overlook the overall thread of continuity of the area. Generally, any structure should provide height, massing, setback, materials and rhythm compatible to surrounding structures. The reproduction of historic design and details is expensive, artificial, and is recommended only for some cases of infill or other small scale construction. Guidelines for new construction focus on general rather than specific design elements in order to encourage architectural innovation.
  - **A.** Setback—Siting. There should be no major variation in setback from the building line. Minor variations for bays and entrances are permissible. The proportion of built edge to open space should preserve the plane of the street wall, particularly along the streets facing Mears Park and the Farmer's Market.
  - **B.** Massing, volume and height. The buildings of the district built before 1900 are generally small to medium in volume and up to seven (7) stories in height. Sometimes several buildings are grouped. Buildings constructed after 1900 are generally large in volume and up to eight (8) stories in height, with the Burlington Northern Building being thirteen (13) stories. The structures of the district are distinguished by their boxy profiles; preservation of this aspect is the most essential element for maintaining the unity of the district. New construction should be compatible with the massing, volume, height and scale of existing adjacent structures.
  - **C. Rhythm and directional emphasis.** The rhythm and directional emphasis is Lowertown can be found both in the relation of several buildings to each other and in the relation of the elements on a single building facade.

Rhythm between buildings is usually distinguished by slight variations in height, windows and doors,

and details, including vertical and horizontal elements. Rhythm may, as in the case of Park Square Court, be accentuated by slight projections and recessions of the facade, causing the scale of the building to match that of its neighbors. The rhythm and directional emphasis of the new construction should be compatible with that of existing adjacent structures.

- **D.** Roofs, caps and cornices. New roof, cap and cornice designs should be compatible with existing adjacent structures. Generally roofs in the district are flat. It is important for roof cornices and roof edges to relate in scale, proportion and detailing.
- **E. Materials and detail.** The materials of new construction should relate to the materials and details of existing adjacent buildings. New buildings in the district should provide more detailing than typical modern commercial buildings, to respond to the surrounding buildings and to reinforce the human scale of the district. Walls of buildings in the district are generally of brick, or occasionally of stone. All non-masonry surfaces, if painted, should be of colors compatible with the masonry character of the district.
- **F.** Windows and doors. Windows should relate to those of existing buildings in the district in terms of solid to opening ration, distribution of window openings, and window setback. In most of the buildings in the district, the area of openings is between 30% and 50% of the facade wall. The proportion, size and detailing of windows and doors in new construction should relate to that of existing adjacent buildings. Double-hung windows are traditional in the district, and are preferred for new construction. Window mullions should emphasize their vertical direction. Casement windows and horizontal sliding windows are not historically common, and because they were not usually used in commercial district are not preferred for new construction. Window and door frames should be wood, appropriately colored, or baked enamel finish aluminum or vinyl-clad.
- **G. Parking.** Parking lots should be screened from street and sidewalk either by walls or plantings or both. If walls are used, their materials should be compatible with the walls of existing adjacent buildings. Walls should be at least eighteen (18) inches high. Walls or plantings should continue the planes of existing adjacent buildings.
- H. Landscaping and street furniture. When lots are used for green space or parking, a visual hole in the street "wall" may result. Landscape treatment can eliminate this potential problem by avoiding a wall of enclosure for the street. Traditional street elements of the area, such as granite curbs, should be preserved. New street furniture should complement the scale and character of the area.
- III. Signs and accessories.
  - *E. Grills, exhaust fans, Etc. Grills, exhaust outlets for air conditioners; bath and kitchen exhaust fans should be incorporated into filler panels and kept out of principal facades, if possible. They may be painted the same color as the filler panel.*

(Ord. No. 17120, § 2, 3-22-84)

## E. FINDINGS:

- 1. *The category of the property.* The property is a parking lot and is not categorized within the Lowertown Heritage Preservation District. The buildings that were located here originally, were razed well before the Lowertown District was established. There may still be some remnants of earlier stone foundations or walls and those shall be verified and documented pursuant to the Minnesota Historic Property Record, and prior to any demolition.
- 2. Setback Siting (Sec. 74-112.1.A). The setbacks comply with the guidelines that state "The proportion of built edge to open space should preserve the plane of the street wall, particularly along the streets facing Mears Park and the Farmer's Market." Staff would also add that the plane of the street wall should also be preserved or reestablished around the Union Depot Plaza, just west of this site. This proposal establishes a street wall for both Fourth and Wacouta streets. The Fourth Street elevation is canted (about 4%) and follows the curb line; the street grid was modified here to accommodate the Green Line tracks in 2010. A sharper angle may not be appropriate given the "boxy" character of the

District, but given this angle is minimal, the new building will still read as having "boxy" massing.

3. *Massing, Volume and Height (Sec. 74-112.I.B).* The proposed building footprint covers the whole parcel and complies with the guidelines for massing and volume. Renderings are submitted to show the proposed height and how the floor levels relate to nearby historic and newer buildings. Not all the floor levels line up with the neighboring floor levels, but the renderings show that the base, shaft and capitol relate to the nearby buildings and along Fourth and Wacouta Streets, complying with the guidelines.

The building setback from the neighboring historic building has been increased given the reduction in footprint size. The new building will not compromise the long-term use and viability of the nearby historic building (Master Framer's) by requiring any closure of existing openings. There are also faded painted signs of early uses and advertisements, since this building's secondary façade was exposed and visible for many decades and this proposal will still allow for maintenance and repairs of the masonry wall. The greater setback will also allow for some visibility of the historic painted signs. The footprint relates well to the footprints of existing historic buildings on this block.

- 4. **Rhythm and Directional Emphasis (Sec. 74-112.I.C.).** Rhythm is created by window and door spacing, bays and detailing. The building has a boxy appearance which is recommended by the Lowertown Guidelines. The building also has a vertical emphasis and is horizontally organized by the storefront base, the shaft and the upper floor with mezzanine. This is consistent with surrounding structures. The storefront bays line up with the shaft and upper two floors. The use of similar colors, despite changes in materials, is used to reinforce rhythm and directional emphasis.
- **5. Roofs, Caps, and Cornices (Sec. 74-112.I.D.).** The guideline states "*It is more important for roof edges to relate in size and proportion, than in detailing.*" A cornice, or cap, was added after the Pre-Application Review and now complies with the guidelines. The flat roof is also consistent with the character of Lowertown.
- 6. Materials and Details (Sec. 74-112.I.E.). New construction in the historic district should reinforce the unique qualities and character of Lowertown without mimicking the historic buildings. The use of materials in new construction is paramount and can mean the difference in complying with the guidelines or not. One way to reinforce the existing character of Lowertown with new construction is to simplify the number of materials present on primary elevations. Brick and stone are the dominant materials in Lowertown and should be for new construction.

The use of metal panels on primary elevations, while not recommended, is used in a way that does not dominate. The metal panels are used in the mezzanine recesses, as design elements on the main facades, and to better integrate custom vents. The panels also have a bronze finish which complements the brick.

Metal windows are not recommended by the guidelines but have been approved on a case-by-case basis in the Lowertown Historic District. The material being proposed may not necessarily compromise the overall quality of the design, as long as the windows are appropriately colored and detailed. The guidelines state that *"Window and door frames should be wood, appropriately colored or bronze-toned aluminum or vinyl-clad."* The bronze tone proposed is acceptable. Detailing should be reviewed more closely by a small design review committee of the HPC and its staff.

Balconies are not addressed specifically in the guidelines but have been approved for new construction projects and for non-primary elevations on historic buildings in Lowertown. Balconies are proposed for

non-primary elevations and will not be visible. The balconies on the two main street facades are recessed and are well integrated into the overall design. The dark metal railing design generally complies with the guidelines for the district.

The guidelines call for materials to be used that are most prevalent in the District which is natural brick usually of dark red, buff or brown colors and that more detailing be incorporated with new construction than in typical modern commercial buildings. The guidelines do not distinguish between primary and non-primary elevations when addressing materials and detail, however, as with traditional buildings the detailing and material often changes for non-primary elevations. Typically a common brick would be used for these elevations. The proposal continues the main elevation design and materials to the south, alley elevation. This is acceptable; however, it is unusual to have storefront-type windows that are raised above grade. The HPC may want to discuss using more punched windows at the alley.

- 7. Windows and Doors (Sec. 74-112.I.F.). The guidelines state "Windows should relate to those of existing buildings in the district in terms of solid to opening ratio, distribution of window openings, and window setback. For most of the buildings in the district, the area of openings is between 30% and 50% of the facade wall. The proportion, size and detailing of windows and doors in new construction should relate to that of existing adjacent buildings." The windows are punched but do not have similar depth from the wall as the historic buildings. The applicant submitted a study of solid-to-void for the new building as compared to a few historic buildings in Lowertown and the solid-to-void relationship is consistent. The guidelines state "Double-hung windows are traditional in the district, and are preferred for new construction. Window mullions should emphasize their vertical direction." Double-hung windows are not proposed but rather fixed panes with a lower operable window. Mullions do have a vertical orientation. The first-level storefront windows are proportioned well but should have a solid bulk-head to be more compatible with nearby storefronts.
- 8. Parking (Sec. 74-112.I.G.). The parking access is on the alley elevations and complies with the guidelines.
- 9. Accessories (Sec. 74-112.I.E.). The guidelines state "Grills, exhaust outlets for air conditioners, bath and kitchen exhaust fans should be incorporated into filler panels and kept out of principal facades, if possible. They may be painted the same color as the filler panel." There are pre-finished metal architectural louvers proposed on all elevations and while not recommended, they are integrated into the overall design but should be colored to match the prefinished metal panels. There are also several exhaust vents located on the primary elevations that are not incorporated into filler panels and these do not comply with the guidelines, even though some thought was given to their placement.
- 10. Landscaping and Street Furniture (Sec. 74-112.I.H.). No street trees are proposed as there isn't' room along Fourth given the LRT tracks, however, the applicant should verify if street trees are required along Wacouta. If they are, accessible trees grates shall be used and not pavers. There may be brick gutters, granite curbs and brick or granite pavers that will be disturbed in the Public Right-of-Way around the site, including the alley, and the applicant must maintain these historic elements and make any necessary repairs.
- 11. **Other Considerations**. As encouraged during the Pre-Application Review, the applicant has taken into consideration the siting of the new building in relation to the Union Depot and the plaza.

## F. STAFF RECOMMENDATION:

Based on the findings, staff recommends approval of city permits to construct the apartment building provided the following conditions are met:

- At the owner's expense, the existing retaining wall shall be photo documented according to the Minnesota Historic Property Record Guidelines (Updated June 2009). Specifically, Level I photo documentation that is outlined in Appendix E. This documented can be found at: <a href="http://www.mnhs.org/shpo/review/docs\_pdfs/updatedmhprguidelines.pdf">http://www.mnhs.org/shpo/review/docs\_pdfs/updatedmhprguidelines.pdf</a>. This work is required prior to any demolition taking place.
- The pre-existing condition of the surrounding public right-of-way shall be documented prior to any demolition, and all extant historic materials shall be carefully removed, salvaged, secured, and reinstalled. This includes but is not limited to tree grates, granite/stone curbs, brick gutters and brick/stone alley.
- 3. The pre-finished architectural louvres on the two primary elevations are acceptable in this case given they are custom, colored appropriately, and integrated into the overall design. However, the exhaust hood vents on the two primary elevations shall not be approved. Alternatives shall be submitted to staff for final review and approval.
- 4. The door and window glass shall not be reflective, tinted or mirrored.
- 5. A solid bulkhead shall be added at the base of all store-front windows, and the final detail shall be submitted to staff for final review and approval.
- 6. The smaller windows on the lower level Wacouta elevation shall be redesigned so they do not appear as sliding windows. One solution is to make them a single, punched window, and evenly spaced.
- 7. Some signage and lighting was indicated on the plans, however, a separate application and details will be required to be reviewed by staff at a later date.
- 8. All final materials, details and colors shall be reviewed and approved by HPC staff and based on the materials and samples submitted by the applicant for the Public Hearing.
- 9. A final materials mock-up panel shall be constructed and located on site. Staff will be notified when it is available and shall review the mock-up panel along with three members of the HPC. Staff will verify the materials and detailing with an approval in writing to the applicant.
- 10. Any revisions to the approved plans must be submitted to the HPC and/or staff for review.
- 11. The HPC stamped approved plans must be kept on site during the construction project.

## G. ATTACHMENTS:

- 1. HPC design review application
- 2. Photos and Renderings
- 3. Architectural Plans



Saint Paul Heritage Preservation Commission Department of Planning and Economic Development 25 Fourth Street West, Suite 1400 Saint Paul, MN 55102 Phone: (651) 266-9078 ApplyHPC@stpaul.gov Project Address: 244 East 4th Street

# Heritage Preservation Commission Design Review Application

### PROCESS

This application must be completed in addition to required city permit applications for individually designated Heritage Preservation Sites and properties located within Heritage Preservation Districts.

Design review applications are reviewed and approved by either heritage preservation staff or the Heritage Preservation Commission (HPC) at a public hearing. HPC staff are authorized to approve work that complies with adopted design review guidelines and preservation programs, available at our website <u>www.stpaul.gov/hpc</u>, while the HPC reviews projects that are significant alterations, demolitions, additions, new construction or proposals that do not comply with HPC guidelines. The decision of whether a proposal may be reviewed and approved by HPC staff or must be reviewed by the HPC at a public hearing is made once a complete application is submitted.

The HPC public hearing schedule is viewable here: https://www.stpaul.gov/departments/planning-economic-development/heritage-preservation/heritage-preservation-commission

A complete application consists of:

- 1) An application form
- 2) Required attachments that adequately describe the proposed work (see attached checklist)

An incomplete application will be put on hold and staff will contact you for additional information. If an application is incomplete for 30 days after it was received, it will be returned to the applicant.

Complete applications will be reviewed in the order they are received. Applications are not entered in queue to be reviewed until staff has determined them to be complete. Once reviewed, a Certificate of Approval will be issued along with any conditions for the proposed work. You will be notified by staff when the Certificate of Approval has been issued and a copy will be sent to the Department of Safety and Inspections (DSI) to complete the HPC process of obtaining the necessary permit(s).

### 1. CATEGORY

### Please check the category that best describes the proposed work

Repair/Rehabilitation	
Moving	
Demolition	

☐ Sign/Awning ☐ Fence/Retaining Wall ☐ Other  New Construction/Addition/ Alteration
 Pre-Application Review Only

### 2. PROJECT ADDRESS

Zip Code: <u>55101-1401</u>

3. APPLICANT INFORMATION	N-		
Name of contact person: Ryan D	uPuis		
Company: KaasWilson Arch	itects		
Street and number: 1301 Ameri	can Blvd.	East	
City: Bloomington	State: MN	Zip Code:	55425
Phone number: 612-879-6000	e-mail:	ryand@kaas	wilson.com
4. PROPERTY OWNER(S) INFO	DRMATION	(If different from a	pplicant)
Name: Norman P. Bjornnes	s Jr.		
Street and number: 3550 East 4	6th Stree	t, Suite 120	
City: Minneapolis	State: MN	Zip Code:	55406
Phone number: 612-874-1102	e-mail:	nbjornnes@oaks	properties.com
5. PROJECT ARCHITECT (If ag	oplicable)		
Contact person: Link Wilson			
Company: KaasWilson Archi	tects		
Street and number: 1301 Americ	can Blvd.	East	
City: Bloomington	State: MN	Zip Code:	55425
Phone number: 612-879-6000	e-mail:	linkw@kaasw	ilson.com

### 6. PROJECT DESCRIPTION

Completely describe ALL exterior changes being proposed for the property. Include description of affected existing exterior features and changes to architectural details such as windows, doors, siding, railings, steps, trim, roof, foundation or porches. Attach specifications for doors, windows, lighting and other features, if applicable, including color and material samples.

This Project proposes to transform the existing surface parking lot at 244 East 4th Street into 70 Luxury Apartment units with dedicated amenity spaces, and 54 Underground parking stalls. The building design maintains scale, rhythm, and continuity with the adjacent buildings in this historic district, and defines the street edge across from the historic Union Depot courtyard. Key design features include a well defined Base, Shaft, and Capital. Also, horizontal and vertical rhythm is created through the use of openings and material detailing.

The primary building materials consist of cast stone, brick, and metal panel cladding. Custom mechanical louvers have been integrated into the facade design and will be finished to match the metal panel siding. Aluminum Storefront and Fiberglass windows will have a dark bronze finish. Refer to Attachment.

Attach additional sheets if necessary



### 7. ATTACHMENTS & DESIGN REVIEW CHECKLIST

Please refer to the following checklist section(s) that relate to your proposed scope of work and check next to the items that are attached to your application. Attach all checked items listed to this application or attach in an email to <u>ApplyHPC@stpaul.gov</u>

### Staff may contact you for additional information or materials.

If your project or work type is not included in this checklist, please contact the staff by calling 651-266-9078 or sending an e-mail to <u>applyhpc@stpaul.gov</u> for assistance on how to complete an application.

<u>Applicant</u> <u>Submitted</u>	<u>Staff</u> <u>Received</u>	<u>Date</u> <u>Received</u>	
			Restoration /Repair/Rehabilitation Three (3) copies of scaled and dimensioned plans which note all materials, finishes, and dimensions on plan (2 copies will be forwarded to the Dept. of Safety and Inspections). Photographs of all features and areas affected by proposed work. If an existing architectural feature is being replaced, please provide detailed drawings of the existing feature. Historic photographs (if any) that inform the restoration/rehabilitation/repair work. Sign/Awaine:
			<ul> <li>Photographs of location of proposed signage on structure/property.</li> <li>Photographs of structure and all exterior sides affected by proposed work.</li> <li>Three (3) copies of plans that note materials, dimensions, colors, and method of attachment.</li> <li>Section drawing showing point of installation, method of installation, awning profile and projection.</li> <li>Illumination plan.</li> <li>Photographs or elevation of the building showing location of proposed sign in relation</li> </ul>
		<u>, 1999</u>	to the building and, if applicable, other signage on the building. New Construction/Addition/Exterior Alteration: Three (3) copies of construction level plans which note all materials, finishes, and dimensions on plan (2 copies will be forwarded to the Dept. of Safety and Inspections). Show how the addition(s) relates to the existing structure.
<ul> <li></li> &lt;</ul>			Photographs of all features and areas affected by proposed work. Site plan showing lot dimensions, location of any existing buildings, and proposed addition(s), elevation plans, section and detail drawings as necessary. All plans must be scaled and dimensioned. Digital copies of the plans and photos submitted on CD or USB.



<u>Applicant</u> Submitted	<u>Staff</u> <u>Received</u>	<u>Date</u> <u>Received</u>	
			Fencing/Retaining Wall: A site plan showing the location of the fence/wall in relation to property lines and any structures with measurements. An elevation drawing or photo of the proposed fence/wall.
			Sample or description of existing material(s). Sample or specifications of proposed material(s). Sample colors. Photographs of all exterior sides affected by the proposed work. Photographs of the building and roof showing existing conditions of roof, coping,
			<ul> <li>flashing, affected masonry, parapet, siding, existing skylights, and/or dormers. Also include any other critical intersections where the roof meets the historic fabric, and sightline drawings when a change in slope or other potentially visible change is proposed.</li> <li>Heating, Ventilating, and Air Conditioning Equipment</li> <li>Site plan showing location of condenser in relation to the building(s) and property lines.</li> <li>Photographs of the proposed location of any condensers or venting.</li> <li>Photographs demonstrating that the proposed unit is not visible from the street.</li> <li>A screening plan if a condenser is in the side yard.</li> <li>Drawing or photograph demonstrating where and how conduit will be attached to the building.</li> </ul>
			<ul> <li>Window/Sash Replacement:</li> <li>Statement describing in detail why windows need replacement as well as a description of weatherization efforts and copy of window repair estimates.</li> <li>Existing window design and dimensions.</li> <li>Proposed window design, dimensions, and manufacturer's specifications including shop drawings.</li> <li>Existing type of exterior storm windows.</li> <li>Proposed style of exterior storm windows.</li> <li>Existing exterior window trim material.</li> <li>Proposed exterior window trim material and style.</li> <li>Photographs of all exterior sides where window replacement is being proposed.</li> <li>Photographs of existing features/conditions which support window replacement proposal.</li> </ul>



<u>Applicant</u> Submitted	<u>Staff</u> Received	<u>Date</u> <u>Received</u>	
		<u>- 1</u>	Other Items Requested by HPC Staff:
	Will any : Are you a	federal m pplying i	oney be used in this project?YESNOFor the Investment Tax Credits?YESNO
	i, the under the affecte must be su work will Signature Fyped nar	ersigned, u d property abmitted b be require of applic ne of appl	nderstand that the Design Review Application is limited to the aforementioned work to . I further understand that any additional exterior work to be done under my ownership y application to the St. Paul Heritage Preservation Commission. Any unauthorized t to be removed. ant: 
1	Signature Typed nar	of owner: ne of own	Worman P. Bjornnes Jr.

Send completed application with the necessary attachments to <u>ApplyHPC@stpaul.gov</u> or to:

Saint Paul Heritage Preservation Commission Department of Planning and Economic Development 25 Fourth Street West, Suite 1400 Saint Paul, MN 55102

You may also click the button below to attach the completed application to an email that will go directly to <u>ApplyHPC@stpaul.gov</u>. Please attach supporting documents to the email as well.

Submit Application



Address: 244 East 4th Street	FILE NO
Date received;	
Date complete:	City Permit #
District:/Individual Site:	5. <sup>-</sup>
Pivotal/Contributing/Non-contributing/New (	Construction/Parcel
□ Requires staff review	□ Requires Commission review
Supporting data: YES NO	Submitted:
Complete application: YES NO	□ 3 Sets of Plans
The following condition(s) must be	15 Sets of Plans reduced to
met in order for application to conform	8 ½" by 11" or 11" by 17"
to preservation program:	Photographs
	□ CD of Plans (pdf) & Photos (jpg)
	City Permit Application
	application
	approxition
	Hearing Date set for:
	HPC Staff Notes
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vork to be performed pursuant to	
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nd architectural control of the	
eritage preservation district or site	
Ch.73.06).	
PC staff annroval	
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# SIBLEY ELEVATION BLACK AND WHITE TURN ON AMBIENT SHADOWS GRAPHIC OVERRIDE WINDOWS TO BE A COLOR, HALFTONE WALL

JAX ELEVATION BLACK AND WHITE TURN ON AMBIENT SHADOWS GRAPHIC OVERRIDE WINDOWS TO BE A COLOR, HALFTONE WALL RAYETTE ELEVATION BLACK AND WHITE TURN ON AMBIENT SHADOWS GRAPHIC OVERRIDE WINDOWS TO BE A COLOR, HALFTONE WALL







# OAKS UNION DEPOT BLACK AND WHITE TURN ON AMBIENT SHADOWS GRAPHIC OVERRIDE WINDOWS TO BE A COLOR, HALFTONE WALL

View set up, pending changes to exterior



# Site | Context









kaas wilson architects Oaks Union Depot 240 East 4th Street, St. Paul, MN







# Maintaining Proportion Massing, Volume, Height



kaas wilson architects Oaks Union Depot 240 East 4th Street, St. Paul, MN

# Maintaining Proportion Massing, Volume, Height





















kaas Oaks Union Depot wilson

architects

240 East 4th Street, St. Paul, MN





# Oaks Union Depot Apartments 244 4th St E

# HATCH KEY CONCRETE MASONRY UNIT **BRICK/ MANUFACTURED STONE** FOAM/POURED IN PLACE INSUL WOOD BLOCKING OR SHIM BATT INSULATION (INSUL-10) QUARRY OR CERAMIC TILE These patterns are scaled for 1-1/2"= 1'-0"details) SYMBOLS KEY ELEVATION ELEVATION ADDENDUM, CHANGE ORDER, PROPOSAL REQUEST, ARCHITECTS SUPPLEMENTAL INSTRUCTIONS KEYNOTES INTERIOR/EXTERIOR WALL TYPE, FLOOR-CEILING TYPE ROOM NAME / NUMBER UNIT NUMBER / NAME DETAIL NUMBER **ELEVATION / WORK POINT** ears Park 1 DETAIL CALLOUT **REVISION CLOUD**

AIR CONDITIONER ACOUST ACOUSTIC/ACOUSTICAL ACOUSTIC TILE ADHESIVE GB ABOVE FINISH FLOOF GC AGGR AGGREGATE ALTERNATE GI ALUMINUM GL ACCESS PANE ARCH ARCHITECTURA ASPH ASPHAL AVENUE BD/BDS BOARD/BOARDS BOTTOM OF FOOTING GS BITUM BITUMINOU BRACKET HB BLDG BUILDING HC BLOCK HD BLKG BLOCKING BOULEVARD **BEAM/BENCH MAF** BOTTOM HM BEDROOM HR BEARING ΗT BRICK BASEMEN ID BETWEEN IN CABINET CATCH BASIN CEMENT INC CEMENT FIBER BOARD CORNER GUARD INT CAST IRON PIPE INV CONTROL JOINT CENTER LINE JCT CEILING CAULKING JT CLOSET JST CONC MASONRY UNI KD COUNTER COMPAN L COLUMN COMBINATION COMPOSITION LAT CONC CONCRETE CONST CONSTRUCTIO CONTINUOUS CONTR CONTRACTOR CORPORATIO LD CORRIDOR LG CARPET CURTAIN ROD LH COUNTERSIN LIB **CERAMIC TILE** I IN COUNTER TO CU FT CUBIC FOOT CU IN CUBIC INCH CU YD CUBIC YARD LR DRYER LT DOUBLE DEPARTMEN DETAIL DRINKING FOUNTAIN DIAMETER DIAGONAL DIMENSION DIVISION DOWN DAMPPROO DINING ROOM/DOOR DOWNSPOUT MH DRAPERY TRACK DISHWASHER DRAWING DRAWER EAST EACH EXT. INSUL FIN SYSTEM ELEVATION ELEC ELECTRIC/ELECTRICAL ELEV ELEVATOR Ν ENGR ENGINEER ENTRANCE EQUAL EQUIP EQUIPMENT EST ESTIMATE EACH WAY ELECTRIC WATER COOLER OD EXISTING EXC EXCAVATE EXHAUST EXP JT EXPANSION JOINT EXT EXTERIOR F TO F FACE TO FACE FABRICATE FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER CABINET FINISHED END PANEL FIRE EXTINGUISHER FINISH FACE FIRE HOSE FIGURE FINISH/ FINISHED FIXTURE FLOOR FLASH FLASHING FLUOR FLUORESCENT FACE OF MASONRY FACE OF WALL FIREPROOF FRAME PSI FREIGHT FACE STUD FACE OF SHEATHING FOOT/FEET FOOTING FURN FURNISH FURRING FIELD VERIFIED GAS GAUGE

# **ABBREVIATIONS**

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S

GALLON GAL GALV GALVANIZED GAR GARAGE GRAB BAR GENERAL CONTRACTOR GENERAL GEN GALVANIZED IRON GLASS/GLAZING GOVT GOVERNMENT GPBD GYPSUM WALLBOARD GPM GALLON PER MINUTE GR GRADE GRTG GRATING GREASE SHIELD GYP GYPSUM HOSE BIB HOLLOW CORE HFAD HDRL HANDRAIL HDWD HARDWOOD HDW HARDWARE HOLLOW META HORIZ HORIZONTAL HOUR HEIGHT HWY HIGHWAY IDENTIFICATION/INSIDE DIA INCH INCL INCLUDE INCORPORATE INFO INFORMATION INSUL INSULATE/INSULATION INTERIOR INVFRT JAN JANITOR JUNCTION JOINT JOIST KNOCK DOWN KIT/K KITCHEN LINEN LABORATORY LAB LAD LADDER LAM LAMINATE LATITUDE LAV LAVATORY LB/LBS POUND/POUNDS LBR LUMBER LOAD LDG LOADING LENGTH LEFT HAND LIBRARY LINOLEUM LNDY LAUNDRY LOA LENGTH OVERAL LONG LONGITUDE LIVING ROOM LIGHT MACH MACHINE MAS MASONRY MATL MATERIAL MAX MAXIMUM MC MEDICINE CABINET MECH MECHANICAL MEMB MEMBRANE MEMO MEMORANDUM MEZZ MEZZANINE MFG MANUFACTURED MANUFACTURER MFR MANHOLE MINIMUM MIN MIR MIRROR MISC MISCELLANEOUS MLDG MOULDING MO MASONRY OPENING MOD MODULAR MTL METAL MTD MOUNTED MULL MULLION NORTH NIC NOT IN CONTRACT NO/# NUMBER NOM NOMINAL NTS NOT TO SCALE OA OVERALL 0C ON CENTER OVERFLOW DRAIN OFF OFFICE OPNG OPENING OPP OPPOSITE ORIG ORIGINAL OSB ORIENTED STRAND BOARD ΟZ OUNCE P&G PITCH & GRAVEL PASS PASSENGER PCF POUNDS PER CUBIC FOOT PEDESTRIAN TRAFFIC COATING WP PED PER PERIMETER PERF PERFORATE PERP PERPENDICULAR PIL PILASTER P LAM PLASTIC LAMINATE PL PLATE PLAS PLASTER PLMB PLUMBING PLYWD PLYWOOD PNEU PNEUMATIC POL POLISHED PORC PORCELAIN PSF POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PAINT/POINT PT PTD PAPER TOWEL DISPENSER PTN PARTITION PREFAB PREFABRICATED PREFIN PREFINISHED PROP PROPERTY PUR PURLINS QR QUARTER/QUARTER-ROUND QUARRY TILE QT QTY QUANTITY

RISER R&S ROD & SHELF RAD RADIATION/RADIUS RB RESILIENT BASE RC RESILIENT CHANNEL RCT RUBBER COMPOSITION TILE RD ROAD/ROUND/ROOF DRAIN RECP RECEPTACLE REC RECESSED REF REFERENCE REFRIG REFRIGERATOF REG REGULAR/REGISTER REINF REINFORCE/REINFORCING REQD REQUIRED RESIL RESILIENT RET RETURN RH ROBE HOOK/RIGHT HAND RFG ROOFING RM ROOM RO ROUGH OPENING RS REDUCER STRIP RWD REDWOOD RWL RAIN WATER LEADER SOUTH SAN SANITARY SB SPLASH BLOCK SC SOLID CORE SCHED SCHEDULE SD SOAP DISH S DISP SOAP DISPENSER SEC SECOND SECT SECTION SH SHELF/SHINGLES SHR SHOWFR SHT SHEET SHTG SHEATHING SID SIDING SIM SIMILAR SLID SLIDING SM SMOOTH (FINISH) SND SANITARY NAPKIN DISPENSER SNR SANITARY NAPKIN RECEPTACLE SPEC SPECIFICATION SQ SQUARE SS SERVICE SINK SSA SINGLE STRENGTH A S STL STAINLESS STEEL ST STREET STD STANDARD STL STEEL STOR STORAGE STR STRINGER STXT SPRAY TEXTURE SUB FL SUBFLOOR SUSP SUSPENDED SHEET VINYL SV S4S SURFACED FOUR SIDES TREAD T&G TONGUE & GROOVE TB TOWEL BAR TC TOP OF CURE TECH TECHNICAL TEL TELEPHONE TEMP TEMPERED TERR TERRAZZO TEX TEXTURE TFE TOP OF FOOTING ELEV THRESH THRESHOLD THRU THROUGH TK BD TACKBOARD T.O TOP OF . TPH TOILET PAPER HOLDER TRANS TRANSOM TV TELEVISION ΤW TOP OF WALL TYP TYPICAL UNDERWRITER'S LAB, INC UL UNLESS NOTED OTHERWISE UNO VAN VANITY VB VAPOR BARRIER/VINYL BASE VEN VENEER VENT VENTILATOR VERT VERTICAL VEST VESTIBULE VFY VERIFY VIN VINYL VNL VINYL VWC VINYL WALL COVERING VCP VITRIFIED CLAY PIPE VCT VINYL COMP TILE W WEST/WASHER W/ WITH W/O WITHOUT WATER CLOSET WC WD WOOD WDW WINDOW WI WROUGHT IRON WATERPROOF WR WATER RESISTAN WS WEATHERSTRIP WSCT WAINSCOTING WT WEIGHT WWF WELDED WIRE FABRIC YD YARD

AXXX B

Room name 101 101 Name x 45x **1**i DOOR NUMBER 'N

EARTH

GRANULAR FILL

SAND

STEEL

ROUGH WOOD

PLYWOOD

WOOD

STUD WALL

DETAIL

SECTION

INTERIOR

AXXX

AXXX

 $\langle D | AXXX | B \rangle$ 

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CONCRETE

GYPSUM BOARD

**RIGID INSULATION OR** 

NORTH ARROW

HDCP SYMBOL

BREAK LINE X

 $\Delta XXX$ 

W2430

1i

1t

CPT-1

(PL-1)

CASEWORK TAG

PARKING TAG

WINDOW TAG

FLOOR & WALL FINISH TAG

MILLWORK FINISH TAG

ģ

AC

ACT

ADH

ΔFF

ALT

AP

AVF

BFE

BKT

BIK

BLVD

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BOT

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BRG

BSMT

CAB

CEM

CFB

CG

CIP

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FAB

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FF

FH

FIG

FIN

FIX

FL

FM

FR

FRT

FS

FSH

FTG

F.V.

GA

FURR

FT

FOW

FPRF

EWC

DPRF

CTOP

CB

BTWN

BRK

59 9/29/2016 11

AM

Saint Paul MN 55101-1401







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C2.0	Grading, Utility, and
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A012	Construction Assemi
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A820	Roof Framing/Flashi
A840	Windows
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A900	init. Framing & Firest

Bldg Gross SF - Overall	Unit Schedule (Net SF - Overall)				
Gross SF	Name	Count	Area	Mezz	Total SF
_evel -2	Unit 1-1	18	566 ft <sup>2</sup>	0 ft <sup>2</sup>	566 ft <sup>2</sup>
11,817 ft <sup>2</sup>	Unit 1-1M	4	566 ft <sup>2</sup>	188 ft <sup>2</sup>	754 ft <sup>2</sup>
	Unit 1-2	4	551 ft <sup>2</sup>	0 ft <sup>2</sup>	551 ft <sup>2</sup>
_evel 1	Unit 1-2M	1	550 ft <sup>2</sup>	183 ft <sup>2</sup>	733 ft <sup>2</sup>
11,747 ft <sup>2</sup>	Unit 1-3	3	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
	Unit 1-3 Type A	1	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
_evel 2	Unit 1-3M	1	647 ft <sup>2</sup>	216 ft <sup>2</sup>	863 ft <sup>2</sup>
9,747 ft <sup>2</sup>	Unit 1-4	5	804 ft <sup>2</sup>	0 ft <sup>2</sup>	804 ft <sup>2</sup>
	Unit 1-5	15	631 ft <sup>2</sup>	0 ft <sup>2</sup>	631 ft <sup>2</sup>
_evel 3	Unit 1-5M	2	625 ft <sup>2</sup>	208 ft <sup>2</sup>	833 ft <sup>2</sup>
9,747 ft <sup>2</sup>	Unit 2-1	5	759 ft <sup>2</sup>	0 ft <sup>2</sup>	759 ft <sup>2</sup>
	Unit 2-2	4	852 ft <sup>2</sup>	0 ft <sup>2</sup>	852 ft <sup>2</sup>
_evel 4	Unit 2-2M	1	851 ft <sup>2</sup>	283 ft <sup>2</sup>	1,134 ft <sup>2</sup>
9,747 ft <sup>2</sup>	Unit 2-3	3	1,122 ft <sup>2</sup>	0 ft <sup>2</sup>	1,122 ft <sup>2</sup>
	Unit 2-3 Type A	1	965 ft <sup>2</sup>	0 ft <sup>2</sup>	965 ft <sup>2</sup>
_evel 5	Unit 2-4M	1	810 ft <sup>2</sup>	270 ft <sup>2</sup>	1,080 ft <sup>2</sup>
9,747 ft <sup>2</sup>	Unit 3-3M	1	1,122 ft <sup>2</sup>	373 ft <sup>2</sup>	1,495 ft <sup>2</sup>
	Grand total: 70				
_evel 6					1
9,728 ft <sup>2</sup>					
Mezzanine Level					
2.585 ft <sup>2</sup>					
74.867 ft <sup>2</sup>					



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Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

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



LINK WILSON REG. NO: 21629

Checked By



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# Parking Schedule Count Type Level Level -2 Level -1 Grand total: 54

