Department of Community Planning & Economic Development
250 South 4th Street, Room 300
Minneapolis, MN 55415-1385

MEMORANDUM

TO: City Planning Commission, Committee of the Whole

FROM: Becca Farrar-Hughes, Senior City Planner, (612) 673-3594

DATE: September 24, 2015

SUBJECT: KA Block Mixed Use Development, 501-523 9th St S, 502-518 9th St S, and 811 5th Ave S

SITE DATA

Existing Zoning	B4N District DP Overlay District
Lot Area	109,730 square feet / 2.52 acres
Ward(s)	7
Neighborhood(s)	Elliot Park Neighborhood, Inc., (EPNI); adjacent to Downtown Minneapolis Neighborhood Association (DMNA)
Designated Future Land Use	Commercial
Land Use Features	The property is within the boundaries of Downtown Minneapolis, an Activity Center and designated Growth Center.
Small Area Plan(s)	Downtown East / North Loop Master Plan; Elliot Park Neighborhood Master Plan

The site consists of a two-story, approximately 38,703 square foot office building constructed in 1974 and the remainder consists of a 297 space accessory (112 spaces) and commercial surface parking lot (185 spaces). The property is considered one zoning lot for the purposes of the redevelopment. The properties surrounding the site have downtown zoning designations predominantly including B4N and B4-1. The uses within the area are varied and include commercial, office and residential uses.

PROJECT DESCRIPTION

The applicant proposes to redevelop a full city block that includes the following components:

- A new Kraus Anderson (KA) corporate office building that is 5 stories and approximately 95,000 square feet in size;
- A new 17-story residential building that consists of 306 dwelling units;
- A new 7-story, 148 room hotel aka "brewtel" building that includes a restaurant and bar;
- A new 3-story Finnegan's brewery and innovation/event center.

All on-site parking would be provided below-grade. A total of 530 spaces are anticipated at this time in two below grade levels accessed off of 8th Street South. Walk-up units are proposed in the residential building along Portland Avenue and 9th Street South. The lobby would be accessed off of Portland Avenue. Access to KA's corporate office building would be located at the corner of 8th Street South and 5th Avenue South. The brewery and hotel would have entrances off of 5th Avenue South.

APPLICATIONS

Based on the size of the proposed development, the project exceeds threshold requirements for a mixed-use development and triggers a mandatory Environmental Assessment Worksheet (EAW). This process will need to be completed prior to the submission of formal land use applications. Based on staff's preliminary review, of the plans developed for the site to date, the following land use applications have been identified:

- Conditional Use Permit (CUP) for a Planned Unit Development (PUD) with alternative requests request for height, loading and signage;
- Site Plan Review;
- Preliminary and final plat.

Additional applications may be required, depending on the plans that the applicant formally submits to the City for review and approval.

PRELIMINARY STAFF COMMENTS

- The proposal is significantly improved from the past proposals for the site and is largely consistent with many adopted City policies. The purpose of bringing the project to the COW meeting at this time is to introduce the project and to gather preliminary feedback. The applicant understands that attendance at another meeting will be necessary as the project details are developed.
- The details will be important as the design evolves and advances. Building materials, surfacing and the treatment of at-grade areas as well as above-grade landscape features on-site located between the proposed buildings currently noted as the service/drop-off/multipurpose court will be especially important. Fenestration in the building walls facing the internal areas will also be an important feature that enhances the safety and feel of the space.

K.A. BLOCK MIXED USE REDEVELOPMENT DESIGN VISION

Committee of the Whole - September 24, 2015

Introduction:

Development Team

The deveopment team is led by the master developer Kraus Anderson (KA) with key development team partners including Saturday Development on Residential and Finnegans on the Hotel - Brewery - Innovation Center.

Design Team

The urban design, site design and architectural design of the Residential and Finnegans Hotel - Brewery - Innovation Center is being done by Elness Swenson Graham Architects. The design of the KA home office is being done by Pope Associates. Sunde Engineering and Damon Farber Associates are providing Civil and Landscape Design.