			708: FIRE PARTITIONS All unit party walls, corridor walls and elevator lobby walls will be c	
<u>APPLI</u>	CABLE BUILDING CODES	<ol> <li>Chapter 1346 - <u>Minnesota Mechanical and Fuel &amp; Gas Code</u> w/ ANSI/ASHRAE Standard 154-2011</li> </ol>	<u>708.3 Fire-resistance rating:</u> "Fire partitions shall have a fire-resistance rating of not less that	
1. Cha 2. Cha	pter 1305 - 2015 <u>Minnesota State Building Code</u> pter 1341 - 2015 <u>Minnesota Accessibility Code</u> - amends	<ol> <li>2014 <u>National Electrical Code</u></li> <li>Chapter 1322/1323 - 2015 <u>Minnesota Energy Code w/</u></li> </ol>	708.4 Continuity: "Fire partitions shall extend from the top of the foundation or flo	
cha 3. <b>Cha</b>	oter 11 of the 2012 IBC pter 7511 - 2015 Minnesota State Fire Code	ANSI/ASHRAE/IES Standard 90.1-2010 9. Chapter 1307 - Elevators and Related Devices - Minnesota Rules	above or to the fire-resistance-rated floor/ceiling or roof/ceiling where the fire partitions are not required to be continuous to the	
4. Cha Rule	pter 1306 - <u>Special Fire Protection Systems</u> - Minnesota s	10. Chapter 1303.1500 - <u>Recycling Space</u> - Minnesota Rules 11. Chapter 1303.1700 - <u>Snow Loads</u> - Minnesota Rules	slab above shall be fireblocked or draftstopped in accordance v     All Fire Partitions will either be continuous through the state of the stat	
5. <b>Cha</b>	pter 4/15 - Minnesota State Plumbing Code	12. Chapter 1303.1600 - Frost Depth - Minnesota Rules 13. Wind Speed / <u>Minimum 90 mph</u>	MNSBC 708.4 <u>708.6 Openings:</u> "Openings in Fire Partitions shall be protocold in accordance u	
<u>1303.15</u>	00 RECYCLING SPACE		Openings in Fire Partitions shall be protected in accordance w <u>Fire doors in corridors</u> will be fire resistance rate <u>Fire window assemblies in corridors will be fire</u>	
SUBP. 4	<b>I: MINIMUM SPACE</b> B = 422 x .0025 = 1.06 SF		Fire window assemblies in condors will be fire res     Fire doors in elevator lobby walls     Fire window assemblies in elevator lobby walls	
•	S-2 = 20,230 x .001 = 20.23 SF R-2 = 70,137 x .0025 = 175.34 SF		713 SHAFT ENCLOSURES	
•	TOTAL REQUIRED = <u>196.63 SF</u>		Trash chutes, elevators and mechanical shafts will be constructed a     MNSBC 1009)	
<u>CHAPT</u>	ER 3: USE & OCCUPANCY CLASSIFICATION		<u>713.4 Fire resistance rating:</u> "Shaft enclosures shall have a fire-resistance rating of not less	
CLASS			connecting less than four stories." • All Shaft Enclosures will have a fire-resistance ra	
•	Building 1 : (Level -2 - Level 1) Nonseparated mixed use complying (Containing B business, <u>R-2</u> residential and <u>S-2</u> enclosed parkir	with MNSBC 508.3 ng garage)	713.5 Continuity: "Shaft enclosures shall be constructed as fire barriers in accord	
•	<b>Building 2</b> : (Levels 2-6) Single occupancy building with more than o (R-2 Multifamily)	ne story complying with MNSBC 506.4	711, or both, and shall have continuity in accordance with <u>Sect</u> 713.6 Exterior Walls:	
CHAPT	ER 5: GENERAL BUILDING HEIGHTS & AREAS		"Where exterior walls serve as a part of a required shaft enclos the fire-resistance-rated enclosure requirements shall not apply	
503: AL	LOWABLE HEIGHTS & AREAS:	nation Tune 14	713.11 Enclosure at the bottom: "Shafts that do not extend to the bottom of the building or struc	
-	Allowable Area: Unlimited		<ol> <li>They shall be enclosed at the lowest level with construction of but not less than the rating required for the shaft enclosure. (M</li> </ol>	
•	Building 2 : Group R-2, Construction Type IIIA		Exceptions: 2. "A shaft enclosure containing a refuse chute or lau	
<b>_</b>	<u>Total Allowable Building Area:</u> 16,000 SF x 5 stories = 80,     Allowable Height: 5 Stories* 85 Feet*	000 SF per MNSBC 506.4.1 exception 2	protected in accordance with Section 713.13.4. (Tras fire-resistance rating)	
> 	*Building allowable height increased due to auto	matic sprinkler system installation per MNSBC 504.2	713.12 Enclosure at the top: "A shaft enclosure that does not extend to the underside of the	
5 5 504: BU	Highest occupied floor from lowest level of f II DING HEIGHT:	ire department access is 73'-4"	construction of the same fire-resistance rating as the topmost fi shaft enclosure.	
- · ·	504.2 Automatic Sprinkler System Increase: "Where a building is equipped throughout with an approved	automatic sprinkler system in accordance with Section 903.3.1.1. the	All Shaft Enclosures will be continuous to the un rated ceiling assembly per MNSBC 713.12	
2 2 2 2	value specified in Table 503 for maximum building height	t is increased by 20 feet (6096 mm) and the maximum number of	<u>/13.13.3 (Retuse &amp; laundry chutes)</u> Refuse, recycling and laundry chute a "Access openings for refuse, recycling and laundry chutes shal	
1 2 〒 506: BI	ILDING AREA MODIFICATIONS:		constructed in accordance with Section 707 or horizontal asser rooms shall be protected by opening protectives having a fire p	
	506.2 Frontage Increase: None required 506.3 Automatic Sprinkler System Increase: None required		<ul> <li>the detection of smoke in accordance with Section 716.5.9.3."</li> <li>Trash rooms will be enclosed by not less than 1-</li> </ul>	
Ť 2	Proposed building <u>will</u> have NFPA 13 automatic sprint	kler system per MNSBC 903.3.1.1	45 minute rated per MNSBC 713.13.3 713.13.4 (Refuse & laundry chutes) Termination Room:	
ວັ 508: MI ຍຸ •	KED USE & OCCUPANCY: 508.1 General:		Refuse, recycling, and laundry chutes shall discharge into an e in accordance with Section 707 or horizontal assemblies constr	
	Building 1 : Building 1 will comply with MNSBC 508.3 Not     Building 2 : Building 2 will comply with MNSBC 508.2 Act	nseparated Occupancies cessory Occupancies	snall be protected by opening protectives having a fire protection     Trash rooms on Level -1 will be enclosed by 2-ho     Trash rooms on Level -1 will be enclosed by 2-ho	
5 509: IN(	CIDENTAL USES:		rated per MNSBC /13.13.4 <u>713.14.1 Elevator lobby:</u>	
•	509.4 Separation: "The incidental uses listed in Table 509 shall be separated	from the remainder of the building or equipped with an automatic	shall separate the elevator shaft enclosure doors from each floor	
ניו מר	<ul> <li>sprinkler system, or both, in accordance with the provision</li> <li>Proposed wate and linen collection rooms o</li> </ul>	s of that table." ver 100 square feet shall be protected with NFPA 13 automatic	1. "Enclosed elevator lobbies are not required at the     automatic sprinkler system in accordance with Section	
	sprinkler system per table 509 and shall be s capable of resisting the passage of smoke p	eparated from the remainder of the building by construction er MNSBC 509.4.2	Elevator lobby be provided on all Level	
510: SP	ECIAL PROVISIONS:		<ul> <li>714: PENETRATIONS</li> <li>714.4.1.2 (Horizontal Assemblies) Membrane penetrations:</li> </ul>	
•	510.2 Horizontal building separation allowance: "A building shall be considered as separate and distinct bu	ildings for the purpose of determining area limitations, continuity of fire	"Penetrations of membranes that are part of a horizontal assen assemblies are required to have a fire-resistance rating recess	
	<ul> <li>walls, limitation of number of stories and type of construction</li> <li>The buildings are separated with a horizontal as</li> </ul>	on where all of the following conditions are met: sembly having a fire-resistance rating of not less than 3 hours.	Exceptions: 7. The ceiling membrane of 1- and 2-hour fire-resistance	
	<ol> <li>I ne building below the horizontal assembly is no</li> <li>The building below the horizontal assembly is of</li> </ol>	by greater than one story above grade plane. Type IA construction.	plate of a wall assembly, provided that all penetrating items thro 714.4.1.1.2.	
ō	4. Snart, stairway, ramp and escalator enclosures resistance rating with opening protectives in acc	ordance with Section 716.5.	<ul> <li>Unit exhausts (bath fans, dryer exhaust</li> <li>Exhaust ducts will be installed as mem</li> </ul>	
СНАРТ	ER 6: TYPES OF CONSTRUCTION	nonzontal assembly complying with 510.2	top plate of the wall (sealed with an app space complying with MNSBC 714.4.1.2	
<u>CHAPT</u> 601: GE	ER 6: TYPES OF CONSTRUCTION	nonzontal assembly complying with 510.2	top plate of the wall (sealed with an app space complying with MNSBC 714.4.1.2 717: DUCTS & AIR TRANSFER OPENINGS	
<u>CHAPT</u> 601: GE •	ER 6: TYPES OF CONSTRUCTION NERAL Table 601 Fire-resistance requirements for building elements (hours)		top plate of the wall (sealed with an app space complying with MNSBC 714.4.1.2 717: DUCTS & AIR TRANSFER OPENINGS • <u>717.5.4 Fire partitions:</u> "Ducts and air transfer openings that penetrate fire partitions sh Exceptions:	
<u>CHAPT</u> 601: GE •	ER 6: TYPES OF CONSTRUCTION         NERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT		top plate of the wall (sealed with an app space complying with MNSBC 714.4.1.2 717: DUCTS & AIR TRANSFER OPENINGS • 717.5.4 Fire partitions: "Ducts and air transfer openings that penetrate fire partitions sh Exceptions: 4. Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance with	
<u>CHAPT</u> 601: GE •	ER 6: TYPES OF CONSTRUCTION         NERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT       TYPE IA         Primary structural frame       3       1         Exterior bearing walls       3       2	<u>:</u>	top plate of the wall (sealed with an app space complying with MNSBC 714.4.1.2 717: DUCTS & AIR TRANSFER OPENINGS • 717.5.4 Fire partitions: "Ducts and air transfer openings that penetrate fire partitions sh Exceptions: 4. Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance w system shall be a duct system for conveying supply, return or e constructed of sheet steel not less than No. 26 race thickness	
<u>CHAPT</u> 601: GE •	Building Formulae Separated from Building 2 with the separated from Building 2 with the separated from Building 2 with the separated from Building elements (hours)         Image: Separated for building elements (hours)         BUILDING ELEMENT       TYPE IA       TYPE II         Primary structural frame       3       1         Exterior bearing walls       3       1         Exterior nonbearing walls       3       1         Exterior in the series walls       3       1		<ul> <li>top plate of the wall (sealed with an appropriate complying with MNSBC 714.4.1.2</li> <li>717: DUCTS &amp; AIR TRANSFER OPENINGS         <ul> <li><u>717.5.4 Fire partitions:</u></li> <li>"Ducts and air transfer openings that penetrate fire partitions sh Exceptions:</li> <li><u>4.</u> Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance w system shall be a duct system for conveying supply, return or econstructed of sheet steel not less than No. 26 gage thickness and inlet terminals."</li> <li><u>4.</u> Unit exhausts (bath fans, driver exhausts)</li> </ul> </li> </ul>	
<u>CHAPT</u> 601: GE •	Building Formulae sequence from Duraning's 2 with the second s		top plate       of the wall (sealed with an appropriate complying with MNSBC 714.4.1.2         717: DUCTS & AIR TRANSFER OPENINGS         • 717.5.4 Fire partitions:         "Ducts and air transfer openings that penetrate fire partitions sh Exceptions:         4.       Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance w system shall be a duct system for conveying supply, return or econstructed of sheet steel not less than No. 26 gage thickness and inlet terminals."         •       Unit exhausts (bath fans, dryer exhaust installed in accordance with MNSBC 71	
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601: GE 601: CE	Building Formulae Residuated from Durating 5.2 with difference of the second formation of the second format	A on fire separation distance:	<ul> <li>top plate of the wall (sealed with an app space complying with MNSBC 714.4.1.2</li> <li>717: DUCTS &amp; AIR TRANSFER OPENINGS         <ul> <li><u>717.5.4 Fire partitions:</u></li> <li>"Ducts and air transfer openings that penetrate fire partitions sh Exceptions:</li></ul></li></ul>	
<u>CHAPT</u> 601: GE • 602: CC	ER 6: TYPES OF CONSTRUCTION         INERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT       TYPE IA         Primary structural frame       3         1       Exterior bearing walls         2       1         Exterior nonbearing walls       3         1       Exterior nonbearing walls         2       1         Roof construction       2         1       1.5         INSTRUCTION CLASSIFICATION         Table 602 Fire resistance rating requirements for exterior walls based         •       North Side: 30 Feet	indizontal assembly complying with 510.2	<ul> <li>top plate of the wall (sealed with an app space complying with MNSBC 714.4.1.2</li> <li>717: DUCTS &amp; AIR TRANSFER OPENINGS         <ul> <li><u>717.5.4 Fire partitions:</u></li> <li>"Ducts and air transfer openings that penetrate fire partitions st Exceptions:</li> <li><u>4.</u> Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance w system shall be a duct system for conveying supply, return or e constructed of sheet steel not less than No. 26 gage thickness and inlet terminals."</li> <li><u>Unit exhausts</u> (bath fans, dryer exhaust installed in accordance with MNSBC 71</li> <li><u>Exhaust ducts will run vertically in wall through-penetration firestop system per ex. 7 without a ceiling radiation damper the exterior of the building.</u></li> </ul> </li> </ul>	
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<u>CHAPT</u> 601: GE • 602: CC	Building Formulae sequences from Durating 5.2 with difference sequences for building elements (hours)         ER 6: TYPES OF CONSTRUCTION         NERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT       TYPE IA       TYPE II         Primary structural frame       3       1         Exterior bearing walls       3       2         Interior bearing walls       3       1         Exterior nonbearing walls       0       0         Floor construction       2       1         Roof construction       2       1         Roof construction       1.5       1         ONSTRUCTION CLASSIFICATION         Table 602 Fire resistance rating requirements for exterior walls based         •       North Side: <u>30 Feet</u> •       South Side: <u>10 Feet</u> •       South Side: <u>10 Feet</u> •       South Side: <u>0 Feet</u> •       R-2 = <u>1 Hour</u> •       East Side: <u>0 Feet</u>	A A d on fire separation distance:	<ul> <li>top plate of the wall (sealed with an appropriate of the sealed with MNSBC 714.4.1.2).</li> <li>T17.5.4 Fire partitions:         <ul> <li>Unit exhausts (bath fans, dryer exhaust installed in accordance with MNSBC 71</li> <li>Exhaust ducts will run vertically in wall through-penetration firestop system propriate of the building.</li> <li>T17.6.2.1 (Horizontal Assemblies) (Membrane Penetrations) Ceiling Radia</li> <li>"Ceiling radiation dampers shall be tested in accordance with S details listed in the fire-resistance-rated assembly and the man required where either of the following applies:</li> <li>Where exhaust duct penetrations are protected in accordance with out ceiling radiation dampers</li> </ul> </li> </ul>	
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<u>СНАРТ</u> 601: GE 602: CC	Ending Formulate from building 2 minutes         ER 6: TYPES OF CONSTRUCTION         NERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT       TYPE IA       TYPE II         Primary structural frame       3       1         Exterior bearing walls       3       2         Interior bearing walls       3       1         Exterior nonbearing walls       0       0         Floor construction       2       1         Roof construction       2         Interior nonbearing walls       0         OF construction         1         Roof construction       2       1         Roof construction       2       1         NOTH Side: 30 Feet         S-2 = 1 Hour         S-2 = 1 Hour <td col<="" td=""><td>h in which the building elements listed in Table 601 are of noncombustible re in this code."</td><td>top plate of the wall (sealed with an appropriate complying with MNSBC 714.4.1.2         717: DUCTS &amp; AIR TRANSFER OPENINGS         * 717.5.4 Fire partitions:         "Ducts and air transfer openings that penetrate fire partitions st Exceptions:         4.       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<u>СНАРТ</u> 601: GE 602: СС	Ending Formula be objected from building 2 mint of ER 6: TYPES OF CONSTRUCTION         ER 6: TYPES OF CONSTRUCTION         Table 601 Fire-resistance requirements for building elements (hours)         MULDING ELEMENT TYPE IA TYPE II         Primary structural frame       3       1         Exterior bearing walls       3       2         Interior bearing walls       3       1         Exterior nonbearing walls       0       0         Floor construction       2       1         Roof construction       1.5       1         NSTRUCTION CLASSIFICATION         Table 602 Fire resistance rating requirements for exterior walls based         • North Side: <u>30 Feet</u> •       South Side: <u>10 Feet</u> •       South Side: <u>10 Feet</u> •       S-2 = 1 Hour         •       R-2 = 1 Hour         •       South Side: <u>30 Feet</u> •       S-2 = 1 Hour         •       S-2 = 1	h in which the building elements listed in Table 601 are of noncombustible re in this code."	<b>1997</b> The sender of the se	
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Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance with system shall be a duct system for conveying supply, return or e constructed of sheet steel not less than No. 26 gage thickness and inlet terminals."</li> <li><u>Unit exhausts (bath fans, dryer exhausi installed in accordance with MNSBC 71</u></li> <li>Exhaust ducts will run vertically in wall through-penetration firestop system performed accordance with S details listed in the fire-resistance-rated assembly and the man required where either of the following applies:</li> <li>2. Where exhaust duct penetrations. Ceiling Radia "Geiling radiation dampers shall be tested in accordance with S details listed in the fire-resistance-rated assembly and the man required where either of the following applies:</li> <li>2. Where exhaust duct penetrations are protected in ac through another dwelling unit or tenant space.</li> <li>T18: CONCEALED SPACES</li> <li>718.2.1 Fireblocking:</li> <li>"Treoblocking:</li> <li>"To combustible construction, fireblocking shall be installed to co barrier between floors, between a top story and a roof or attics through 718.2.7."</li> <li>718.2.1 Fireblocking:</li> <li>"Tireblocking materials:</li> <li>1. Two-inch (51 mm) nominal lumber.</li> <li>2. Two thicknesses of 0.719-inch (18.3 mm) wood structu 4. One thickness of on: 10.4 mm) particlebard 5. One-fourth-inch (64 mm) ceinaral fiber or other appr horizontal fireblocking requirement in particlebard 5. One-fourth-inch (64 mm) ceinaral fiber or other appr horizontal fireblocking shall be provided in concealed spaces of stud wal as follows:</li> <li>1. Vertically at the ceiling and floor levels.</li> <li>2. Two thickness of onineral Mood or mineral fiber or other appr horizo</li></ul></td></t<>	It is which the building elements listed in Table 601 are of noncombustible re in this code." It on fire separation distance: It on fire separation distance: It on fire separation distance: It is which the building elements listed in Table 601 are of noncombustible re in this code." It is exterior walls are of noncombustible materials and the interior building elardant-treated wood framing complying with Section 2303.2 shall be or less." 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CHAPT 601: GE 602: CC • • • • • • • • • • • • • •	ER 6: TYPES OF CONSTRUCTION         NERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT       TYPE IA         Primary structural frame       3       1         Exterior bearing walls       3       2         Interior bearing walls       3       1         Exterior nonbearing walls       0       0       0         Floor construction       2       1         Roof construction       1.5       1         NSTRUCTION CLASSIFICATION       Table 602 Fire resistance rating requirements for exterior walls based         •       North Side: 30 Feet       S-2 = 1 Hour         •       South Side: 10 Feet       S-2 = 1 Hour         •       R-2 = 1 Hour       R-2 = 1 Hour         •       South Side: 30 Feet       S-2 = 1 Hour         •       South Side: 30 Feet       S-2 = 1 Hour         •       S-2 = 1 Hour       R-2 = 1 Hour         •       West Side: 30 Feet       S-2 = 1 Hour         •       S-2 = 1 Hour       R-2 = 1 Hour         •       S-2 = 1 Hour       R-2 = 1 Hour         •       S-2 = 1 Hour       R-2 = 1 Hour         •       S-2 = 1 Hour       R-2 = 1 Hour	the exterior walls are of noncombustible materials and the interior building elements listed in Table 601 are of noncombustible re in this code."  the exterior walls are of noncombustible materials and the interior building elements listed in Table 601 are of noncombustible re in this code."  the exterior walls are of noncombustible materials and the interior building elements listed wood framing complying with Section 2303.2 shall be or less."  re-retardant-treated wood framing complying with MNSBC 2303.2  with Tables 601 and 602 and this section. The required fire-resistance sater than 10 feet (3048 mm) shall be rated for exposure to fire from the with a fire separation distance of less than or equal to 10 feet (3048 mm) aration distance greater than 10 feet and will be rated for exposure to fire from the with a fire separation distance of less than or equal to 10 feet (3048 mm) aration distance of less than or equal to 10 feet and will be rated for exposure and will be rated for exposure to fire from the with a fire separation distance of less than or equal to 10 feet and will be rated for exposure and will be rated for exposure to fire from the with a fire separation distance of less than or equal to 10 feet and will be rated and trash room walls will be constructed as Fire Barriers stance-rated shaft or stainway or ramp enclosure, or separation, such exterior walls and the fire-resistance-rated enclosure or separation resistance rated shaft or stainway or ramp enclosure or separation.	<b>Idea plate of the wall (sealed with an apper space complying with MNSBC 714.1.1. 717.5.1</b> Fire partitions: Tuckis and air transfer openings that penetrate fire partitions at Exceptions: <ul> <li>a. Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance we system shall be a duct system for conveying supply, return or e constructed of sheet steel not less than No. 26 gage thickness and intel terminals."</li> <li><u>Unit exhausts (bath fans, dryer exhaustinistalled in accordance with MNSBC 71.6.2.1 (Horizontal Assemblies) (Membrane Penetration firestop system perex. 7 without a ceiling radiation dampers the exterior of the building. <b>717.6.2.1 (Horizontal Assemblies) (Membrane Penetrations) Ceiling Radii "Ceiling radiation dampers shall be tested in accordance with MNSBC 71.6.2.1 (Horizontal Assemblies) (Membrane Penetrations) Ceiling Radii "Ceiling radiation dampers shall be tested in accordance with through another dwelling unit or tenant space. 171.6.2.1 (Horizontal Assemblies) (Membrane Penetrations are protected in ac through another dwelling unit or tenant space. 171.6.2.1 (Horizontal Assemblies) (Membrane Penetrations are protected in ac through another dwelling unit or tenant space. 171.6.2.1 Fireblocking: 171.6.2.1 Fireblocking:</b> Tin combustible construction, fireblocking shall be installed to c a barrier between floors, between a top story and a roof or attic s through 718.2.7." <b>718.2 Fireblocking:</b> Timo thicknesses of 1.7.6.1 (S mm) mominal lumber . <b>1.</b> Two thicknesses of 1.7.6.1 (S mm) mominal lumber . <b>1.</b> Two thicknesses of 1.7.6.1 (S mm) mominal lumber . <b>1.</b> Two thicknesses of 1.7.6.1 (S mm) mominal lumber . <b>1.</b> Two thicknesses of 1.7.6.1 (S mm) mominal lumber . <b>1.</b> Two thicknesses of 1.7.6.1 (S mm) mominal lumber . <b>1.</b> Two thicknesses of 1.7.6.1 (S mm) mominal lumber . <b>1.</b> Two thicknesses of 1.7.6.1 (S mm)</u></li></ul>	
CHAPT 601: GE 602: CC	Endury Fortune of complete to the Dataling of Endury         RE 6: TYPES OF CONSTRUCTION         NERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT       TYPE IA       TYPE II         Primary structural frame       3       1         Exterior bearing walls       3       2         Interior bearing walls       0       0         Floor construction       2       1         Not CLASSIFICATION         Table 602 Fire resistance rating requirements for exterior walls based         Proposed fire separation distance varies:         •       North Side: <u>30 Feet</u> S-2 = 1 Hour         •       South Side: <u>10 Feet</u> S-2 = 1 Hour         •       South Side: <u>30 Feet</u> S-2 = 1 Hour         •       South Side: <u>30 Feet</u> S-2 = 1 Hour         •       Secept as permitted in Section 603 and elsewhe         Building 1 will comply with MNSBC 602.2       602.3 Type III:         *       Type II construction is that type of construction in which t         elements are of any material permitted by this code. <u>Fire-r</u> permitted within exterior walls semblies of a 2-hour rating         Type II construction is t	In the initial initinitini initinial initial initial initial initial initial initia	<ul> <li><b>IDENTIFY OF CONTROLS</b></li> <li><b>717: DUCTS &amp; AIR TRANSFER OPENINGS</b></li> <li><b>717: 5.4</b> Fire partitions:         <ul> <li>"Ducks and air transfer openings that penetrate fire partitions at Exceptions:</li> <li>Such walls are penetrated by ducted HVAC systems throughout with an automatic spinkler system in accordance we system shall be a duct system for conveying supply, return or econstructed of sheet steel not less than No. 26 gage thickness and intel terminals."</li></ul></li></ul>	
CHAPT 601: GE 602: CC • • • • • • • • • •	ER 6: TYPES OF CONSTRUCTION         NERAL         Table 601 Fire-resistance requirements for building elements (hours)         BUILDING ELEMENT       TYPE IA         Type II       Type II         Primary structural frame       3       1         Exterior obearing walls       3       2         Interior nonbearing walls       0       0         Floor construction       2       1         Roof construction       1.5       1         NSTRUCTON CLASSIFICATION       Table 602 Fire resistance rating requirements for exterior walls based         •       North Side: 30 Feet       S-2 = 1 Hour         •       South Side: 10 Feet       S-2 = 1 Hour         •       South Side: 10 Feet       S-2 = 1 Hour         •       South Side: 30 Feet       S-2 = 1 Hour         •       South Side: 10 Feet       S-2 = 1 Hour         •       South Side: 30 Feet       S-2 = 1 Hour         •       West Side: 30 Feet       S-2 = 1 Hour         •       S-2 = 1 Hour       R-2 = 1 Hour         •       West Side: 30 Feet       S-2 = 1 Hour         •       S-2 = 1 Hour       R-2 = 1 Hour         •       West Side: 30 Feet       S-2 = 1 Hour	In the initial initinitinitial initial initial initial initial initial initial init	<ul> <li>too plate of the wall (sealed with an appapace complying with MNSBC 714.4.1.2</li> <li>717: DUCTS &amp; AR TRANSFER OPENINGS         <ul> <li>717.5.4 Fire partitions:</li> <li>"Ducts and air transfer openings that penetrate fire partitions st Exceptions:</li> <li>Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system in accordance with SMSBC 714.4.1.2</li> <li>Such walls are penetrated by ducted HVAC systems throughout with an automatic sprinkler system for conveying supply, return ore constructed of sheet steel not less than No. 26 gage thickness and intel terminals:</li> <li><u>Unit exhausts</u> (bath fans, dryer exhaust installed in accordance with MMSBC 714.4.1.2</li> <li>Exhaust ducts will run vertically in wall through-penetration firestop system petee exterior of the building.</li> <li>717.6.2.1 (Horizontal Assemblies) (Membrane Penetrations) Cealing Radiusto dampers shall be tested in accordance with S details listed in the fire-resistance-rated assembly and the man required where either of the following applies:</li> <li>Where exhaust (duct penetrations) are protected in ac through another dwelling unit or tenant space.</li> <li><u>Unit exhausts</u> (bath fans, dryer exhaust without calling radiation dampers</li> </ul> </li> <li>718: CONCEALED SPACES         <ul> <li>Tiscipcoking shall consist of the following materials:                <ul> <li>Two-inch (S1 mm) nominal lumber</li> <li>Two-inch (S1 mm) nominal lumber</li> <li>Two thicknesses of 1-inch (25 mm) nominal lumber</li> <li>Two-inch (S1 mm) nominal lumber</li> <li>The blocking shall be provided in floor of radius as follows:</li></ul></li></ul></li></ul>	
CHAPT 601: GE 602: CC	Endury Formulae coparated from building of minit of the second s	In the initial assembly complying with 310-2 In the initial assembly complying with 310-2 In the initial assembly complying with 310-2 In the exterior distance: In the initial assembly complying with 310-2 In the exterior walls are of noncombustible materials and the interior building teardant-treated wood framing complying with Section 2303.2 shall be or less." In the exterior walls are of noncombustible materials and the interior building teardant-treated wood framing complying with Section 2303.2 shall be or less." Interestandant-treated wood framing complying with MNSBC 2303.2 Interestandant-treated framing complying with MNSBC 2303.2 Interestandant-treated fram 10 feet (3048 mm) shall be rated for exposure to fire from the with a fire separation distance of less than or equal to 10 feet (3048 mm) aration distance of less than or equal to 10 feet (3048 mm) aration distance of less than or equal to 10 Feet and will be rated and trash room walls will be constructed as Fire Barriers Interestance rated shaft or stainway or ramp enclosure, or separation, such restrict walls and the fire-resistance-rated enclosure or separation resistance rated shaft or stainway enclosure will be rated 1 hour per required fire-resistance rated shaft or stainway enclosure will either be inside or from both sides per MNSBC 705.5. Thoor/ceiling assembly below to the underside of the floor or roof effect there inside or from both sides per MNSBC 705.5.	<ul> <li>In plate of the wall (sealed with an approximate of the seal of with MNSBC 714.1.1</li> <li>717: DUCTS &amp; AR TRANSFER OPENINGS</li> <li>717.5.4 Fire partitions:         <ul> <li>"Ducts and air transfer openings that penetrate fire partitions st Exceptions:                 <ul></ul></li></ul></li></ul>	

# onstructed as Fire Partitions complying with MNSBC 708

han 1 hour."

por/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck assembly above, and shall be securely attached thereto. In combustible construction e sheathing, deck or slab, the space between the ceiling and the sheathing, deck or <u>vith Sections 718.2 and 718.3 at the partition line</u>..." ugh the floor/Ceiling assembly or be draftstopped at the partition line per

with section 716" ted for 20 minutes

resistance rated for <u>45 minutes</u> istance rated for <u>45 minutes</u> will be fire resistance rated for 45 minutes

as Shaft Enclosures per MNSBC 713. (Exit access stairways shall be protected per

than 2 hours where connecting four stories or more, and not less than 1 hour where

ating of 2 hours per MNSBC 713.4

dance with <u>Section 707</u> or horizontal assemblies constructed in accordance with Section tion 707.5 for fire barriers or Section 711.4 for horizontal assemblies as applicable.

ure, such walls shall comply with the requirements of Section 705 for exterior walls and

cture shall comply with one of the following: n of the same fire-resistance rating as the lowest floor through which the shaft passes, lechanical shafts will terminate at precast plank assembly per MNSBC 713.11)

Indry chute shall not be used for any other purpose and shall terminate in a room sh rooms on Level -1 will comply with MNSBC 713.11.1 ex. 2 and have a 2-hour

e roof sheathing, deck or slab of the building shall be enclosed at the top with floor penetrated by the shaft, but not less than the fire-resistance rating required for the

nderside of roof sheathing or be enclosed at the top with a 2-hour fire-resistance

access rooms: I be located in rooms or compartments enclosed by not less than 1-hour fire barriers nblies constructed in accordance with Section 711, or both. Openings into the access rotection rating of not less than 3/4 hour. Doors shall be self- or automatic-closing upon

-hour fire barriers in accordance with MNSBC 707 and trash room doors will be

enclosed room separated from the remainder of the building by fire barriers constructed ructed in accordance with Section 711, or both. Openings into the termination room on rating equal to the protection required for the shaft enclosure. our Fire Barriers per MNSBC 707 and Level -1 Trash room doors will be 90 minute

here an elevator shaft enclosure connects more than three stories. The lobby enclosure oor by fire partitions..."

level(s) of exit discharge, provided the level(s) of exit discharge is equipped with an tion 903.3.1.1." els except Level 1 per MNSBC 713.14.1 ex. 1

mbly shall comply with Section 714.4.1.1.1 or 714.4.1.1.2. Where floor/ceiling sed fixtures shall be installed such that the required fire resistance will not be reduced.

ce-rated horizontal assemblies is permitted to be interrupted with the double wood top rough the double top plates are protected in accordance with Section 714.4.1.1.1 or

t, kitchen exhausts) will comply with MNSBC 714.4.1.2 ex. 7. nbrane penetrations in walls per MNSBC 717 and then run up through the double proved through-penetration firestop system (714.4.1.1.2)) and into the truss 2 ex. 7 without a ceiling radiation damper.

hall be protected with listed fire dampers installed in accordance with their listing.

, have a required fire-resistance rating of 1 hour or less, and are in buildings equipped vith Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC exhaust air as part of the structure's HVAC system. Such a duct system shall be and shall be continuous from the air-handling appliance or equipment to the air outlet

t, kitchen exhausts) in <u>Fire Partitions</u> (party walls and/or corridor walls) will be 17.5.4 ex. 4 stud cavity and penetrate double top plate of wall (sealed with approved er MNSBC 714.4.1.1.2) and into the truss space complying with MNSBC 714.4.1.2

er. The duct will be contiuous from the air-handling appliance to the air outlet on iation Dampers:

Section 717.3.1. Ceiling radiation dampers shall be installed in accordance with the ufacturer's installation instructions and the listing. Ceiling radiation dampers are not

cordance with Section 714.4.1.2, are located within the cavity of a wall and do not pass t, kitchen exhaust) will be installed in accoradnce with MNSBC 717.6.2.1 (2.)

tut off concealed draft openings (both vertical and horizontal) and shall form an effective 1106: PARKING & PASSENGER LOADING FACILITIES space. Fireblocking shall be installed in the locations specified in Sections 718.2.2

with broken lap joints

ural panels with joints backed by 0.719-inch (18.3 mm) wood structural panels. with joints backed by 0.75-inch (19 mm) particleboard.

her approved materials installed in such a manner as to be securely retained in place. c application.

roved nonrigid materials shall be permitted for compliance with the 10-foot (3048 mm) of studs or staggered studs."

arty wall airspace will be met in accordance with MNSBC 718.2.1.1 alls and partitions, including furred spaces, and parallel rows of studs or staggered studs,

mm).

ncealed vertical stud wall or partition spaces and concealed horizontal spaces created aled vertical and horizontal spaces such as occur at soffits, drop ceilings, cove ceilings

asonry or concrete fire-resistance-rated floors, the space between the floor slab and the naterial to resist the free passage of flame and products of combustion or fireblocked in pring that will exceed 100 square feet..."

nm) gypsum board, 3/8- inch (9.5 mm) wood structural panel, 3/8- inch (9.5 mm) bard, batts or blankets of mineral wool or glass fiber, or other approved materials ained."

R-1 buildings, in Group R-2 buildings with three or more dwelling units, in Group R-3 raftstopping shall be located above and in line with the dwelling unit and sleeping unit

paces in line with dwelling unit separations per MNSBC 718.3.2

or other concealed roof spaces of Group R-2 buildings with three or more dwelling alled above, and in line with, sleeping unit and dwelling unit separation walls that do not

spaces in line with dwelling unit separations per MNSBC 718.4.2

722: CALCULATED FIRE RESISTANCE

Table 722.6.2(1) Time assigned to wallboard membranes 5/8" Type X Gypsum Wallboard = 40 minutes

Table 722.6.2(2) Time assigned for contribution of wood frame Wood studs 16 inches o.c. = 20 minutes

- 722.6.2.1 Fire-resistance rating of wood assemblies 'The fire-resistance rating of a wood frame assembly is equal to the sum of the time assigned to the membrane on the fire-exposed side, the time assigned to the framing members and the time assigned for additional contribution by other protective measures such as insulation. The membrane on the unexposed side shall not be included in determining the fire resistance of the assembly." • Fire-resistance rating of exterior walls will be calculated per MNSBC 722.6.1
- **CHAPTER 9: FIRE PROTECTION SYSTEMS**
- 903: AUTOMATIC SPRINKLER SYSTEMS
  - 903.3.1.1 NFPA 13 sprinkler systems "Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1." An NFPA 13 automatic sprinkler system will be provided throughout buildings 1 & 2 per MNSBC 903.3.1.1 •

CHAPTER 10: MEANS OF EGRESS

1007: ACCESSIBLE MEANS OF EGRESS

- <u>1007.2.1 Elevators required:</u>
  - "In buildings where a required accessible floor is four or more stories above or below a level of exit discharge, at least one required accessible means of egress shall be an elevator complying with Section 1007.4.
  - One accessible means of egress will be an elevator complying with Section 1007.4 One elevator will comply with the emergency operation and signaling device requirements of Section 2.27 of ASME A17.1.
  - Standby power shall be provided in accordance with Chapter 27 and Section 3003. 1007.3 Stairways
  - "In order to be considered part of an accessible means of egress, a stairway between stories shall have a clear width of 48 inches (1219 mm) minimum between handrails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from either ar area of refuge complying with Section 1007.6 or a horizontal exit. Exit access stairways that connect levels in the same story are not permitted as part an accessible means of egress.
    - Exceptions: The areas of refuge are not required in Group R-2 occupancies. 6.
      - Areas of refuge will not be provided in stairways per MNSBC 1007.3 ex.6
    - Two-way communication systems per MNSBC 1007.8 will be provided at every elevator landing on each level that is one or more stories above or below the story of exit discharge.
- 1007.8 Two-way communication: "A two-way communication system shall be provided at the elevator landing on each accessible floor that is one or more stories above or below the story of exit discharge complying with Sections 1007.8.1 and 1007.8.2." Two-way communication systems will be provided at every elevator landing on each level that is one or more stories
- above or below the story of exit discharge per MNSBC 1007.8 1007.8.1 System requirements: "Two-way communication systems shall provide communication between each required location and the fire command center or a central control point location approved by the fire department. Where the central control point is not constantly attended, a two-way communication system shall
- have a timed automatic telephone dial-out capability to a monitoring location or 9-1-1. The two-way communication system shall include both audib and visible signals." 1009: STAIRWAYS

1009.3.1.2 Fire-resistance rating:

"Exit access stairway enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less that 1 hour where connecting less than four stories. The number of stories connected by the exit access stairway enclosures shall include any basements, but not any mezzanines. Exit access stairway enclosures shall have a fire-resistance rating not less than the floor assembly penetrated but need not exceed 2 hours."

Stairway enclosures will be constructed as 2-hour Fire Barriers per MNSBC 1009.3.1.2

1013: GAURDS 1013.8 Window Sills:

- "In occupancy groups R-1, R-2, and R-3 where the lowest part of the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or other surface below, the lowest part of the window opening shall be at a height not less than 36 inches (914 mm) above the finished floor surface of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere where such openings are located within 36 inches (914 mm) of the finished floor. Exceptions
  - Windows that are provided with window opening control devices that comply with Section 1013.8.1. All windows will have operable sections of window 36 inches or more above finished floor or they will be provided with window opening control devices complying with 1013.8.1 per MNSBC 1013.8
- 1013.8.1 Window opening control devices: "Window opening control devices shall comply with ASTM F2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section
- 1018: CORRIDORS

Table 1018.1 Corridor fire-resistance rating:

B & S = 0 R = 1

1-hour fire-resistance rated corridor will be provided in R-2 occupancies only per MNSBC table 1018.1

1018.6 Corridor Continuity: 'Fire-resistance-rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms. Where the path of egress travel within a fire-resistance-rated corridor to the exit includes travel along unenclosed exit access stairways or ramps, the fire resistance-rating shall be continuous for the length of the stairway or ramp and for the length of the connecting corridor on the adjacent floor leading to the exit.

Exceptions: Foyers, lobbies, or reception rooms that are more than 1,000 square feet per floor in aggregate area and other rooms or spaces that are 2.

- constructed as required for corridors shall not be construed as intervening rooms when the rooms or spaces meet the following: The spaces are not occupied as dwelling units, sleeping units, incidental uses or hazardous uses. The rooms, spaces, or corridors are protected by an automatic smoke detection system that initiates alarm notification devices b.
  - in all normally occupied rooms or spaces that use the corridor for a means of egress.
- The room or space is arranged so that it does not obstruct access to the required exits.
- Group R occupancies shall be provided with an automatic sprinkler system throughout to allow the use of Exception 2. Lobby on level 1 will be constructed as required for corridors and will comply with MNSBC 1018.6 Exception 2
- **1023: EXIT PASSAGEWAYS**

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1023.3 Construction: "Exit passageway enclosures shall have walls, floors and ceilings of not less than a 1-hour fire-resistance rating, and not less than that required for

- any connecting interior exit stairway or ramp. Exit passageways shall be constructed as fire barriers in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both." Exit passageway B on Level 1 and Exit passageway A on Level -2 will be constructed of 2-hour fire barriers in accordance with MNSBC
- 707 and 2-hour horizontal assemblies in accordance with MNSBC 711

CHAPTER 11: ACCESSIBILITY (SEE MN RULES CHAPTER 1341, 2015 MN ACCESSIBILTY CODE)

1105: ACCESSIBLE ENTRANCES

1105.1 Public Entrances: "In addition to accessible entrances required by Sections 1105.1.1 to 1105.1.5, at least 60 percent of all public entrances to each building, facility, and tenant space shall be <u>accessible</u>."

•

- 1106.2 Groups R-2 & R-3: "At least 2 percent, but not less than one, of each type of parking space provided for occupancies in Groups R-2 and R-3, which are required to have Accessible, Type A or Type B dwelling or sleeping units, shall be accessible. Where parking is provided within or beneath a building,
- accessible parking spaces shall also be provided within or beneath the building." <u>Outdoor surface parking</u> stalls: <u>None</u>
  - Indoor garage parking stalls: 54 total (2 accessible, 52 non-accessible) 3.7% accessible
- <u>Total combined parking</u>: 54 total (2 accessible, 52 non-accessible) <u>3.7% accessible</u> 1106.5 Van spaces:
  - "For every six or fraction of six accessible parking spaces, at least one shall be a van-accessible parking space. Exception: "In Group R-2 and R-3 occupancies, van-accessible spaces located within private garages shall be permitted to have vehicular routes
- entrances, parking spaces and access aisles with a minimum vertical clearance of 7 feet (2134 mm)." 1 Van-accessible parking spaces will be provided Van-accessible stall will be provided with <u>7 feet of minimum vertical clearance</u> in accordance with 1106.5

and one drinking fountain shall comply with the requirements for standing persons."

2 Drinking fountains will be provided in accordance with 1109.5.1

required accessible spaces, at least 5 percent, but not less than one of each type shall be accessible."

provided shall comply with the requirements for standing persons."

1107: DWELLING UNITS & SLEEPING UNITS

•

1109: OTHER FEATURES & FACILITIES

<u>1109.9 Storage:</u>

1109.5.1 (Drinking Fountains) Minimum number:

1109.5.2 (Drinking Fountains) More than the minimum number:

- 1107.6.2 Group R-2: "Dwelling units and sleeping units shall be provided in Group R-2 occupancies in accordance with Sections 1107.6.2.1 and 1107.6.2.2"
- 1107.6.2.1.1 Type A units: "In Group R-2 occupancies containing more than seven dwelling units or sleeping units, at least 2 percent but not less than one of the units shall be
  - a Type A unit. All Group R-2 units within a contiguous parcel of land development, irrespective of lot lines and public rights-of-way within the development, shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units. Where three or more Type A units are required, at least one Type A unit shall be provided with an accessible roll-in shower."
  - 2 Type A units will be provided in accordance with 1107.6.2.1.1. (70 x .02 = 1.4) • None are required to be provided with an accessible roll-in shower in accordance with 1107.6.2.1.1
- 1107.7.2 Multistory units: "A multistory dwelling or sleeping unit which is not provided with elevator service is not required to be a Type B unit. Where a multistory unit is provided with external elevator service to only one floor, the floor provided with elevator service shall be the primary entry to the unit, shall comply with the requirements for a Type B unit and a **toilet facility** shall be provided on that floor."

All <u>multistory units</u> will have a toilet facility meeting the requirements for a <u>Type B unit</u> on the main level

"No fewer than two drinking fountains shall be provided. One drinking fountain shall comply with the requirements for people who use a wheelchair

"Where more than the minimum number of drinking fountains specified in Section 1109.5.1 are provided, 50 percent of the total number of drinking fountains provided shall comply with the requirements for persons who use a wheelchair and 50 percent of the total number of drinking fountains

"Where fixed or built-in storage elements such as cabinets, coat hooks, shelves, medicine cabinets, lockers, closets and drawers are provided in

Common area lockers, cabinets and other storage elements will comply with 1109.9 and at least 5% will be accessible

		<u>1109.11 Seating a</u> "Where at least •	at tables, counters a e seating or standing t 5 percent of the se <u>Seating and/or</u> 1109.11	and work surfaces: g space at fixed or bu eating and standing s standing space in	uilt-in tables, spaces, but no <b>common are</b>	counters or work surfaces is provided in accessible spaces, ot less than one, shall be accessible" eas will be at least <u>5% accessible</u> in compliance with			kaas wilson architects
0	1110: \$	SIGNAGE							
IE		<u>"Signs</u> "Signs	shall be provided in	accordance with Se	ection 1110 ar	nd shall comply with ICC A117.1."		1301 American Blvd. E	East.
		"Interio numbe comply	r and exterior signs rs, and room names with ICC A117.I, S	identifying toilet room s shall comply with IC ection 703.5 and incl	ms, bathing n CC A117.1, S lude text desc	ooms, locker rooms, dressing rooms, fitting rooms, room ection 703.3. Where pictograms are provided, they shall criptors."		Bloomington, MN 5542 tel: (612) 879-6000	25
	•	<u>1110.4 Means of</u> "Signaç	<u>Egress:</u> ge providing instruct	tions for the operatio	on of exit door	rs shall comply with ICC A117.1, Section 703.2. Floor		www.kaaswilson.com	
	•	egress 1110.5 Parking:	shall comply with I	BC Chapter 10."				Civil and Structural Er	ngineer
	•	"Acces <u>1110.6 Entrances</u> "Where Access	sible parking space <u> s:</u> a not all entrances a sibility complying wit	s shall be identified b re accessible, acces h ICC A117.1, Section	by signs composible entranc on 703.6.3.I.	plying with ICC A117.1, Section 502.7." es shall be identified by the International Symbol of Directional signs complying with ICC A117.1, Section 703.2,		BKBM Engineers 5930 Brooklyn Blvd. Minneapolis, MN 5542 763-843-0420	29
	СНАРТ			t the hearest access	ible entrance	shall be provided at all nonaccessible entrances."			
	2015 M	IN ENERGY CODE V	WITH ASHRAE					Mechanical Engineer	
	2015 M	IN COMMERCIAL E	NERGY CODE					Kenneth S. Kendle, P.	.E.
n	СНАРТ •	TER 4: COMMERCIA C401.2 Applicatio	AL ENERGY EFFIC	IENCY	f the following	r.		1900 Oakcrest Ave, S Roseville, MN 55113 651.633.3955	te 1
		1. 2	The requiremen	ts of ANSI/ASHRAE	/IESNA 90.1. C403 C404	g. and C405. In addition, commercial buildings shall comply wit	'n		
i		3.	either Section C The requiremen building energy	406.2, C406.3 or C4 ts of Section C407, ( cost shall be equal to	06.4. C402.4, C403 o or less than	8.2, C404, C405.2, C405.3, C405.4, C405.6 and C405.7. The 85 percent of the standard reference design building."	)	Electrical Enginner Wunderlich-Malec	
е			•	ANSI/ASHRAE	II comply wi IIESNA 90.1	th <u>C401.2 (1.)</u> and meet the requirements of		6101 Blue Circle Drive Eden Prairie, Minneso	e ota 55343
S	ANSI/A	ASHRAE/IESNA 90.1	I STANDARD					952-933-3222	
	SECTIO	ON 4: ADMINISTRA 4.2.1 Compliance	TION & ENFORCE	MENT					
ole	•	<u>4.2.1.1 New Build</u> "New b •	lings: puildings shall comp The project wil	ly with either the prov I comply with <u>Secti</u>	visions of <u>Sec</u> ions 5, 6, 7, 8	<u>ctions 5, 6, 7, 8, 9, and 10</u> or Section 11." <b>8, 9 and 10</b> of <u>ANSI/ASHRAE/IESNA 90.1</u>		Interior Designer BDH+Young 7001 France Ave S #	200
an	SECTIO	ON 5: BUILDING EN 5.4.3.1 Continuou	IVELOPE us Air Barrier:					Edina, MN 55435	200
ed,		"The er Except	ntire building envelo ion:	pe shall be designed	d and constru	cted with a continuous air barrier."		952-893.9020	
		a. b.	"Semiheated sp "Single wythe co	aces in climate zone oncrete masonry buil	es 1 thru 6." Idings in clima	ate zone 2B"			
	·	d. and me	"The continuous "Chanical ventilation	air barrier shall be c	designed to re	esist positive and negative pressures from wind, stack effect,		Oaks Unior	n Depot
/e of	•	<u>5.4.3.1.2 Air Barri</u> "The fo	ier Installation: Ilowing areas of the	continuous air barri	er in the build	ling envelope shall be wrapped, sealed, caulked, gasketed, o	or	Apartments	6
		taped in a.	n an approved man Joints around fe	ner to minimize air le	eakage: frames (both	manufactured and site-built).		244 4th St E	4 4 4 0 4
		b. C.	Junctions betwe Penetrations thr	en walls and floors, ough the air barrier i	between wall n building env	s at building corners, between walls and roofs or ceilings. velope roofs, walls, and floors.		Saint Paul Min 5510	1-1401
<u>,</u>		а. е.	Joints, seams, c	connections between	i planes, and	other changes in air barrier materials. "		Oaks Propertie	es, LLC
, n	<u>CHAPT</u> •	TER 29: PLUMBING Table 2902.1 Min	SYSTEMS	auired plumbina fixtu	ires:				
		Occupancy	WC-Male	WC-Female	Lav.	Drinking Fountain		3550 East 46th Street Suite 120	
		<u> </u>	.1	.1	.1	.1		Minneapolis, MN 5540	)6
		TOTAL	<u>1</u>	1	1	1		Proiect Number	1577
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		y y	pe IA <sup>9</sup>	ade		HORIZONTAL BU SEPARATION COMF	IILDING PLYING		
					-4	GRADE PLANF	C 510.2		

# Building Separation Diagram

Bldg Gross SF - Overall		
Gross S	SF	
Level -2		
	11,817 ft <sup>2</sup>	
	11,747 ft <sup>2</sup>	
Level 2		
	9,747 ft <sup>2</sup>	
Level 3		
	9,747 ft <sup>2</sup>	
	9,747 ft <sup>2</sup>	
Level 5		
	9,747 ft <sup>2</sup>	
Level 6	(10	
	9,728 ft <sup>2</sup>	
Mezzanine Level		
	2,585 ft <sup>2</sup>	
	74,867 ft <sup>2</sup>	



1577

9-29-2016

Author

Checker

1/4'' = 1'-0''

TRASH CHUTE SHAFT WALLS — CONSTRUCTED AS <u>2-HOUR FIRE</u> <u>BARRIERS</u> COMPLYING WITH MNSBC 707 TRASH CHUTE ACCESS COMPARTMENT CONSTRUCTED AS <u>1-HOUR FIRE</u> <u>BARRIERS</u> COMPLYING WITH MNSBC 707

PROPERTY LINE TYP. ----



Code Plan Key					
101 Name : Unit Type R2 200SF/Occ. 150 SF - 2 Occ.	Room Number Room Name - Accessibility Type Occupancy - Load Factor Room Area - Occupant Load				
(20m) 🗕	OPENING FIRE RATING				
	FIRE BARRIER COMPLYING WITH MNSBC 707				
	FIRE PARTITION COMPLYING WITH MNSBC 708				
	1 HOUR RATED EXTERIOR WAL COMPLYING WITH MNSBC 705				
	2 HOUR RATED EXTERIOR WAL COMPLYING WITH MNSBC 705				
	UNRATED RATED ASSEMBLY				
	R-2 OCCUPANCY				
	TYPE A DWELLING UNIT				





 $\begin{array}{r} \hline 13 \\ \hline 1/2" = 1'-0" \end{array}$ 







1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

Civil and Structural Engineer BKBM Engineers 5930 Brooklyn Blvd. Minneapolis, MN 55429 763-843-0420

Mechanical Engineer Kenneth S. Kendle, P.E. 1900 Oakcrest Ave, Ste 1 Roseville, MN 55113 651.633.3955

Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

Date

Drawn By

Checked By

Author

9-29-2016

1577

Checker

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

LINK WILSON REG. NO: 21629

Code Details

As indicated



U S

2 KITCHEN CLEARANCES 1/4" = 1'-0"



Common area s	ignage ST-28
Backer:	1/8" brushed aluminum 4.5"x10.5" square corners spray clear satin finish
Face:	1/8" non-glare clear acrylic subsurface painted: black 4"x10" square corners
Raised Text:	Color: White Font: 3/4" Gil Sans Condensed 1" bottom / 1" right
Braille:	Clear rasters 3/8" bottom / 1" right
Logo:	subsurface painted logo: red 1.3/8*w x 1.3/8*h 1/2* top / 1/2* left subsurface engraved logo text backspray color: white

REFERENCE. VERIFY ACTUAL DESIGN OF SIGNAGE WITH OWNER

5/8" MIN. CHARACTER - 1 1/2" CHARACTER VERIFY ROOM NAMES WITH OWNER ------ 5/8" MIN. CHARACTER SIGNAGE SUB TO REQUEST DIGITAL COPY OF DRAWING FROM CONTRACTOR SIGNAGE SUB PROVIDE ALL DRAWINGS FOR SIGNAGE. 1/8" PLEXI GLASS BLACK & WHITE BUILDING PLAN RED DOT & "YOU ARE HERE" TEXT Font: 1" Gil Sans Con I" bottom / 1/2" right Clear rasters 3/8" bottom / 1" right Directional signage ST-26 Backer: 1/8" brushed aluminum 4.5"x10.5" square corner spray clear satin finish 1/8" non-glare clear acrylic subsurface painted: black 4"x10" square corners Color: White Font: 3/4" Gil Sans Condensed 1" bottom / 1" right subsurface logo 1 3/8"w x 1 3/8"h 1/2" top / 1/2" left logo text: NOTE: SIGNAGE SHOWN HERE IS FOR MINIMUM CODE REQUIREMENT

+THO RESTROO

0.080" (t) CLEAR ACRYLIC WITH SURFACE

9" (H) X 6" (W), 0.080" (t) CLEAR ACRYLIC WITH SURFACE APPLIED FORMICA DECOMETAL \_\_(COLOR)\_\_ LAMINATE TEXT TO BE SURFACE APPLIED DURANODIC (220-69) VINYL

APPLIED DECOMETAL LAMINATE

kaas wilson architects

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As indicated



Construction Assemblies

1 1/2" = 1'-0"

A012





25 Slab on Grade NTS



Corridor Floors NTS

FLOOR FINISH - SEE SCHEDULE

- 3/4" FLOOR SHEATHING

3/4" GYPSUM CONCRETE TOPPING

WOOD JOISTS - SEE STRUCTURAL

5/8" TYPE X GYPSUM WALLBOARD

1-Hour Rating Per

MNSBC 722.6.2











![](_page_29_Picture_3.jpeg)

1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

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# Oaks Union Depot Apartments 244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

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LINK WILSON REG. NO: 21629

![](_page_29_Picture_23.jpeg)

1" = 20'-0"

![](_page_29_Picture_25.jpeg)

CONTRACTOR PHOTOGRAPH ALLEY PRIOR TO CONSTRUCTION

REPAIR ASPHALT IN ALLEY
 POST PROJECT

# CONNECTED DRAIN TILE GRID-DRAIN TO STORM W/ BACK FLOW PREVENTOR -

Parking Schedule Туре Count Level Level -2 Level -1 Grand total: 54

![](_page_30_Figure_2.jpeg)

1 Level -2 1/8" = 1'-0"

Wacouta Street

# GARAGE PLAN GENERAL NOTES

1. ALL DIMENSIONS A WALLS ARE TAKEN TO OF MASONRY AT CMU CENTER OF STUD AT UNLESS NOTED OTH

2. ALL DIMENSIONS ARE TAKEN TO THE C AT FRAMED WALLS, MASONRY AT CMU W NOTED OTHERWISE.

3. SEE SHEET A013 F INTERIOR WALL TYPE

4. SEE SHEET A880 FC ASSEMBLIES AT PENE ELEVATOR LOBBY, & DETAILS. FIRE CAUL TRADE SHALL BE OF MANUFACTURER - G

![](_page_30_Picture_11.jpeg)

AT EXTERIOR TO EXTERIOR FACE AU WALLS OR T FRAMED WALLS, HERWISE. AT INTERIOR WALLS CENTER OF STUD AND FACE OF	<ul> <li>5. TOPS OF WALLS FOR TRASH, ELEVATOR LOBBY &amp; STAIR SHALL HAVE FIRE CAULK. SEE SHEET A860 FOR DETAILS.</li> <li>6. PROTECT ALL PLUMBING EQUIPMENT SEE PIPE SHIELD DETAILS ON A300.</li> <li>7. 4" WHITE PAINT STRIPE TYPICAL AT ALL DADI/INC STALLS OF OUR OF TO CL</li> </ul>	<ul> <li>11. NUMBER ALL PARKING STALLS 50" AFF.</li> <li>12. LOCATE A TYPE FE2 FIRE EXTINGUISHER EVERY 150' OF GARAGE.</li> <li>MEASURED FROM END TO END OF GARAGE SPACE. PROVIDE A FIRE EXTINGUISHER IN EACH ELEVATOR EQUIPMENT ROOM.</li> </ul>	1301 Suite Bloon tel: ( fax: ( www
FOR EXTERIOR AND PES.	<ul> <li>8. SLOPE CONCRETE TO FLOOR DRAINS AS NOTED.</li> </ul>	13. NO WOOD STUDS AND GYP. AT GARAGE LEVEL - USE METAL STUDS AND MOISTURE-RESISTANT GYP. BOARD.	Civil BKB 5930
FOR FIRE-CAULKING NETRATIONS, TRASH, & STAIR FIRE CAULK LKING USED BY EACH	9. MAINTAIN 7'-0" MIN. CLEAR HEAD HEIGHT FROM GARAGE DOOR TO H.C. VAN ACCESSIBLE STALL.	14. PAINT ALL PRECAST COLUMNS IN THE PARKING AREA YELLOW.	763-
F THE SAME G.C. TO	10. GEODETIC ELEVATION 729' FROM CIVIL PLANS = 100'-0" IN ARCHITECTURAL PLANS.		Mech

![](_page_30_Picture_13.jpeg)

1 American Blvd. East. e 100 omington, MN 55425 (612) 879-6000 (612) 879-6666 v.kaaswilson.com

il and Structural Engineer BM Engineers 80 Brooklyn Blvd. neapolis, MN 55429 3-843-0420

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244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number	1577
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LINK WILSON REG. NO: 21629

![](_page_30_Picture_29.jpeg)

![](_page_31_Figure_0.jpeg)

# GARAGE PLAN GENER

1. ALL DIMENSIONS AT WALLS ARE TAKEN TO OF MASONRY AT CMU CENTER OF STUD AT F UNLESS NOTED OTHEF

2. ALL DIMENSIONS A ARE TAKEN TO THE C AT FRAMED WALLS, A MASONRY AT CMU W NOTED OTHERWISE.

3. SEE SHEET A013 FC INTERIOR WALL TYPES

4. SEE SHEET A880 F ASSEMBLIES AT PENE ELEVATOR LOBBY, & S DETAILS. FIRE CAULK TRADE SHALL BE OF MANUFACTURER - G. COORDINATE.

![](_page_31_Picture_8.jpeg)

RAL NOTES			
AT EXTERIOR O EXTERIOR FACE J WALLS OR FRAMED WALLS, ERWISE. AT INTERIOR WALLS CENTER OF STUD AND FACE OF ALLS, UNLESS	<ul> <li>5. TOPS OF WALLS FOR TRASH, ELEVATOR LOBBY &amp; STAIR SHALL HAVE FIRE CAULK. SEE SHEET A860 FOR DETAILS.</li> <li>6. PROTECT ALL PLUMBING EQUIPMENT SEE PIPE SHIELD DETAILS ON A300.</li> <li>7. 4" WHITE PAINT STRIPE TYPICAL AT ALL PARKING STALLS, 9'-0" CL TO CL, UNO</li> </ul>	<ul> <li>11. NUMBER ALL PARKING STALLS 50" AFF.</li> <li>12. LOCATE A TYPE FE2 FIRE EXTINGUISHER EVERY 150' OF GARAGE. MEASURED FROM END TO END OF GARAGE SPACE. PROVIDE A FIRE EXTINGUISHER IN EACH ELEVATOR EQUIPMENT ROOM.</li> <li>12. NO WOOD STUDS AND GYP. AT</li> </ul>	1301 American Bl Suite 100 Bloomington, MN tel: (612) 879-600 fax: (612) 879-666 www.kaaswilson.c
OR EXTERIOR AND ES. OR FIRE-CAULKING ETRATIONS, TRASH,	<ul> <li>8. SLOPE CONCRETE TO FLOOR DRAINS AS NOTED.</li> <li>9. MAINTAIN 7'-0" MIN. CLEAR HEAD HEIGHT FROM GARAGE DOOR TO H.C. MAN ACCESSIBLE STALL</li> </ul>	GARAGE LEVEL - USE METAL STUDS AND MOISTURE-RESISTANT GYP. BOARD. 14. PAINT ALL PRECAST COLUMNS IN THE PARKING AREA YELLOW.	BKBM Engineers 5930 Brooklyn Blv Minneapolis, MN 5 763-843-0420
C. TO	10. GEODETIC ELEVATION 729' FROM CIVIL PLANS = 100'-0" IN ABCHITECTUBAL PLANS.		Mechanical Engine Kenneth S. Kendle

![](_page_31_Picture_10.jpeg)

Blvd. East. 55425 com

ral Engineer vd. 55429

neer dle, P.E. 1900 Oakcrest Ave, Ste 1 Roseville, MN 55113 651.633.3955

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Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

Date

Drawn By

Checked By

Author

Checker

9-29-2016

1577

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ne

LINK WILSON REG. NO: 21629

Alley Level -Parking Plan As indicated

A301

![](_page_32_Figure_0.jpeg)

1 Level 1 1/8" = 1'-0"

FLOOR PLAN GENERAL NOTES

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE TAKEN TO EXTERIOR FACE OF MASONRY AT CMU WALLS OR CENTER OF STUD AT FRAMED WALLS UNLESS NOTED OTHERWISE.

2. ALL DIMENSIONS AT INTERIOR WALLS ARE TAKEN TO THE CENTER OF STUD. DIMENSIONS OF FURRING WALLS ARE TO FACE OF WALL.

3. UNLESS NOTED OTHERWISE, WALLS WITHOUT DESIGNATION ARE TYPE I3A OR 13B.

4. 'FS' AT INTERIOR DIMENSIONS DENOTES DIMENSIONS TO FACE OF STUD WALL, 'CS' TO CENTER OF STUD WALL AND 'FOW' DENOTES FACE OF WALL.

5. SEE SHEETS A012 AND A013 FOR EXTERIOR AND INTERIOR WALL TYPES.

6. SEE SHEETS A012 AND A013 FOR FLOOR-CEILING & ROOF-CEILING ASSEMBLIES.

7. CORRIDOR WALLS ARE WALL TYPE C2B, 2X6'S, UNLESS NOTED OTHERWISE.

8. UNIT PARTY WALLS TO BE WALL TYPE P1, UNLESS NOTED OTHERWISE.

9. SEE A860 FOR FIRE BLOCKING @ PARTY WALL. SEE A860 FOR UNIT/ CORRIDOR FIRE BLOCKING.

# 10. SEE A861 FOR GYP. I JOINTS. 11. ELECTRICAL APPURT **MOUNTED FROM 15" - 48"**

12. ALL WINDOWS WITHI SWING SHALL BE TEMPEI

13. CABINET PULLS @ AL BATHS.

14. SEPARATE SOFFIT SU RETURN W/ GYPSUM BOA 15. = CASED OPEI

16. NOT USED

17. SEE A500 - A502 FOR ELEVATIONS.

18. NOT USED

19. NOT USED

20. F.E. @ CORRIDORS S EXTINGUISHER DETAILS. O.C. EACH FLOOR, MAX. RATED WHEN PENETRAT ASSEMBLIES.

	1		kaas
			wilson
BOARD CONTROL	21. BATH FANS: SEE 8/A860.	31. CORRIDOR CEILINGS ARE TO BE COVERED WITH GYPSUM SHEATHING	Architects
TENANCES TO BE " AFF. SEE A011.	22. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE A860.	PER FLOOR ASSEMBLY. CEILINGS DROPPED FOR MECH. AT CORRIDORS ARE NOTED ON OVERALL BUILDING	1301 American Blvd. East. Suite 100
IN 30" OF DOOR ERED.	23. SHAFT WALL INTERSECTIONS WITH STANDARD WALLS SEE A860.	PLANS. KEEP DROPPED CEILINGS AS TIGHT/HIGH AS POSSIBLE.	Bloomington, MN 55425 tel: (612) 879-6000
LL KITCHENS AND	24. AT ALL BEARING STUDS WITH PIPE PENETRATIONS, STRAP PLATES AS	32. NOT USED	fax: (612) 879-6666 www.kaaswilson.com
	REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF WALL.	33. GC SHALL COORDINATE PATH OF ROOF OVERFLOW DRAIN LEADERS	Civil and Structural Engineer
ARD.	25. NOT USED	FLOOR FRAMING. SEE FLOOR PLANS AND	BKBM Engineers
ENING	26. SEE A840 FOR ROOF ACCESS DETAILS.	DRAIN LEADERS.	Minneapolis, MN 55429
R EXTERIOR	27. ALL STEEL BEAMS AND COLUMNS MUST BE FIREPROOFED. SEE SHEET A860.	34. ROOF DRAIN LEADERS AND OVERFLOW DRAIN LEADERS SHALL BE INSULATED FROM THE INTERIOR FACE	763-843-0420
	28. SEE INTERIORS SHEETS FOR INTERIOR ELEVATIONS, FINISHES, SCHEDULES, AND DETAILS.	OF THE EXTERIOR SHEATHING AND ALONG THE FULL LENGTH OF THE LEADER.	Mechanical Engineer
	29. FURNITURE AND EQUIPMENT N.I.C.		1900 Oakcrest Ave, Ste 1
SEE A861 FOR FIRE . LOCATE F.E. 150' CABINETS MUST BE TING RATED WALL	30. WHEN NOT OTHERWISE SHOWN IN AN ELEVATION VIEW, SEE ENLARGED FLOOR PLANS FOR TAGS DENOTING CABINETRY AT KITCHEN ISLANDS.		Roseville, MN 55113 651.633.3955
			Electrical Enginner Wunderlich-Malec

Name	Count	Area	Mezz	Total SI
Unit 1-1	18	566 ft <sup>2</sup>	0 ft <sup>2</sup>	566 ft <sup>2</sup>
Unit 1-1M	4	566 ft <sup>2</sup>	188 ft <sup>2</sup>	754 ft <sup>2</sup>
Unit 1-2	4	551 ft <sup>2</sup>	0 ft <sup>2</sup>	551 ft <sup>2</sup>
Unit 1-2M	1	550 ft <sup>2</sup>	183 ft <sup>2</sup>	733 ft <sup>2</sup>
Unit 1-3	3	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
Unit 1-3 Type A	1	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
Unit 1-3M	1	647 ft <sup>2</sup>	216 ft <sup>2</sup>	863 ft <sup>2</sup>
Unit 1-4	5	804 ft <sup>2</sup>	0 ft <sup>2</sup>	804 ft <sup>2</sup>
Unit 1-5	15	631 ft <sup>2</sup>	0 ft <sup>2</sup>	631 ft <sup>2</sup>
Unit 1-5M	2	625 ft <sup>2</sup>	208 ft <sup>2</sup>	833 ft <sup>2</sup>
Unit 2-1	5	759 ft <sup>2</sup>	0 ft <sup>2</sup>	759 ft <sup>2</sup>
Unit 2-2	4	852 ft <sup>2</sup>	0 ft <sup>2</sup>	852 ft <sup>2</sup>
Unit 2-2M	1	851 ft <sup>2</sup>	283 ft <sup>2</sup>	1,134 ft <sup>2</sup>
Unit 2-3	3	1,122 ft <sup>2</sup>	0 ft <sup>2</sup>	1,122 ft <sup>2</sup>
Unit 2-3 Type A	1	965 ft <sup>2</sup>	0 ft <sup>2</sup>	965 ft <sup>2</sup>
Unit 2-4M	1	810 ft <sup>2</sup>	270 ft <sup>2</sup>	1,080 ft <sup>2</sup>
Unit 3-3M	1	1,122 ft <sup>2</sup>	373 ft <sup>2</sup>	1,495 ft <sup>2</sup>
Grand total: 70				

Parking Schedule						
Type Level Count						
	Level -2	28				
	Level -1	26				
Grand total: 54						

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

6101 Blue Circle Drive

952-933-3222

Interior Designer

Edina, MN 55435

7001 France Ave S #200

BDH+Young

952-893.9020

Eden Prairie, Minnesota 55343

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

1577 9-29-2016

Author

Checker

Date	
Drawn By	

Checked By

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

![](_page_32_Picture_33.jpeg)

LINK WILSON REG. NO: 21629

![](_page_32_Picture_36.jpeg)

Level 1 - Floor Plan

As indicated

A31

![](_page_33_Figure_0.jpeg)

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE TAKEN TO EXTERIOR FACE OF MASONRY AT CMU WALLS OR CENTER OF STUD AT FRAMED WALLS UNLESS NOTED OTHERWISE.

2. ALL DIMENSIONS AT INTERIOR WALLS ARE TAKEN TO THE CENTER OF STUD. DIMENSIONS OF FURRING WALLS ARE TO FACE OF WALL.

3. UNLESS NOTED OTHERWISE, WALLS WITHOUT DESIGNATION ARE TYPE I3A OR 13B.

4. 'FS' AT INTERIOR DIMENSIONS DENOTES DIMENSIONS TO FACE OF STUD WALL, 'CS' TO CENTER OF STUD WALL AND 'FOW' DENOTES FACE OF WALL.

5. SEE SHEETS A012 AND A013 FOR EXTERIOR AND INTERIOR WALL TYPES.

6. SEE SHEETS A012 AND A013 FOR FLOOR-CEILING & ROOF-CEILING ASSEMBLIES.

7. CORRIDOR WALLS ARE WALL TYPE C2B, 2X6'S, UNLESS NOTED OTHERWISE.

8. UNIT PARTY WALLS TO BE WALL TYPE P1, UNLESS NOTED OTHERWISE.

9. SEE A860 FOR FIRE BLOCKING @ PARTY WALL. SEE A860 FOR UNIT/ CORRIDOR FIRE BLOCKING.

10. SEE A861 FOR GYP. BOARD JOINTS. 11. ELECTRICAL APPURTENANC MOUNTED FROM 15" - 48" AFF. S 12. ALL WINDOWS WITHIN 30" O SWING SHALL BE TEMPERED.

13. CABINET PULLS @ ALL KITC BATHS.

14. SEPARATE SOFFIT SUPPLY RETURN W/ GYPSUM BOARD.

15. = CASED OPENING

16. NOT USED

17. SEE A500 - A502 FOR EXTER ELEVATIONS.

18. NOT USED

19. NOT USED

20. F.E. @ CORRIDORS SEE A86 EXTINGUISHER DETAILS. LOCAT O.C. EACH FLOOR, MAX. CABINE RATED WHEN PENETRATING RA ASSEMBLIES.

CONTROL	21. BATH FANS: SEE 8/A860.
CES TO BE	22. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE A860.
DF DOOR	23. SHAFT WALL INTERSECTIONS WITH STANDARD WALLS SEE A860.
CHENS AND	24. AT ALL BEARING STUDS WITH PIPE PENETRATIONS, STRAP PLATES AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF WALL.
FROM	25. NOT USED
	26. SEE A840 FOR ROOF ACCESS DETAILS.
	27. ALL STEEL BEAMS AND COLUMNS MUST BE FIREPROOFED. SEE SHEET A860.
	28. SEE INTERIORS SHEETS FOR INTERIOR ELEVATIONS, FINISHES, SCHEDULES, AND DETAILS.
	29. FURNITURE AND EQUIPMENT N.I.C.
61 FOR FIRE TE F.E. 150' ETS MUST BE ATED WALL	30. WHEN NOT OTHERWISE SHOWN IN AN ELEVATION VIEW, SEE ENLARGED FLOOR PLANS FOR TAGS DENOTING CABINETRY AT KITCHEN ISLANDS.

31. CORRIDOR CEILINGS ARE TO BE COVERED WITH GYPSUM SHEATHING PER FLOOR ASSEMBLY. CEILINGS DROPPED FOR MECH. AT CORRIDORS ARE NOTED ON OVERALL BUILDING PLANS. KEEP DROPPED CEILINGS AS TIGHT/HIGH AS POSSIBLE.

32. NOT USED

33. GC SHALL COORDINATE PATH OF ROOF OVERFLOW DRAIN LEADERS THROUGH FLOOR TRUSSES AT SECOND FLOOR FRAMING. SEE FLOOR PLANS AND RCP'S FOR LOCATIONS OF OVERFLOW DRAIN LEADERS.

34. ROOF DRAIN LEADERS AND OVERFLOW DRAIN LEADERS SHALL BE INSULATED FROM THE INTERIOR FACE OF THE EXTERIOR SHEATHING AND ALONG THE FULL LENGTH OF THE LEADER.

Unit S	chedule	e (Net SF	- Ove	rall)
Name	Count	Area	Mezz	Total SF
Unit 1-1	18	566 ft <sup>2</sup>	0 ft <sup>2</sup>	566 ft <sup>2</sup>
Unit 1-1M	4	566 ft <sup>2</sup>	188 ft <sup>2</sup>	754 ft <sup>2</sup>
Unit 1-2	4	551 ft <sup>2</sup>	0 ft <sup>2</sup>	551 ft <sup>2</sup>
Unit 1-2M	1	550 ft <sup>2</sup>	183 ft <sup>2</sup>	733 ft <sup>2</sup>
Unit 1-3	3	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
Unit 1-3 Type A	1	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
Unit 1-3M	1	647 ft <sup>2</sup>	216 ft <sup>2</sup>	863 ft <sup>2</sup>
Unit 1-4	5	804 ft <sup>2</sup>	0 ft <sup>2</sup>	804 ft <sup>2</sup>
Unit 1-5	15	631 ft <sup>2</sup>	0 ft <sup>2</sup>	631 ft <sup>2</sup>
Unit 1-5M	2	625 ft <sup>2</sup>	208 ft <sup>2</sup>	833 ft <sup>2</sup>
Unit 2-1	5	759 ft <sup>2</sup>	0 ft <sup>2</sup>	759 ft <sup>2</sup>
Unit 2-2	4	852 ft <sup>2</sup>	0 ft <sup>2</sup>	852 ft <sup>2</sup>
Unit 2-2M	1	851 ft <sup>2</sup>	283 ft <sup>2</sup>	1,134 ft <sup>2</sup>
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Unit 3-3M	1	1,122 ft <sup>2</sup>	373 ft <sup>2</sup>	1,495 ft <sup>2</sup>
Grand total: 70				

![](_page_33_Picture_29.jpeg)

1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

Civil and Structural Engineer BKBM Engineers 5930 Brooklyn Blvd. Minneapolis, MN 55429 763-843-0420

Mechanical Engineer Kenneth S. Kendle, P.E. 1900 Oakcrest Ave, Ste 1 Roseville, MN 55113 651.633.3955

Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

Date	9-29-2016
------	-----------

Drawn By

Checke

1577

I HEREBY CERTIFY THAT THIS PLAN. SPECIFICATION OR REPORT WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT I AM A REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

LINK WILSON REG. NO: 21629

Checked By

![](_page_33_Picture_48.jpeg)

![](_page_34_Figure_0.jpeg)

4th Street East

FLOOR PLAN GENERAL NOTES

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE TAKEN TO EXTERIOR FACE OF MASONRY AT CMU WALLS OR CENTER OF STUD AT FRAMED WALLS UNLESS NOTED OTHERWISE.

2. ALL DIMENSIONS AT INTERIOR WALLS ARE TAKEN TO THE CENTER OF STUD. DIMENSIONS OF FURRING WALLS ARE TO FACE OF WALL.

3. UNLESS NOTED OTHERWISE, WALLS WITHOUT DESIGNATION ARE TYPE I3A OR 13B.

4. 'FS' AT INTERIOR DIMENSIONS DENOTES DIMENSIONS TO FACE OF STUD WALL, 'CS' TO CENTER OF STUD WALL AND 'FOW' DENOTES FACE OF WALL.

5. SEE SHEETS A012 AND A013 FOR EXTERIOR AND INTERIOR WALL TYPES.

6. SEE SHEETS A012 AND A013 FOR FLOOR-CEILING & ROOF-CEILING ASSEMBLIES.

7. CORRIDOR WALLS ARE WALL TYPE C2B, 2X6'S, UNLESS NOTED OTHERWISE.

8. UNIT PARTY WALLS TO BE WALL TYPE P1, UNLESS NOTED OTHERWISE.

9. SEE A860 FOR FIRE BLOCKING @ PARTY WALL. SEE A860 FOR UNIT/ CORRIDOR FIRE BLOCKING.

10. SEE A861 FOR GYP. BOARD JOINTS. 11. ELECTRICAL APPURTENANC MOUNTED FROM 15" - 48" AFF. S

12. ALL WINDOWS WITHIN 30" C SWING SHALL BE TEMPERED. 13. CABINET PULLS @ ALL KITC

BATHS. 14. SEPARATE SOFFIT SUPPLY I RETURN W/ GYPSUM BOARD.

15. = CASED OPENING

16. NOT USED 17. SEE A500 - A502 FOR EXTER

ELEVATIONS.

18. NOT USED

19. NOT USED

20. F.E. @ CORRIDORS SEE A86 EXTINGUISHER DETAILS. LOCAT O.C. EACH FLOOR, MAX. CABINE RATED WHEN PENETRATING RA ASSEMBLIES.

![](_page_34_Picture_24.jpeg)

OCONTROL	21. BATH FANS: SEE 8/A860.
CES TO BE	22. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE A860.
OF DOOR	23. SHAFT WALL INTERSECTIONS WITH STANDARD WALLS SEE A860.
CHENS AND	24. AT ALL BEARING STUDS WITH PIPE PENETRATIONS, STRAP PLATES AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF WALL.
'FROM	25. NOT USED
	26. SEE A840 FOR ROOF ACCESS DETAILS.
	27. ALL STEEL BEAMS AND COLUMNS MUST BE FIREPROOFED. SEE SHEET A860.
NUR	28. SEE INTERIORS SHEETS FOR INTERIOR ELEVATIONS, FINISHES, SCHEDULES, AND DETAILS.
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61 FOR FIRE ATE F.E. 150' ETS MUST BE ATED WALL	30. WHEN NOT OTHERWISE SHOWN IN AN ELEVATION VIEW, SEE ENLARGED FLOOR PLANS FOR TAGS DENOTING CABINETRY AT KITCHEN ISLANDS.

31. CORRIDOR CEILINGS ARE TO BE COVERED WITH GYPSUM SHEATHING
PER FLOOR ASSEMBLY. CEILINGS DROPPED FOR MECH. AT CORRIDORS ARE NOTED ON OVERALL BUILDING
PLANS. KEEP DROPPED CEILINGS AS TIGHT/HIGH AS POSSIBLE.

32. NOT USED

33. GC SHALL COORDINATE PATH OF ROOF OVERFLOW DRAIN LEADERS THROUGH FLOOR TRUSSES AT SECOND FLOOR FRAMING. SEE FLOOR PLANS AND RCP'S FOR LOCATIONS OF OVERFLOW DRAIN LEADERS.

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Unit S	chedule	e (Net SF	- Ove	rall)
Name	Count	Area	Mezz	Total SF
Unit 1-1	18	566 ft <sup>2</sup>	0 ft <sup>2</sup>	566 ft <sup>2</sup>
Unit 1-1M	4	566 ft <sup>2</sup>	188 ft <sup>2</sup>	754 ft <sup>2</sup>
Unit 1-2	4	551 ft <sup>2</sup>	0 ft <sup>2</sup>	551 ft <sup>2</sup>
Unit 1-2M	1	550 ft <sup>2</sup>	183 ft <sup>2</sup>	733 ft <sup>2</sup>
Unit 1-3	3	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
Unit 1-3 Type A	1	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
Unit 1-3M	1	647 ft <sup>2</sup>	216 ft <sup>2</sup>	863 ft <sup>2</sup>
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Unit 1-5	15	631 ft <sup>2</sup>	0 ft <sup>2</sup>	631 ft <sup>2</sup>
Unit 1-5M	2	625 ft <sup>2</sup>	208 ft <sup>2</sup>	833 ft <sup>2</sup>
Unit 2-1	5	759 ft <sup>2</sup>	0 ft <sup>2</sup>	759 ft <sup>2</sup>
Unit 2-2	4	852 ft <sup>2</sup>	0 ft <sup>2</sup>	852 ft <sup>2</sup>
Unit 2-2M	1	851 ft <sup>2</sup>	283 ft <sup>2</sup>	1,134 ft <sup>2</sup>
Unit 2-3	3	1,122 ft <sup>2</sup>	0 ft <sup>2</sup>	1,122 ft <sup>2</sup>
Unit 2-3 Type A	1	965 ft <sup>2</sup>	0 ft <sup>2</sup>	965 ft <sup>2</sup>
Unit 2-4M	1	810 ft <sup>2</sup>	270 ft <sup>2</sup>	1,080 ft <sup>2</sup>
Unit 3-3M	1	1,122 ft <sup>2</sup>	373 ft <sup>2</sup>	1,495 ft <sup>2</sup>
			-	

![](_page_34_Picture_31.jpeg)

1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

Civil and Structural Engineer BKBM Engineers 5930 Brooklyn Blvd. Minneapolis, MN 55429 763-843-0420

Mechanical Engineer Kenneth S. Kendle, P.E. 1900 Oakcrest Ave, Ste 1 Roseville, MN 55113 651.633.3955

Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Drawn By

Checked By

Project Number

te	9-29-2016

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Checke

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

![](_page_34_Picture_46.jpeg)

LINK WILSON REG. NO: 21629

![](_page_34_Picture_50.jpeg)

		•		
Name	Count	Area	Mezz	Total SF
Unit 1-1	18	566 ft <sup>2</sup>	0 ft <sup>2</sup>	566 ft <sup>2</sup>
Unit 1-1M	4	566 ft <sup>2</sup>	188 ft <sup>2</sup>	754 ft <sup>2</sup>
Unit 1-2	4	551 ft <sup>2</sup>	0 ft <sup>2</sup>	551 ft <sup>2</sup>
Unit 1-2M	1	550 ft <sup>2</sup>	183 ft <sup>2</sup>	733 ft <sup>2</sup>
Unit 1-3	3	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
Unit 1-3 Type A	1	658 ft <sup>2</sup>	0 ft <sup>2</sup>	658 ft <sup>2</sup>
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Unit 2-1	5	759 ft <sup>2</sup>	0 ft <sup>2</sup>	759 ft <sup>2</sup>
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Unit 3-3M	1	1,122 ft <sup>2</sup>	373 ft <sup>2</sup>	1,495 ft <sup>2</sup>
Grand total: 70				

![](_page_35_Figure_0.jpeg)

![](_page_35_Figure_2.jpeg)

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE TAKEN TO EXTERIOR FACE OF MASONRY AT CMU WALLS OR CENTER OF STUD AT FRAMED WALLS UNLESS NOTED OTHERWISE.

2. ALL DIMENSIONS AT INTERIOR WALLS ARE | 12. ALL WINDOWS WITHIN 3 TAKEN TO THE CENTER OF STUD. DIMENSIONS OF FURRING WALLS ARE TO FACE OF WALL.

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9. SEE A860 FOR FIRE BLOCKING @ PARTY WALL. SEE A860 FOR UNIT/ CORRIDOR FIRE BLOCKING.

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SWING SHALL BE TEMPERE

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17. SEE A500 - A502 FOR EX ELEVATIONS.

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19. NOT USED 20. F.E. @ CORRIDORS SEE

EXTINGUISHER DETAILS. LO O.C. EACH FLOOR, MAX. CAB 8. UNIT PARTY WALLS TO BE WALL TYPE P1, RATED WHEN PENETRATING ASSEMBLIES.

ARD CONTROL	21. BATH FANS: SEE 8/A860.
NANCES TO BE	22. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE A860.
30" OF DOOR	23. SHAFT WALL INTERSECTIONS WITH STANDARD WALLS SEE A860.
KITCHENS AND	24. AT ALL BEARING STUDS WITH PIPE PENETRATIONS, STRAP PLATES AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF WALL.
PLY FROM D.	25. NOT USED
NG	26. SEE A840 FOR ROOF ACCESS DETAILS.
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Unit Schedule (Net SF - Overall)				
Name	Count	Area	Mezz	Total SF
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Unit 2-2	4	852 ft <sup>2</sup>	0 ft <sup>2</sup>	852 ft <sup>2</sup>
Unit 2-2M	1	851 ft <sup>2</sup>	283 ft <sup>2</sup>	1,134 ft <sup>2</sup>
Unit 2-3	3	1,122 ft <sup>2</sup>	0 ft <sup>2</sup>	1,122 ft <sup>2</sup>
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Grand total: 70				

![](_page_35_Picture_29.jpeg)

1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

Civil and Structural Engineer BKBM Engineers

5930 Brooklyn Blvd. Minneapolis, MN 55429 763-843-0420

Mechanical Engineer Kenneth S. Kendle, P.E. 1900 Oakcrest Ave, Ste 1 Roseville, MN 55113 651.633.3955

Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

# Oaks Union Depot Apartments 244 4th St E

Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number	1577		
Date	9-29-2016		
Drawn By	Author		
Checked By	Checker		

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

LINK WILSON REG. NO: 21629

Level 4 - Floor Plan

As indicated

![](_page_35_Picture_48.jpeg)


		1
FLOOR PLAN GENERAL NOTES		
1. ALL DIMENSIONS AT EXTERIOR WALLS ARE TAKEN TO EXTERIOR FACE OF	10. SEE A861 FOR GYP. BOARD CONTROL JOINTS.	21. BATH FANS: SEE 8/A860.
MASONRY AT CMU WALLS OR CENTER OF STUD AT FRAMED WALLS UNLESS NOTED OTHERWISE.	11. ELECTRICAL APPURTENANCES TO BE MOUNTED FROM 15" - 48" AFF. SEE A011.	22. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE A860.
2. ALL DIMENSIONS AT INTERIOR WALLS ARE	12. ALL WINDOWS WITHIN 30" OF DOOR	23. SHAFT WALL INTERSECTIONS WITH STANDARD WALLS SEE A860.
DIMENSIONS OF FURRING WALLS ARE TO FACE OF WALL.	13. CABINET PULLS @ ALL KITCHENS AND BATHS.	24. AT ALL BEARING STUDS WITH PIPE PENETRATIONS, STRAP PLATES AS REQUIRED TO MAINTAIN STRUCTURAL
3. UNLESS NOTED OTHERWISE, WALLS WITHOUT DESIGNATION ARE TYPE I3A OR 13B.	14. SEPARATE SOFFIT SUPPLY FROM RETURN W/ GYPSUM BOARD.	INTEGRITY OF WALL. 25. NOT USED
4. 'FS' AT INTERIOR DIMENSIONS DENOTES	15. = CASED OPENING	26. SEE A840 FOR ROOF ACCESS DETAILS.
TO CENTER OF STUD WALL AND 'FOW' DENOTES FACE OF WALL.	16. NOT USED	27. ALL STEEL BEAMS AND COLUMNS MUST BE FIREPROOFED. SEE SHEET A860.
5. SEE SHEETS A012 AND A013 FOR EXTERIOR AND INTERIOR WALL TYPES.	17. SEE A500 - A502 FOR EXTERIOR ELEVATIONS.	28. SEE INTERIORS SHEETS FOR INTERIOR ELEVATIONS, FINISHES, SCHEDULES, AND
6. SEE SHEETS A012 AND A013 FOR FLOOR-	18. NOT USED	DETAILS.
CEILING & ROOF-CEILING ASSEMBLIES.	19. NOT USED	29. FURNITURE AND EQUIPMENT N.I.C.
7. CORRIDOR WALLS ARE WALL TYPE C2B, 2X6'S, UNLESS NOTED OTHERWISE.	20. F.E. @ CORRIDORS SEE A861 FOR FIRE EXTINGUISHER DETAILS. LOCATE F.E. 150'	30. WHEN NOT OTHERWISE SHOWN IN AN ELEVATION VIEW, SEE ENLARGED FLOOR PLANS FOR TAGS DENOTING CABINETRY
8. UNIT PARTY WALLS TO BE WALL TYPE P1, UNLESS NOTED OTHERWISE.	RATED WHEN PENETRATING RATED WALL ASSEMBLIES.	AT KITCHEN ISLANDS.
9. SEE A860 FOR FIRE BLOCKING @ PARTY WALL. SEE A860 FOR UNIT/ CORRIDOR FIRE BLOCKING.		

31. CORRIDOR CEILINGS ARE TO BE
COVERED WITH GYPSUM SHEATHING
PER FLOOR ASSEMBLY. CEILINGS
DROPPED FOR MECH. AT CORRIDORS
ARE NOTED ON OVERALL BUILDING
PLANS. KEEP DROPPED CEILINGS AS
TIGHT/HIGH AS POSSIBLE.

32. NOT USED

33. GC SHALL COORDINATE PATH OF ROOF OVERFLOW DRAIN LEADERS THROUGH FLOOR TRUSSES AT SECOND FLOOR FRAMING. SEE FLOOR PLANS AND RCP'S FOR LOCATIONS OF OVERFLOW DRAIN LEADERS.

34. ROOF DRAIN LEADERS AND OVERFLOW DRAIN LEADERS SHALL BE INSULATED FROM THE INTERIOR FACE OF THE EXTERIOR SHEATHING AND ALONG THE FULL LENGTH OF THE LEADER.

Unit Schedule (Net SF - Overall)				
Name	Count	Area	Mezz	Total SF
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Grand total: 70				



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Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

## Oaks Union Depot Apartments

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LINK WILSON REG. NO: 21629







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2. ALL DIMENSIONS AT INTERIOR WALLS ARE TAKEN TO THE CENTER OF STUD. DIMENSIONS OF FURRING WALLS ARE TO FACE OF WALL.

3. UNLESS NOTED OTHERWISE, WALLS WITHOUT DESIGNATION ARE TYPE I3A OR 13B.

4. 'FS' AT INTERIOR DIMENSIONS DENOTES DIMENSIONS TO FACE OF STUD WALL, 'CS' TO CENTER OF STUD WALL AND 'FOW' DENOTES FACE OF WALL.