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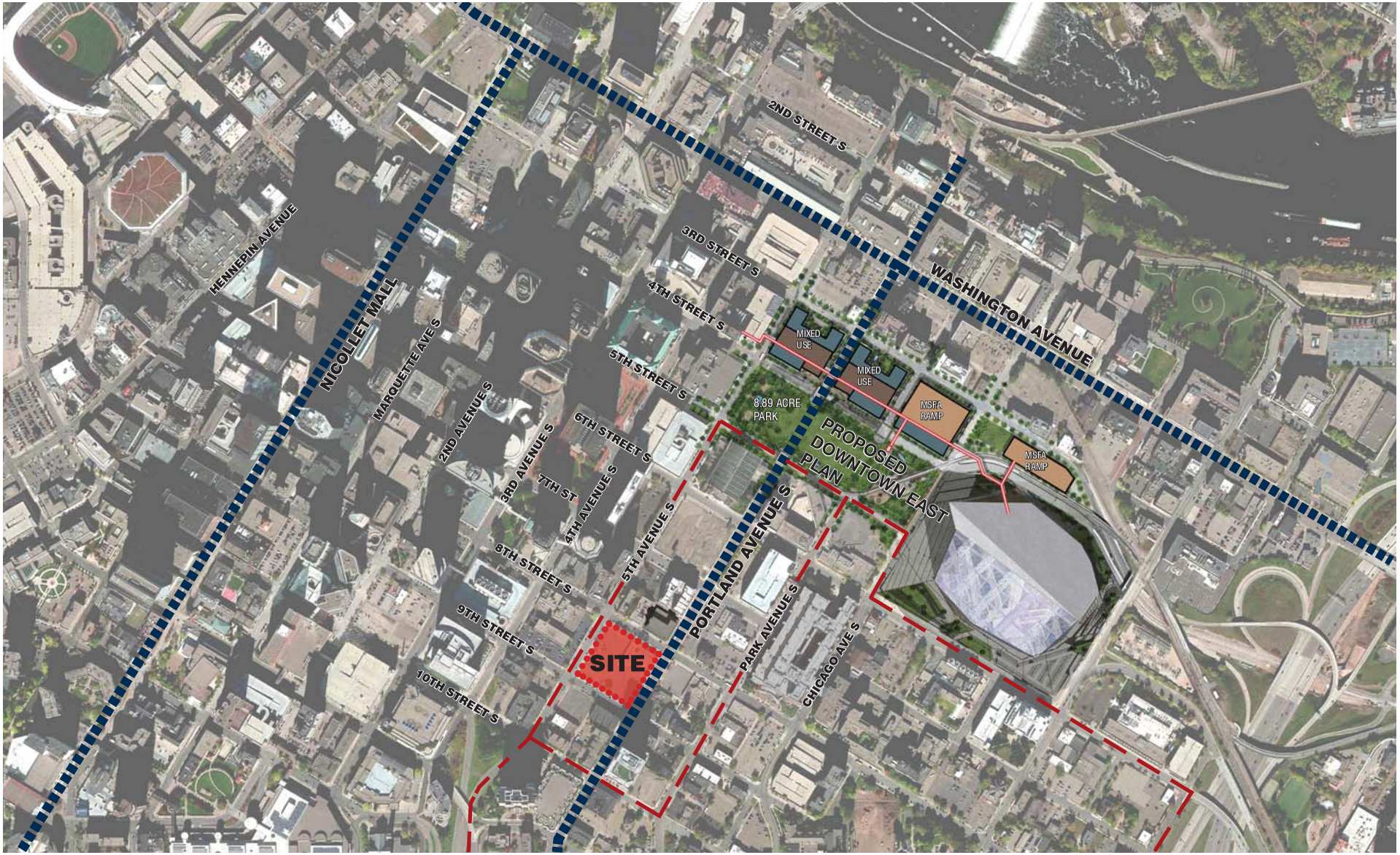