5. SEE SHEETS A012 AND A013 FOR EXTERIOR AND INTERIOR WALL TYPES.

6. SEE SHEETS A012 AND A013 FOR FLOOR-CEILING & ROOF-CEILING ASSEMBLIES.

7. CORRIDOR WALLS ARE WALL TYPE C2B, 2X6'S, UNLESS NOTED OTHERWISE.

8. UNIT PARTY WALLS TO BE WALL TYPE P1, UNLESS NOTED OTHERWISE.

9. SEE A860 FOR FIRE BLOCKING @ PARTY WALL. SEE A860 FOR UNIT/ CORRIDOR FIRE BLOCKING.



			kaas wilson architects
RD CONTROL	21. BATH FANS: SEE 8/A860.	31. CORRIDOR CEILINGS ARE TO BE	
NCES TO BE SEE A011.	22. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE A860.	PER FLOOR ASSEMBLY. CEILINGS DROPPED FOR MECH. AT CORRIDORS ARE NOTED ON OVERALL BUILDING PLANS, KEEP DROPPED CEILINGS AS	1301 American Blvd. East. Suite 100 Bloomington, MN 55425
" OF DOOR	STANDARD WALLS SEE A860.	TIGHT/HIGH AS POSSIBLE.	tel: (612) 879-6000
TCHENS AND	24. AT ALL BEARING STUDS WITH PIPE PENETRATIONS, STRAP PLATES AS	32. NOT USED	www.kaaswilson.com
	REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF WALL.	33. GC SHALL COORDINATE PATH OF ROOF OVERFLOW DRAIN LEADERS	Civil and Structural Engineer
LY FROM	25. NOT USED	FLOOR FRAMING. SEE FLOOR PLANS AND	5930 Brooklyn Blvd.
à	26. SEE A840 FOR ROOF ACCESS DETAILS.	DRAIN LEADERS.	Minneapolis, MN 55429 763-843-0420
FRIOR	27. ALL STEEL BEAMS AND COLUMNS MUST BE FIREPROOFED. SEE SHEET A860.	34. ROOF DRAIN LEADERS AND OVERFLOW DRAIN LEADERS SHALL BE INSULATED FROM THE INTERIOR FACE	
	28. SEE INTERIORS SHEETS FOR INTERIOR ELEVATIONS, FINISHES, SCHEDULES, AND DETAILS.	OF THE EXTERIOR SHEATHING AND ALONG THE FULL LENGTH OF THE LEADER.	Mechanical Engineer Kenneth S. Kendle, P.E.
	29. FURNITURE AND EQUIPMENT N.I.C.		Roseville, MN 55113
A861 FOR FIRE CATE F.E. 150' NETS MUST BE RATED WALL	30. WHEN NOT OTHERWISE SHOWN IN AN ELEVATION VIEW, SEE ENLARGED FLOOR PLANS FOR TAGS DENOTING CABINETRY AT KITCHEN ISLANDS.		651.633.3955
			Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

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Grand total: 70				

Interior Designer
BDH+Young
7001 France Ave S #200
Edina, MN 55435
952-893.9020

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number	1577
Date	9-29-2016
	Author

iawii by	700101
hecked By	Checker

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LINK WILSON REG. NO: 21629

Level 6 - Floor Plan





FLOOR PLAN GENERAL NOTES

1. ALL DIMENSIONS AT EXTERIOR WALLS ARE TAKEN TO EXTERIOR FACE OF MASONRY AT CMU WALLS OR CENTER OF STUD AT FRAMED WALLS UNLESS NOTED OTHERWISE.

2. ALL DIMENSIONS AT INTERIOR WALLS ARE TAKEN TO THE CENTER OF STUD. DIMENSIONS OF FURRING WALLS ARE TO FACE OF WALL.

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4. 'FS' AT INTERIOR DIMENSIONS DENOTES DIMENSIONS TO FACE OF STUD WALL, 'CS' TO CENTER OF STUD WALL AND 'FOW' DENOTES FACE OF WALL.

5. SEE SHEETS A012 AND A013 FOR EXTERIOR AND INTERIOR WALL TYPES.

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9. SEE A860 FOR FIRE BLOCKING @ PARTY WALL. SEE A860 FOR UNIT/ CORRIDOR FIRE BLOCKING.

### 10. SEE A861 FOR GYP. I JOINTS. 11. ELECTRICAL APPURTE MOUNTED FROM 15" - 48" / 12. ALL WINDOWS WITHI

SWING SHALL BE TEMPE 13. CABINET PULLS @ AL BATHS.

14. SEPARATE SOFFIT S RETURN W/ GYPSUM BO 15. \_\_\_\_\_ = CASED OPE

16. NOT USED

17. SEE A500 - A502 FOR ELEVATIONS.

18. NOT USED

19. NOT USED

20. F.E. @ CORRIDORS S EXTINGUISHER DETAILS. O.C. EACH FLOOR, MAX. RATED WHEN PENETRAT ASSEMBLIES.

			kaas
			wilson
BOARD CONTROL	21. BATH FANS: SEE 8/A860.	31. CORRIDOR CEILINGS ARE TO BE COVERED WITH GYPSUM SHEATHING	
TENANCES TO BE 3" AFF. SEE A011.	22. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE A860.	PER FLOOR ASSEMBLY. CEILINGS DROPPED FOR MECH. AT CORRIDORS ARE NOTED ON OVERALL BUILDING	1301 American Blvd. East. Suite 100
IN 30" OF DOOR	23. SHAFT WALL INTERSECTIONS WITH STANDARD WALLS SEE A860.	PLANS. KEEP DROPPED CEILINGS AS TIGHT/HIGH AS POSSIBLE.	Bloomington, MN 55425 tel: (612) 879-6000
LL KITCHENS AND	24. AT ALL BEARING STUDS WITH PIPE PENETRATIONS, STRAP PLATES AS	32. NOT USED	fax: (612) 879-6666 www.kaaswilson.com
SUPPLY FROM	INTEGRITY OF WALL.	33. GC SHALL COORDINATE PATH OF ROOF OVERFLOW DRAIN LEADERS THROUGH FLOOR TRUSSES AT SECOND	Civil and Structural Engineer
ARD.	25. NOT USED	FLOOR FRAMING. SEE FLOOR PLANS AND RCP'S FOR LOCATIONS OF OVERFLOW	5930 Brooklyn Blvd.
ENING	26. SEE A840 FOR ROOF ACCESS DETAILS.	DRAIN LEADERS.	Minneapolis, MN 55429 763-843-0420
REXTERIOR	27. ALL STEEL BEAMS AND COLUMNS MUST BE FIREPROOFED. SEE SHEET A860.	34. ROOF DRAIN LEADERS AND OVERFLOW DRAIN LEADERS SHALL BE INSULATED FROM THE INTERIOR FACE	
	28. SEE INTERIORS SHEETS FOR INTERIOR ELEVATIONS, FINISHES, SCHEDULES, AND DETAILS.	OF THE EXTERIOR SHEATHING AND ALONG THE FULL LENGTH OF THE LEADER.	Mechanical Engineer Kenneth S. Kendle, P.E.
	29. FURNITURE AND EQUIPMENT N.I.C.		1900 Oakcrest Ave, Ste 1 Roseville MN 55113
SEE A861 FOR FIRE . LOCATE F.E. 150' CABINETS MUST BE TING RATED WALL	30. WHEN NOT OTHERWISE SHOWN IN AN ELEVATION VIEW, SEE ENLARGED FLOOR PLANS FOR TAGS DENOTING CABINETRY AT KITCHEN ISLANDS.		651.633.3955
			Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive

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Eden Prairie, Minnesota 55343

952-933-3222

Interior Designer BDH+Young

Edina, MN 55435

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7001 France Ave S #200

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#### ROOF PLAN NOTES

1. SEE A006 FOR TYPICAL ROOF/CEILING CONSTRUCTION.

2. PROVIDE RATED ROOF ACCESS HATCHES, AS SHOWN ON PLANS - SEE A350, A620, A840, AND SPECIFICATIONS.

3. SEE SPECIFICATIONS FOR ROOF MEMBRANE SYSTEM AND ACCESSORIES.

4. SEE A840 FOR ROOF FRAMING AND FLASHING DETAILS.

5. SEE MECHANICAL PLANS FOR LOCATIONS OF MECHANICAL EQUIPMENT. PROVIDE FALL PROTECTION FOR ANY ROOF OPENING OR EQUIPMENT LOCATED WITHIN 10' OF A ROOF EDGE.

6. PROVIDE SPLASH BLOCKS AT ANY DOWN SPOUTS NOT CONNECTED TO BELOW GRADE PIPE, AS WELL AS AT ANY DISCHARGE POINT FOR OVERFLOW ROOF DRAINS. INSTALL SPLASH BLOCKS WITH POSITIVE SLOPE AWAY FROM THE BUILDING AND ENSURE ADEQUATE LENGTH TO AVOID EROSION AT SPLASH BLOCK DISCHARGE EDGE.



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REFLECTED CEILING PLAN GENERAL NOTES

1. CEILINGS HEIGHTS INDICATED ON PLAN (E.G., 9'-0") ARE FROM FINISHED FLOOR OF LEVEL OF PLAN SHOWN.

2. ACOUSTICAL TILE CEILING GRIDS TO BE CENTERED IN RECTANGULAR ROOMS OR CENTERED BETWEEN LONGEST WALLS OF IRREGULARLY SHAPED ROOMS UNLESS OTHERWISE NOTED.

3. AT SUSPENDED GYP. BD CEILINGS, PROVIDE CONTROL JOINTS PER INDÚSTRY STANDARDS, VERIFY CONTROL JOINT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

4. ALL DIMENSIONS AT INTERIOR WALLS ARE TAKEN AT THE CENTER OF WALL UNLESS OTHERWISE NOTED.

5. 'FS' AT INTERIOR DIMENSIONS DENOTES DIMENSIONS TO FACE OF STUD, 'CS' TO CENTER OF STUD AND 'FOW' DENOTES FACE OF WALL.

6. FOR WALLS THAT PENETRATE CEILINGS SEE WALL TYPES SHOWN ON THE FLOOR PLAN.

7. SEE SHEET A006 FOR EXTERIOR AND INTERIOR WALL TYPE ASSEMBLIES.

8. SEE SHEET A006 FOR FLOOR-CEILING & ROOF-CEILING ASSEMBLIES.

9. COORDINATE ALL OVERHEAD MECHANICAL, ELECTRICAL, AND DECOR WORK. FOR DIFFUSER AND RETURN GRILL SIZES SEE MECHANICAL PLANS. FOR LIGHT FIXTURE TYPES SEE ELECTRICAL LIGHTING PLANS.

10. BATH FANS: SEE DETAIL X/AXXX.

11. RECESSED FIXTURES IN WOOD FRAME STRUCTURE: SEE 16/A860.

12. SPRINKLER HEADS ARE NOT SHOWN. LOCATE ALL SPRINKLER HEADS IN THE CENTER OF CEILING TILES.

13. OPEN GRID CEILINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH NFPA STANDARDS. MINIMUM CLEARANCE OF 24" SHALL BE MAINTAINED BETWEEN TOP OF OPEN GRID CEILINGS AND SPRINKLER DEFLECTORS. LOCATE DEFLECTORS NOT MORE THAN 1" BELOW THE CEILING. AT PERIMETER COVES WHERE OBSTRUCTIONS DO NOT EXIST THE SPRINKLER HEADS SHALL BE LOCATED A MIN. OF 1" AND A MAX. OF 12" BELOW THE CEILING.

14. MECHANICAL SOFFITS AT UNITS 8'-0" AFF, TYP. CONTRACTOR TO COORDINATE SOFFIT WIDTH AND DEPTH WITH DUCT SIZES. TYPICAL SOFFIT AT 2'-0" WIDE, 1'-0" DEEP.







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3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

Date	9-29-201
Drawn By	Autho
Checked By	Checke

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

Me

LINK WILSON REG. NO: 21629

1577

Level 1 RCP











2 Mezzanine Level - Enlarged Commons 1/4" = 1'-0"





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Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

# Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

9-29-2016

Date Drawn By

Checked By

Checker

Author

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Enlarged Plans 1/4" = 1'-0"

A4(



UNIT PLAN GENERAL NOTES

**1. FENESTRATION SHOWN IN UNIT** PLANS VARIES -- SEE OVERALL FLOOR PLANS FOR FENESTRATION CONDITIONS AT EACH UNIT.

2.ALL TUB & SHOWER SURROUNDS TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION.

3.PROVIDE BACKING IN ALL UNIT BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR FUTURE GRAB BARS.

4. ALL WINDOWS WITHIN 30" OF DOOR SWING SHALL BE TEMPERED.

5. FURNITURE, N.I.C.

6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE **BACKING FOR CLOSET & LAUNDRY** SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.

11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.

12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.

#### UNIT FLOORING KEY

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CAF
TILE



/OOD

RPET

UNIT KITCHEN NOTES

1. PROVIDE WALL BASE BEHIND

REFRIGERATOR. 2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER CABINETS AND APPLIANCES.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.

7. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

8. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS).

9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS.

10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS.

11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE RANGE CUT-OUTS WITH COUNTERTOP AND APPLIANCE SUPPLIERS.

12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPE B UNITS.

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.

#### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL ON A010

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.



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LINK WILSON REG. NO: 21629

Unit Plans 1-1, 1-2 As indicated



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### **UNIT KITCHEN NOTES**

1. PROVIDE WALL BASE BEHIND REFRIGERATOR.

SPLASH AT WALL(S).

SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER CABINETS AND APPLIANCES.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.

7. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

8. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS, ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS).

9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS.

10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS.

11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE RANGE CUT-OUTS WITH COUNTERTOP AND APPLIANCE SUPPLIERS.

12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPE B UNITS.

CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE

2. CAULK BACKSPLASH AND END

3. VERIFY ALL APPLIANCE SIZES WITH

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH

ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.

#### UNIT BATH NOTES

ON A010

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S). 2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

AND PUBLIC BATHROOMS. SEE DETAIL

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.

UNIT PLAN GENERAL NOTES

1. FENESTRATION SHOWN IN UNIT PLANS VARIES -- SEE OVERALL FLOOR PLANS FOR FENESTRATION CONDITIONS AT EACH UNIT.

TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION. 3.PROVIDE BACKING IN ALL UNIT BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR

2.ALL TUB & SHOWER SURROUNDS

4. ALL WINDOWS WITHIN 30" OF DOOR SWING SHALL BE TEMPERED.

5. FURNITURE, N.I.C.

FUTURE GRAB BARS.

6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE **BACKING FOR CLOSET & LAUNDRY** SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.

11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.

12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.





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1577 Project Number 9-29-2016

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LINK WILSON REG. NO: 21629

Checke









Unit Plans 1-3, 1-3 Type A

As indicated









30" Ref.

EP1.2490 SBF3 (ADA)

 $\begin{array}{r} \hline & \text{Unit 1-3 Type A Kitchen Elevation1} \\ \hline & 3/8" = 1'-0" \end{array}$ 



(1a) Unit 1-4 Kitchen 1 3/8" = 1'-0"





1b Unit 1-4 Kitchen 2 3/8" = 1'-0"







(1c) Unit 1-4 Bathroom Elevation 3/8" = 1'-0"

(2a) Unit 1-5 Bathroom Elevation3/8" = 1'-0"



SEE A310 FOR STORE FRONT WINDOWS ON FIRST FLOOR

- DETAIL AT FIRST FLOOR ONLY

#### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL ON A010

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND CABINETS AND APPLIANCES. TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.

#### UNIT KITCHEN NOTES

1. PROVIDE WALL BASE BEHIND REFRIGERATOR.

2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.

7. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

8. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS, ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS).

9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS.

10. PROVIDE GREEN TYPE 'X' GYP BOARD AT ALL PLUMBING WALLS.

11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE RANGE CUT-OUTS WITH COUNTERTOP AND APPLIANCE SUPPLIERS.

12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPË B UNITS.

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.

UNIT PLAN GENERAL NOTES

1. FENESTRATION SHOWN IN UNIT PLANS VARIES -- SEE OVERALL FLOOR PLANS FOR FENESTRATION CONDITIONS AT EACH UNIT.

2.ALL TUB & SHOWER SURROUNDS TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION.

**3.PROVIDE BACKING IN ALL UNIT** BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR FUTURE GRAB BARS.

4. ALL WINDOWS WITHIN 30" OF DOOR SWING SHALL BE TEMPERED.

5. FURNITURE, N.I.C.

6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE BACKING FOR CLOSET & LAUNDRY SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.

11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.

12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.

UNIT FLOORING KEY



kaas wilson architects

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Unit Plans 1-4, 1-5





1) Unit 2-1 <sup>1</sup> 3/8" = 1'-0"



1. PROVIDE WALL BASE BEHIND REFRIGERATOR.

2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE

DRAWERS AND DOORS AND OTHER

5. CAULK AROUND ALL ELECTRICAL,

6. PROVIDE FINISH END PANELS AT ALL

7. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR 48" ABOVE FINISHED FLOOR.

CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS, CABINETS, AND NO SHELVES AT 15"

9. PULLS ON CABINET DOORS AND

10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS.

BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND OVERLAP THE CLEAR FLOOR SPACE COORDINATE RANGE CUT-OUTS WITH

12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES &

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UNIT PLAN GENERAL NOTES

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6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE **BACKING FOR CLOSET & LAUNDRY** SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

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12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.

UNIT FLOORING KEY



### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL ON A010

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.



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here

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Unit Plans 2-1, 2-2









(1e) Unit 2-3 Type A - Bath 1 3/8" = 1'-0"

UNIT KITCHEN NOTES 1. PROVIDE WALL BASE BEHIND REFRIGERATOR. 2. CAULK BACKSPLASH AND END SPLASH AT WALL(S). 3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS. 4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER CABINETS AND APPLIANCES. 5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS. 6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES. 7. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER. 8. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS, ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS). 9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS. 10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS. 11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE RANGE CUT-OUTS WITH COUNTERTOP AND APPLIANCE SUPPLIERS. 12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPE B UNITS. 13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.

**UNIT PLAN GENERAL NOTES** 

1. FENESTRATION SHOWN IN UNIT PLANS VARIES -- SEE OVERALL FLOOR PLANS FOR FENESTRATION CONDITIONS AT EACH UNIT.

2.ALL TUB & SHOWER SURROUNDS TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION.

3.PROVIDE BACKING IN ALL UNIT BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR FUTURE GRAB BARS.

4. ALL WINDOWS WITHIN 30" OF DOOR SWING SHALL BE TEMPERED.

5. FURNITURE, N.I.C.

6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE BACKING FOR CLOSET & LAUNDRY SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.

11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.

12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.

#### UNIT FLOORING KEY

WOOD CARPET TILE

#### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL ON A010

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.



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### Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

1577 Project Number 9-29-2016 Date

Drawn By

Checked By

Checker

Author

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REL

LINK WILSON REG. NO: 21629









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### UNIT FLOORING KEY WOOD



CARPET TILE

UNIT KITCHEN NOTES

1. PROVIDE WALL BASE BEHIND REFRIGERATOR.

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4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER CABINETS AND APPLIANCES.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.

. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

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13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

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15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.



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LINK WILSON REG. NO: 21629



Unit Plan 2-3



UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

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7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET



(1) Unit 1-1M <sup>1</sup>3/8" = 1'-0"





#### UNIT PLAN GENERAL NOTES

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# UNIT FLOORING KEY



UNIT KITCHEN NOTES

1. PROVIDE WALL BASE BEHIND REFRIGERATOR.

TILE

2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

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LINK WILSON REG. NO: 21629

Unit Plan 1-1M

As indicated

#### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL ON A010

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.







(1c) Unit 1-2M - Kitchen 2 3/8" = 1'-0"

2a Unit 1-2M - Bath 2 3/8" = 1'-0"





2 Unit 1-2M Mezzanine 3/8" = 1'-0"

3 Unit 1-2M - Stair 3/8" = 1'-0"

UNIT PLAN GENERAL NOTES	UNIT BATH NOTES
1. FENESTRATION SHOWN IN UNIT PLANS VARIES SEE OVERALL FLOOB PLANS FOR FENESTRATION	1. CAULK VANITY BACKSPLASH A END SPLASH AT WALL(S).
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FUTURE GRAB BARS. 4. ALL WINDOWS WITHIN 30" OF DOOR SWING SHALL BE TEMPERED.	4. PROVIDE GREEN TYPE X GYP BOARD AT ALL PLUMBING & VAL WALLS AND BEHIND ALL SHOWE TUB WALLS.
5. FURNITURE, N.I.C.	5. CAULK AROUND ALL ELECTRI MECHANICAL, AND PLUMBING
6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT	PENETRATIONS.
<ul> <li>INSULATION.</li> <li>7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.</li> </ul>	ONE 24" TOWEL BAR OVER TOTLE ONE 24" TOWEL BAR IN LOCATIC DEPICTED ON PLAN, LOCATED 4 TYPICAL. PROVIDE ONE TP HOLE PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.
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Unit Plan 1-2M











3 Unit 1-3M - Stair 3/8" = 1'-0"

#### UNIT BATH NOTES

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2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER CABINETS AND APPLIANCES.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.

7. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

8. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS, ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS).

9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS.

10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS.

11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE RANGE CUT-OUTS WITH COUNTERTOP AND APPLIANCE SUPPLIERS.

12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPE B UNITS.

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.



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Mechanical Engineer Kenneth S. Kendle, P.E. 1900 Oakcrest Ave, Ste 1 Roseville, MN 55113 651.633.3955

Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

### Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

Drawn By

Date

Checked By

Author Checker

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LINK WILSON REG. NO: 21629



Unit Plan 1-3M









2 Unit 1-5M Mezzanine 3/8" = 1'-0"

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#### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL ON A010

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND 4. ALL WINDOWS WITHIN 30" OF TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.



1. FENESTRATION SHOWN IN UNIT PLANS VARIES -- SEE OVERALL FLOOR PLANS FOR FENESTRATION CONDITIONS AT EACH UNIT.

2.ALL TUB & SHOWER SURROUNDS TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION.

**3.PROVIDE BACKING IN ALL UNIT** BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR FUTURE GRAB BARS.

DOOR SWING SHALL BE TEMPERED.

5. FURNITURE, N.I.C.

6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE BACKING FOR CLOSET & LAUNDRY SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.

11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.

12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.



### TILE

#### UNIT KITCHEN NOTES

1. PROVIDE WALL BASE BEHIND REFRIGERATOR.

2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER CABINETS AND APPLIANCES.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL SUPERVISION AND THAT I AM A EXPOSED SIDES.

7. PROVIDE MFGR'S CABINET SURFACE MINNESOTA. AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

Sim8. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS, ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS).

9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS.

10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS.

11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE RANGE CUT-OUTS WITH COUNTERTOP AND APPLIANCE SUPPLIERS.

12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPE B UNITS.

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.

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Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

## Oaks Union Depot Apartments

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Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

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Unit Plan 1-5M











× 2'-10" 8" 3'-6"

<u>UNIT KI</u> 1. PRO' REFRIG

2. CAU SPLASH 3. VERI SUPPLI CLEARA

4. CABI LAYOUT CLEAR/ DRAWE CABINE

5. CAUL MECHAN PENETF 6. PROV EXPOSE

7. PRO TOE KIC AND EX NEEDEI BACKEF FLUSH

8. PRO CABINE SHELVE ONE SH CABINE HIGH C

9. PULL DRAWE 10. PRC BOARD

11. PRO BACKSI TOPS, I DROP-I COORE COUNT SUPPLI

12. MOU IN ALL 1 ALL TYF 13. PRC WALL C CABINE

14. SEE HEIGHT CLEAR MICRO

15. ALL ANNOT CONTI







(2a) Unit 2-2M - Bath 2 3/8" = 1'-0"



KITCHEN NOTES	UNIT BATH NOTES	UNIT PLAN GENERAL NOTES	Kaas
ROVIDE WALL BASE BEHIND RIGERATOR.	1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).	1. FENESTRATION SHOWN IN UNIT PLANS VARIES SEE OVERALL FLOOD PLANS FOR FENESTRATION	architects
AULK BACKSPLASH AND END SH AT WALL(S).	2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-	CONDITIONS AT EACH UNIT.	1301 American Blvd. East.
RIFY ALL APPLIANCE SIZES WITH LIER. VERIFY ALL APPLIANCE RANCES WITH CABINETS.	AND PUBLIC BATHROOMS. SEE DETAIL ON A010	TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION.	Suite 100 Bloomington, MN 55425 tel: (612) 879-6000
BINET SUPPLIER TO ADJUST UT FOR NECESSARY	3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.	3.PROVIDE BACKING IN ALL UNIT BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR	fax: (612) 879-6666 www.kaaswilson.com
RANCES AT CORNERS FOR VERS AND DOORS AND OTHER NETS AND APPLIANCES.	4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND	4. ALL WINDOWS WITHIN 30" OF	Civil and Structural Engineer BKBM Engineers
ULK AROUND ALL ELECTRICAL, ANICAL, AND PLUMBING	5. CAULK AROUND ALL ELECTRICAL,	5. FURNITURE, N.I.C.	5930 Brooklyn Blvd. Minneapolis, MN 55429
OVIDE FINISH END PANELS AT ALL SED SIDES.	6. ALL UNIT BATHROOMS TO RECEIVE	6. ALL CORRIDOR WALLS, WALLS BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT	703-043-0420
OVIDE MFGR'S CABINET SURFACE KICK AT CABINET TOE KICK SPACE EXPOSED CABINET SIDES (IF	ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL BROVIDE ONE TO HOLDER	INSULATION. 7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE	Mechanical Engineer Kenneth S. Kendle, P.E.
DED). TRIM OFF MFGR'S TOE KICK (ER AT FACE OF END CABINET FOR H CORNER.	PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.	TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.	Roseville, MN 55113 651.633.3955
OVIDE STANDARD UPPER NET ADJUSTABLE SHELVES (TWO	7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.	8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE	
SHELF AT 18" AND 24" HIGH NETS, AND NO SHELVES AT 15" CABINETS).	OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.	9. SEE A011 FOR TYPICAL KITCHEN &	Electrical Enginner Wunderlich-Malec
ILLS ON CABINET DOORS AND VERS AT ALL UNITS.	9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET	BATH CLEARANCE REQUIREMENTS. 10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND	Eden Prairie, Minnesota 55343 952-933-3222
ROVIDE GREEN TYPE 'X' GYP. RD AT ALL PLUMBING WALLS.	FUNCTIONALITY.	FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.	
ROVIDE A CONTINUOUS 3" (SPLASH BEHIND ALL COUNTER 5, INCLUDING BEHIND SLIDE-IN AND P-IN RANGES. G.C. TO		11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.	BDH+Young 7001 France Ave S #200
RDINATE RANGE CUT-OUTS WITH NTERTOP AND APPLIANCE PLIERS.		12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL BETLIENS TYPICAL	Edina, MN 55435 952-893.9020
OUNT UPPER CABINETS 46" A.F.F. L Type A UNITS, AND 54" A.F.F. IN 'YPE B UNITS.			Oaks Union Depot
ROVIDE A WOOD VALANCE BELOW - CABINETS ABOVE SINKS - MATCH			Apartments
EE SHEET A470 FOR TYP CABINET HTS, CABINET PULL LOCATIONS,		CARPET	244 4th St E Saint Paul MN 55101-1401
R SPACES AT APPLIANCES & O CABINET LOCATIONS.		TILE	Oaks Properties, LLC
L CABINE I SIZES AND TYPE TATIONS ARE BASED ON THE MID- INENT CABINETRY CATALOG.		L	3550 East 46th Street
			Suite 120 Minneapolis, MN 55406
			Project Number 1577
			Date 9-29-2016



Unit Plan 2-2M

Drawn By

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LINK WILSON REG. NO: 21629

Author

Checker



1 Unit 2-4M 3/8" = 1'-0"



<u>UNIT PLAN GE</u>

1. FENESTRA PLANS VARIE FLOOR PLANS

2.ALL TUB & S TO BE FULLY GRAB BAR INS 3.PROVIDE B

BATHROOMS DETAILS ON S FUTURE GRAI 4. ALL WINDO

DOOR SWING 5. FURNITURE

6. ALL CORRIE BETWEEN UN WALLS TO RI INSULATION.

7. ALL ELECTR OUTLETS AND TO BE MOUNT 48" ABOVE FII

8. PROVIDE B FOR INSTALL KITCHEN CAE BACKING FO SHELVING (R

9. SEE A011 F0 BATH CLEARA

10. PROVIDE 3 FOR ALL APPL FIXTURES. SE

11. THE CLEA REQ'D FOR OI OVERLAP THE AREA(S) FOR

12. ALL GYP. RECEIVE LEV FINISH WALL 

ENERAL NOTES	UNIT BATH NOTES	UNIT KITCHEN NOTES	architects
ATION SHOWN IN UNIT ES SEE OVERALL	1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).	1. PROVIDE WALL BASE BEHIND REFRIGERATOR.	
IS FOR FENESTRATION AT EACH UNIT.	2. PROVIDE HDWD. VENEER PIPE	2. CAULK BACKSPLASH AND END	1301 American Blvd. East. Suite 100
SHOWER SURROUNDS	PROTECTION PANEL AT ALL ROLL- UNDER SINKS IN ACCESSIBLE UNITS	SPLASH AT WALL(S).	Bloomington, MN 55425 tel: (612) 879-6000
ISTALLATION.	ON A010	SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.	fax: (612) 879-6666 www.kaaswilson.com
ACKING IN ALL UNIT S FOR GRAB BARS PER	3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.	4. CABINET SUPPLIER TO ADJUST	Civil and Structural Engineer
AB BARS.	4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE	CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER	BKBM Engineers 5930 Brooklyn Blvd.
OWS WITHIN 30" OF G SHALL BE TEMPERED.	WALLS AND BEHIND ALL SHOWER AND TUB WALLS.	CABINETS AND APPLIANCES.	Minneapolis, MN 55429
E, N.I.C.	5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING	5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.	100-040-0420
IDOR WALLS, WALLS NITS AND PLUMBING ECEIVE SOUND BATT	6. ALL UNIT BATHROOMS TO RECEIVE	6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.	Mechanical Engineer
BICAL SWITCHES	ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN LOCATED 48" AFE	7. PROVIDE MFGR'S CABINET SURFACE	1900 Oakcrest Ave, Ste 1
ID THERMOSTATS ARE ITED BETWEEN 15" AND INISHED FLOOR.	TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.	AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.	651.633.3955
BACKING NECESSARY ATION OF UPPER BINETS, PROVIDE	7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.	8. PROVIDE STANDARD UPPER	Electrical Enginner
R CLOSET & LAUNDRY REF. A470)	8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT	SHELVES AT 30" OR 36" HIGH CABINETS, ONE SHELF AT 18" AND 24" HIGH	Wunderlich-Malec 6101 Blue Circle Drive
FOR TYPICAL KITCHEN &	9. G.C. TO COORDINATE FAUCET	HIGH CABINETS).	Eden Prairie, Minnesota 55343 952-933-3222
30" X 48" CLEAR SPACE	MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSUBE PROPER FAUCET	9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS.	
EE SHEET A011 FOR DETAILS.	FUNCTIONALITY.	10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS.	Interior Designer BDH+Young
AR FLOOR SPACE DNE FIXTURE MAY		11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER	7001 France Ave S #200 Edina, MN 55435
IE CLEAR FLOOR SPACE R ANOTHER.		TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE BANGE CUT-OUTS WITH	952-893.9020
. BD. SURFACES TO VEL 4 SMOOTH FINISH.		COUNTERTOP AND APPLIANCE SUPPLIERS.	
. RETURNS, TYPICAL.		12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN	Oaks Union Depot
ING KEY	~	ALL TYPE B UNITS.	Apartments
WOOD		13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.	244 4th St E Saint Paul MN 55101-1401
CARPET		14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS	Oaks Properties, LLC
		15. ALL CABINET SIZES AND TYPE	3550 East 46th Street
		ANNOTATIONS ARE BASED ON THE MID- CONTINENT CABINETRY CATALOG.	Suite 120 Minneapolis, MN 55406
			Project Number 1577







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#### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S). 2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-

AND PUBLIC BATHROOMS. SEE DETAIL

ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND CABINETS AND APPLIANCES.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN

7. ALL BATHROOM MIRRORS TO BE

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT

MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET





#### UNIT KITCHEN NOTES

. PROVIDE WALL BASE BEHIND REFRIGERATOR.

2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER

5. CAULK AROUND ALL ELECTRICAL MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.

. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS).

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12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPE B UNITS.

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.

UNIT PLAN GENERAL NOTES

**1. FENESTRATION SHOWN IN UNIT** PLANS VARIES -- SEE OVERALL FLOOR PLANS FOR FENESTRATION

CONDITIONS AT EACH UNIT. 2.ALL TUB & SHOWER SURROUNDS

TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION.

3.PROVIDE BACKING IN ALL UNIT BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR FUTURE GRAB BARS.

4. ALL WINDOWS WITHIN 30" OF DOOR SWING SHALL BE TEMPERED.

5. FURNITURE, N.I.C. 6. ALL CORRIDOR WALLS, WALLS

BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE BACKING FOR CLOSET & LAUNDRY SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.

11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.

12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.

WOOD

CARPET

UNIT FLOORING KEY



Unit Plan 3-3M



kaas wilson architects

1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

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2 Unit 3-3M Mezzanine (Type B) 3/8" = 1'-0"



#### UNIT BATH NOTES

1. CAULK VANITY BACKSPLASH AND END SPLASH AT WALL(S).

2. PROVIDE HDWD. VENEER PIPE PROTECTION PANEL AT ALL ROLL-UNDER SINKS IN ACCESSIBLE UNITS AND PUBLIC BATHROOMS. SEE DETAIL ON A010

3. COORDINATE SHOWER HEAD AND ROD HEIGHTS WITH SUPPLIER.

4. PROVIDE GREEN TYPE X GYP. BOARD AT ALL PLUMBING & VALVE WALLS AND BEHIND ALL SHOWER AND CABINETS AND APPLIANCES. TUB WALLS.

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. ALL UNIT BATHROOMS TO RECEIVE ONE 24" TOWEL BAR OVER TOILET & ONE 24" TOWEL BAR IN LOCATION DEPICTED ON PLAN, LOCATED 48" AFF, TYPICAL. PROVIDE ONE TP HOLDER. PROVIDE ONE ROBE HOOK IN LOCATION DEPICTED IN PLAN.

7. ALL BATHROOM MIRRORS TO BE 42" HIGH x WIDTH OF VANITY U.N.O.

8. INSTALL VANITY COUNTER ELEC. OUTLETS ADJACENT TO VANITY, NOT ABOVE VANITY.

9. G.C. TO COORDINATE FAUCET MOUNTING LOCATION W/ FIXTURE SUPPLIER & COUNTERTOP SUPPLIER TO ENSURE PROPER FAUCET FUNCTIONALITY.

#### UNIT KITCHEN NOTES

I. PROVIDE WALL BASE BEHIND REFRIGERATOR.

2. CAULK BACKSPLASH AND END SPLASH AT WALL(S).

3. VERIFY ALL APPLIANCE SIZES WITH SUPPLIER. VERIFY ALL APPLIANCE CLEARANCES WITH CABINETS.

4. CABINET SUPPLIER TO ADJUST LAYOUT FOR NECESSARY CLEARANCES AT CORNERS FOR DRAWERS AND DOORS AND OTHER

5. CAULK AROUND ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS.

6. PROVIDE FINISH END PANELS AT ALL EXPOSED SIDES.

7. PROVIDE MFGR'S CABINET SURFACE TOE KICK AT CABINET TOE KICK SPACE AND EXPOSED CABINET SIDES (IF NEEDED). TRIM OFF MFGR'S TOE KICK BACKER AT FACE OF END CABINET FOR FLUSH CORNER.

8. PROVIDE STANDARD UPPER CABINET ADJUSTABLE SHELVES (TWO SHELVES AT 30" OR 36" HIGH CABINETS, ONE SHELF AT 18" AND 24" HIGH CABINETS, AND NO SHELVES AT 15" HIGH CABINETS).

9. PULLS ON CABINET DOORS AND DRAWERS AT ALL UNITS.

10. PROVIDE GREEN TYPE 'X' GYP. BOARD AT ALL PLUMBING WALLS.

11. PROVIDE A CONTINUOUS 3" BACKSPLASH BEHIND ALL COUNTER TOPS, INCLUDING BEHIND SLIDE-IN AND DROP-IN RANGES. G.C. TO COORDINATE RANGE CUT-OUTS WITH COUNTERTOP AND APPLIANCE SUPPLIERS.

12. MOUNT UPPER CABINETS 46" A.F.F. IN ALL Type A UNITS, AND 54" A.F.F. IN ALL TYPE B UNITS.

13. PROVIDE A WOOD VALANCE BELOW WALL CABINETS ABOVE SINKS - MATCH CABINET FINISH.

14. SEE SHEET A470 FOR TYP CABINET HEIGHTS, CABINET PULL LOCATIONS, CLEAR SPACES AT APPLIANCES & MICRO CABINET LOCATIONS.

15. ALL CABINET SIZES AND TYPE ANNOTATIONS ARE BASED ON THE MID-CONTINENT CABINETRY CATALOG.

UNIT PLAN GENERAL NOTES

**1. FENESTRATION SHOWN IN UNIT** PLANS VARIES -- SEE OVERALL FLOOR PLANS FOR FENESTRATION CONDITIONS AT EACH UNIT.

2.ALL TUB & SHOWER SURROUNDS TO BE FULLY BACKED FOR FUTURE GRAB BAR INSTALLATION.

3.PROVIDE BACKING IN ALL UNIT BATHROOMS FOR GRAB BARS PER DETAILS ON SHEET A010 FOR FUTURE GRAB BARS.

4. ALL WINDOWS WITHIN 30" OF DOOR SWING SHALL BE TEMPERED.

5. FURNITURE, N.I.C. 6. ALL CORRIDOR WALLS, WALLS

BETWEEN UNITS AND PLUMBING WALLS TO RECEIVE SOUND BATT INSULATION.

7. ALL ELECTRICAL SWITCHES, OUTLETS AND THERMOSTATS ARE TO BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR.

8. PROVIDE BACKING NECESSARY FOR INSTALLATION OF UPPER KITCHEN CABINETS. PROVIDE BACKING FOR CLOSET & LAUNDRY SHELVING (REF. A470)

9. SEE A011 FOR TYPICAL KITCHEN & BATH CLEARANCE REQUIREMENTS.

10. PROVIDE 30" X 48" CLEAR SPACE FOR ALL APPLIANCES AND FIXTURES. SEE SHEET A011 FOR CLEARANCE DETAILS.

11. THE CLEAR FLOOR SPACE REQ'D FOR ONE FIXTURE MAY OVERLAP THE CLEAR FLOOR SPACE AREA(S) FOR ANOTHER.

12. ALL GYP. BD. SURFACES TO RECEIVE LEVEL 4 SMOOTH FINISH. FINISH WALL RETURNS, TYPICAL.

UNIT FLOORING KEY



kaas wilson architects

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Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

### Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

1577 Project Number

9-29-2016

Drawn By

Checked By

Date

Checker

Author

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VANITY LIGHT SEE ELEC.

WOOD CARPET TILE

Unit Plan 3-3M Mezzanine











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Exterior Material Tag Key
4.1 UTILITY BRICK VENEER
4.2 ARCHITECTURAL CAST STONE
5.1 PREFINISHED METAL CORNICE FASCIA
5.2 PREFINISHED METAL WALL PANELS FIRESTONE UC-500
5.3 PREFINISHED METAL CABLE GAURDRAIL
5.4 STEEL LINTEL - PAINTED
5.5 PREFINISHED METAL IVY SCREEN
5.6 PREFINISHED ALUMINUM BALCONY & RAIL
8.1 FIBERGLASS WINDOW
8.2 PREFINSHED METAL ARCHITECTURAL LOUVER
8.3 UNIT EXHAUST HOOD - PAINTED
8.4 ALUMINUM STOREFRONT
8.5 OVERHEAD GARAGE DOOR
8.6 PATIO DOOR
22.1 ARCHITECTURAL LIGHTING

Exterior Elevations 1/8" = 1'-0"















Exterior Material Tag Key
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		ar	kaas wilson chitects
1301 A Suite 1 Bloom tel: (6 fax: (6 www.k Civil a BKBM 5930 E Minnea 763-84	American Blv 00 ington, MN 5 12) 879-600 12) 879-666 aaswilson.co nd Structura Engineers Brooklyn Blvo apolis, MN 5 43-0420	rd. East. 55425 0 6 5 5 1 Enginee d. 5429	ər
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3550 E Suite 1 Minnea	East 46th Str 120 apolis, MN 5	reet 5406	
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Revision			
Rev. No.			

**Building Sections** 

3/16" = 1'-0" **A600** 





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**Building Sections** 

3/16" = 1'-0" A601





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**Building Sections** 

3/16" = 1'-0" A602





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**Unit 2-2M** 605

F

**Unit 2-2**505

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**Unit 2-2** 405

**Unit 2-2** 205

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Vesitbule

128

4

Bike Storage

4

Water Room 002

011

**Unit 2-2** 305

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STAIRWAY GENERAL NOTES
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1. WIDTH OF STAIRWAYS SHALL BE AS SPECIFIED IN DRAWINGS. WIDTH SHALL NOT BE LESS THAN 44 INCHES. 2. ALL STAIRWAYS TO HAVE A MINIMUM HEAD CLEARANCE OF 6'-8" MEASURED

3. STAIR TREADS AND RISERS TO BE UNIFORM IN SHAPE AND SIZE. TOLERANCES BETWEEN LARGEST AND SMALLEST TREAD OR RISER WILL NOT EXCEED 3/8".

VERTICALLY FROM THE EDGE OF NOSING.

4. EACH STAIRWAY IS TO HAVE A FLOOR OR LANDING AT THE TOP AND BOTTOM. THE DEPTH OF A LANDING WILL NOT BE LESS THAN THE WIDTH OF THE STAIRWAY IT SERVES.

5. A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE GREATER THAN 12 FEET BETWEEN FLOOR LEVELS OR LANDINGS. 6. STAIRWAYS MUST HAVE HANDRAILS ON

7. HANDRAIL HEIGHT TO BE 34" TO 38" MEASURED ABOVE STAIR NOSING AND SHALL BE UNIFORM.

EACH SIDE.

8. HANDRAILS WITH CIRCULAR CROSS-SECTIONS ARE TO HAVE A DIAMETER OF 1 1/4" TO 2". NON-CIRCULAR CROSS-SECTIONS ARE TO HAVE A PERIMETER DIMENSION OF 4" TO 6 1/4" WITH A MAXIMUM CROSS-SECTION OF 2 1/4".

9. HANDRAIL GRIPPING SURFACES WITH BE CONTINUOUS WITHOUT INTERRUPTION BY NEWEL POSTS OR OTHER OBSTRUCTIONS. 10. HANDRAILS SHALL EXTEND HORIZONTALLY MIN 12" BEYOND TOP RISER AND CONTINUE TO SLOPE FOR THE

DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER. 11. CLEAR SPACE BETWEEN HANDRAIL

AND WALL TO BE MINIMUM OF 1 1/2".

12. GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, MEZZANINES, INDUSTRIAL EQUIPMENT PLATFORMS, STAIRWAYS, RAMPS, AND LANDINGS THAT ARE LOCATED MORE THAN 30" ABOVE FLOOR OR GRADE BELOW.

13. GUARDS SHALL FORM A PROTECTIVE BARRIER NOT LESS THAN 42" HIGH, MEASURED VERTICALLY ABOVE THE LEADING EDGE OF THE TREAD, ADJACENT WALKING SURFACE, OR ADJACENT SEATBOARD.

14. OPEN GUARDS ARE TO HAVE A PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING UP TO A HEIGHT OF 34". FROM 34" TO 42", AN 8" DIAMETER SPHERE CANNOT PASS THROUGH

15. THE TRIANGULAR OPENING FORMED BY THE RISER, TREAD, AND BOTTOM RAIL SHALL BE A MAXIMUM SIZE SUCH THAT A 6" DIAMETER SPHERE CANNOT PASS THROUGH

16. STANDPIPES HOSE CONNECTIONS SHALL BE PROVIDED IN ALL THE FOLLOWING LOCATIONS:

> A. IN EVERY REQUIRED STAIRWAY, A HOSE CONNECTION SHALL BE PROVIDED FOR EACH FLOOR LEVEL ABOVE OR BELOW GRADE, LOCATED AT THE INTERMEDIATE FLOOR LEVEL LANDING.

B. ON EACH SIDE OF THE WALL ADJACENT TO THE EXIT OPENING OF A HORIZONTAL EXIT

C. IN EVERY EXIT PASSAGEWAY AT THE ENTRANCE FROM THE EXIT PASSAGE WAY TO OTHER AREAS OF A BUILDING

17. SHAFT ENCLOSURES SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 2 HOURS.

**18. PENETRATIONS INTO AND OPENINGS** THROUGH A VERTICAL EXIT ENCLOSURE OR EXIT PASSAGEWAY ARE PROHIBITED EXCEPT FOR REQUIRED EXIT DOORS, EQUIPMENT AND DUCTWORK NECESSARY FOR INDEPENDENT PRESSURIZATION, SPRINKLER PIPING, STANDPIPES, AND ELECTRICAL RACEWAYS SERVING THAT PASSAGEWAY.

19. EXIT PASSAGEWAYS SERVING IN AN EGRESS SYSTEM SHALL NOT BE LESS THAN 44" IN WIDTH, SHALL NOT BE OBSTRUCTED, SHALL NOT BE LESS THAN 2-HOUR FIRE-RESISTANCE RATING.



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Vertical Circulation





3 Stair B- Level 3 1/4" = 1'-0"



7 Stair B Section 3/16" = 1'-0"



4 <u>Stair B2 Section</u> 1/4" = 1'-0"







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 $2 \frac{\text{Level -1 - Alley Level Commons}}{1/4" = 1'-0"}$ 





5 Mezzanine Level - Commons 1/4" = 1'-0"



3 Level 1 - Commons 1/4" = 1'-0"





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6 Elevator Section 3/16" = 1'-0"



16 Handrail Extension - Bottom of Stair 1" = 1'-0"

C:\R



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2 SPANDREL @ 1ST FLOOR 1 1/2" = 1'-0"



1 Foundation - Waterproofing at Elevator Pit 1 1/2" = 1'-0"

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# **Exterior Details**







1 1/2" = 1'-0"


### SEE 1 / A812 NOTES APPLY

FILL OUTRIGGER CAVITIES WITH INSULATION OVER OCCUPIED SPACES

#### WEATHER RESISTIVE BARRIER FULL HEIGHT OF WALL TO TOP OF ROOF EDGE BLOCKING

OFFSET JOIST HANGER BRACKET TO PERMIT GYP BOARD TO BE RUN CONTINUOUS TO UNDERSIDE OF ROOF SHEATHING

WITH J CHANNEL - BACKER ROD AND SEALANT AT MOVEMENT JOINT

CORNICE FASICA INTERLOCKED

BRICK TIE BELOW TOP COURSE OF CORBEL LAST 4 COUSES OF BRICK CORBEL

OUT 1/2" PER COURSE TO ALIGN TO FACE OF MASONRY PILASTER INSULATED HEADER

BRICK COURSE OVER LINTEL IS IN SAME PLANE AS FIELD BRICK

SEE TYPICAL WINDOW FLASING DETAILS NOTES APPLY

MASONRY PILASTER BEYOND MASONRY JAMB BEYOND

SEE TYPICAL WINDOW FLASING DETAILS NOTES APPLY

SEALANT PREFINISHED J CHANNELS FOR WALL PANELS

METAL WALL PANELS FIRESTONE UC-500

PREFINISHED J CHANNELS FOR WALL PANELS WITH WEEP HOLES PREFINISHED DRIP CAP FLASHING

SELF ADHERED WINDOW SILL PAN FLASHING PREFINISHED METAL SLIP SILL FLASING INSTALLED OVER FLEXIBLE FLASHING AND SEALED TO WINDOW FRAME FLEXIBLE FLASHING INSTALLED UNDER WINDOW SILL PAN FLASHING AND RUNOVER TOP OF MASONRY SILL BELOW METAL FLASHING CAST STONE PROFILE - SP3 @ PILASTERS · CAST STONE PROFILE - SP2 @ FIELD BRICK

- CAST STONE PROFILE - SP1 @ SILLS AND PARAPETS ON 6TH FLOOR

DOWEL CAST STONE PROFILE INTO TOP CORSE OF MASONRY

BRICK TIE BELOW TOP COURSE OF CORBEL

4 COUSES OF BRICK CORBEL OUT 1/2" PER COURSE TO ALIGN TO FACE OF MASONRY PILASTER



1 ROOF EDGE @ RECESSED DECK 1 1/2" = 1'-0"



SEE TYPICAL WINDOW FLASING DETAILS NOTES APPLY

MASONRY PILASTER BEYOND

MASONRY JAMB BEYOND

2 PARAPET EDGE @ ROOF DECK 1 1/2" = 1'-0"

FTR ROOF MEMBRANE EXTEND OVER ROOF EDGE TO BOTTOM OF CLEAT HOT AIR WELD TO MEMBRANE - FTR MEMBRANE FLASHING FASTEN CLEAT WITH GALVANIZED ANNULAR RING SHANK NAILS (6" O.C.)

24GA GALVANIZED CONTINUOUS CLEAT / WATERDAM PREFINISHED FASCIA COVER - FIBERTITE 200 FASCIA SYSTEM FASTEN CLEAT WITH GALVANIZED ANNULAR RING SHANK NAILS (12" O.C.)

2x8 OUTRIGGERS AND BLOCKING FOR OVERHANG

PREFINISHED METAL FASCIA SECURED BELOW CLEAT PREFINISHED METAL CORNICE FASCIA SECURED BELOW OVERHANG AND PROVIDES INTERLOCKED EDGE CONNECTION FOR FASICA

#### WEATHER RESISTIVE BARRIER FULL HEIGHT OF WALL TO TOP OF ROOF EDGE BLOCKING

PREFINISHED METAL CORNICE FASICA INTERLOCKED WITH J CHANNEL FOR METAL SOFFIT PANELS

METAL SOFFIT PANELS FIRESTONE UC-500 RUN PERPENDICULAR TO WALL

FACE ALIGNS WITH FACE OF EXTERIOR WALL FRAMING

kaas wilson architects

1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

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Electrical Enginner Wunderlich-Malec 6101 Blue Circle Drive Eden Prairie, Minnesota 55343 952-933-3222

Interior Designer BDH+Young 7001 France Ave S #200 Edina, MN 55435 952-893.9020

### Oaks Union Depot Apartments

244 4th St E Saint Paul MN 55101-1401

Oaks Properties, LLC

3550 East 46th Street Suite 120 Minneapolis, MN 55406

Project Number

Date

Checked By

Drawn By

Author Checker

9-29-2016

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1 1/2" = 1'-0"

Ö





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**Deck Details** 

As indicated **A8** 







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WOOD STUD **Storefront Details** As indicated A841 5 WALL CONNECTION TO MULLION 6" = 1'-0"







 $15 \frac{\text{Interior Unit - Bath Fan}}{1 1/2" = 1'-0"}$ 

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BEARING WALL

SEE STRUCT.

FLOOR TRUSS SEE STRUCT.

BEARING WALL

SEE STRUCT.

<S2B

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(10) Elevator - Side Wall1" = 1'-0"

<F2A≻

**<22** 

	Unit Door Schedule											
				Door		Fire	Eramo	Мс	ounting De	tail		
Type Mark	Туре	Width	Height	Operation Type	Door Panel	Rati ng	Туре	Head	Jamb	Sill	Hardware	Comments
U01	U01 - Unit Entry	3'-0"	6'-8"	Swing	P6 : WD1	20	KD0				3	Coordinate Threshold with Floor Finishes
U02	U02 - Bedroom / Bath	3'-0"	6'-8"	Swing	P2 : CV0		CV0				4	
U03	U03 - Bedroom / Bath pocket	3'-0"	6'-8"	Pocket	F : WD0		WD0				1	Lock
U04	U04 - Mech. Int.	2'-8"	6'-8"	Swing	P2 : CV0		CV0				7	
U05	U05 - Closet 3068	3'-0"	6'-8"	Swing	P2 : CV0		CV0				5	
U05b	U05b - Closet 2868	2'-8"	6'-8"	Swing	P2 : CV0		CV0				5	
U06	U06 - Closet 2468	2'-4"	6'-8"	Swing	P2 : CV0		CV0				5	
U07	U07 - Closet 1868	1'-8"	6'-8"	Swing	P2 : CV0		CV0				5	
U08	U08 - Bypass Closet 5068	5'-0"	6'-8"	Bypass	F : WD0		DW0				1	
U09	U09 - Bypass Closet 6068	6'-0"	6'-8"	Bypass	F : WD0		DW0				1	
U11	U11 - Closet 4868	4'-8"	6'-8"	Double : Swing	P2 : CV0		CV0				6	Pair of 2'-4" Doors
U12	U12 - Closet 5068	5'-0"	6'-8"	Double : Swing	P2 : CV0		CV0				6	Pair of 2'-6" Doors
U16	U16 - Sliding Barn Door	4'-0"	6'-8"	Sliding	F : WD0		DW0				1	Sliding Barn Door
U21	U21 - Bedroom / Bath small	2'-10"	6'-8"	Swing	P2 : CV0		CV0				4	
U33	U33 - Patio	3'-0"	6'-8"	Swing	P2 : HG1	-	HM0	15/A831	15/A831	15/A831	10	Insulated, Fiberglass Door will Mulled Light where shown



				Door				M	ounting Deta	ils	
Mark	Room Name	Width	Height	Operation Type	Door Panel	Fire Rating	Frame Type	Head	Jamb	Sill Hardwa	re Comments
000	Parking	16'-0"	7'-0"							1	Insulated, Automatic, Sectional Door. fob post at exterior,
002	Water Room	3'-0"	7'-0"	Swina	F : HM0	45	НМО			30R	4" High Frame Head
003	Elec. Service Room	3'-0"	7'-0"	Swing	F : HM0	45	HM0			33R	4" Frame Head
004	Elevator Lobby	3'-6"	7'-0"	Swing	F : HM0	45	HM0			31R	4" High Frame Head, Access Control Coordinated with
004B		8'-8"	3'-4"	Borrowed Light							Door Operator
005	Electrical Meters	3'-0"	7'-0"	Swing	F : HM0	45	HM0			30R	4" High Frame Head
0082	Stair B2	3'-0"	7'-0"	Swing	F : HM0	90	HM0			36R	4" High Frame Head
0091A	Exit Passageway A	3'-0"	7'-0"	Swing	F : HM0	90	HM0			36R	4" High Frame Head
0091B	Exit Passageway A	3'-0"	7'-0"	Swing	F:HM0	90	HM0			36R	4" High Frame Head
0091C	Exit Passageway A	3'-0"	7'-0"	Swing	F : HM1	-	НМО			11	4" Frame Head, Exit Only Trim
001	Parking Garage	16'-0"	8'-0"							1	Insulated, Automatic, Sectional Door. fob post at exterior,
012	Elevator Lobby	3'-6"	7'-0"	Swing	F : HM0	45	HM0			31R	4" High Frame Head, Access Control Coordinated with
012B		8'-8"	3'-4"	Borrowed Light							
0120	Trash/Recycle	7'-0"	7'-0"	Double : Swing	F · HM0	120	НМО			50B	4" High Frame Head
082	Stair B2	3'-0"	7'-0"	Swing	F : HM0	90	HMO			33R	4" High Frame Head
090	Stair A	3'-0"	7'-0"	Swing	F : HM0	90	HM0			33R	4" Frame Head, Verify Lintel Type & height
0091D	Stair A Security Door	3'-0"	6'-8"	Swing	F : WD1	-	KD0			47R	Access Control
121	Trash Chutes	6'-0"	6'-8"	Double : Swing	F : WD1	45	KD0			76R	Verify door width & Provide Center Mullion
121A	Corridor	3'-0"	6'-8"	Swing	F : WD1	20	KD0			47R	Access Control
121B	Corridor	3'-0"	6'-8"	Swing	F:WD1	20	KD0			47R	Access Control
122	Elec.	3'-0"	6'-8"	Swing	F:WD1	20	KD0			40R	
123	Storage	3'-0"	6'-8" 6' 9"	Swing		20				40R	
124	Dog Wash	3-0	0-0 6' 9"	Swing		20				42ROI	Grada 2 Claser & Lever
125	Janitor	3-0	6'-8"	Swing		20	KD0			40N 40R	Grade 2 Closer & Lever
120	Mech	3'-0"	6'-8"	Swing	F:WD1	20	KD0			40R	
128A	Vestibule	6'-2"	8'-10"	Swing	P1 : AL1	-	AL:1			2A	
128B	Vestibule	6'-2"	6'-11"	Swing	P1 : AL1	-	AL:2			2B	Mag Lock & Access Control ea Leaf, Intercom System,
130A	Game Room	3'-0"	6'-8"	Swing	P1 : WG1	20	KD2			40RA	Programmable Access Control
131A	Fitness	3'-6"	6'-8"	Swing	P1 : WG1	20	KD2			40RA	Programmable Access Control
132	Fitness Studio	6'-0"	6'-8"	Double : Sliding	F : WD1	-	DW0			1	Sliding Barn Doors
133	Parcel	3'-0"	6'-8"	Swing	F : WD1	20	KD0			40R	Verify Keying Requirements
135	Leasing Office	3'-0"	6'-8"	Swing	F:WD1	20	KD2			43R	
135A	Work Room	3'-0"	6'-8" 7' 0"	Swing	F:WD1	-	KD0			46	4" Llink Frame Llood (Varify Door & frame beight to
		0.0"	7-0	Swing		30				401	coordinate with CMU coursing
181A	Exit Passageway B	3'-0"	7'-0"	Swing		90	KD0			46R	4" High Frame Head (Verify Door & frame height to coordinate with CMU coursing
181B	Exit Passageway B	3'-0"	7'-0"	Swing	F:WD1	90	KD0			4/R	Access Control, 4" High Frame Head (Verify door & frame height(
182 190	Stair B2 Stair A	3'-6" 3'-0"	8'-6" 7'-0"	Swing Swing	P2 : AL1 F : WD1	- 90	AL : 3 KD0			2A 33R	Access Control 4" Frame Head, Verify door & frame height to coord with
											CMU coursing
220	Trash Chutes	6'-0"	6'-8"	Double : Swing	F:WD1	45	KD0			76R	Verify door width & Provide Center Mullion
221	Elevator Lobby	8'-0"	8'-0"	Double : Swing	F : WD1	45	KD0			61RH	Magnetic Holds
222	Elec.	3'-0"	6'-8"	Swing	F : WD1	20	KD0			40R	
223	Low Volt	3'-0"	6'-8"	Swing	F : WD1	20	KD0			40R	
230A	Stair B to Patio	3'-0"	6'-8"	Swing	F:HM1	-	HM0			13	Programmable Access Control
230B	Stiar A to Patio	3'-0"	6'-8"	Swing	F:HM1	-	HM0			13	Programmable Access Control
280	Stair B	3'-0"	6'-8" c' 9"	Swing	N:WG1	90	KD0			46R	
290		3-0	0-0	Swing	IN . WGI	90	KDU			400	
320	Trash Chutes	6'-0"	6'-8"	Double : Swing	F : WD1	45	KD0			76R	Verify door width & Provide Center Mullion
321	Elevator Lobby	8'-0"	8'-0"	Double : Swing	F:WD1	45	KD0			61RH	Magnetic Holds
322	Elec.	3'-0"	6'-8"	Swing	F:WD1	20	KD0			40R	
323	Low Volt	3'-0"	6'-8"	Swing	F : WD1	20	KD0			40R	
380	Stair B	3'-0"	6'-8"	Swing	N : WG1	90	KD0			46R	
390	Stair A	3'-0"	6'-8"	Swing	N : WG1	90	KD0			46R	
420	Trash Chutes	6'-0"	6'-8"	Double : Swing	F : WD1	45	KD0			76R	Verify door width & Provide Center Mullion
421	Elevator Lobby	8'-0"	8'-0"	Double : Swing	F : WD1	45	KD0			61RH	Magnetic Holds
422	Elec.	3'-0"	6'-8"	Swing	F : WD1	20	KD0			40R	
423	Low Volt	3'-0"	6'-8"	Swing	F:WD1	20	KD0			40R	
480	Stair B	3'-0"	6'-8"	Swing	N:WG1	90	KD0			46R	
490	Stair A	3'-0"	6'-8"	Swing	N : WG1	90	KD0			46R	
520	Trash Chutes	6'-0"	6'-8"	Double : Swing	F : WD1	45	KD0			76R	Verify door width & Provide Center Mullion
521	Elevator Lobby	8'-0"	8'-0"	Double : Swing	F:WD1	45	KD0			61RH	Magnetic Holds
522	Elec.	3'-0"	6'-8"	Swing	F:WD1	20	KD0			40R	
523 590	Low Volt	3'-0"	6'-8" 6' 0"	Swing	F:WD1	20	KD0			40R	
590 590	Stair A	3-0	0-0 6'-8"	Swing		90	KD0			40H	
030	Stall A	5-0	0-0	Swilly		30				401	
620	Trash Chutes	6'-0"	6'-8"	Double : Swing	F : WD1	45	KD0			76R	Verify door width & Provide Center Mullion
621	Elevator Lobby	8'-0"	8'-0"	Double : Swina	F : WD1	45	KD0			61RH	Magnetic Holds
622	Elec.	3'-0"	6'-8"	Swing	F : WD1	20	KD0			40R	
623	Low Volt	3'-0"	6'-8"	Swing	F:WD1	20	KD0			40R	
630	Party Room	3'-6"	6'-8"	Swing	P2 : HG1	20	KD2			40RA	
630A	Party Room to Deck	3'-0"	6'-8"	Swing	P2 : HG1	-	HM0			13	Programmable Access Control
631	Outdoor Deck	3'-6"	8'-0"	Swing	P2 : HG1	20	HMU			40RA	Access Control on Corridor Side. Deck side always
680	Stair B	3'-0"	6'-8"	Swina	N : WG1	90	KD0			46R	
690	Stair A	3'-0"	6'-8"	Swing	N : WG1	90	KD0			46R	

DOOR MATERIAL ABBREVIATIONS CV0: HOLLOW CORE COMPOSITE VENEER DOOR CV1: SOLID CORE COMPOSITE VENEER DOOR WD0: HOLLOW CORE WOOD VENEER DOOR WD1: SOLID CORE WOOD DOOR WG1: SOLID CORE WOOD DOOR WITH GLAZED

Swing

Stair A

3'-0"

6'-8"

HM0: HOLLOW METAL DOOR HM1: INSULATED METAL DOOR

HG1: INSULATED METAL DOOR WITH GLAZED PANELS

N : WG1

GLT-1 - SINGLE PANE, NON IMPACT INTERIOR GLAZING GLT-1T - SINGLE PANE, TEMPERED INTERIOR GLAZING GLT-2 - DOUBLE PANE, NON IMPACT EXTERIOR GLAZING GLT-2T - INSULATED, TEMPERED EXTERIOR GLAZING GLT-FNI90 - NON-IMPACT GLAZING RATED BETWEEN 20 TO 90 MIN GLT-FRI20 - IMPACT SAFETY GLAZING RATING OF 20 MINUTES GLT-FRI45 - IMPACT SAFETY GLAZING RATED BETWEEN 20 & 45 GLT-FRI3 - IMPACT SAFETY GLAZING RATED BETWEEN 60 MIN TO

#### DOOR GENERAL NOTES: FRAMES.

KD0

3. PAINT ALL HOLLOW METAL DOORS & FRAMES. EXTERIOR HM DOORS WILL GENERALLY REQUIRED TWO COLORS. EXTERIOR PAINT COLOR AS INDICATED ON PLANS / MATCH ADJACENT FINISH COLOR. INTERIOR PAINT COLOR SHALL BE AS SPECIFIED BY INTERIOR DESIGNER.

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DEPTHS, TYPICAL.

DOOR.

SIDES.

7. PRE-HUNG & UNIT DOORS SHALL HAVE CASING OR MILLWORK TRIM TYPICAL EACH SIDE AS SCHEDULED BY INTERIOR DESIGNER. 8. COORDINATE FLECTRICAL AND LOW VOLTAGE WITH OWNER AND ARCHITECT

1. HOLLOW METAL DOORS SHALL HAVE 2" HOLLOW METAL DOOR FRAMES. EXTERIOR H.M. DOORS SHALL BE GALVANIZED AND HAVE INSULATED

2. VERIFY THE HEIGHT OF HOLLOW METAL DOORS AND ASSOCIATED FRAMES TO COORDINATE WITH BOND BEAMS ON COURSE. ADJUST FRAME HEAD HEIGHT, DOOR HEIGHT AND / OR DOOR UNDER CUT TO COORDINATE WITH FLOOR SLOPES.

4. DOORS IN GYP BOARD WALL PARTITIONS SHALL HAVE GYP BOARD RETURNS WITH FINISHES AS SPECIFIED FOR ON INTERIOR PLANS 5. DOOR FRAMES AT INTERIOR WALLS SHALL HAVE THROAT DEPTHS EQUAL TO THE DEPTH OF THE ASSOCIATED PARTITION. FIELD VERIFY PARTITION

6. KNOCK-DOWN FRAME TRIM SHALL HAVE TRIM EACH SIDE AS FOLLOWS: AT MECH CLOSET DOORS, PROVIDE WOOD CASING TRIM ON PUBLIC SIDE OF DOOR & STANDARD METAL CASING ON NON-PUBLIC SIDE OF AT MECH / STORAGE TYPE DOORS IN AREAS NOT VISIBLE TO COMMON AREAS WITH DÉCOR, PROVIDE STANDARD METAL TRIM EACH SIDE. AT PUBLIC DOORS OR UNIT ENTRANCE DOORS WHERE BOTH SIDES ARE VISIBLE & INCLUDED IN DÉCOR, PROVIDE WOOD CASING ON BOTH



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## Doors/Details

1/4" = 1'-0"



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yright Kaas Wilson Architects | 9/29/2016 12:06:51 F





Penetrations-PVC PIPE FC-2082-EJ1



A -Α — 3. <u>Firestopping</u> - FlameSafe<sup>®</sup> FS 1900 Series Sealant. 3A. Mineral wool backing (4 pcf) filled to depth of wall space. '3B. Apply FS 1900 into annular space to a depth of 1/4 in. For a 1 hr. assembly add a 1/2 in, crown and overlap the wallboard 1/2 in. For a 2 hr. assembly add a 1/4 in. crown and overlap the wallboard 1/4 in. System design evaluated to the ASTM E814 (UL 1479) Fire Tests of Through-Penetration Firestops. Design based upon tested configurations by nationally recognized testing laboratories (e.g. UL, FM, etc.) as well as in-house testing. Thernational Protective Coatings Corp. 725 Carol Avenue Oakhurst, NJ 07755 Phone: 732-531-3667 800-334-8796 Facsimile: 732-531-5192 888-531-5192 This information is based upon internal and third party testing which we believe to be reliable. The user must determine the suitability of the product and the design of the application. Since the actual installation of the product is beyond our control, IPC Corporation's only responsibility shall be to refund or replace materials found to be defective as per our standard warranty. This information is based upon internal and third party testing which we believe to be reliable. The user must determine the suitability of the product and the design of the application. Since the actual installation of the product is beyond our control, IPC Corporation's only responsibility shall be to refund or replace materials found to be defective as per our standard warranty. Drawn by Joe Charland M.E. Rev.# 001 Drawing # WL2038 PC Drawing # WL1089 Rev.# 000 2-402 1 - 404

penetrations-PLASTIC PIPE WL 1/16" = 1'-0"

Penetrations-METALIC PIPE WL1 1/16" = 1'-0"





2 Fire Resistive Column Assembly 1/16" = 1'-0"







This material was extracted by IPC from the 1998 edition of the UL Fire Resistance Directory.

This material was extracted by IPC from the 1998 edition of the UL Fire Resistance Directory

Penetrations-METAL PIPE WL 1 1/16" = 1'-0"

Penetrations-METALIC PIPE W7006B1 1/16" = 1'-0"

penetrations-STEEL PIPE FC1 1/16" = 1'-0"

International Protective Coatings Corp. — FS1900, FS1901, FS1905 and FS1929 Sealant
 +Bearing the UL Listing Mark
 \*Bearing the UL Classification Marking



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



LINK WILSON REG. NO: 21629 Penetration **Details** 1/16" = 1'-0"

1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall have the following construction details. A. Studs—Nom 2 by 6 in. or double nom 2 by 4 in. lumber studs. B. Sole Plate—Nom 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly C. Top Plate— The double top plate shall consist of two nom 2 by 6 in. or two sets of parallel 2 by 4 in. lumber plates tightly butted. Max diam of opening is 5 in. D. Wallboard, Gypsum\* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design. 3. Through Penetrants—One nonmetallic pipe or conduit to be installed approximately midway between wood joists and centered within the firestop system. Diam of openings hole-sawed through flooring system and through gypsum wallboard ceiling to be nom 1/2 in. larger than the outside diam of through penetrant. Pipe or conduit to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes or conduits may be used: A. **Polyvinyl Chloride (PVC) Pipe**—Nom 4 in. diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. B. Rigid Nonmetallic Conduit+—Nom 4 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).
C. Chlorinated Polyvinyl Chloride (CPVC) Pipe—Nom 4 in. diam (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) or vectod (drain waste or ward) bining success. Yented (drain, waste or vent) piping systems.
 Fill, Void or Cavity Material\*—Sealant—Min 3/4 in. thickness-of fill, material applied within annulus, flush with top surface of floor. Min 3/4 in thickness of fill material applied within annulus, flush with lower top plate of chase wall assembly. Additional fill material to be installed such that a min 3/8 in. crown is formed around the penetrating item on the his material was extracted by top surface of floor and lower plate of chase wall assembly International Protective Coatings Corp.—FS1900, FS1901, FS1905 and FS1929 Sealant +Bearing the UL Listing Mark \*Bearing the UL Classification Marking IPC from the 1998 edition of the UL Fire Resistance Directory.



1. Chase wall assembly

IPC Drawing # FC2082

- 1A. 2x6 in. or double 2x4 in. lumber studs. 1B. Sole Plate - Nom. 2x6 in. or two parallel 2x4 in. lumber plates.
- 1C. Min. 3/4 in. lumber or plywood subfloor with a max. 5 in. diameter penetrant opening.
- 1D. Nominal 2x10 in. lumber joists. 1E. Double top plate consisting of two 2x6 in. or
- two sets of parallel 2x4 in. lumber plates.

providing a 1 hr. F rating (located on all walls and ceilings of chase system).

- 2A. Max. 4 in. rigid nonmetallic conduit, PVC (solid or cellular core), and CPVC piping as an open (vented) or closed system. Annular space - Min. 1/8 in. to max. 3/8 in. at
- 3. <u>Firestopping</u> FlameSafe<sup>®</sup> FS 1900 Series Sealant. 3A. At floor surface, apply FS 1900 3/4 in. deep into annular space with a 3/8 in. crown.
- 3B. At bottom of top plate, apply FS 1900 3/4 in. deep into annular space with a 3/8 in. crown.
- NOTES System design evaluated to the ASTM E814 (UL 1479) Fire Tests of Through-Penetration Firestops. 2. Design based upon tested configurations by nationally recognized testing laboratories (e.g. UL, FM, etc.) as well as

to be defective as per our standard

\_\_\_ warranty.

System No. F-C-2082

F Rating-1 Hr

T Rating-1 Hr

and account

Floor-Ceiling Assembly—The 1 hr fire-rated solid or trussed lumber joist

floor-ceiling assembly shall be constructed of the materials and in the manner specified in individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:

A. Flooring System—Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture\* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 5 in.
 B. Wood Joists—Nom 2 by 10 in. lumber joists spaced 16 in. OC with

Wood Jossa – Kom y Jo M. Kumber Joss Space (16 M. OC With nom 1 by 3 in. lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members\* with bridging as required with ends firestopped.
 Furring Channels—(Not Shown)— Resilient galv steel furring installed perpendicular to wood joists (Item 18) between wallboard (Item 10) and wood joists as required in the individual ElocacCellion Design

and wood joists as required in the individual Floor-Ceiling Design

Wallboard, Gypsum\*—Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. Wallboard secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design.
 Chase Wall—The through penetrant (Item 3) shall be routed through a

SECTION A-A

	III-IIUUSe testiii	у,
De International Prot	ective Coatings Corp.	725 Carol Avenue Oakhurst, NJ 07755 Phone: 732-531-3667 800-334-8796 Facsimile: 732-531-5192 868-531-5192
Firestop Assembly Approved by John Goga C.E.	Project: Drawn by Joe Charland M.E.	This information is based upon internal and third party testing which we
Product: FlameSafe FS1900 Series Sealant	Approval:	believe to be reliable. The user must determine the suitability of the product
Fire Rating: 1 HOUR	Installer:	and the design of the application. Since the actual installation of the
UL System: FC2082	Date:	<ul> <li>product is beyond our control, iPC Corporation's only responsibility shall be to refund or replace materials found</li> </ul>
		- be to retuine of replace indeering round

Rev.# 001 2-204

->A

A

Penetrations-STEEL COPPER PIPE FC 1 1/16" = 1'-0"





### 1F. One layer of gypsum wallboard capable of 2. Penetrant

top plate and subfloor.





1301 American Blvd. East.



As indicated



#### EROSION CONTROL NOTES



- ALL EROSION CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO ANY SITE GRADING OPERATIONS. THE CITY ENGINEERING DEPARTMENT MUST BE NOTIFIED UPON COMPLETION OF THE INSTALLATION OF THE REQUIRED EROSION CONTROL FACILITIES AND PRIOR TO ANY GRADING OPERATION BEING COMMENCED. THE CONTRACTOR IS RESPONSIBLE TO SCHEDULE A PRE-CONSTRUCTION GRADING MEETING ON-SITE WITH THE CITY. IF DAMAGED OR REMOVED DURING CONSTRUCTION, ALL EROSION CONTROL FACILITIES SHALL BE RESTORED AND IN PLACE AT THE END OF EACH DAY. 2. ANY EROSION CONTROL FACILITIES DEEMED NECESSARY BY THE CITY; BEFORE, DURING OR AFTER THE GRADING ACTIVITIES, SHALL BE INSTALLED AT THEIR REQUEST.
- 3. NO DEVIATIONS SHALL BE MADE FROM THE ELEVATIONS SHOWN ON THE APPROVED GRADING PLAN, WITHOUT PRIOR APPROVAL FROM THE CITY.
- 4. FLOWS FROM DIVERSION CHANNELS OR PIPES (TEMPORARY OR PERMANENT) SHALL BE ROUTED TO SEDIMENTATION BASINS OR APPROPRIATE ENERGY DISSIPATERS TO PREVENT TRANSPORT OF SEDIMENTATION BASINS OR APPROPRIATE ENERGY DISSIPATERS TO PREVENT TRANSPORT OF SEDIMENT TO OUTFLOW TO LATERAL CONVEYORS AND TO PREVENT EROSION AND SEDIMENTATION WHEN RUNOFF FLOWS INTO THESE CONVEYORS.
- 5. SITE ACCESS ROADS SHALL BE GRADED OR OTHERWISE PROTECTED WITH SILT FENCES, DIVERSION CHANNELS, OR DIKES AND PIPES TO PREVENT SEDIMENT FROM EXITING THE SITE VIA THE ACCESS ROADS. SITE-ACCESS ROADS SHALL BE SURFACED WITH CRUSHED ROCK WHERE THEY ADJOIN EXISTING PAVED ROADWAYS.
- 6. SOILS TRACKED FROM THE SITE BY MOTOR VEHICLES OR EQUIPMENT SHALL BE CLEANED DAILY FROM PAVED ROADWAY SURFACES, OR MORE FREQUENTLY IF REQUESTED BY CITY, THROUGHOUT THE DURATION OF CONSTRUCTION.
- 7. DUST CONTROL MEASURES SHALL BE PERFORMED PERIODICALLY WHEN CONDITIONS REQUIRE AND/OR AS DIRECTED BY THE CITY. 8. ALL EROSION CONTROL MEASURES SHALL BE USED AND MAINTAINED FOR THE DURATION OF SITE CONSTRUCTION. IF CONSTRUCTION OPERATIONS OR NATURAL EVENTS DAMAGE OR INTERFERE WITH THESE EROSION CONTROL MEASURES, THEY SHALL BE RESTORED TO SERVE THEIR INTENDED FUNCTION AT THE END OF EACH DAY OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- 9. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED AS SOON AS POSSIBLE. ANY AREAS WHICH HAVE BEEN FINISHED GRADED OR AREAS THAT HAVE BEEN FINISHED AND FOR WHICH GRADING OR SITE BUILDING CONSTRUCTION OPERATIONS ARE NOT ACTIVELY UNDERWAY SHALL BE SEEDED AND MULCHED AS SET FORTH IN THE FOLLOWING PARAGRAPHS WITHIN 14 DAYS:
- A. ALL SEEDED AREAS SHALL BE EITHER MULCHED AND DISC-ANCHORED OR COVERED BY FIBROUS BLANKETS TO PROTECT SEEDS AND LIMIT EROSION. TEMPORARY STRAW MULCH SHALL BE DISC-ANCHORED AND APPLIED AT A UNIFORM RATE OF NOT LESS THAN TWO TONS PER ACRE AND NOT LESS THAN 80% COVERAGE. B. IF THE GRADED AREA IS ANTICIPATED TO BE RE-DISTURBED/DEVELOPED WITHIN SIX MONTHS, PROVIDE A TEMPORARY VEGETATIVE COVER CONSISTING OF MINNESOTA DEPARTMENT OF TRANSPORTATION (MNDOT) SEED MIXTURE 21-111 (OATS), OR 21-112 (WINTER WHEAT), AT A RATE OF 100 POUNDS PER ACRE. C. IF GRADED AREA WILL NOT BE DEVELOPED FOR A PERIOD GREATER THAN SIX MONTHS, PROVIDE A SEMI-PERMANENT VEGETATIVE COVER OF SEED MIXTURE MNDOT 22-112 AT A RATE OF 40 POUNDS PER ACRE.
- D. GRADING BONDS OR THE EQUIVALENT SECURITIES SHALL BE RETAINED UNTIL TURF HAS GERMINATED AND SURVIVED A 60-DAY GROWING PERIOD.
- E. ALL AREAS THAT WILL NOT BE MOWED OR MAINTAINED AS PART OF THE ULTIMATE DESIGN WILL BE PERMANENTLY RESTORED USING SEED MIXTURE MNDOT 25-141 AT A RATE OF 59 POUNDS PER ACRE. F. UNLESS SPECIFIED ELSEWHERE WITHIN THE CONSTRUCTION DOCUMENTS (I.E. ARCHITECTURAL SITE PLAN OR LANDSCAPE PLAN), PERMANENT TURF RESTORATION SHALL CONSIST OF MN/DOT SEED MIXTURE 25-131 (COMMERCIAL TURF GRASS) AT A RATE OF 220 POUNDS PER ACRE. G. WHENEVER OTHER EROSION AND SEDIMENT CONTROL PRACTICES ARE INADEQUATE, TEMPORARY ON-SITE SEDIMENT BASINS THAT CONFORM TO THE CRITERIA FOR ON-SITE DETENTION BASINS SHALL BE PROVIDED.
- H. MULCH, HYDROMULCH, AND TACKIFIERS MAY NOT BE USED FOR STABILIZATION IN SWALES OR DRAINAGE DITCHES
- 11. RUNOFF SHALL BE PREVENTED FROM ENTERING ALL STORM SEWER CATCH BASINS PROVIDING THEY ARE NOT NEEDED DURING CONSTRUCTION, A SILT FENCE OR SEDIMENT PROTECTION DEVICES AS DETAILED SHALL BE INSTALLED AND MAINTAINED AROUND ALL CATCH BASINS UNTIL THE TRIBUTARY AREA TO THE CATCH BASIN IS RESTORED.
- SEDIMENT BASINS, DORMANT SEEDING AND HIGH RATES OF APPLICATION OF BOTH SEED AND MULCH. 13. EROSION CONTROL FACILITIES SHALL BE INSTALLED AND MAINTAINED AROUND THE PERIMETER OF ALL LAKES, PONDS AND WETLANDS WITHIN OR ADJACENT TO THE AREA TO BE GRADED UNTIL THE TRIBUTARY AREA TO THE LAKE, POND OR WETLAND IS RESTORED.
- 14. TO MINIMIZE EROSION, ALL 3:1 SLOPES SHALL BE COVERED WITH A MN/DOT 3885 CATEGORY 2 STRAW EROSION CONTROL BLANKETS OR STAKED SOD.
- 15. ACCUMULATION OF ALL SEDIMENT OCCURRING IN STORM SEWERS, DITCHES, LAKES, PONDS AND WETLANDS SHALL BE REMOVED PRIOR TO, DURING AND AFTER COMPLETION OF GRADING ACTIVITIES. 16. EROSION CONTROL ITEMS AND DEVICES SHALL BE REMOVED ONLY AFTER THE AREA HAS RECEIVED FINAL STABILIZATION OR AS DIRECTED BY THE CITY.

12. GRADING ACTIVITIES PROPOSED TO BEGIN AFTER OCTOBER 15 WILL REQUIRE AN APPROVED PHASING SCHEDULE. THE AREA OF LAND THAT THE CITY WILL ALLOW TO BE DISTURBED AT THIS TIME OF YEAR WILL BE SEVERELY LIMITED. THE CITY WILL ALSO REQUIRE ADDITIONAL EROSION CONTROL DEVISES, I.E., TEMPORARY

PROPOSED PLAN SYMBOLS	BLDG	A Bi
CONSTRUCTION LIMITS	CB CL CONC DIP ELEV EX FFE INV MAX MH MIN PVC RCP RED	
CURB REMOVAL	APPF	20X
*NOTE: CONSTRUCTION LIMITS ARE ANTICIPATED TO BE PROPERTY LINE UNLESS OTHERWISE SHOWN.	NOTE: STORM : RECEIVE INSTALL 2/C3.0 RUNOFF.	SEWI RUI INLE ON
KEYED NOTES		
KEYED NOTES ARE DENOTED BY NO ON PLAN.		
1 INSTALL ROCK CONSTRUCTION ENTRANCE. REFER	TO DETAI	L 1,

7 REMOVE RETAINING WALL IN ITS ENTIRETY. 8 REMOVE FENCE IN ITS ENTIRETY. 9 EXISTING BUILDING TO REMAIN. PROTECT AT ALL TIMES. 10 REMOVE OVERHEAD ELECTRIC TO NEAREST JUNCTION. 11 REMOVE CONCRETE CURB AND GUTTER TO NEAREST JOINT. RETAINING WALL IS NOT TO BE DISTURBED. CONTRACTOR IS TO ENSURE THAT WALL IS FUNCTIONAL AFTER CONSTRUCTION.

2 INSTALL INLET SEDIMENT PROTECTION. REFER TO DETAIL 2/C3.0.

A SAWCUT AND REMOVE BITUMINOUS PAVEMENT IN ITS ENTIRETY TO THE EXTENTS SHOWN.

5 REMOVE CONCRETE PAVEMENT IN ITS ENTIRETY TO THE EXTENTS SHOWN.

3 INSTALL BIO ROLL. REFER TO DETAIL 3/3.0.

6 REMOVE TREE IN ITS ENTIRETY INCLUDING STUMP.

[13] REMOVE CATCH BASIN IN ITS ENTIRETY. FOLLOW ALL CITY OF ST. PAUL STANDARDS AND SPECIFICATIONS.

**GENERAL NOTES:** 

- CITY OF ST. PAUL AND UTILITY OWNER. REFER TO ALL CONSTRUCTION DOCUMENTS. 2. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A TRAFFIC CONTROL PLAN WHILE WORKING WITHIN THE RIGHT-OF-WAY. THE TRAFFIC CONTROL PLAN SHALL BE APPROVED BY THE CITY ENGINEERING DEPARTMENT PRIOR TO STREET ENCROACHMENT.
- . CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND REVIEW ALL CONSTRUCTION DOCUMENTS AND GEOTECHNICAL REPORTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ITEMS THAT SHOULD HAVE BEEN ANTICIPATED BY PERFORMING THE ABOVE
- 4. THE ROCK CONSTRUCTION ENTRANCE INDICATED ON THE PLAN IS SHOWN IN AN APPROXIMATE LOCATION. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR IS TO COORDINATE WITH THE CITY OF ST. PAUL FOR THE EXACT ROCK CONSTRUCTION ENTRANCE LOCATION.

ST PALIL'S NOTES

- CITY, ANY RESULTING DELAYS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 4. CITY OF ST. PAUL PERMIT REQUIREMENTS:
- ALLEYS, OR IF DRIVING OVER CURBS.
- UNDER CITY OF ST. PAUL LEGISLATIVE CODES.
- 4.5. REQUIREMENTS TO WORK IN THE PUBLIC RIGHT OF WAY: SERVICE DESK. (651–266–6151).
- RESTORATIONS" AND ARE AVAILABLE AT THE PERMIT OFFICE.
- SIGN(S)
- UNDER A PERMIT FROM PUBLIC WORKS SEWER SECTION (651-266-6234).
- ANY DAMAGE OR RELOCATIONS.

- SURVEYING (651-266-6075) IF YOU HAVE ANY QUESTIONS. RESTORATION.
- 19. MAINTAIN 8 FEET OF COVER OVER ALL WATER MAINS AND SERVICES.
- FOR TYPICAL WATER MAIN OFFSETS.



INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE CITY OF ST. PAUL. ALL SILT FENCES SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY CONSTRUCTION ACTIVITY. SILT FENCES SHALL BE INSTALLED ALONG THE CONTOUR. 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND MARK ALL EXISTING UTILITIES 48 HOURS BEFORE CONSTRUCTION STARTS. THE ENGINEER, ARCHITECT OR OWNER

DOES NOT GUARANTEE THAT ALL THE UTILITIES ARE MAPPED, OR IF MAPPED, ARE SHOWN CORRECTLY. CONTACT GOPHER STATE ONE CALL AT 651-454-0002 FOR FIELD LOCATING EXISTING UTILITIES. CONTACT UTILITY OWNER IF DAMAGE OCCURS DUE TO CONSTRUCTION. 3. THERE MAY BE MISCELLANEOUS ITEMS TO BE REMOVED THAT ARE NOT IDENTIFIED ON THESE

- PLANS. THE CONTRACTOR SHALL VISIT THE SITE AND REVIEW THE DOCUMENTS TO OBTAIN A CLEAR UNDERSTANDING OF THE INTENDED SCOPE OF WORK. 4. PRIOR TO START OF CONSTRUCTION, DISCONNECT ALL GAS AND ELECTRIC SERVICES.
- COORDINATE DISCONNECTION OF EACH UTILITY WITH THE UTILITY OWNER. REMOVE ALL GAS AND ELECTRIC LINES UNDER PROPOSED BUILDING FOOTPRINT. 5. ANY UTILITIES NOT INDICATED FOR REMOVAL OR ABANDONMENT, ARE TO BE PROTECTED AT ALL TIMES
- 6. ALL EXISTING CURB AND GUTTER IS TO BE REMOVED WITHIN THE SCOPE OF THE PROJECT FROM THE SAW CUT LINES TO THE NEAREST JOINT.
- 7. THE BACKGROUND INFORMATION WAS PREPARED BY HARRY S JOHNSON. (952) 884-5341. 8. ALL WORK IN THE PUBLIC RIGHT OF WAY IS TO BE COORDINATED WITH THE CITY OF ST. PAUL. ROADWAY REPAIRS, BOULEVARD REPAIRS, AND TRAFFIC CONTROL ARE TO BE PER CITY OF ST. PAUL STANDARDS AND SPECIFICATIONS.

1. CONCRETE CURB AND GUTTER REMOVAL, PAVEMENT REMOVAL, AND UTILITY REMOVAL LIMITS ARE TO BE COORDINATED THE

1. INSPECTION CONTACT: THE DEVELOPER SHALL CONTACT THE RIGHT OF WAY INSPECTOR CLINT MROZINSKI AT (651) 485-0418 (ONE WEEK PRIOR TO BEGINNING WORK) TO DISCUSS TRAFFIC CONTROL, PEDESTRIAN SAFETY AND COORDINATION OF ALL WORK IN THE PUBLIC RIGHT OF WAY. NOTE: IF A ONE WEEK NOTICE IS NOT PROVIDED TO THE

2. SAFE WORK SITE REQUIREMENTS: THE CONTRACTOR SHALL PROVIDE A CONTINUOUS, ACCESSIBLE AND SAFE PEDESTRIAN WALKWAY THAT MEETS ADA AND MN MUTCD STANDARDS IF WORKING IN A SIDEWALK AREA, AND TRAFFIC CONTROL PER MN MUTCD REQUIREMENTS FOR WORK IN THE PUBLIC RIGHT OF WAY. 3. NO PRIVATE FACILITIES IN THE RIGHT OF WAY: THE DEVELOPER IS STRICTLY PROHIBITED FROM INSTALLING PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR

LIGHTING IN THE CITY'S RIGHT OF WAY. THIS INCLUDES STUBBING CONDUIT OR CABLE INTO THE PUBLIC RIGHT OF WAY TO ACCOMMODATE UTILITY FEEDS TO THE SITE. COORDINATE WITH EACH UTILITY PRIOR TO CONSTRUCTION TO DETERMINE FEED POINTS INTO THE PROPERTY. UTILITIES ARE RESPONSIBLE FOR SECURING EXCAVATION PERMITS TO RUN THEIR SERVICE INTO A SITE, AND (WHERE REQUIRED) SUBMITTING PLANS FOR REVIEW BY THE PUBLIC WORKS UTILITY REVIEW COMMITTEE.

4.1. ORDERING OBSTRUCTION AND EXCAVATION PERMITS: CONTACT PUBLIC WORKS RIGHT OF WAY SERVICE DESK AT (651) 266-6151. IT IS STRONGLY RECOMMENDED THAT CONTRACTORS CALL FOR COST ESTIMATES PRIOR TO BIDDING TO OBTAIN ACCURATE COST ESTIMATES. 4.2. OBSTRUCTION PERMITS: THE CONTRACTOR MUST OBTAIN AN OBSTRUCTION PERMIT IF CONSTRUCTION (INCLUDING SILT FENCES) WILL BLOCK CITY STREETS, SIDEWALKS OR

4.3. EXCAVATION PERMITS: ALL DIGGING IN THE PUBLIC RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. IF THE PROPOSED BUILDING IS CLOSE TO THE RIGHT OF WAY, AND EXCAVATING INTO THE RIGHT OF WAY IS NEEDED TO FACILITATE CONSTRUCTION, CONTACT THE UTILITY INSPECTOR. 4.4. FAILURE TO SECURE PERMITS: FAILURE TO SECURE OBSTRUCTION PERMITS OR EXCAVATION PERMITS WILL RESULT IN A DOUBLE-PERMIT FEE AND OTHER FEES REQUIRED

ALL UTILITIES AND CONTRACTORS WORKING IN THE PUBLIC RIGHT OF WAY MUST TO BE REGISTERED, INSURED AND BONDED, AS RECOGNIZED BY THE PUBLIC WORKS

5. ALL WORK ON CURBS, DRIVEWAYS, AND SIDEWALKS WITHIN THE PUBLIC RIGHT OF WAY MUST BE DONE BY A LICENSED AND BONDED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SIDEWALK SECTION (651-266-6120). SIDEWALK GRADES MUST BE CARRIED ACROSS DRIVEWAYS.

6. RESTORATION OF ASPHALT AND CONCRETE PAVEMENTS ARE PERFORMED BY THE PUBLIC WORKS STREET MAINTENANCE DIVISION. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT TO THE CITY FOR THE COST OF THESE RESTORATIONS. THE CONTRACTOR SHALL CONTACT PUBLIC WORKS STREET MAINTENANCE TO SET UP A WORK ORDER PRIOR TO BEGINNING ANY REMOVALS IN THE STREET AT 651-292-6600. PROCEDURES AND UNIT COSTS ARE FOUND IN STREET MAINTENANCE'S "GENERAL REQUIREMENTS - ALL

7. SIGNS REGULATING PARKING AND/OR TRAFFIC ON PRIVATE PROPERTY SHALL BE INSTALLED BY THE PROPERTY OWNER OR CONTRACTOR OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. SIGNS APPROVED BY PUBLIC WORKS TRAFFIC ENGINEERING REGULATING PARKING AND/OR TRAFFIC IN THE PUBLIC RIGHT-OF-WAY FOR THIS DEVELOPMENT SHALL BE INSTALLED BY CITY FORCES AT THE EXPENSE OF THE DEVELOPMENT. CONTACT TRAFFIC ENGINEERING 651-266-6200 SIX WEEKS IN ADVANCE OF NEEDED

8. ABANDONING EXISTING SEWER SERVICE OR MAKING NEW CONNECTIONS TO CITY SEWER MUST BE DONE TO CITY STANDARDS BY A LICENSED HOUSE DRAIN CONTRACTOR

9. ALL WATER MAIN AND SERVICES TO BE INSTALLED ACCORDING TO 'SPRWS STANDARDS FOR INSTALLATION OF WATER MAINS', AND "SPRWS WATER CODE'. 10. ALL EXISTING WATER SERVICES NOT BEING REUSED MUST BE CUT-OFF AND ABANDONED PER SPRWS WATER CODE'.

11. THE CONTRACTOR SHALL CONTACT JOHN MCNAMARA, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE, (651-266-9780), IF REMOVAL OR RELOCATION OF EXISTING FACILITIES IS REQUIRED OR IN THE EVENT OF DAMAGE TO THE LIGHTING OR SIGNAL UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY (AND RELATED COSTS) FOR

11.1. THE INSTALLATION OF PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IS STRICTLY PROHIBITED IN THE CITY'S ROW (RIGHT OF WAY). 12. CONTRACTOR IS TO CONTACT GREG REESE, CITY FORESTER (651-632-2430) PRIOR TO IMPACTING ANY BOULEVARD TREES

13. BUSINESS SIGNS WILL REQUIRE A SEPARATE REVIEW AND SIGN PERMIT FROM THE DEPARTMENT OF SAFETY AND INSPECTIONS. SITE PLAN APPROVAL DOES NOT CONSTITUTE APPROVAL OF BUSINESS SIGNS SHOWN ON THE SITE PLAN. CONTACT YAYA DIATTA OF DSI ZONING (651-266-9080) IF YOU HAVE ANY QUESTIONS ABOUT SIGNS. 14. CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY IRONS. CALL SAM GIBSON OF PUBLIC WORKS

15. AS PER THE CITY'S "STANDARD SPECIFICATION FOR STREET OPENINGS" POLICY, RESTORATION ON ROADWAY SURFACES LESS THAN 5 YEARS OLD WILL REQUIRE FULL WIDTH MILL AND OVERLAY OR ADDITIONAL DEGRADATION FEES. PAVEMENT RESTORATION SHALL BE COMPLETED BY THE ST. PAUL PUBLIC WORKS STREET MAINTENANCE DIVISION. ALL RELATED COSTS ARE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR. CONTACT KEVIN NELSON AT 651-266-9700 FOR ESTIMATE OF COSTS FOR PAVEMENT

16. PIPE MUST BE MECHANICAL JOINT UNDERNEATH THE BUILDING FOOTPRINT AND UP TO TEN FEET OUTSIDE OF THE BUILDING FOOTPRINT.

17. WATER SERVICES TO BE INSTALLED ACCORDING TO SPRWS (STANDARDS FOR THE INSTALLATION OF WATER MAINS 18. A FOUR-SIDED TRENCH BOX IS REQUIRED ON ALL EXCAVATIONS DEEPER THAN 5 FEET WHERE UNDERGROUND WORK OR INSPECTION IS TO BE PERFORMED BY SPRWS. LADDERS ARE REQUIRED AND MUST EXTEND 3 FEET ABOVE THE SURFACE OF THE TRENCH. SIDEWALKS, PAVEMENTS, DUCTS AND APPURTENANT STRUCTURE SHALL NOT BE UNDERMINDED UNLESS A SUPPORT SYSTEM OR ANOTHER METHOD OF PROTECTION IS PROVIDED. TRENCHES IN EXCESS OF 20 FEET IN DEPTH MUST BE SIGNED OFF BY A REGISTERED PROFESSIONAL ENGINEER. EXCAVATED MATERIAL MUST BE KEPT A MINIMUM OF 2 FEET FROM THE EDGE OF THE TRENCH.

20. PIPE MATERIAL FOR 8" DUCTILE IRION PIPE MUST BE CLASS 52, PIPE MATERIAL FOR 6" AND 4" DUCTILE IRON PIPE MUST BE CLASS 53. 21. MAINTAIN 3 FEET VERTICAL SEPARATION BETWEEN WATER AND SEWER PIPES OR A 12-INCH SEPARATION WITH HIGH DENSITY INSULATION PER SPRWS STANDARD PLATE d-10

22. REFER TO SPRWS "STANDARDS FOR THE INSTALLATION OF WATER MAINS" STANDARD PLATE D-11 FOR RESTRAINED PIPE REQUIREMENT 23. ALL WATER SERVICE VALVE BOXES WITHIN CONSTRUCTION AREA MUST BE EXPOSED AND BROUGHT TO GRADE UPON COMPLETION OF CONSTRUCTION. 24. ALL PIPE WORK INSIDE OF PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL.



1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com



5930 Brooklyn Boulevard Minneapolis, MN 55429-2518 (763) 843-0420 Fax: (763) 843-0421 www.bkbm.com BKBM project number 16328.00

### Oaks Union Depot Apartments

240 4th St E Saint Paul MN 55101-1401

240 4th Street East, St Paul, Minnesota

Project Number	16328
Date	09/29/2016
Drawn By	NPA
Checked By	KAM

## **Demolition Plan**



# GRADING, UTILITY, AND PAVING PLAN

- DOCUMENT REVIEW.

- PERFORM THIS WORK.

- 15. WINTER MULCHING:

THE CONTRACTOR SHALL VISIT THE SITE, REVIEW ALL CONSTRUCTION DOCUMENTS AND FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BIDDING. NO ADDITIONAL COMPENSATION WILL BE GIVEN FOR WORK THAT COULD HAVE BEEN IDENTIFIED BY A SITE VISIT OR CONSTRUCTION

2. THE BACKGROUND INFORMATION WAS PREPARED BY HARRY S. JOHNSON CO., INC. CONTACT THOMAS HODORFF AT (952) 884-5341. 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND MARK ALL EXISTING UTILITIES 48 HOURS BEFORE CONSTRUCTION STARTS. THE ENGINEER, ARCHITECT OR OWNER DOES NOT GUARANTEE THAT ALL THE UTILITIES ARE MAPPED, OR IF MAPPED, ARE SHOWN CORRECTLY. CONTACT GOPHER ONE AT 651-454-0002 FOR FIELD LOCATING EXISTING UTILITIES. CONTACT UTILITY OWNER IF DAMAGE OCCURS DUE TO CONSTRUCTION. 4. PROTECT ALL EXISTING STRUCTURES AND UTILITIES WHICH ARE NOT SCHEDULED FOR REMOVAL

5. NOTIFY CITY BUILDING INSPECTOR BEFORE TRENCHING AND EXCAVATION WORK COMMENCES. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS PRIOR TO START OF CONSTRUCTION.

6. ALL SPOT ELEVATIONS SHOWN AS 13.33, FOR EXAMPLE, ARE TO BE UNDERSTOOD TO MEAN 713.33. 7. ALL SPOT ELEVATIONS ALONG THE CURB-LINE INDICATE THE ELEVATION OF THE GUTTER, UNLESS NOTED OTHERWISE.

8. ACCESSIBLE PARKING AREAS SHALL NOT HAVE SLOPES IN ANY DIRECTION THAT EXCEED 2%.

9. PROVIDE POSITIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.

10. UPON COMPLETION OF THE GRADING AND UTILITY WORK, THE CONTRACTOR SHALL CERTIFY THAT ALL GRADING AND UTILITY WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED GRADING AND UTILITY PERMITS. AN AS-BUILT GRADING AND UTILITY PLAN SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND DISTRIBUTION.

11. PRIOR TO ISSUANCE OF BUILDING PERMITS, ALL NECESSARY EROSION CONTROL DEVICES MUST BE IN PLACE AND FUNCTIONING. THE CITY WILL INSPECT THE SITE TO DETERMINE ITS SUITABILITY FOR BUILDING ACTIVITIES. IF THE PUBLIC UTILITIES HAVE NOT BEEN INSTALLED AT THIS POINT, IT MAY BE NECESSARY TO WITHHOLD BUILDING PERMITS FOR VARIOUS LOTS TO ALLOW THE CONTRACTOR ADEQUATE SPACE TO

12. ALL DEBRIS CREATED IN THE PROCESS OF CLEARING AND GRADING THE SITE SHALL BE REMOVED FROM THE SITE. THIS INCLUDES TREES AND SHRUBS. UNDER NO CIRCUMSTANCES SHALL THIS TYPE OF MATERIAL BE BURIED OR BURNED ON THE SITE. 13. ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION. EROSION CONTROL

MEASURES SHALL BE INSTALLED TO PREVENT SEDIMENT FROM RUNNING OFF ONTO ADJACENT PROPERTIES. ANY DAMAGE TO ADJACENT PROPERTIES MUST BE CORRECTED AND RESTORED AS SOON AS PERMISSION IS GRANTED FROM THE ADJACENT PROPERTY OWNER(S). 14. IF CONSTRUCTION OF THE SITE WORK PROCEEDS THROUGH THE WINTER MONTHS, ANY DISTURBED AREAS OUTSIDE THE BUILDING

FOOTPRINTS ARE TO BE MINIMALLY STABILIZED PRIOR TO MARCH 1, AS FOLLOWS: AREAS PLANNED TO RECEIVE PAVEMENTS ARE TO HAVE CLASS 5 BASE INSTALLED; ALL OTHER DISTURBED AREAS ARE TO BE SEEDED, STRAW MULCH PLACED, AND DISC-ANCHORED.

15.A. SNOW MULCHING SHALL BE DEFINED AS MULCH MATERIAL SPREAD OVER THE TOP OF SNOW SO THAT THE MULCH MELTS THROUGH THE SNOW AND STICKS TO THE EXPOSED SOILS. 15.B. FROZEN GROUND MULCHING SHALL BE DEFINED AS MULCH MATERIAL SPREAD OVER FROZEN GROUND. MULCH MATERIALS THAT DO NOT REQUIRE DISC-ANCHORING INTO THE SOIL MAY BE PLACED WITHOUT MODIFICATION. MULCH MATERIALS THAT REQUIRE DISC-ANCHORING MAYBE ANCHORED WITH HYDRAULIC SOIL STABILIZERS OR MAY BE FROZEN TO THE SOIL BY APPLYING WATER, AT A RATE OF 2000 GALLONS PER ACRE, OVER THE MULCH AS A SUBSTITUTION FOR DISC-ANCHORING.

16. RETAINING WALLS AND APPROPRIATE SAFETY FENCING ALONG THE TOP OF WALLS ARE TO BE DESIGNED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER. SUBMIT RETAINING WALL SHOP DRAWINGS TO PROJECT TEAM PRIOR TO CONSTRUCTION. 17. THE CONTRACTOR SHALL LIMIT THE DISTURBED AREA AS MUCH AS POSSIBLE

PROPOSED PLA	N SYMBOLS	BLDO	G Building	
CONSTRUCTION LIMITS PERIMETER SEDIMENT CONTROL PROPERTY LINE SAWCUT LINE (APPROX.) STORM SEWER SANITARY SEWER WATER PIPE		BM CB CON( ELEV EX FFE INV LFE MAX MH MIN PVC RCP	Bench Mark Catch Basin C Concrete V Elevation Existing Finished Floor Elevation Invert Lower Floor Elevation Maximum Manhole Minimum Polyvinyl Chloride P Reinforced Concrete Pipe	
MANHOLE		_ w.o.	. wasnout	
ROCK CONSTRUCTION ENTRANCE SEWER INVERT ELEVATION	INV. 706.21	A	APPROXIMATE DISTURBED AREA IS 0.30 ACRES	5
SPOT ELEVATION	(3.28)			
SOIL BORING	SB-1	NOTE STOP	TE: DRM SEWER INLETS NOT SHOWN ON PLA	N MAY
CONCRETE WASHOUT AREA	CONCRETE W.O. AREA	RECI INST 2/C RUN	CEIVE RUNOFF FROM CONSTRUCTION ACT TALL INLET SEDIMENT PROTECTION PER C3.0 ON ALL STORM INLETS THAT MAY F NOFF.	IVITIES. DETAIL RECEIVE
BITUMINOUS PAVEMENT				
CONCRETE PAVEMENT/SIDEWALK				

#### \*NOTE: CONSTRUCTION LIMITS ARE ANTICIPATED TO BE PROPERTY LINE UNLESS OTHERWISE SHOWN.

### <u>KEYED NOTES</u>

KEYED NOTES ARE DENOTED BY NO ON PLAN.

1 INSTALL ROCK CONSTRUCTION ENTRANCE. REFER TO DETAIL 1/C3.0.

- 2 INSTALL INLET SEDIMENT PROTECTION. REFER TO DETAIL 2/C3.0.
- 3 PERIMETER SEDIMENT CONTROL. REFER TO DETAIL 3/C3.0.
- 4 INSTALL MANHOLE OVER TOP OF EXISTING SANITARY SEWER. REFER TO DETAIL 5/C3.0.
- INSTALL 6-INCH WET TAP FOR FIRE PROTECTION. STUB 6-INCH DIPE WITHIN 5-FEET OF BUILDING. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO INSTALLATION.
- $^{33}$  COORDINATE INSTALLATION WITH SAINT PAUL REGIONAL WATER SERVICES. REFER TO DETAIL 4/C3.0.
- 6 INSTALL 4-INCH WET TAP FOR FIRE PROTECTION. STUB 6-INCH DIPE WITHIN 5-FEET OF BUILDING. COORDINATE EXACT LOCATION WITH MECHANICAL PRIOR TO INSTALLATION. COORDINATE INSTALLATION WITH SAINT PAUL REGIONAL WATER SERVICES. REFER TO DETAIL 4/C3.0.
- 7 INSTALL NEW MANHOLE. CONNECT TO EXISTING STORM SEWER. REFER TO DETAIL 5/C3.0. STUB 4-INCH PVC PIPE TO WITHIN 5-FEET OF BUILDING. COORDINATE WITH MECHANICAL ENGINEERING EXACT LOCATION AND INVERT.
- 10/C3.0. THE SYSTEM MUST MEET THE RATE CONTROL REQUIREMENTS INDICATED ON SHEET C4.0. ANY ALTERNATE DESIGNS MUST BE APPROVED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION.
- 9 INSTALL B624 CURB AND GUTTER PER DETAIL 6/C3.0.
- 10 INSTALL SIDEWALK PER DETAIL 7/C3.0.
- 11 REPAIR STREET AND ALLEY PAVEMENT PER DETAIL 8/C3.0. EXISTING PAVEMENT CROSS-SECTION IS UNKNOWN AT THIS TIME. CONTRACTOR SHALL MATCH EXISTING PAVEMENT CROSS-SECTIONS.
- 12 INSTALL NOSEDOWN CURB PER DETAIL 9/C3.0.
- 13 APPROXIMATE LOCATION OF TEMPORARY CONTAINED CONCRETE WASH OUT BIN. REFER TO THE MINNESOTA'S NPDES/SDS GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY FOR MORE DETAILS. SELF CONTAINED CONCRETE WASHOUTS ON CONCRETE DELIVERY TRUCKS IS AN ACCEPTABLE ALTERNATIVE TO ON-SITE CONTAINMENT.
- 14 INSTALL NEW CATCH BASIN PER DETAIL 5/C3.0 WITH NEENAH CASTING R-2335

### <u>ST. PAUL'S NOTES:</u>

- INSPECTION CONTACT: THE DEVELOPER SHALL CONTACT THE RIGHT OF WAY INSPECTOR CLINT MROZINSKI AT (651) 485-0418 (ONE WEEK PRIOR TO BEGINNING WORK) TO DISCUSS TRAFFIC CONTROL, PEDESTRIAN SAFETY AND COORDINATION OF ALL WORK IN THE PUBLIC RIGHT OF WAY. NOTE: IF A ONE WEEK NOTICE IS NOT PROVIDED TO THE CITY, ANY RESULTING DELAYS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SAFE WORK SITE REQUIREMENTS: THE CONTRACTOR SHALL PROVIDE A CONTINUOUS, ACCESSIBLE AND SAFE PEDESTRIAN WALKWAY THAT MEETS ADA AND MN MUTCD STANDARDS IF
- WORKING IN A SIDEWALK AREA, AND TRAFFIC CONTROL PER MN MUTCD REQUIREMENTS FOR WORK IN THE PUBLIC RIGHT OF WAY. NO PRIVATE FACILITIES IN THE RIGHT OF WAY: THE DEVELOPER IS STRICTLY PROHIBITED FROM INSTALLING PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IN THE CITY'S RIGHT OF WAY. THIS INCLUDES STUBBING CONDUIT OR CABLE INTO THE PUBLIC RIGHT OF WAY TO ACCOMMODATE UTILITY FEEDS TO THE SITE. COORDINATE WITH EACH UTILITY PRIOR TO CONSTRUCTION TO DETERMINE FEED POINTS INTO THE PROPERTY. UTILITIES ARE RESPONSIBLE FOR SECURING EXCAVATION PERMITS TO RUN THEIR SERVICE INTO A
- SITE, AND (WHERE REQUIRED) SUBMITTING PLANS FOR REVIEW BY THE PUBLIC WORKS UTILITY REVIEW COMMITTEE. 4. CITY OF ST. PAUL PERMIT REQUIREMENTS:
- 4.1. ORDERING OBSTRUCTION AND EXCAVATION PERMITS: CONTACT PUBLIC WORKS RIGHT OF WAY SERVICE DESK AT (651) 266-6151. IT IS STRONGLY RECOMMENDED THAT CONTRACTORS CALL FOR COST ESTIMATES PRIOR TO BIDDING TO OBTAIN ACCURATE COST ESTIMATES. 4.2. OBSTRUCTION PERMITS: THE CONTRACTOR MUST OBTAIN AN OBSTRUCTION PERMIT IF CONSTRUCTION (INCLUDING SILT FENCES) WILL BLOCK CITY STREETS, SIDEWALKS OR ALLEYS, OR
- IF DRIVING OVER CURBS.
- 4.3. EXCAVATION PERMITS: ALL DIGGING IN THE PUBLIC RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. IF THE PROPOSED BUILDING IS CLOSE TO THE RIGHT OF WAY, AND EXCAVATING INTO THE RIGHT OF WAY IS NEEDED TO FACILITATE CONSTRUCTION, CONTACT THE UTILITY INSPECTOR.
- 4.4. FAILURE TO SECURE PERMITS: FAILURE TO SECURE OBSTRUCTION PERMITS OR EXCAVATION PERMITS WILL RESULT IN A DOUBLE-PERMIT FEE AND OTHER FEES REQUIRED UNDER CITY OF ST. PAUL LEGISLATIVE CODES. 4.5. REQUIREMENTS TO WORK IN THE PUBLIC RIGHT OF WAY:
- ALL UTILITIES AND CONTRACTORS WORKING IN THE PUBLIC RIGHT OF WAY MUST TO BE REGISTERED, INSURED AND BONDED, AS RECOGNIZED BY THE PUBLIC WORKS SERVICE DESK. (651 - 266 - 6151).
- 5. ALL WORK ON CURBS, DRIVEWAYS, AND SIDEWALKS WITHIN THE PUBLIC RIGHT OF WAY MUST BE DONE BY A LICENSED AND BONDED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SIDEWALK SECTION (651-266-6120). SIDEWALK GRADES MUST BE CARRIED ACROSS DRIVEWAYS.
- 6. RESTORATION OF ASPHALT AND CONCRETE PAVEMENTS ARE PERFORMED BY THE PUBLIC WORKS STREET MAINTENANCE DIVISION. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT TO THE CITY FOR THE COST OF THESE RESTORATIONS. THE CONTRACTOR SHALL CONTACT PUBLIC WORKS STREET MAINTENANCE TO SET UP A WORK ORDER PRIOR TO BEGINNING ANY REMOVALS IN THE STREET AT 651-292-6600. PROCEDURES AND UNIT COSTS ARE FOUND IN STREET MAINTENANCE'S "GENERAL REQUIREMENTS - ALL RESTORATIONS" AND ARE
- AVAILABLE AT THE PERMIT OFFICE. 7. SIGNS REGULATING PARKING AND/OR TRAFFIC ON PRIVATE PROPERTY SHALL BE INSTALLED BY THE PROPERTY OWNER OR CONTRACTOR OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. SIGNS APPROVED BY PUBLIC WORKS TRAFFIC ENGINEERING REGULATING PARKING AND/OR TRAFFIC IN THE PUBLIC RIGHT-OF-WAY FOR THIS DEVELOPMENT SHALL BE INSTALLED BY CITY
- FORCES AT THE EXPENSE OF THE DEVELOPMENT. CONTACT TRAFFIC ENGINEERING 651-266-6200 SIX WEEKS IN ADVANCE OF NEEDED SIGN(S). 8. ABANDONING EXISTING SEWER SERVICE OR MAKING NEW CONNECTIONS TO CITY SEWER MUST BE DONE TO CITY STANDARDS BY A LICENSED HOUSE DRAIN CONTRACTOR UNDER A
- PERMIT FROM PUBLIC WORKS SEWER SECTION (651-266-6234).
- 9. ALL WATER MAIN AND SERVICES TO BE INSTALLED ACCORDING TO 'SPRWS STANDARDS FOR INSTALLATION OF WATER MAINS', AND "SPRWS WATER CODE'. 10. ALL EXISTING WATER SERVICES NOT BEING REUSED MUST BE CUT-OFF AND ABANDONED PER SPRWS WATER CODE'
- 11. THE CONTRACTOR SHALL CONTACT JOHN MCNAMARA, GENERAL FOREMAN, LIGHTING SIGNAL MAINTENANCE, (651-266-9780), IF REMOVAL OR RELOCATION OF EXISTING FACILITIES IS REQUIRED OR IN THE EVENT OF DAMAGE TO THE LIGHTING OR SIGNAL UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY (AND RELATED COSTS) FOR ANY DAMAGE OR RELOCATIONS
- 11.1. THE INSTALLATION OF PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IS STRICTLY PROHIBITED IN THE CITY'S ROW (RIGHT OF WAY).
- 12. CONTRACTOR IS TO CONTACT GREG REESE, CITY FORESTER (651-632-2430) PRIOR TO IMPACTING ANY BOULEVARD TREES.
- 13. BUSINESS SIGNS WILL REQUIRE A SEPARATE REVIEW AND SIGN PERMIT FROM THE DEPARTMENT OF SAFETY AND INSPECTIONS. SITE PLAN APPROVAL DOES NOT CONSTITUTE APPROVAL OF BUSINESS SIGNS SHOWN ON THE SITE PLAN. CONTACT YAYA DIATTA OF DSI ZONING (651-266-9080) IF YOU HAVE ANY QUESTIONS ABOUT SIGNS.
- 14. CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY IRONS. CALL SAM GIBSON OF PUBLIC WORKS SURVEYING (651–266–6075) IF YOU HAVE ANY QUESTIONS.
- 15. AS PER THE CITY'S "STANDARD SPECIFICATION FOR STREET OPENINGS" POLICY, RESTORATION ON ROADWAY SURFACES LESS THAN 5 YEARS OLD WILL REQUIRE FULL WIDTH MILL AND OVERLAY OR ADDITIONAL DEGRADATION FEES. PAVEMENT RESTORATION SHALL BE COMPLETED BY THE ST. PAUL PUBLIC WORKS STREET MAINTENANCE DIVISION. ALL RELATED COSTS ARE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR. CONTACT KEVIN NELSON AT 651-266-9700 FOR ESTIMATE OF COSTS FOR PAVEMENT RESTORATION.
- 16. PIPE MUST BE MECHANICAL JOINT UNDERNEATH THE BUILDING FOOTPRINT AND UP TO TEN FEET OUTSIDE OF THE BUILDING FOOTPRINT. 17. WATER SERVICES TO BE INSTALLED ACCORDING TO SPRWS (STANDARDS FOR THE INSTALLATION OF WATER MAINS."
- 18. A FOUR-SIDED TRENCH BOX IS REQUIRED ON ALL EXCAVATIONS DEEPER THAN 5 FEET WHERE UNDERGROUND WORK OR INSPECTION IS TO BE PERFORMED BY SPRWS. LADDERS ARE REQUIRED AND MUST EXTEND 3 FEET ABOVE THE SURFACE OF THE TRENCH. SIDEWALKS, PAVEMENTS, DUCTS AND APPURTENANT STRUCTURE SHALL NOT BE UNDERMINDED UNLESS A SUPPORT SYSTEM OR ANOTHER METHOD OF PROTECTION IS PROVIDED. TRENCHES IN EXCESS OF 20 FEET IN DEPTH MUST BE SIGNED OFF BY A REGISTERED PROFESSIONAL ENGINEER.
- EXCAVATED MATERIAL MUST BE KEPT A MINIMUM OF 2 FEET FROM THE EDGE OF THE TRENCH. 19. MAINTAIN 8 FEET OF COVER OVER ALL WATER MAINS AND SERVICES.
- 20. PIPE MATERIAL FOR 8" DUCTILE IRION PIPE MUST BE CLASS 52, PIPE MATERIAL FOR 6" AND 4" DUCTILE IRON PIPE MUST BE CLASS 53.
- 21. MAINTAIN 3 FEET VERTICAL SEPARATION BETWEEN WATER AND SEWER PIPES OR A 12-INCH SEPARATION WITH HIGH DENSITY INSULATION PER SPRWS STANDARD PLATE d-10 FOR TYPICAL WATER MAIN OFFSETS.
- 22. REFER TO SPRWS "STANDARDS FOR THE INSTALLATION OF WATER MAINS" STANDARD PLATE D-11 FOR RESTRAINED PIPE REQUIREMENT
- 23. ALL WATER SERVICE VALVE BOXES WITHIN CONSTRUCTION AREA MUST BE EXPOSED AND BROUGHT TO GRADE UPON COMPLETION OF CONSTRUCTION. 24. ALL PIPE WORK INSIDE OF PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL.



ABBREVIATIONS

kaas wilson

1301 American Blvd. East Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com



5930 Brooklyn Boulevard Minneapolis, MN 55429-2518 (763) 843-0420 Fax: (763) 843-0421 www.bkbm.com BKBM project number 16328.00

## Oaks Union Depot Apartments

240 4th St E Saint Paul MN 55101-1401

240 4th Street East, St. Paul, Minnesota

Project Number	16328
Date	09/29/2016
Drawn By	NPA
Checked By	KAM

Grading, Utility, and Paving Plan





C3.0



EXISTING CONDITIONS  $\begin{pmatrix} 1 \\ C6.0 \end{pmatrix}$ 

EXISTING DRAINAGE AREAS							
			Q OUT (CFS) STORM EVENT				
DRAINAGE AREA	(ACRES)	(ACRES)	(ACRES)	2–YEAR (2.80")	10–YEAR (4.19")	100–YEAR (7.42")	ROUTING
1	0.28	0.01	0.29	1.12	1.71	2.45	SHEET FLOW TO CB IN ALLEY
2	0.01	0.00	0.01	0.05	0.08	0.11	SHEET FLOW TO 4TH ST
TOTAL	0.29	0.01	0.30	1.17	1.79	2.56	



<u>national wetlands inventory map</u> st. paul, mn



WATERBODY

MISSISSIPPI RIVER

2	PROPOSED	CONDITIONS
6.0/	1"=20'	

PROPOSED DRAINAGE AREAS						
DRAINAGE AREA	IMPERVIOUS AREA (ACRES)	PERVIOUS AREA (ACRES)	TOTAL AREA (ACRES)	Q OUT (CFS		
				2 - YEAR	10 - YEAR	100-YEAR
				(2.60)	(4.19)	(7.42)
1	0.28	0.00	0.28	1.12	1.71	2.44
2	0.01	0.00	0.01	0.05	0.07	0.11
3	0.01	0.00	0.01	0.02	0.00	0.05
TANK	-	-	_	0.30	0.38	0.47
TOTAL	0.30	0.00	0.30	0.37	0.45	0.63

STORMWATER RUNOFF SUMMARY					
	2–YR STORM (2.80") RUNOFF (CFS)	10–YR STORM (4.20") RUNOFF (CFS)	100–YR STORM (7.42") RUNOFF (CFS)		
EXISTING SITE	1.17	1.79	2.56		
PROPOSED SITE	0.37	0.45	0.63		
PAUL REQUIREMENT	1.64 cfs PE	0.49			

# SPECIAL AND IMPAIRED WATERS THESE SPECIAL AND IMPAIRED WATERS ARE LOCATED WITHIN ONE MILE (AERIAL RADIUS) OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE. DUE TO THE PROXIMITY OF THESE SPECIAL ADN IMPAIRED WATERS, THE BMPS DESCRIBED IN APPENDIX A OF THE NPDES PERMIT WILL APPLY TO ALL AREAS OF THE SITE. IMPAIRMENT(S)

FECAL COLIFORM, MERCURY IN FISH TISSUE, MERCURY IN WATER COLUMN, PCB IN FISH TISSUE, PERFLUOROOCTANCE SULFONATE (PFSO) IN FISH TISSUE, TURBIDITY



Project Number	16328
Date	09/29/2016
Drawn By	NPA
Checked By	KAM

### Watershed Plan









X, Other Areas" Flood Insurance

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ROW) ROW)

being

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SD ۵ field or of record.

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work,





1301 American Blvd E.





1301 American Blvd E.



























NOTES TO HVAC UNIT PLANS:

- EXTERNALLY INSULATE EXHAUST DUCTS MIN. 5' BACK FROM EXTERIOR ENVELOPE PENETRATION AT WALL OR ROOF. - EXTEND 4"Ø BATH AND DRYER EXHAUSTS UP INTO TRUSS SPACE AND EXHAUST OUT SIDEWALL AS SHOWN AT FLOORS 1 THRU 5, AND AT FLOOR 6 WHERE SHOWN. PROVIDE SIDEWALL HOOD WITH DAMPER AND BIRDSCREEN. SIDEWALL HOODS TO HAVE COLOR AS SELECTED BY ARCHITECT AND COLORS MAY VARY DEPENDING ON SIDING MATERIAL - COORD. WITH ARCH. OMIT BIRDSCREEN AT DRYER EXHAUSTS.

- EXHAUSTS AT FLOOR 6 MAY EXIT THROUGH ROOF - SEE PLAN. FURNISH MIN. 24" GOOSENECK WITH BACKDRAFT DAMPER. INCLUDE BIRDSCREEN AT TOILET EXHAUSTS.

- TERMINATE INTAKE AT BASE OF MAGIC PAK PER MANUFACTURER REQUIREMENTS. RETURN AIR FROM ENCLOSED INTERIOR SPACES SHALL BE THRU UNDERCUTS AT DOOR, TRANSFER GRILLES, OR A COMBINATION OF THESE METHODS. AIR TRANSFER SPACE PROVIDED SHALL MEET A.C.C.A. GUIDELINES, 300 FPM MAX. - INSTALL 4"Ø OUTSIDE AIR INTAKE DUCT AS SHOWN AND DUCT BACK THROUGH TRUSS TO RETURN AIR DUCT AT BASE OF SPVAC UNIT. INSULATE DUCT AS REQUIRED AND FURNISH MANUAL VOLUME DAMPER. MAINTAIN 10'-0" CLEAR BETWEEN BUILDING EXHAUSTS AND INTAKES.

AT TYPE SPVAC (MAGIC PAK) UNITS, CONNECT 1/2" GAS LINE FROM BASEMENT WITH SEDIMENT TRAP, SHUTOFF VALVE, MAXITROL 325-3 OR EQ. REGULATOR, AND UNION. GAS LINES FROM BASEMENT SHALL HAVE NO JOINTS IN WALLS OR CONCEALED SPACES. ALSO FURNISH TRAPPED CONDENSATE LINE TO CONDENSATE RISER, AND INSTALL UP 508 APPROVED CONDENSATE OVERFLOW PROTECTION SWITCH. ALL CLEARWATER AIR CONDITIONING CONDENSATE SHALL DISCHARGE TO STORM DRAWL

- PROVIDE SEPARATE PIPING SYSTEM FOR CONVEYANCE OF CONDENSATE FROM CONDENSING FURNACES, AND DISCHARGE TO SANITARY DRAIN.

- COORDINATE EXHAUST AND INTAKE LOCATIONS ON EXTERIOR ELEVATIONS WITH ARCHITECT PRIOR TO INSTALLATION.



1/4"=1'-0"

















1301 American Blvd E. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com

Mechanical Engineer: Kenneth S. Kendle, P.E. 1900 Oakcrest Ave., Suite 1 Roseville, MN 55113 Phone: 651.633.3955 kskpe@comcast.net

Electrical Engineer: Wunderlich-Malec 6101 Blue Circle Dr. Eden Prairie, MN 55343 Phone: (952) 933-3222 www.wmeng.com

Structural: BKBM Engineers 5930 Brooklyn Blvd Minneapolis, MN 55429 P: (763) 843-0436

General Contrator: Frana Companies Inc. 633 2nd Ave S Hopkins, MN 55343 P: (952) 935-8600

### Oaks Union Depot 240 4th St E St Paul, MN 55101-1401

Project Number	1577
Permit Set	09/29/2016
Drawn	KSK
Checked	KSK
I hereby certify the specification, or rep pared by me or une supervision, and tha Registered Professia under the laws of MINNES <b>MINNES</b> Date <u>09/29/2016</u> Ref	at this plan, port was pre- der my direct it I am a duly onal Engineer the State of OTA OTA
Date	
Revision	
Rev. No.	
Mecha Unit F	anical Plans
M4	50

1/4"=1'-0"

NOTES TO HVAC UNIT PLANS:

1/4"=1'-0"

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<u>UNIT 2-1</u>

1 M451





2 UNIT 2-2 M451

1/4"=1'-0"





1/4"=1'-0"



UPPER











1/4"=1'-0"







UPPER













Electric Heater ScheduleNo.LocationMakeModelTypeWattVoltPhHzEH-1VariousMarkelHF3220T2RPWWall heater1500208160EH-2VariousMarkelHF3316T2RPWall heater3000208160EH-3VariousMarkelF3317T2RPWall heater4800208160EH-4VariousMarkelF1F5105NUnit heater5000208160EH-5VariousMarkelCV4512XCove heater450120160EH-6VariousMarkelCP127Cove heater450120160	Amp Comments 7.2 Provide integral t-stat, surface mounting 14.4 Provide integral t-stat, surface mounting 23.0 Provide integral t-stat, surface mounting 24.0 Provide ceiling mounting bracket, remote 4.0 Provide mounting bracket, remote t-stat	g frame where noted g frame where noted g frame where noted t-stat		1301 American Blvd E. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666
EH-6VariousMarketCP127Ceiting panet750120160Note: not all heater types listed on electric heater schedule may be included on this proFan ScheduleNo.DescriptionLocationMakeModelEF-1Bath/general exhaustsResidence bathroomsDeltaVFB070B3A1EF-2General exhaustCommon area jan. and toiletDeltaVFB080C4A1EF-3Garage exhaustGarageGreenheckSBE-2L36-1EF-4Trash room exhaustGarageGreenheckSP-4200EF-5Fitness exhaust first floorCeilingGreenheckSQ-85-DSingle Packaged Vertical Air Conditioner (SPVAC)Unit ScheduleSchedule	5.3       Provide mounting frame, remote t-stat; valic         ject - verify on plans         Type       CFM       TSP (in)       particular         Ceiling/wall       60       0.20       12         Ceiling/wall       70       0.20       12         5       Prop       14,350       0.25       1-1,         Inline       375       0.50       1,         Ceiling       200       0.25       4	ower Volt Ph Hz Comments 12 W 115 1 60 Provide 3"x4" increaser at out 33 W 115 1 60 Mount in ceiling /2 HP 208 3 60 Flush interior mount; with grav /8 HP 115 1 60 Vibration mounts, speed contro 48 W 115 1 60 With integral backdraft damper 12 HP 115 1 60 Vibration mounts, speed contro	let vity backdraft damper, wall housing, motor guard, VFD ller ceiling radiation damper, grille ller	Mechanical Engineer: Kenneth S. Kendle, P.E. 1900 Oakcrest Ave., Suite 1 Roseville, MN 55113 Phone: 651.633.3955 kskpe@comcast.net Electrical Engineer: Wunderlich-Malec 6101 Blue Circle Dr. Eden Prairie, MN 55343 Phone: (952) 933-3222
No.DescriptionMakeModelCFMExt S. P.ToAC-1Various - see plansMagic-PakHWC9N2211P126000.30AC-2Various - see plansMagic-PakHWC9N3311P188300.30AC-3Various - see plansMagic-PakHWC9N3311P248550.30AC-4Various - see plansMagic-PakHWC9N3311P248550.30AC-5Various - see plansMagic-PakHWC9N3311P248550.30AC-6LobbyMagic-PakHWC9N5511P308400.30AC-6LobbyMagic-PakHWC9N5511P308400.30AC-6LobbyMagic-PakHWC9N5511P308400.30AC-6LobbyMagic-PakHWC9N5511P308400.30AC-6LobbyMagic-PakHWC9N5511P308400.30AC-6LobbyMagic-PakHWC9N5511P308400.30AC-6LobbyMagic-PakHWC9N5511P308400.30	CoolingGas Heatingtal BtuhSens. BtuhInput BtuhDutput11,8008,26024,0001917,00012,75033,0003322,00016,06033,0003322,00016,06044,0004327,00018,36044,0004327,00018,36055,00055). Conn. separate 3/4"trapped condensate lines	ut Btuh KW Volt Ph Hz Comments 9,000 208 1 60 Programmable thermos 1,000 208 1 60 Programmable thermos 1,500 208 1 60 Programmable thermos from AC coil and condensing furnace to risers and dise	stat, wall sleeve, adapters stat, wall sleeve, adapters	www.wmeng.com Structural: BKBM Engineers 5930 Brooklyn Blvd Minneapolis, MN 55429 P: (763) 843-0436
Rooftop Unit Schedule No. Description Make Type Model Tons CFM RTU-1 Corridor unit Bryant Rooftop 580JP04A 3 1,20 Provide 14' roof curb, 2' TA filters, standard-static, insulated cabinet, 2-stage prog Fancoil Unit Schedule No. Description Make Type Model CFM FCU-1 Workroom/Parcel/Mail/Lobby Bryant Horiz. DX FB4CNF024008 750 Furnish refrigerant lines, thermostat, cooling coll condensate drains, condensate overf Furnace Schedule No. Description Make Type Model CFM FU-1 Unit 2-2M Bryant Downflow condensing 912SC36060514 1,15 Fr-2 Unit 2-2M Bryant Downflow condensing 912SC36060514 1,15 Fr-2 Unit 2-4M Bryant Downflow condensing 912SC36060514 1,15 Fr-2 Unit for FCU-1 Bryant 123ANA018 Air cooled 1.5 85 CU-2 Cond unit for FCU-1 Bryant 123ANA018 Air cooled 1.5 85 CU-2 Cond unit for FCU-1 Bryant 123ANA036 Air cooled 3.0 95 Furnish refrigerant liquid and suction Lines, TXV, filter/drier, liquid line solenoid, thermostat with subbase and automatic changeover, ball bearing fan motor, low-press. swi No. Location Make Model CFM Intake ESP Intake CFM Air-to-Air Heat Exchanger Schedule No. Location Make Model CFM Intake ESP Intake CFM HX-1 Elev. lobbies Renewaire BR70 50 0.4' Unit Heater Schedule	Cooling- Ext S. P. Total S. P. Total Btuh Sc 0 0.50' 35,600 rammable thermostat with dual averaging sensors, Cooling Ext S. P. Total Btuh Sens. Btuh Hec 0.38' 18,000 12,960 6.0 100 switch; interlock with condensing unit per s Cooling Ext S. P. Total Btuh Sens. Btuh 5 0.50' 36,000 25,920 r), furnace condensate drain, drain neutralizer, ing unit per schedule. MCA MECP Volt Ph Hz Comments 11.7A 15A 208/230 1 60 Mount on 19.0A 30A 208/230 1 60 Mount on 19.0A 30A 208/230 1 60 Mount on time-delay relay, mounting pad or frame, tch. Butdoor units include low-ambient trim for at (Btuh) CFM Ext S. P. HP 104,950 14,350 0.50' 10 60 , temp. control, insulated cabinet, freeze prot. , ETL listed, spark ignition, exhaust fan relay Exhaust ESP Exhaust Motors Vo 85 0.1' (2) @ 100 watt	<ul> <li>Heating</li> <li>ens. Btuh Input Btuh Dutput Btuh Fan HP 26,300 72,000 56,000 1/2 26,300 72,000 56,000 1/2</li> <li>i, factory disconnect and 115v service outlet, 0-25% D</li> <li>at KW Fan HP Volt Ph Hz Comments 00208v 1/3 208 1 60 Provide t-stat; h 00208v 1/3 208 1 60 Provide t-stat; h 00208v 1/3 208 1 60 Provide t-stat; h schedule.</li> <li></li></ul>	Volt Ph Hz Comments 208 3 60 see below 208 3 60 see below A intake eater 8.0 KW @ 240v derated to 6.0 KW @ 208v eater 8.0 KW @ 240v derated to 6.0 KW @ 208v dz Comments 60 Heat/cool t-stat; see below 60 Heat/cool t-stat; see below 8 reg.;	Frana Companies Inc. 633 2nd Ave S Hopkins, MN 55343 P: (952) 935-8600 <b>Oaks Union</b> <b>Depot</b> 240 4th St E St Paul, MN 55101-1401 Project Number 1577 Permit Set 09/29/2016 Drawn KSK Checked KSK I hereby certify that this plan, specification, or report was pre- pared by me or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the State of MINNESOTA Licit S, Kille Date 09/29/2016 Reg.# 19630
UH-1 Garage entry Uper Reznor UDAS-200 Gas-fired power-vent 200 UH-2 Garage entry upper Reznor UDAS-200 Gas-fired power-vent 200 Provide sidewall exhaust venting and terminate per manufacturer's instructions.	,000 i66,000 1/4 166,000 1/4	<pre>115 1 60 Furnish t-stat, vent cap 115 1 60 Furnish t-stat, vent cap</pre>	MADIC-PAK OR CONDENSING FURMICE 3/4" 3/4" TO 3.0 TON (TYP). WADIC-PAK, 10 TO 2.5 TON AT LOWER FLOORS (TYP). TO 3.0 TON (TYP). TO 3.0 TON (TYP). TO 3.0 TON AT LOWER FLOORS (TYP). TO 1-1/4" FURMICE TO SANTARY CONDENSATE TO SANTARY RECEIPTOR IN GARAGE - SEE GRAGE PLAN. USE ONLY CORDONOLMERSISTANT PIPING, C.P.V.C. OR EQUAL. CONDENSATE RISERS (TYP)	In the second se
	M800	NO SCALE	1 CONDENSATE RISERS NO SCALE	M800

No. Location Make Model Type Watt Volt Ph Hz Amp Comments EH-1 Various Markel HF3220T2RPW Wall heater 1500 208 1 60 7.2 Provide integral t-stat, surface mounting frame where noted EH-2 Various Markel HF3316T2RP Wall heater 3000 208 1 60 14.4 Provide integral t-stat, surface mounting frame where noted EH-3 Various Markel F3317T2RP Wall heater 4800 208 1 60 23.0 Provide integral t-stat, surface mounting frame where noted EH-4 Various Markel F1F5105N Unit heater 5000 208 1 60 24.0 Provide ceiling mounting bracket, remote t-stat EH-5 Various Markel CV4512X Cove heater 450 120 1 60 4.0 Provide mounting bracket, remote t-stat EH-6 Various Markel CV4512X Cove heater 450 120 1 60 4.0 Provide mounting bracket, remote t-stat EH-6 Various Markel CP127 Ceiling panel 750 120 1 60 6.3 Provide mounting frame, remote t-stat; verify ceiling type Note: not all heater types listed on electric heater schedule may be included on this project - verify on plans		0r 1301 American Blvd E. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com
Fan ScheduleNo.DescriptionLocationMakeModelTypeCFMTSP (in)powerVolt PhHzCommentsEF-1Bath/general exhaustsResidence bathroomsDeltaVFB070B3A1Ceiling/wall600.2012 W115160Provide 3'x4' increaser at outEF-2General exhaustCommon area jan. and toiletDeltaVFB080C4A1Ceiling/wall700.2033 W115160Mount in ceilingEF-3Garage exhaustGarageGreenheckSBE-2L36-15Prop14,3500.251-1/2 HP208360Flush interior mount; with graEF-4Trash room exhaustGarageGreenheckSQ-90-DInline3750.501/8 HP115160Vibration mounts, speed controEF-5Fitness exhaustCeilingGreenheckSQ-85-DInline2100.501/12 HP115160Vibration mounts, speed controEF-6Core exhaust first floorCeilingGreenheckSQ-85-DInline2100.501/12 HP115160Vibration mounts, speed controSingle Packaged Vertical Air Conditioner (SPVAC) Unit ScheduleSurade	tlet avity backdraft damper, wall housing, motor guard, VFD oller r, ceiling radiation damper, grille oller	Mechanical Engineer: Kenneth S. Kendle, P.E. 1900 Oakcrest Ave., Suite 1 Roseville, MN 55113 Phone: 651.633.3955 kskpe@comcast.net Electrical Engineer: Wunderlich-Malec 6101 Blue Circle Dr. Eden Prairie, MN 55343 Phone: (952) 933-3222
No. Description Make Model CFM Ext S.P. Total Btuh Sens. Btuh Input Btuh Dutput Btuh KW Volt Ph Hz Comments AC-1 Various - see plans Magic-Pak HWC9N2211P12 600 0.30 11,800 8,260 24,000 19,000 208 1 60 Programmable thermo AC-2 Various - see plans Magic-Pak HWC9N3311P18 830 0.30 17,000 12,750 33,000 31,000 208 1 60 Programmable thermo AC-3 Various - see plans Magic-Pak HWC9N3311P24 855 0.30 22,000 16,060 33,000 31,000 208 1 60 Programmable thermo AC-4 Various - see plans Magic-Pak HWC9N3311P24 855 0.30 22,000 16,060 44,000 41,000 208 1 60 Programmable thermo AC-5 Various - see plans Magic-Pak HWC9N3311P24 855 0.30 22,000 16,060 44,000 41,000 208 1 60 Programmable thermo AC-5 Various - see plans Magic-Pak HWC9N3311P24 855 0.30 27,000 18,360 44,000 41,000 208 1 60 Programmable thermo AC-6 Lobby Magic-Pak HWC9N4411P30 840 0.30 27,000 18,360 55,000 51,500 208 1 60 Programmable thermo AC-6 Lobby Magic-Pak HWC9N511P30 840 0.30 27,000 18,360 55,000 51,500 208 1 60 Programmable thermo AC-6 Lobby Magic-Pak HWC9N511P30 840 0.30 27,000 18,360 55,000 51,500 208 1 60 Programmable thermo AC-6 Lobby Magic-Pak HWC9N511P30 840 0.30 27,000 18,360 55,000 51,500 208 1 60 Programmable thermo AC-6 Lobby Magic-Pak HWC9N511P30 840 0.30 27,000 18,360 55,000 51,500 208 1 60 Programmable thermo	ostat, wall sleeve, adapters ostat, wall sleeve, adapters	www.wmeng.com Structural: BKBM Engineers 5930 Brooklyn Blvd Minneapolis, MN 55429 P: (763) 843-0436 General Contrator: Erana Companies Inc
Rooftop Unit Schedule No. Description Make Type Model Tons CFM Ext S. P. Total S. P. Total Btuh Sens. Btuh Input Btuh Dutput Btuh Fan HP RTU-1 Corridor unit Bryant Rooftop 580JP04A 3 1,200 0.50" 35,600 26,300 72,000 56,000 1/2 RTU-2 Corridor unit Bryant Rooftop 580JP04A 3 1,200 0.50" 35,600 26,300 72,000 56,000 1/2 Provide 14" roof curb, 2" TA filters, standard-static, insulated cabinet, 2-stage programmable thermostat with dual averaging sensors, factory disconnect and 115v service outlet, 0-25% D.	Volt Ph Hz Comments 208 3 60 see below 208 3 60 see below A.intake	633 2nd Ave S Hopkins, MN 55343 P: (952) 935-8600 Oaks Union
Fancoil Unit Schedule No. Description Make Type Model CFM Ext S.P. Total Btuh Sens. Btuh Heat KW Fan HP Volt Ph Hz Comments FCU-1 Workroom/Parcel/Mail/Lobby Bryant Horiz. DX FB4CNF024008 750 0.38" 18,000 12,960 6.0@208v 1/3 208 1 60 Provide t-stat; h FCU-2 Game room Bryant Horiz. DX FB4CNF024008 750 0.38" 18,000 12,960 6.0@208v 1/3 208 1 60 Provide t-stat; h FU-2 Game room Bryant Horiz. DX FB4CNF024008 750 0.38" 18,000 12,960 6.0@208v 1/3 208 1 60 Provide t-stat; h Furnish refrigerant lines, thermostat, cooling coil condensate drains, condensate overflow switch; interlock with condensing unit per schedule. Furnace Schedule	neater 8.0 KW @ 240v derated to 6.0 KW @ 208v neater 8.0 KW @ 240v derated to 6.0 KW @ 208v	Depot 240 4th St E St Paul, MN
No. Description Make Type Model CFM Ext S.P. Total Btuh Sens. Btuh Input Btuh Dutput Btuh Blower HP Volt Ph F-1 Unit 2-2M Bryant Downflow condensing 912SC36060S14 1,155 0.50' 36,000 25,920 60,000 56,000 1/3 115 1 F-2 Unit 2-4M Bryant Downflow condensing 912SC36060S14 1,155 0.50' 36,000 25,920 60,000 56,000 1/3 115 1 All units: Furnish filter rack, PVC intake and vent thru roof(size as recommended by mfr), furnace condensate drain, drain neutralizer, condensate overflow switch conforming to UL 508, cased DX coil, refrigerant lines, cooling coil condensate drain, interlock with condensing unit per schedule.	Hz Comments 60 Heat/cool t-stat; see below 60 Heat/cool t-stat; see below	SSTUT-1401Project Number1577Permit Set09/29/2016DrawnKSK
No. Description Make Model Type Tons Ambient T(F) MCA MOCP Volt Ph Hz Comments CU-1 Cond unit for FCU-1 Bryant 123ANA018 Air cooled 1.5 85 11.7A 15A 208/230 1 60 Mount on pad at garage CU-2 Cond unit for FCU-2 Bryant 123ANA018 Air cooled 1.5 85 11.7A 15A 208/230 1 60 Mount on pad at garage CU-3 Cond unit for F-1 Bryant 123ANA036 Air cooled 3.0 95 19.0A 30A 208/230 1 60 Mount on pad on roof; low-ambient trim CU-4 Cond unit for F-2 Bryant 123ANA036 Air cooled 3.0 95 19.0A 30A 208/230 1 60 Mount on pad on roof; low-ambient trim Furnish refrigerant liquid and suction lines, TXV, filter/drier, liquid line solenoid, time-delay relay, mounting pad or frame, thermostat with subbase and automatic changeover, ball bearing fan motor, low-press. switch. Outdoor units include low-ambient trim for operation below 55 F ambient temp.		Checked KSK I hereby certify that this plan, specification, or report was pre- pared by me or under my direct
No. Location Make Model Type Heat (Btuh) CFM Ext S.P. HP Volt Ph Hz Comments MUA-1 Garage Titan TA-122-NG-HRD Direct fired - indoor 1,104,950 14,350 0.50" 10 208 3 60 Interlock with EF-3 MUA-1: Provide low-leak motorized inlet damper, VFD, filter box with 1" cleanable media, temp. control, insulated cabinet, freeze prot., ductstat and space thermostat, 1-5 psig gas pressur carbon monoxide/nitrogen dioxide detection system, down-discharge, summer/winter switch, ETL listed, spark ignition, exhaust fan relay Air-to-Air Heat Exchanger Schedule	re reg, ,	supervision, and that I am a duly Registered Professional Engineer under the laws of the State of MINNESOTA Kernett S. Kollo
No. Location Make Model CFM Intake ESP Intake CFM Exhaust ESP Exhaust Motors Volt Ph Hz Comments HX-1 Elev. lobbies Renewaire BR70 50 0.4" 85 0.1" (2)@100 watt 115 1 60 Provide piped condensate drain as requi Unit Heater Schedule No. Location Make Model Type Heat input (Btuh) Dutput (Btuh) HP Volt Ph Hz Comments UH-1 Garage entry lower Reznor UDAS-200 Gas-fired power-vent 200,000 166,000 1/4 115 1 60 Furnish t-stat, vent cap	ired	Date 09/29/2010 Reg.# 19030
UH-2 Garage entry upper Reznor UDAS-200 Gas-fired power-vent 200,000 166,000 1/4 115 1 60 Furnish t-stat, vent cap Provide sidewall exhaust venting and terminate per manufacturer's instructions.		
	MAGIC-PAK OR CONDENSING FURNACE (TYP) AT TOP FLOOR, 1.0 TO 3.0 TON (TYP).	Revision
FURNISH POUNDS-TO-INCHES PRESSURE REGULATOR WHERE SHUTOFF VALVE FUEL DELIVERY PRESSURE EXCEEDS 14" W.C.	MAGIC-PAK, 1.0 TO 2.5 TON AT LOWER FLOORS (TYP).	
	1 - 1/4" - 1 - 1/4" $1 - 1/4" - 1 - 1/4"$ $1 - 1/4" - 1 - 1/4"$	Rev. No.
GAS PIPING AT APPLIANCE COND. PIPING AT R.W.L.	EXTEND 1-1/4" FURNACE CONDENSATE TO SANITARY RECEPTOR IN GARAGE – SEE GARAGE PLAN. USE ONLY CORROSION-RESISTANT PIPING, C.P.V.C. OR EQUAL.	Mechanica Schedules and Details
2 PIPING DETAILS NO SCALE	CONDENSATE RISERS (TYP)	M800













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SUDS DRAIN UP





1301 American Blvd E.






NO SCALE

























PANEL

NOTES TO PLUMBING UNIT PLANS:

- PROVIDE HOT AND COLD WATER MANIFOLDS AT LAUNDRY ROOM CEILING AND EXTEND 1/2" PEX SUPPLY PIPING THRU TRUSS SPACE TO ALL FIXTURE SUPPLIES. – FURNISH 1/4" VALVED COLD W. TO SUPPLY BOX AT REFRIG. FROM KITCHEN SINK BRANCH LINE (OR AS OTHERWISE NOTED). PIPE SIZE SHALL BE 1/2" WHERE CONCEALED IN WALL.

– FURNISH 3/8" VALVED HOT W. TO DISHWASHER (WHERE FURNISHED) FROM KITCHEN SINK BRANCH LINE.

– INSTALL GARBAGE DISPOSAL AT KITCHEN SINKS (WHERE FURNISHED – SUPPLIED BY OTHERS).

- FURNISH SHUTOFF VALVES AT SUPPLIES TO EACH FIXTURE.

- SEE RISER PLANS FOR RISER SIZES.

- VERIFY ORIENTATION OF TUB DRAINS (LEFT OR RIGHT) WITH ARCHITECT.



1/4"=1'-0"











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1/4"=1'-0"







1/4"=1'-0"

P450

1577

KSK

KSK

09/29/2016







NOTES TO PLUMBING UNIT PLANS:

- PROVIDE HOT AND COLD WATER MANIFOLDS AT LAUNDRY ROOM CEILING AND EXTEND 1/2" PEX SUPPLY PIPING THRU TRUSS SPACE TO ALL FIXTURE SUPPLIES.

– FURNISH 1/4" VALVED COLD W. TO SUPPLY BOX AT REFRIG. FROM KITCHEN SINK BRANCH LINE (OR AS OTHERWISE NOTED). PIPE SIZE SHALL BE 1/2" WHERE CONCEALED IN WALL.

- FURNISH 3/8" VALVED HOT W. TO DISHWASHER (WHERE FURNISHED) FROM KITCHEN SINK BRANCH LINE.

- INSTALL GARBAGE DISPOSAL AT KITCHEN SINKS (WHERE FURNISHED - SUPPLIED BY OTHERS).

- FURNISH SHUTOFF VALVES AT SUPPLIES TO EACH FIXTURE.

- SEE RISER PLANS FOR RISER SIZES.

- VERIFY ORIENTATION OF TUB DRAINS (LEFT OR RIGHT) WITH ARCHITECT.

2 UNIT 2-2 P451

1/4"=1'-0"



















1/4"=1'-0"











UPPER













(D1)<sub>51 DFU</sub>

 $\left< D2 \right>_{65 \text{ DFU}}$ 



 $\langle D5 \rangle_{59 \text{ DFU}}$ 



 $\langle D7 \rangle_{142 \text{ DFU}}$ 

 $\langle D3 \rangle_{42 \text{ DFU}}$ 

D4 59 DFU

 $\langle D6 \rangle_{83 \text{ DFU}}$ 

 $\langle D8 \rangle_{82}$  dfu







FIXTURE	WASTE	VENT
WATER CLOS.	4"	2"
LAVATORY	1-1/2"	1-1/2"
SHOWER	2"	1-1/2"
W.M.O.B.	2"	1-1/2"
LAUND. TRAY	1-1/2"	1-1/2"
TUB/SHWR	2"	1-1/2"
KIT. SINK	1-1/2"	1-1/2"
CLINIC SINK	4"	2"
SPA TUB	2"	1-1/2"
DR. FOUNT.	1-1/2"	1-1/2"

	3/4"C,	3/4"C, 1/2"H 1 → 4.75 CWFU, - ↓ 2.25 HWFU			
CWFU, IWFU	1"C,	3/4"C, 1/2"H 1			
	3/4 H	3/4"C,	FIXTURE	НОТ	COLD
			WATER CLOS. (TANK)		1/2"
WFU, VFU		2.25 HWFU	LAVATORY	1/2"	1/2"
	1"C.		URINAL		3/4"
	3/4"H	3/4"0	TUB/SHWR	1/2"	1/2"
		1/2"H	KIT. SINK	1/2"	1/2"
WFU, /FU		↓ 4.75 CWFU, ↓ 2.25 HWFU	BAR SINK	1/2"	1/2"
	1-1/4"C	·	WMOB/L.T.	1/2"	1/2"
	1"H	3/4"C,	DR. FOUNT.		1/2"
₩FU, ₩FU WFU, ₩FU	1-1/4"C,	4.75 CWFU, 2.25 HWFU 3/4"C, 1/2"H ↓ 4.75 CWFU, ↓ 2.25 HWFU	WATER PIPE SIZING NOTES: PER SERVICES AVAILABLE WATER PRE SIZING AT MAINS AND VERTICAL PRESSURE LOSS PER 100 FT, I VELOCITIES FOR CPVC-CTS OR CONTRACTORS PROVIDING ALTER MANUFACTURERS SHALL VERIFY LOSS IS NO GREATER THAN DES VELOCITY LIMITATIONS OF ALTER ARE NOT EXCEEDED.	ST PAUL F SSURE IN S RISERS BAS NOT TO EXC CPVC SCH. NATE WATER THAT PIPING GIGN VALUES NATE MANUF	REGIONAL WATER STREET IS 79 PSI SED ON MAX. 6.0 EED RECOMMENDE 80, 8.0 FPS. PIPING MATERIAL SYSTEM PRESSU S, AND THAT MAXI FACTURER'S MATER
	1-1/4"C, 1"H				

## 1301 American Blvd E Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com Plumbing Engineer: Kenneth S. Kendle, P.E. 1900 Oakcrest Ave., Suite 1 Roseville, MN 55113 Phone: 651.633.3955 kskpe@comcast.net Electrical Engineer: Wunderlich-Malec 6101 Blue Circle Dr. Eden Prairie, MN 55343 Phone: (952) 933-3222 www.wmeng.com

Structural: BKBM Engineers 5930 Brooklyn Blvd Minneapolis, MN 55429 P: (763) 843-0436

General Contrator: Frana Companies Inc. 633 2nd Ave S Hopkins, MN 55343 P: (952) 935-8600

## Oaks Union Depot 240 4th St E St Paul, MN 55101-1401

Project Number	1577
Permit Set	09/29/2016
Drawn	KSK
Checked	KSK
I hereby certify that the specification, or report pared by me or under supervision, and that I Registered Professional under the laws of the MINNESOT	this plan, was pre- my direct am a duly Engineer State of A
Date	
Revision	
Plumb	ing
Riser P7(	rs )1

STRUCT	URAL SYMBOLS				
	DIMENSIONAL LUMBER	BP1	BEARING PLATE MARK - SEE SCHEDULE		MATCH LINE
	WOOD BLOCKING	(C1)	COLUMN MARK - SEE SCHEDULE		EXISTING BUILDING LINE
	FINISH WOOD	XXX PLF	DESIGN DIAPHRAGM SHEAR FORCE TO BE RESISTED BY PRECAST WALL PANEL OR COLD-FORMED STEEL STUD SHEAR WALL. SEE PLAN NOTES FOR LOAD TYPE.		HIDDEN EXISTING BUILDING LINE
	STEEL OR METAL	EP1	EMBED PLATE MARK - SEE SCHEDULE		BREAK LINE
		CF4-0	FOOTING MARK FOR COLUMNS - SEE SCHEDULE		DIRECTION OF SLOPE
		WF2-0	FOOTING MARK FOR WALLS - SEE SCHEDULE		
	FACE OR COMMON BRICK		KEY NOTES - SPECIFIC NOTES KEYED TO AN ELEMENT OR AREA, SEE SCHEDULE	<u>==</u>	STEEL BEAM SPLICE
	RIGID INSULATION		LINTEL MARK - SEE SCHEDULE	<u> </u>	STEEL BEAM CONTINUOUS OVER SUPPORT
	BATT OR BLANKET INSULATION	P1	PIER MARK - SEE SCHEDULE		MOMENT CONNECTION FOR STEEL BEAMS
	PLYWOOD	PC1	PILE CAP MARK - SEE SCHEDULE	*	LOCATION OF BEAM BRACE
	EARTH, FILL OR BACKFILL		REVISION MARK - INDICATES A CHANGE AFTER CONTRACT DOCUMENT ISSUE		SPAN OF STRUCTURAL ELEMENT
	SAND OR GROUT	(SW1)	SHEAR WALL MARK - SEE SCHEDULE		SLAB REINFORCING - TOP BARS
		(SR1)	STUD RAIL MARK - SEE SCHEDULE		
4	CONCRETE	W1	WALL REINFORCING MARK - SEE SCHEDULE		SLAB REINFORCING - BOTTOM BARS
	STONE		TT ELEVATION CHANGE (STEPPED OR SLOPED)	+ +	DIMENSION LINES
				• • •	MATERIAL LIMIT LINES
		(A)	GRID BUBBLE	<b>♦♦</b>	MATERIAL NOT INCLUDED IN LIMIT LINES
		X	SECTION NUMBER	s	FOOTING STEP
			DRAWING NUMBER WHERE SECTION IS FOUND		
		X	DETAIL NUMBER		
			DRAWING NUMBER WHERE DETAIL IS FOUND		
			ELEVATION NUMBER		
			DRAWING NUMBER WHERE ELEVATION IS FOUND		

## **STRUCTURAL ABBREVIATIONS**

ADDN'L	Additional	FF	Far Face	NTS NTS	Not To Scale
<u></u>	At	FV	Field Verify	NO or #	Number
	And	FLG	Flance		On Center
	Anchor		Floor		Oponing
	Anchor Delt				Opening
/R	Anchor Bolt	FI	Foot	UPP	Opposite
	Angle	FIG	Footing	OD	Outside Diameter
LT	Alternate	FOUND or FDN	Foundation	OF	Outside Face
ARCH	Architect or Architectural	GALV	Galvanized	1	Per
BSMT	Basement	GA	Gauge	PCF	Pounds per Cubic Foot
ЗМ	Beam	GC	General Contractor	PLK	Plank
BRG	Bearing	GL or GLU-LAM	Glue Laminated Wood	PI	Plate
RNT	Bent	Н	H Shaped Column	PT	Post Tension(ing)
	Between		High Point	#	Pound
	Block		Headed Stud(a)		Dound nor Square Feet
				PSF	Pound per Square Fool
B	Bond Beam / Lintel Beam	HSS	Hollow Structural Shape	PSI	Pound per Square Inch
OT or BTM	Bottom	HK	Hook	PSL	Parallel Strand Lumber
orkt	Bracket	HORIZ	Horizontal	PC	Precast
ldg	Building	IN	Inch	RFG	Reinforcing
ant	Cantilever	INFO	Information	REINF	Reinforcing or Reinforce
LG	Ceiling	ID	Inside Diameter	REBAR	Reinforcing Bar
TR	Center	IF	Inside Face	REQ'D	Required
TR'D	Centered		Insulation	REV	Reverse
41 N D 4	CenterLine	INGOL	Interior	PD	Reverse Roof Drain
7L 2					Root Dialit
	Channel	JI	Joint	SCHED OF SCH	Schedule
JLR	Clear	JSI(s)	Joist(s)	SEC	Section
OL	Column	K	Kips	V	Shear
OMP	Composite	KIP	1 Kip = 1,000 lbs	SHT	Sheet
ONC	Concrete	K/FT	Kips per Foot	SIM	Similar
MU	Concrete Masonry Unit	KSF	Kips per Square Foot	SOG	Slab on Grade
OND	Condition	KSI	Kips per Square Inch	S	South
ONN	Connection	IW	Light Weight	SPS	Spaces
	Construction		Light Weight	SPEC	Specification
	Control loint			51 20	Square
				SQ	Square
	Continuous		Long Leg Horizontal	STAGG	Stagger
ONTR	Contractor	LLV	Long Leg Vertical	STD	Standard
)BA	Deformed Bar Anchor	LP	Low Point	STL	Steel
)L	Dead Load	LSH	Long Side Horizontal	STRUCT or STR	Structure
EFL	Deflection	LSL	Laminated Strand Lumber	SUPP	Support
TL or DET	Detail	LSV	Long Side Vertical	TEMP	Temporary or Temperat
	Diameter		Laminated Veneer Lumber	THRU	Through
	Diagonal	MEG	Manufacturor / Manufacturing	T/ or TOP/	Top of Flomont
	Diagonal	MAS	Manufacturer / Manufacturing		Top or Liement
/IIVI NA/L (- )		MAS MO	Masonny	TOD	
WL(S)	Dowel(s)	MO	Masonry Opening	TOB	Top of Beam
WG(s) or DRWG	Drawing(s)	MAT	Material	IOF	I op of Footing
A	Each	MAX	Maximum	TOS	Top of Slab
F	Each Face	MECH	Mechanical	TYP	Typical
W	Each Way	MBR	Member	UN	Unless Noted
-W	East - West	MF77	Mezzanine	UNO	Unless Noted Otherwis
	Fast	MIN	Minimum	VER	Verify
	Effoctivo Forco (P.T.)	MISC	Miscollanoous	VER	Vortical
			Missellanesus Channel		Vorific in Einld
L	Elevation	M	Moment	WWF	Welded Wire Fabric
LEV	Elevator	MPH	Miles per Hour	W	West or Wide Flange
Q	Equal	NF	Near Face	WND	Window
XP	Expansion	N	North	W/	With
J or EXP JT	Expansion Joint	N-S	North - South	W/O	Without
YT	Extend or Exterior	NOM	Nominal	WD	Wood
-/ \				110	11000

# STRUCTURAL NOTES

requirements in other crock	DESIGN LOADS	CONCRETE REINFORCING
requirements in other areas.	Roof Dead Load: 25 net cunarimposed (Includes allowance for halloated roof Line)	Provide standard hooks whe
COORDINATION ARCHITECTURAL, MECHANICAL AND FLECTRICAL ITEMS	12 psf for roof unlift calculation to allow for fully-adhered	Provide enoxy coated reinfor
Verify all depressions dimensions elevations openings equipment supports and details	membrane roof system )	walls and exterior walls nie
and coordinate by reference to architectural mechanical and electrical drawings	Roof Snow Load Parameters	not required for building foun
	Ground Snow Load = 50 psf	Provide epoxy coated reinfor
OPENINGS	Exposure Factor (Ce) = 1.0	columns, slab reinforcing, be
Verify size and location of all openings with architectural, mechanical and electrical	Occupancy Importance Factor = 1.0	supporting chairs and tie wire
drawings. Structural drawings do not necessarily show all openings.	Thermal Factor (Ct) = 1.0	Support slab reinforcing for if
Place openings in floor and roof not shown on structural drawings between structural	60 psf Snow Load at balconies/decks without structure above	
members. Notify Structural Engineer before openings larger than 12" in any dimension	Snow Drift Loads: In accordance with ASCE 7-10 Chapter 7.	Soft metric bar sizes vs. inch
are added.	Components and Cladding Wind Uplift (ultimate)	drawings reflect the U.S. Sys
Obtain prior approval from Structural Engineer before making any openings through	Interior Zones = xxx psf	
structural members if the openings are not shown on the structural drawings.	Edge Zones = xxx psf (within'' of edge, away from corner)	Inch-Pound Bar S
	Corner Zones = xxx pst (within'' of corner)	Designation
UESIGN CODES AND STANDARDS	Overnangs = xxx pst	#3
(2015)	FIOULLIVE LODUS	#4
American Concrete Institute (ACI) 318-11 - Building Code Requirements for Structural	(Reduced per BC Section 1607 10)	#6
Concrete	Parking 40 nsf (unreduced)	#0
American Concrete Institute (ACI) 530-11 – Building Code Requirements for Masonry	Mechanical Rooms 125 psf	#8
Structures	Stairs. Corridors.	#9
American Institute of Steel Construction (AISC) 360-10 – Specification for Structural	and Trash Rooms 100 psf	#10
Steel Buildings	Public Areas 100 psf	#11
American Institute of Steel Construction (AISC) – Steel Construction Manual - Fourteenth	Light Storage 125 psf	#14
Edition	Stair Treads 300 # concentrated load	#18
American Welding Society - Structural Welding Code - Steel (2010) as modified by AISC	Balconies and Decks	
Specifications	Residential Spaces 60 psf	CONCRETE COVER ON RE
American Iron and Steel Institute (AISI) S100-07/S2-10 – North American Specification	Public Spaces 100 psf	Pile Caps & Grade Bea
for the Design of Cold-Formed Steel Structural Members, with Supplement 2, dated 2010	Snow drift load may be considered independently from live load	
American Forest and Paper Association - National Design Specification for Wood	Wind Loads	VValls: 1-1/2" clear o
Construction - 2012 Edition	ASUE 7-10 Directional Procedure Parameters	#6 Dars of lat
	EXPOSULE D	Columns and Reams:
Beinforcing Steel (Ev)	Nominal design wind speed 90 MPH	Less than 2-Hour Rater
60,000 psi (A615, Grade 60)	Wind Directionality Factor (Kd) 0.85	Slabs: 3/4" clear bo
Post Tensioning Strand (Fpu)	Risk Category II	2-Hour Rated Construct
270,000 psi (A416, Grade 270 low-relaxation)	Topographic Factor (Kzt) 1.0	Slabs: 1" clear botto
Concrete (f'c) (28 day compressive strength)	Seismic Loads	PT Tendons: 3/4" clea
6,000 psi for post-tensioned beams and slabs	Seismic design not required per MSBC 1305.0011 Subparagraph 4.	3-Hour Rated Construct
6,000 psi for supported slabs		Slabs: 1 1/4" clear b
5,000 psi for columns		PT Tendons: 11/4" c
4,500 psi for exterior concrete	TEMPORARY BRACING	Slab on Grade: Place re
4,000 psi unless noted	This structure is a non-self-supporting wood frame that requires interaction with slabs,	(minimum 3/4
4,000 psi for rite core	floor sheathing, and wood shear walls to provide the required lateral stability. Provide	Parking Ramp Slabs Bo
3,000 psi for pile caps	required temporary bracing until permanent bracing, floors, and walls are in place.	I op: 2" Magazar ( Walla & Calur
5,000 psi (pre-mixed grout) for masonry cores, linters, and bond beams	factoring. The Contractor is responsible for all means and methods of temporary bracing	1/2" from inside fa
2 000 nsi prism strength (fm) unless noted	If the Contractor elects to place wall sheathing or floor topping on any levels above stud	Masonry Lintels/Bond F
3 000 nsi arout strenath	walls that do not yet have sheathing one of the following are required prior to such	of lintel
Structural Steel (Ev)	placement.	
50.000 psi (A992 or A572 Grade 50) for W shapes		CONCRETE SLABS ON GF
36,000 psi (A36) for bars, plates, angles and other shapes	1. Provide blocking matching the size and species of studs at mid-height of all	See details 4 & 5/S600 for cr
50,000 psi (A500, Grade C) for rectangular structural tubing	load-bearing stud walls at the bottom three levels in five level wood structures	If control joints are not show
46,000 psi (A500, Grade C) for round structural tubing	and at the bottom two levels in four level wood structures, except that walls	provide additional joints to m
35,000 psi (A53, Type E or S, Grade B) for pipes	with doubled or tripled studs fastened with 10d nails at 8" oc	Exterior slabs, 10'-0" or
Wood (Base Design Values subject to modification per 2012 NDS)	staggered each face do not require blocking. Blocking required by the shear	Interior slabs, 12'-0" oc
Spruce-Pine-Fir No. 2 for Studs	wall schedule is not eliminated by the above nailing option.	"L" shaped panels and recta
Bending: 8/5 psi		not allowed.
Compression (parallel to grain): 1,150 psi	2. Retain a Specialty Structural Engineer to evaluate the adequacy of	All control/construction joints
Snear: 135 psi	temporary unbraced stud wall conditions, design related bracing for the	
E: I,400,000 psi Southorn Ding No. 2.9 Patter for Tracted Lumber	conditions, and submit signed/certified calculations and drawings for review by	CUNCKETE SUPPORTED
Southern Fine NO. 2 & Detter NOI Heated Luffiber Rending: 1.500 ppi (201), 1.250 (206)	ute Suuciulai Engineer of Recold and Architect. Provide temporary bracing for all walls (constate mesonary cold formed steel, or wood)	Exterio reiniorcing to 2° clear
Compression (percondicular to grain): 565 pei	Frovice temporary bracing for all walls (concrete, masoniny, cold formed steel, or wood)	space at 1 diamotors minimi
Shear: 175 nsi	שונה נוופץ מוב טו מטבקטמוב טבאקוו אוופווקנוו מווט מוצ מוטולדע מווטוטובט ווו וווומו וטוווו.	All dron nanele to be noured
F: 1 600 000 psi	GEOTECHNICAL INFORMATION	Provide sleeves through slat
Hem Fir No. 2 for Joists and Beams	The foundation design is based on the recommendations contained in Geotechnical	and electrical drawings Spr
Bending: 850 psi	Report number B1600248 prepared by Braun Intertec Corporation. Allowable foundation	See details 6/S611 & 3/S611
Compression (parallel to grain): 1.300 psi	pressures are to be verified in field by a licensed professional deotechnical engineer	12" and at reentrant corners
Shear: 150 psi	Foundation design parameters are as follows:	Groups of sleeves shall be re
E: 1,300,000 psi	Lateral Soil Pressure (equivalent fluid pressure)	between sleeves exceeds 1.
Laminated Veneer Lumber (LVL)	Lateral pressure on foundation walls: 65 psf/ft	Place construction joints in c
Bending: 2,600 psi	Lateral pressure on cantilever retaining walls: 45 psf/ft	approval. Provide #4 x 3'-0"
Shear: 285 psi	Passive soil pressure: 305 psf/ft	
Compression (parallel to grain): 2,510 psi		POURED CONCRETE WAL
E: 1,900,000 psi	BACKFILLING	See detail 14/S600 for horizo
	Backfill and materials behind foundation and retaining walls shall be as outlined in the	All openings 12" or larger, in
2.0E Parallel Strand Lumber for beams (PSL)	Control Panort	1 - #4 x 4'-0" each face
2.0E Parallel Strand Lumber for beams (PSL) Bending: 2,900 psi	Geolecinical Report.	
2.0E Parallel Strand Lumber for beams (PSL) Bending: 2,900 psi Shear: 290 psi	Do not backfill or compact earth against walls retaining earth until supporting slabs have	1 - #5 each face, each
2.0E Parallel Strand Lumber for beams (PSL) Bending: 2,900 psi Shear: 290 psi Compression (parallel to grain): 2,900 psi	Do not backfill or compact earth against walls retaining earth until supporting slabs have reached 75% of their design strength or adequate bracing is in place. Provide bracing	1 - #5 each face, each Wall reinforcing is continuous
2.0E Parallel Strand Lumber for beams (PSL) Bending: 2,900 psi Shear: 290 psi Compression (parallel to grain): 2,900 psi E: 2,000,000 psi	Do not backfill or compact earth against walls retaining earth until supporting slabs have reached 75% of their design strength or adequate bracing is in place. Provide bracing designed and certified by an Engineer licensed in the state in which the project is located.	1 - #5 each face, each Wall reinforcing is continuous See detail 13/S600 for typica
<ul> <li>2.0E Parallel Strand Lumber for beams (PSL) Bending: 2,900 psi Shear: 290 psi Compression (parallel to grain): 2,900 psi E: 2,000,000 psi</li> <li>1.8E Parallel Strand Lumber for columns (PSL) Depending: 2,400 psi</li> </ul>	Do not backfill or compact earth against walls retaining earth until supporting slabs have reached 75% of their design strength or adequate bracing is in place. Provide bracing designed and certified by an Engineer licensed in the state in which the project is located. Submit design and calculations to Structural Engineer for review only.	1 - #5 each face, each Wall reinforcing is continuous See detail 13/S600 for typica

IN	ADDITION TO THE REGULAR INSP		
SF CC SF M/	DE. SEE SPECIFICATION IN ACCORDAN DE. SEE SPECIFICATION SECTION PECIFIC REQUIREMENTS. CONSTR AY REQUIRE SPECIAL INSPECTION	UCTION NOT AS BUT IS NOT LIS	ATERIAL SPECIFICATION SECTIONS FOR SSOCIATED WITH THE STRUCTURAL SYSTEM STED HERE.
ITE	Μ	REQUIRED?	REMARKS
1.	Soils compliance prior to foundation construction	YES	Reference IBC 1705.6
2.	Structural concrete	YES	Reference IBC table 1705.3 and MSBC 1305.1705
3.	Reinforcing steel	YES	Reference IBC table 1705.3
4.	Bolts installed in concrete	YES	Reference IBC table 1705.3
5.	Expansion/adhesive anchors	YES	
6.	Structural steel fabrication	YES	May be omitted if fabricator is AISC certified. Reference IBC 1705.2 and AISC 360 Chapter N
7.	Structural welding and high strength bolting	YES	Reference IBC 1705.2.1 and AISC 360 Chapter N
8.	Structural masonry	YES	Reference IBC 1705.4, TMS 402/602, and MSBC 1305.1705
9.	Wood trusses	NO	Reference IBC 1705.5. Fabricator shall be a licensee of the Truss Plate Institute Quality Assurance Program. Submit certificate of compliance to the Building Official in accordance with IBC 1704.2.5.2.
10.	Precast concrete	NO	Precast manufacturing plant shall be certified by the PCI Plant Certification Program Categories C3A and C4A. Submit certificate of compliance to the building official in accordance with IBC 1704 2.5.2.
11.	Pile foundations	YES	Reference IBC 1705.7
12.	Structural wood shear walls and diaphragms	NO	Wind Exposure Category B, Vult < 155 mph or Wind Exposure Category C or D, Vult < 142 mph

Compression (parallel to grain): 2,500 psi

E: 1,800,000 psi

	SHEET INDEX
S000	TITLE SHEET
S300	FOOTINGS AND FOUNDATION PLAN
S301	LEVEL -1 FRAMING PLAN
S302	LEVEL 1 FRAMING PLAN
S320A	LEVEL 2 FRAMING PLAN - PT
S320B	LEVEL 2 FRAMING PLAN - WOOD
S330	LEVEL 3 - 5 FRAMING PLANS
S360	LEVEL 6 FRAMING PLAN
S361	MEZZANINE FRAMING PLAN
S370	ROOF FRAMING PLAN
S600	SECTIONS AND DETAILS
S601	SECTIONS AND DETAILS
S610	SECTIONS AND DETAILS
S611	SECTIONS AND DETAILS
S620	SECTIONS AND DETAILS
S621	SECTIONS AND DETAILS
S622	SECTIONS AND DETAILS
S900	SCHEDULES AND DETAILS
S901	SCHEDULES AND DETAILS
S902	SCHEDULES AND DETAILS

### ING GENERAL where hook lengths are not specified. ired reinforcing splice lengths.

nforcing for all concrete exposed to weather such as retaining piers, columns, slabs, and paving. Epoxy coated reinforcing is foundation walls unless specifically noted. inforcing for all reinforcing in parking ramp slabs including

, beam reinforcing, wall reinforcing, beam stirrups and ties, for its entire length and independent of beam steel.

inch-pound (U.S. System of Measures) bar size table. BKBM



REINFORCING Beams: 3" clear bottom and sides

2" clear top ear outside face and surfaces exposed to earth or weather (2" for

### : 1-1/2" clear to ties or stirrups ated Construction (IBC Section 721 Prescriptive Fire Protection): r bottom and top

truction (IBC Section 721 Prescriptive Fire Protection): bottom and top clear bottom and top ruction (IBC Section 721 Prescriptive Fire Protection): ear bottom and top

4" clear bottom and top e reinforcing in upper third of slab n 3/4" clear top) Bottom: 1" clear

olumns: centered in cell e face of cell if not centered

ond Bms: Place bottom reinforcing within 4" of bottom

or control/construction joints. nown on plan, place control/construction joints at columns and o meet the spacings indicated below: " oc maximum

ectangular panels (with length to width ratio greater than 1.5) are pints must be continuous and not staggered or offset.

clear slab edges. ubing to be embedded in slab is 3/4" OD PVC. Center in slab.

slabs for all penetrations. Verify exact location with mechanical Spread reinforcing to provide proper concrete cover. S611 for additional slab reinforcing at slab openings larger than

e reinforced as a single slab opening unless clear spacing s 1.5 times the larger sleeve diameter. in center 1/3 of span. Location is subject to Engineer's 3'-0" at 12" oc, center in slab.

orizontal reinforcing at intersecting walls. , in walls shall have: face diagonal at each corner ach side of opening, extend 2'-0" beyond opening

nuous through columns, unless detailed otherwise. pical vertical control/construction joints.



POST-TENSIONED SLABS AND BEAMS Post-tensioned tendon design is based upon 0.5" diameter, 7 wire low-relaxation strand. Provide encapsulated tendons in accordance with the material requirements for aggressive environments in the PTI Specification for Unbonded Single Strand Tendons. Provide parabolic tendon profile using control points given. Limit one-way tendon pulls to 120'-0" and two-way tendon pulls to 240'-0". Provide a minimum of 2 slab tendons over columns in both directions. Space tendons or groups of tendons at a maximum of 8 x slab thickness or 60", whichever is less. Extend dead end tendons minimum 6'-0" from last support shown on plan. The typical banded beam width at interior columns and mid span is 3'-6" The typical banded beam width at exterior column and mid span is 2'-6" See details 6/S610 and 11/S610 for locating sleeves and embedded items near slab edges and columns. Do not tie embedded items or conduit to tendons. Limit penetration of anchors drilled or "shot" into the slab from above or below to 5/8" maximum. Do not core drill holes in post-tensioned members. PRECAST CONCRETE UNITS The design of all precast concrete units shall conform to ACI 318. Precast units shall sustain the superimposed loads indicated on the plans in addition to all other dead loads. Submit complete shop drawings to Architect/Engineer for review, showing the erection plan, all bearing conditions, and anchorage details Design of precast units and anchorages shall be prepared by an engineer licensed in the state in which the project is located. Design loads used shall be indicated on the shop drawings. Provide necessary headers at floor openings. Upon installation, plank shall be essentially past the effects of deformation due to creep, and shall have camber not over 1/360 of the span. Camber shall be uniform from plank to plank with similar spans and loading. Place openings not shown on plans between webs in precast plank units. Verify acceptability with precast supplier. NON-BEARING WALLS Provide thickened slab below non-bearing masonry walls. See section 12/S600. REINFORCED CONCRETE BLOCK WALLS When one bar is required in a single core, place in center, unless noted otherwise. When two bars are required in a single core, place one near each face. Lap vertical reinforcing 48 bar diameters at splices. Lap horizontal bond beam reinforcing 48 bar diameters at splices. See detail 11/S600 for corner bars. Extend vertical reinforcing from footings to 2" clear top of wall or to beam bearing for reinforcing below beams. Fill block core at vertical reinforcing (8" minimum length along wall) with concrete or grout. Vibrate in place. Rodding and puddling are not allowed Maximum grout pour height is 4'-0" for plain masonry units or 12 feet for open core block. Provide cleanouts if pour height exceeds 5'-4". Maximum grout lift height within a grout pour is 5'-4". See Specification 042731 for grouting requirements if plain shapes are being used. Provide horizontal joint reinforcing at 16"oc. CONCRETE BLOCK WALL LINTELS See sheet S902 for lintels in non-bearing masonry walls. All block lintels to be filled with concrete or grout. Vibrate in place. Fill a minimum of two block courses below lintel bearing. If opening occurs next to concrete column, bolt L3x3x5/16 to column with two 1/2" dia. x 6" expansion bolts and rest lintel on angle. If opening occurs next to steel columns weld L3x3x5/16 to column and rest lintel on angle. LOOSE ANGLE BRICK LINTELS Bear lintel a minimum of 8" each side of opening. Locate vertical leg tight against back face of brick. Provide minimum lintels as follows: Spans up to 4'-0" L4 x 3-1/2 x 3/8 (LLV) Spans 4'-0" to 9'-4" L6 x 3-1/2 x 3/8 (LLV) Provide longer horizontal leg, if needed, to extend to between 1/2" and 1" clear outside face of brick. COLD-FORMED STEEL FRAMING Design and construct cold-formed steel framing according to AISI Specification for Design of Cold-formed Steel Structural Members. Gravity and lateral loads shall be according to IBC Chapter 16. Provide calculations, prepared and certified by an engineer licensed to practice in the state in which the project is located, and detailed shop drawings for review. The cold-formed steel framing resists lateral loads only and provides lateral stability for exterior materials. Provide connections that transfer loads to the primary structural frame and allow for a minimum deflection of floor and roof framing of L/360. PRE-FABRICATED STRUCTURAL WOOD Provide manufacturer's recommended lumber for wood trusses or joists. Design roof trusses or joists for the following superimposed loads: Top chord dead load of 15 psf Top chord snow load of 35 psf Bottom chord dead load of 10 psf. Design floor trusses or joists for the following superimposed loads: Top chord dead load of 18 psf Top chord live load of 40 psf Bottom chord dead load of 7 psf. Limit live load deflection of roof framing to L/360. Limit live load deflection of floor framing to L/480. Provide design of metal plate connected wood trusses, plywood web joists, open web wood joists, and connections prepared by an Engineer licensed in the state in which the project is located. Indicate design loadings on shop drawings. Submit complete shop drawings to Architect/Engineer for review, showing the erection plan, bearing conditions, and anchorage details. DIMENSION LUMBER All member sizes given on drawings are nominal dimensions. Provide joist bridging at 8'-0" maximum oc. Provide 3" minimum bearing each end for wood lintels and headers. Double all joists under parallel partitions. Frame all beams and joists not bearing on supporting members with joist hangers. Joist hangers shown are Simpson Strong-Tie Products. Alternative products shall have equal or greater capacity. Submit manufacturer's information with shop drawings. Bear wood joists the full width of supporting members (stud walls, beams, etc.) unless otherwise noted. Fasten wood beams made of 2 or more 2"x's with 3 rows of 0.131"x3" nails at 12"oc, each ply. See detail 4/S621for fastening of LVL beams. Fasten wood posts and jambs made of 2 or more 2"x's with 0.131"x3" nails at 8"oc, each Attach sill plates to floor slab with Hilti X-U57 fasteners with 3/4" maximum embedment at the following spacing: Typical interior walls: 2'-8" oc Typical exterior walls: 2'-0" oc Each sill plate is to have a minimum of 2 bolts with one bolt located within 12" of each end of each piece. Nail in accordance with IBC Table 2304.9.1 unless noted otherwise on details. Provide galvanized or stainless steel fasteners in contact with treated lumber. Provide galvanized steel fasteners for use with galvanized steel hangers/connectors and provide stainless steel fasteners for use with stainless steel hangers/connectors. Provide allowance in studs and sheathing as required for plumbing pipes, etc. due to

overall wood shrinkage above each level as follows: 1st Level above plank/slab: Up to 1/8" 2nd Level above plank/slab: Up to 1/2" 3rd Level above plank/slab: Up to 7/8" 4th Level above plank/slab: Up to 1 1/4" 5th Level above plank/slab: Up to 1 5/8" See 1/S620 for allowable holes or notches in wood studs. See 2/S620 for allowable holes or notches in dimension lumber joists



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BKBM

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# Oaks Union Depot Apartments

240 4th St E Saint Paul MN 55101-1401

240 4th Street East, St. Paul, Minnesota

Project Number	16328
Date	9-30-2016
Drawn By	JJH
Checked By	TRF
I HEARBY CERTIFY THAT T SPECIFICATION OR REPOR PREPARED UNDER MY DIF SUPERVISION AND THAT I REGISTERED ENGINEER U LAWS OF THE STATE OF MINNESOTA.	HIS PLAN, RT WAS RECT AM A INDER THE
ANTHONY R. FOGGIA	REG. NO: 48232
Date	
Revision	

TITLE SHEET



	wilson architects
	1301 American Blvd. East. Suite 100 Bloomington, MN 55425 tel: (612) 879-6000 fax: (612) 879-6666 www.kaaswilson.com
	5930 Brooklyn Boulevard Minneapolis, MN 56429-2518 Phone: (763) 843-0420 Fax: (763) 843-0421 2016 BKBM Professional Engineers, Inc. All rights reserved. This document is an instrument of service and is the property of BKBM Professional Engineers, Inc. and may not be used or copied without prior written consent. BKBM Job No. 16328.00
45'-21/2"	
	Oaks Union Depot Apartments 240 4th St E Saint Paul MN 55101-1401 240 4th Street East, St. Paul, Minnesota
	Project Number 16328 Date 9-30-2016 Drawn By CJK
D FOOTINGS AND FOUNDATION PLAN UNLESS NOTED OTHERWISE: 1 UNLESS NOTED OTHERWISE: 1. SEE SHEET S000 FOR STRUCTURAL NOTES, ABBREVIATIONS AND SYMBOLS. 2. SEE SHEET S000 FOR STRUCTURAL NOTES, ABBREVIATION DETAILS. 3. SEE SHEET S000 FOR SCHEDULES. 4. PROVIDE 4* SLAB ON GRADE WIMICRO FIBER REINFORCING (MINIMUM 1.5 POUNDS PER CUBIC YARD). 5. TOP OF SLAB ELEVATION = VARIES, SEE PLAN. 6. TOP OF PILE CAP AT WALLS AND COLUMNS = 82' - 4" 7. PROVIDE SLEEVES FOR ALL PIPES THAT INTERSECT BUILDING FOUNDATIONS. COORDINATE LOCATIONS AND ELEVATIONS WITH CIVIL AND MECHANICAL. 8. TOP OF GRADE BEAM ELEVATION = VARIES, SEE PLAN. 6. TOP OF GRADE BEAM ELEVATION = VARIES, SEE PLAN. 7. PROVIDE SLEEVES FOR ALL PIPES THAT INTERSECT BUILDING FOUNDATIONS. COORDINATE LOCATIONS AND ELEVATION = VARIES, SEE PLAN. 8. PROVIDE #5 @ 48"OC VERTICALS CENTERED IN MASONRY WALLS.	Checked By TRF I HEARBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT I AM A REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. MUMU A ANTHONY R. FOGGIA REG. NO: 48232
<ul> <li>10. PROVIDE DOWELS TO MATCH MASONRY WALL REINFORCING SIZE AND SPACING, HOOK AT BOTTOM OF FOOTING. PROJECT 30".</li> <li>11. PLACE FIRST BAR 1/2 TYPICAL SPACING FROM EDGE OF PIERS.</li> <li>12. PROVIDE 2#5 VERTICAL @ 8"OC AT EACH OPENING JAMB AND BEAM BEARING. SEE 7/S600 FOR TYPICAL JAMB REINFORCING LAYOUT. SEE PIER SCHEDULE FOR ADDITIONAL REINFORCEMENT REQUIRED.</li> <li>13. FOOTINGS FOR WALLS NOT NOTED SHALL BE 12" THICK WITH A MINIMUM PROJECTION OF 4" EACH SIDE. REINFORCE WITH 2#5 CONTINUOUS. ADD 1.#5 CONTINUOUS FOR EACH 6" WIDTH OVER 24".</li> <li>14. SEE SHEET S901 FOR DOWELS FROM PILE CAP TO COLUMN.</li> <li>15. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF RAMPS, SLAB SLOPES, STEPPED SLABS AND PARTITION WALLS.</li> <li>16. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.</li> <li>17. ● DENOTES BATTERED PILE AND INDICATES DIRECTION OF BATTER.</li> </ul>	Revision
B       KEYNOTES         6       CONCRETE OVERPOUR TO CREATE A LEVEL LANDING. SLOPE AND BLEND CONCRETE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM OPENING.         7       PROVIDE AIR-ENTRAINED EXTERIOR CONCRETE AND EPOXY-COATED REBAR FOR EXTERIOR COLUMNS FULL HEIGHT.         8       BATTER PILE AT 30 DEGREE (OFF VERTICAL) ANGLE, SEE PLAN FOR REQUIRED QUANTITY AND DIRECTION. SKEW PILE AS NECESSARY TO AVOID CONFLICT WITH OTHER PILES.         9       BATTER PILE AT 12 DEGREE (OFF VERTICAL) ANGLE (2.5:12 SLOPE), SEE PLAN FOR REQUIRED QUANTITY AND DIRECTION. SKEW PILE AS NECESSARY TO AVOID CONFLICT WITH OTHER PILES.	وَ يَوْ J FOOTINGS AND FOUNDATION PI AN

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		kaas wilson architects
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45' - 2 1/2"		
	Image: Display the problem of the p	Oaks Union Depot Apartments 240 4th St E Saint Paul MN 55101-1401 240 4th Street East, St. Paul, Minnesota
E	POST TENSIONING LEGEND         FIXED END         STRESSING END         ADDED TENDON       MUMBER OF         TRANSVERSE TENDONS LEGEND:       NUMBER OF	Project Number 16328 Date 9-30-2016 Drawn By CJK
2/0- 8/1-2"	Image: Stable control of the stable	Checked By TRF I HEARBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT I AM A REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. ANTHONY R. FOGGIA REG. NO: 48232
	BOTTOM BARS:         1. BOTTOM BARS ARE CENTERED BETWEEN GRIDS.         2. EXTEND EVERY THIRD BOTTOM BAR 6" PAST CENTERLINE OF SUPPORT EACH END.         NUMBER OF BARS, TYP BAR SIZE, TYP EPOXY COATED WHERE SHOWN, TYP BAR LENGTH, TYP BAR SPACING, TYP 5 #6x13' - 0"@1'-0" FROVIDE STANDARD HOOK WHERE SHOWN ON PLAN         TYPICAL SLAB REINFORCING NOTES:         1. CENTER BARS ON OPENINGS.         2. WHERE EXTENTS AND SPACING OF BARS IS NOT DEFINED, PLACE BARS SUCH THAT THEY ARE EQUALLY SPACED OVER THE WIDTH EXTENDING HALFWAY TO EACH ADJACENT COLUMN LINE.	Revision
	3. NOOK LENGTH IS IN ADDITION TO THE BAK LENGTH STATED.	LEVEL 1 FRAMING PLAN



→ → 5

- AND PARTITION WALLS. 8. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.

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# Oaks Union Depot Apartments

240 4th St E Saint Paul MN 55101-1401

240 4th Street East, St. Paul, Minnesota

Project Number	16328
Date	9-30-2016
Drawn By	CJK
Checked By	TRF
ANTHONY R. FOGG	REG. NO: 48232
Date	
Revision	
Rev. No.	
LEVEL FRAMING I PT	. 2 PLAN -











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F	Oaks Union Depot Apartments 240 4th St E Saint Paul MN 55101-1401
E	240 4th Street East, St. Paul, Minnesota Project Number 16328
	Date 9-30-2016 Drawn By CJK Checked By TRF
D Never the set of t	NOT RUCTIC NOT RUCTIC ONSTRUCTIC
C NON-IYPICAL WALLS ARE NOTED ON PLAN THUS: WOOD WALL WWW 6/16 STUD SPACING IN INCHES WIDTH OF 2x STUD AT CONTRACTOR'S OPTION: REPLACE STUDS @ 6"OC WITH DOUBLE STUDS @ 12"OC. REPLACE STUDS @ 8"OC WITH DOUBLE STUDS @ 16"OC. 8. WALL SHEATHING AT EXTERIOR WALLS IS " PLYWOOD OR " OSB. SEE 5/S620 FOR NAILING REQUIREMENTS. 9. EXTENT OF SHEAR WALLS IS LIMITED TO SOLID WALL SECTION BETWEEN OPENINGS UNLESS OTHERWISE INDICATED WITH EXTENT ARROWS. 10. SEE DETAILS/ FOR TYPICAL FRAMING AT EXTERIOR OPENINGS. 11. ROOF SHEATHING IS 19/32" PLYWOOD OR OSB (40/20 SPAN RATING). SEE 5/S620 FOR NAILING REQUIREMENTS. 12. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF RAMPS AND PARTITION WALLS.	Dat
B	Revisi
	ROOF FRAMING
	S370





















## Oaks Union Depot Apartments 240 4th St E

Saint Paul MN 55101-1401

240 4th Street East, St. Paul, Minnesota



- PT SLAB, SEE PLAN

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(20) SECTION



















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# Oaks Union Depot Apartments

240 4th St E Saint Paul MN 55101-1401

240 4th Street East, St. Paul, Minnesota



		WOOD JOIST SCHEDULE
MARK	SIZE	REMARKS
UNLESS NOTED OT	HERWISE:	

1. TRUSSES ARE TO BE CONTINUOUS OVER INTERIOR BEARING WALLS AND TERMINATE AT DEMISING WALLS, TYPICAL.

	HEADER SCHEDULE											
		LEVI	LEVEL 2 LEVEL 3		EL 3	LEVEL 4		LEVEL 5		LEVEL 6		
MARK	HEADER	JACK STUDS	KING STUDS	JACK STUDS	KING STUDS	JACK STUDS	KING STUDS	JACK STUDS	KING STUDS	JACK STUDS	KING STUDS	REMARKS
H1												
H2												
H3												
H4												
H5												

UNLESS NOTED OTHERWISE: 1. SEE 3/S620 FOR TYPICAL WALL OPENING DETAIL.

2. PROVIDE SOLID VERTICAL BLOCKING AT ALL FLOORS AT ALL POST LOCATIONS.

3. BEAR HEADERS ON FULL WIDTH OF JACK STUDS.

										WOOD SHEA	R WALL SCH	EDULE								
			SHEATHING	6		ATTACHMENT AT PANEL EDGES					SILL PLATE CONNECTION						HOLD DOWN			
MARK	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6
SW1	1 LAYER _" OUTSIDE FACE, BLOCKED					dx" @ _"OC					"Ø ANCHORS @"OC									
SW2	1 LAYER _" OUTSIDE FACE, BLOCKED					dx"@_"OC					"Ø ANCHORS @"0C									
SW3	1 LAYER" EACH WALL, BLOCKED					dx"@_"OC					"Ø ANCHORS @ "OC									
SW4	1 LAYER" ONE FACE					dx"@_"OC					"Ø ANCHORS @ "OC									
SW5	1 LAYER" EACH FACE					dx" @ _"OC					"Ø ANCHORS @ "OC									
SW6	1 LAYER" EACH FACE, BLOCKED					dx" @ _"OC					"Ø ANCHORS @ "OC									

UNLESS NOTED OTHERWISE:

1. SHEATHING TO BE CONTINUOUS FOR LENGTH OF SHEAR WALL. LAP SHEATHING ON SINGLE STUD. AT INTERSECTING WALLS, PROVIDE FLAT 2x MEMBER 2" WIDER THAN INTERSECTING WALL AND ATTACH SHEATHING TO FLAT 2x ON EACH SIDE OF INTERSECTING WALL.

2. PLYWOOD OR OSB TO BE APA RATED SHEATHING THAT CONFORMS TO PRODUCT STANDARD PS-1.

SEE 15/S610 FOR TYPICAL HOLD DOWN DETAIL TO POST TENSIONED CONCRETE SLAB AT HOLD DOWN LOCATIONS INDICATED IN SCHEDULE. 4. SEE 10/S620 AND 11/S620 FOR TYPICAL HOLD DOWN DETAILS BETWEEN WOOD FLOORS AT HOLD DOWN LOCATIONS INDICATED IN SCHEDULE.

5. PROVIDE MINIMUM 2-2x STUDS AT EACH END OF SHEAR WALL PANEL. SEE SCHEDULE FOR HOLD DOWN REQUIRED AT EACH END OF SHEAR WALL.

PROVIDE RSP STRAP TIES ON EACH SIDE OF TOP AND BOTTOM SILL PLATES FOR BORED HOLE/NOTCH GREATER THAN 1 1/2" FOR 2x4 OR 2 1/2" FOR 2x6. PROVIDE 1/4"Øx3" SDS SCREWS @ 12"OC OR (3) 0.131Øx3" NAILS @ 6"OC BETWEEN STUDS AT LOCATIONS WHERE WALL STUD SIZE CHANGES.

AT GYPSUM SHEATHING, ATTACHMENT AT INTERMEDIATE STUDS IS EQUAL TO ATTACHMENT AT PANEL EDGES.

9. AT PLYWOOD OR OSB SHEATHING, ATTACHMENT AT INTERMEDIATE STUDS IS 12"OC.

10. AT PLYWOOD OR OSB SHEATHING LOCATIONS, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL GYPSUM SHEATHING REQUIREMENTS TO ACHIEVE REQUIRED FIRE RATING.

11. SEE ELEVATION 6/S620 FOR WOOD SHEAR WALL FRAMING AND ADDITIONAL REQUIREMENTS.

								WOOD	BEARING WA	LL SCHEDULE						
			\\/\\/1			- \\/\\/2		1411 6 - 14/14/3	DEMISING WALL (DOUBLE WALL) SUPPORTING UP TO 12'-0" TRIBUTARY WIDTH OF FLOOR/ROOF			DEMISING WALL (DOUBLE WALL) SUPPORTING UP TO 10'-0" TRIBUTARY WIDTH OF FLOOR/ROOF			DEN S TRIBL	
FLOOR						- • • • • •				TRUSSES F	PER LEVEL -	WW4	TRUSSES PER LEVEL - WW5		VW5	<u>T</u> /
LEVEL	STUD SIZE AND SPACING	STUD GRADE	PLATE GRADE	STUD SIZE AND SPACING	STUD GRADE	PLATE GRADE	STUD SIZE AND SPACING	STUD GRADE	PLATE GRADE	STUD SIZE AND SPACING	STUD GRADE	PLATE GRADE	STUD SIZE AND SPACING	STUD GRADE	PLATE GRADE	STUD S SPA
4	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2x_@"OC	SPF NO	SPF NO	2x_@"OC	SPF NO	SPF NO	2x_@
3	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2x_@"OC	SPF NO	SPF NO	2x_@"OC	SPF NO	SPF NO	2x_@
2	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2 - 2x_@"OC	SPF NO	SPF NO	2 - 2x_@"OC	SPF NO	SPF NO	2 - 2x_(
1	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2x6@"OC	SPF NO	SPF NO	2 - 2x_@"OC	SPF NO	SPF NO	2 - 2x_@"OC	SPF NO	SPF NO	2 - 2x_(

UNLESS NOTED OTHERWISE:

1. SEE SHEET S000 FOR WOOD GRADES WHERE GRADE IS NOT NOTED. 2. PROVIDE PRESSURE TREATED BOTTOM PLATES AT WALLS SUPPORTED ON CONCRETE OR MASONRY.

	•		,	

MARK





### CONCRETE BEAM AND JOIST SCHEDULE NOTES:

- UNLESS OTHERWISE NOTED: 1. WHEN A BAR IS SCHEDULED MORE THAN ONCE IN A GIVEN JOIST OR BEAM PLACE BARS SCHEDULED FIRST ON THE SOUTH OR WEST END.
- 2. PROVIDE 1- #4 AT CORNERS OF ALL STIRRUPS OR TIES WHICH DO NOT CORNER AROUND SCHEDULED STEEL. EXTEND #4 1'-6" BEYOND LAST STIRRUP OR TIE.
- 3. CLOSED TIES REQUIRED IF BEAM DEPTH IS LESS THAN 21", TWO-PIECE TIES NOT PERMITTED.

	STUDRAIL SCHEDULE											
	# OF	# OF # OF STUD DIST TO 1ST										
MARK	RAILS/COL	STUDS/RAIL	STUD Ø	SPACING - 'S'	STUD - 'So'	SEE DTL						
SR1	8	8	1/2"	4"	4"	А						
SR2	12	10	1/2"	4"	4"	D						
SR3	6	26	1/2"	3"	3"	В						
SR4	SR4 12 8 1/2" 4 3/4" 2 1/2" C											
SR5	SR5 18 20 1/2" 4" E											
UNLESS NOTED	OTHERWISE:											

1. PLACE 1 RAIL IN EACH DIRECTION WITHIN 1/2" OF COLUMN CORNERS OR LOCATED 2" FROM SLAB EDGES FOR EDGE AND CORNER COLUMNS. SPACE RAILS EQUALLY EACH SIDE OF COLUMN. 2. SEE DETAIL 13/S610 FOR TYPICAL STUDRAIL.

3. YIELD STRENGTH OF STUDS: Fy = 50,000 PSI.

- 4. SEE DETAILS 11/S610 12/S610 FOR SLAB OPENING ADDITIONAL REQUIREMENTS. 5. SEE STRUCTURAL NOTES ON S000 FOR REQUIRED TOP AND BOTTOM CONCRETE COVER ON STUDRAILS.
- 6. PROVIDE 1" CLEAR TOP FOR STUD RAILS EXPOSED TO WEATHER (i.e. BALCONIES). STUDRAILS AT CONCRETE

EXPOSED TO WEATHER SHALL BE GALVANIZED OR EPOXY COATED. 7. DISTANCE TO FIRST STUD 'So' TO BE MEASURED FROM FACE OF COLUMN BELOW.





## TIE AND STIRRUP DIAGRAMS



	GRADE BEAM SCHEDULE											
	SI	ZE	BOT	BARS	•	TOP BARS	S OR	CENTERLINE OF OR STIRRUPS OR TIES		REMARKS		
WARN	W	D	NO.	SIZE	NO.	SIZE & LENGTH	W	SUPPORT	E	SIZE	SPACING EA END	
GB1	18"	24"	2	#8	2	#6xCONT				#4	SS@10"OC	
GB2	18"	30"	3	#8	2	#6xCONT				#4	SS@12"OC	

### GRADE BEAM SCHEDULE NOTES:

UNLESS NOTED OTHERWISE:

- 1. BOTTOM BARS EXTEND FROM CENTER TO CENTER OF SUPPORT AND TOP BARS ARE CENTERED ON INTERIOR SUPPORT.
- 2. SCHEDULED LENGTHS DO NOT INCLUDE HOOKS. 3. WHEN A BAR IS SCHEDULED MORE THAN ONCE IN A GIVEN JOIST OR BEAM PLACE BARS SCHEDULED FIRST ON THE SOUTH OR WEST END.
- 4. UNLESS NOTED USE STANDARD HOOK.
- 5. PLACE ENDS OF TOP BARS 2" FROM EDGE OF CONCRETE AT DISCONTINUOUS SUPPORTS. 6. PROVIDE BOLSTERS CHAIRS AND CONTINUOUS SUPPORT BARS AS REQUIRED TO SUPPORT TOP AND BOTTOM BARS AND MAINTAIN THE CONCRETE COVER LISTED IN THE STRUCTURAL NOTES.
- 7. PROVIDE 1-#4 AT CORNERS OF ALL STIRRUPS OR TIES WHICH DO NOT CORNER AROUND SCHEDULED STEEL. EXTEND #4 18" BEYOND LAST STIRRUP OF TIE.
- 8. AT BEAMS WHERE WIDTH VARIES BY 4" OR MORE ADD 1-#6 TOP AND BOTTOM OVER WIDER PORTION AND VARY TIE/STIRRUP WIDTH WITH JOIST.
- 9. AT BEAM WHERE DEPTH VARIES ADD 2-#6 BOTTOM AND VARY TIE/STIRRUP DEPTH WITH BEAM.
- 10. PLACE FIRST STIRRUP AT ONE-HALF SPACING OF INITIAL STIRRUP SPACING FROM FACE OF SUPPORT.

		PILE CAP	SCHEDULE
MARK	# OF PILES	DETAIL	REMARKS
PC3	3	3/S601	
PC3A	3	3A/S601	
PC3B	3	3B/S601	
PC4	4	4/S601	
PC4A	4	4A/S601	
PC6	6	16/S601	

UNLESS NOTED OTHERWISE: 1. PILES ARE 12"Ø WITH 70 TON DESIGN CAPACITY.







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Chashed Du	
I HEARBY CERTIFY THAT SPECIFICATION OR REPO PREPARED UNDER MY D SUPERVISION AND THAT REGISTERED ENGINEER LAWS OF THE STATE OF MINNESOTA.	THIS PLAN, ORT WAS IRECT I AM A UNDER THE
ANTHONY R. FOGGIA	REG. NO: 48232
Date	
Revision	

SCHEDULES AND DETAILS





- 4. PROVIDE LAP SPLICES OF LENGTHS SHOWN. LAP ABOVE TOP OF SLAB. EXTEND VERTICALS TO MATCH
- NUMBER OF BARS IN COLUMN ABOVE. LAP SPLICES TO BE CLASS "B" FOR VERTICALS WITHOUT SPECIFIC NOTES. 5. EXTEND DISCONTINUOUS BARS TO 2" CLEAR TOP OF BEAM OR SLAB AND HOOK.
- 6. PROVIDE CROSSTIES AS SHOWN WITH 90 DEGREE HOOK ONE END AND 135 DEGREE HOOK OTHER END. SIZE TO MATCH TIES. ALTERNATE TIE CONFIGURATIONS MEETING ACI 318, SECTION 7.10.5 ARE ACCEPTABLE.
- 7. PROVIDE FIRST TIE MAXIMUM OF ONE-HALF TIE SPACING ABOVE TOP OF FOOTING OR SLAB. EXTEND TIES TO WITHIN ONE-HALF TIE SPACING OF BOTTOM SLAB REINFORCING. IF BEAMS FRAME INTO A COLUMN FROM ALL FOUR SIDES, EXTEND TO WITHIN 3" OF THE BOTTOM REINFORCING OF THE SHALLOWEST BEAM.
- 8. SEE 18/S610 FOR COLUMN TIE SPACING THROUGH BEAM-COLUMN JOINT.
- CONCRETE COLUMN SCHEDULE NOTES: (FOR SPECIFIC CONDITIONS)
- ELEVATIONS GIVEN IN COLUMN SCHEDULE ARE TO TOP OF STRUCTURAL SLAB. 2. PROVIDE 90 DEGREE HOOK, ACI STANDARD, ON ALL VERTICAL BARS INTO BEAM AT TOP OF COLUMN. STAGGER EMBEDMENT AS NECESSARY, PROVIDING ACI MINIMUM. PROVIDE 1 1/2 BAR DIAMETERS CLEAR BETWEEN HOOKS. HOOK VERTICALS AS CLOSE TO TOP OF SLAB AS ALLOWED BY COVER AND CONFINEMENT.
- 3. EXTEND ENOUGH VERTICALS TO LAP WITH VERTICALS IN COLUMN ABOVE. HOOK REMAINING VERTICALS INTO BEAM. SEE NOTE #3 FOR HOOKS. IF FACE OF COLUMN ABOVE IS OFFSET 3" OR MORE, PROVIDE SEPARATE DOWELS THAT ARE LAP SPLICED WITH VERTICALS ABOVE.







4-#8 DOWELS W/ 90° STD HOOK INTO FOOTING, PROJECT 4'-0" ABOVE TOP OF FOOTING. EXTEND DOWELS TO 3" CLEAR OF BOTTOM OF FOOTING.









		NON-BEARIN	G WALL LIN	ITEL SCHEDUL	E							
Ν	ASONRY LINT	ELS	STEEL LINTELS									
CLR MAS OPENING	4'-0" OR LESS	4'-1" TO 8'-0"	4'-1" TO 8'-0" CLR MAS OPENING 4'-0" OR LESS 4		4'-1" TO 8'-0"	8'-1" TO 12'-0"						
4" WALL	1-#4 BOTTOM	NA	4" WALL	L3 1/2x3 1/2x5/16	L5x3 1/2x5/16 LLV	NA						
6" WALL	1-#4 BOTTOM	1-#5 BOTTOM	6" WALL	2-L2 1/2x3 1/2x5/16 LLV	2-L5x3x5/16 LLV	W8x15+ 5/16x5 PLATE						
8" WALL	2-#4 BOTTOM	2-#5 BOTTOM	8" WALL	2-L3 1/2x3 1/2x5/16	2-L5x3 1/2x5/16 LLV	W8x15+ 5/16x7 PLATE						
10" WALL	2-#4 BOTTOM	2-#5 BOTTOM	10" WALL	2-L3 1/2x3 1/2x5/16	2-L5x3 1/2x5/16 LLV	W8x15+ 5/16x9 PLATE						
12" WALL	2-#4 BOTTOM	2-#5 BOTTOM	12" WALL	2-L5x3 1/2x5/16 LLV + 5/16x11 PLATE	2-L5x3 1/2x5/16 LLV + 5/16x11 PLATE	W8x15+ 5/16x11 PLATE						
16" WALL	16" WALL         Wall											
UNLESS NOTED 1. MASONRY L A. TH B. TH	JNLESS NOTED OTHERWISE: MASONRY LINTELS MAY BE USED FOR MASONRY WALL OPENINGS UNDER THE FOLLOWING CONDITIONS: A. THE HEIGHT OF THE MASONRY ABOVE THE OPENING IS AT LEAST EQUAL TO THE CLEAR WIDTH OF THE OPENING. B. THE LENGTH OF THE WALL AND DISTANCE TO THE NEAREST CONTROL JOINT ON EACH SIDE OF THE OPENING IS AT LEAST EQUAL											

	CLASS 'A' TENSION LAP SPLICE TABLE											
fc(psi)												
2500	3000	3500	4000	5000	6000	7000	8000					
1'-6"	1'-5"	1'-4"	1'-3"	1'-1"	1'-0"	1'-0"	1'-0"					
2'-0"	1'-10"	1'-9"	1'-7"	1'-5"	1'-4"	1'-3"	1'-2"					
2'-6"	2'-4"	2'-2"	2'-0"	1'-10"	1'-8"	1'-6"	1'-5"					
3'-0"	2'-9"	2'-7"	2'-5"	2'-2"	2'-0"	1'-10"	1'-9"					
4'-5"	4'-0"	3'-9"	3'-6"	3'-2"	2'-10"	2'-8"	2'-6"					
5'-0"	4'-7"	4'-3"	4'-0"	3'-7"	3'-3"	3'-0"	2'-10"					
5'-8"	5'-2"	4'-10"	4'-6"	4'-0"	3'-8"	3'-5"	3'-2"					
6'-4"	5'-9"	5'-4"	5'-0"	4'-6"	4'-1"	3'-9"	3'-6"					
7'-1"	7'-1"6'-4"5'-10"5'-6"4'-11"4'-6"4'-2"3'-11"											
		C 'D' TEN										

CLASS B TENSION LAP SPLICE TABLE

fc(psi)											
2500	3000	3500	4000	5000	6000	7000	8000				
1'-11"	1'-10"	1'-8"	1'-7"	1'-5"	1'-4"	1'-2"	1'-2"				
2'-7"	2'-5"	2'-3"	2'-1"	1'-11"	1'-9"	1'-7"	1'-6"				
3'-3"	3'-0"	2'-9"	2'-7"	2'-4"	2'-2"	2'-0"	1'-10"				
3'-11"	3'-7"	3'-4"	3'-1"	2'-10"	2'-7"	2'-4"	2'-3"				
5'-8"	5'-3"	4'-10"	4'-6"	4'-1"	3'-9"	3'-5"	3'-3"				
6'-6"	6'-0"	5'-6"	5'-2"	4'-8"	4'-3"	3'-11"	3'-8"				
7'-4"	6'-9"	6'-3"	5'-10"	5'-3"	4'-9"	4'-5"	4'-2"				
8'-3"	7'-6"	6'-11"	6'-6"	5'-9"	5'-3"	4'-11"	4'-7"				
9'-2"	8'-2"	7'-7"	7'-1"	6'-4"	5'-10"	5'-5"	5'-0"				

1. THESE TABLES SHOW LENGTHS FOR PLAIN, BOTTOM ASTM A615 GRADE 60 BARS IN NORMAL WEIGHT CONCRETE. MEETING THE SPACING AND COVER LIMITATIONS GIVEN BELOW. MULTIPLY THESE LENGTHS BY ALL OF THE

APPLICABLE FACTORS GIVEN FOR OTHER CONDITIONS. SPECIFIC EMBEDMENT, LAP, OR PROJECTION LENGTHS SHOWN ON DRAWINGS GOVERN OVER THESE TABLES.

2. SPACING AND COVER REQUIREMENTS.

a. CLEAR SPACING BETWEEN BARS AT SPLICE ≥2db AND CLEAR COVER ≥db OR b. CLEAR SPACING BETWEEN BARS AT SPLICE ≥db AND CLEAR COVER ≥db AND STIRRUPS/TIES OVER FULL LENGTH

OF SPLICE. STIRRUPS/TIES TO BE SPACED SUCH THAT:

s x n≤16 FOR #3 TIES/STIRRUPS s x n≤32 FOR #4 TIES/STIRRUPS

s x n≤50 FOR #5 TIES/STIRRUPS

db = BAR DIAMETER IN INCHES, s = SPACING OF TIES/STIRRUPS, n = NUMBER OF BARS SPLICED AT A GIVEN LOCATION. 3. MULTIPLY GIVEN SPLICE LENGTHS BY ALL THE FOLLOWING APPLICABLE FACTORS:

a. MULTIPLY BY 1.5 IF SPACING OR COVER REQUIREMENTS ARE NOT MET.

b. MULTIPLY BY 1.3 FOR TOP BARS. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE BELOW THE BAR.

c. MULTIPLY BY 1.2 FOR #3 OR #4 EPOXY COATED BARS SPACED 4" MIN OC WITH 1 1/2" MIN CLEAR COVER. d. MULTIPLY BY 1.31 FOR OTHER EPOXY COATED TOP BARS.

e. MULTIPLY BY 1.5 FOR OTHER EPOXY COATED BARS - EXCEPT TOP BARS.

f. MULTIPLY BY 1.3 FOR LIGHTWEIGHT CONCRETE.

g. MULTIPLY BY fy/60 FOR BARS WITH YIELD STRESS >60 KSI. USE CLASS 'B' TENSION LAP SPLICES UNLESS SPECIFICALLY NOTED OTHERWISE.

5. COMPRESSION LAP LENGTH, ONLY WHERE NOTED, TO BE 30db. INCREASE TO 44db FOR Fy = 75 KSI, AND 57db FOR Fy = 90KSI.

TO THE CLEAR OPENING WIDTH.

USE STEEL LINTELS AT NON-BEARING WALL OPENINGS NOT MEETING MASONRY CONDITIONS.

MASONRY LINTELS MAY BE USED FOR ANY LINTEL IN SOLIDLY GROUTED WALLS UP TO 8'-0" SPAN. 4. MASONRY LINTELS ARE 8" LINTEL BLOCK FILLED WITH 3,000 PSI CONCRETE W/4 1/2" MIN FROM TOP OF LINTEL TO REINFORCING.

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