K.A. BLOCK MIXED USE REDEVELOPMENT DESIGN VISION

Committee of the Whole - September 24, 2015

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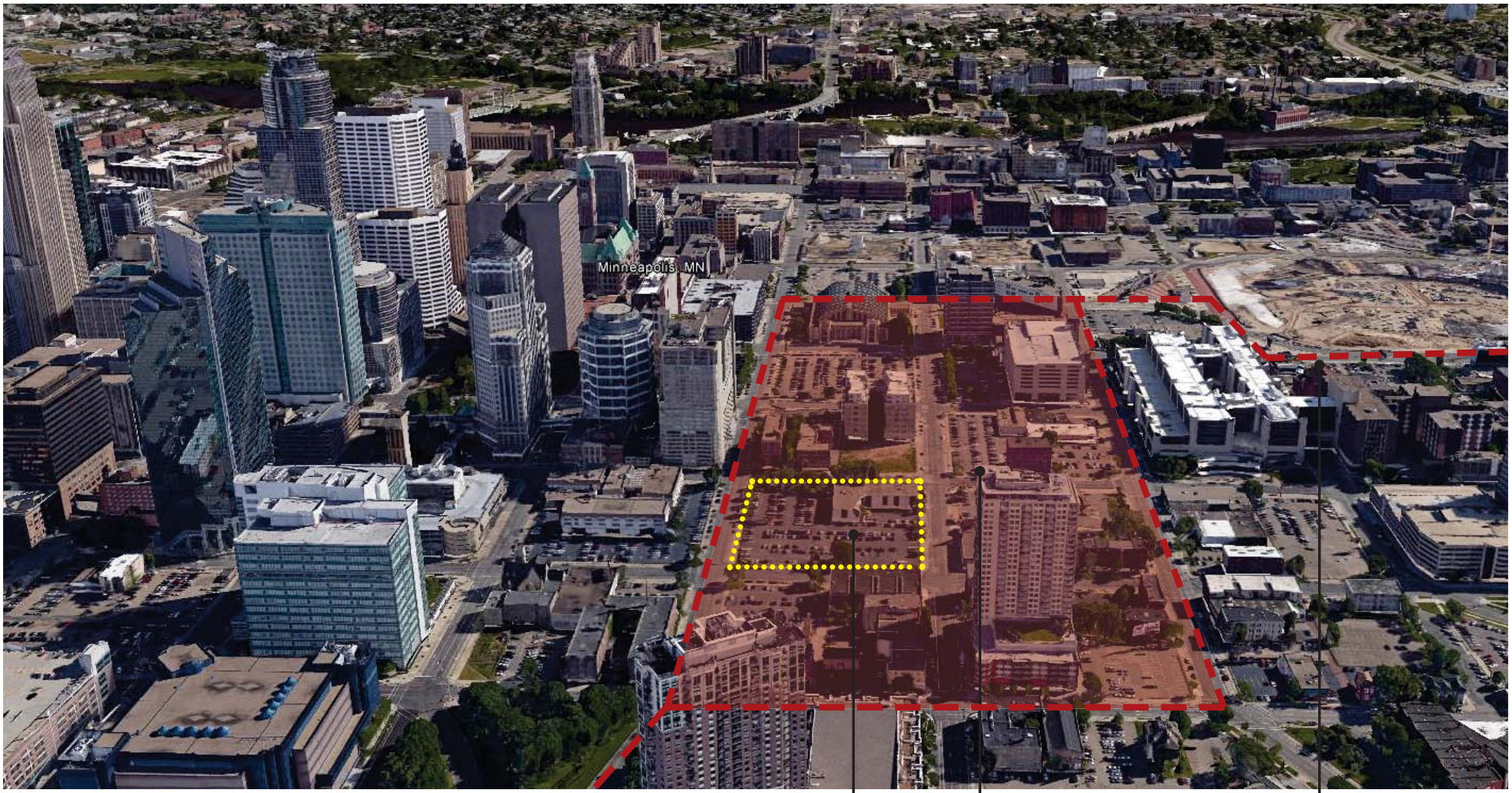
SITE CONTEXT



SITE

ELLIOT PARK/DOWNTOWN EAST
"DOWNTOWN SECTOR"

ELLIOT PARK
NEIGHBORHOOD
BOUNDARY

Corner of 5th Ave and 9th St looking east at site

3/4 of Lot - Surface

Corner of 8th St and 5th Ave looking south at site

Corner of 9th St and Portland Ave looking north at site

Corner of Portland Ave and 8th St looking west at site

VISION and PURPOSE

The Vision and Purpose of the proposed KA Block redevelopment is to transform an entire city block, consisting of a surface parking lot and antiquated office building into a vibrant, high-density mixed use destination in East Downtown consistent with several key sources of guidance.

This particular area of the city is currently characterized by several large surface parking lots and is in need of creative infill redevelopment. The proposed project can serve as a catalyst for future improvements and investment along the Portland Avenue Corridor.

MIXED USE PROGRAM SUMMARY

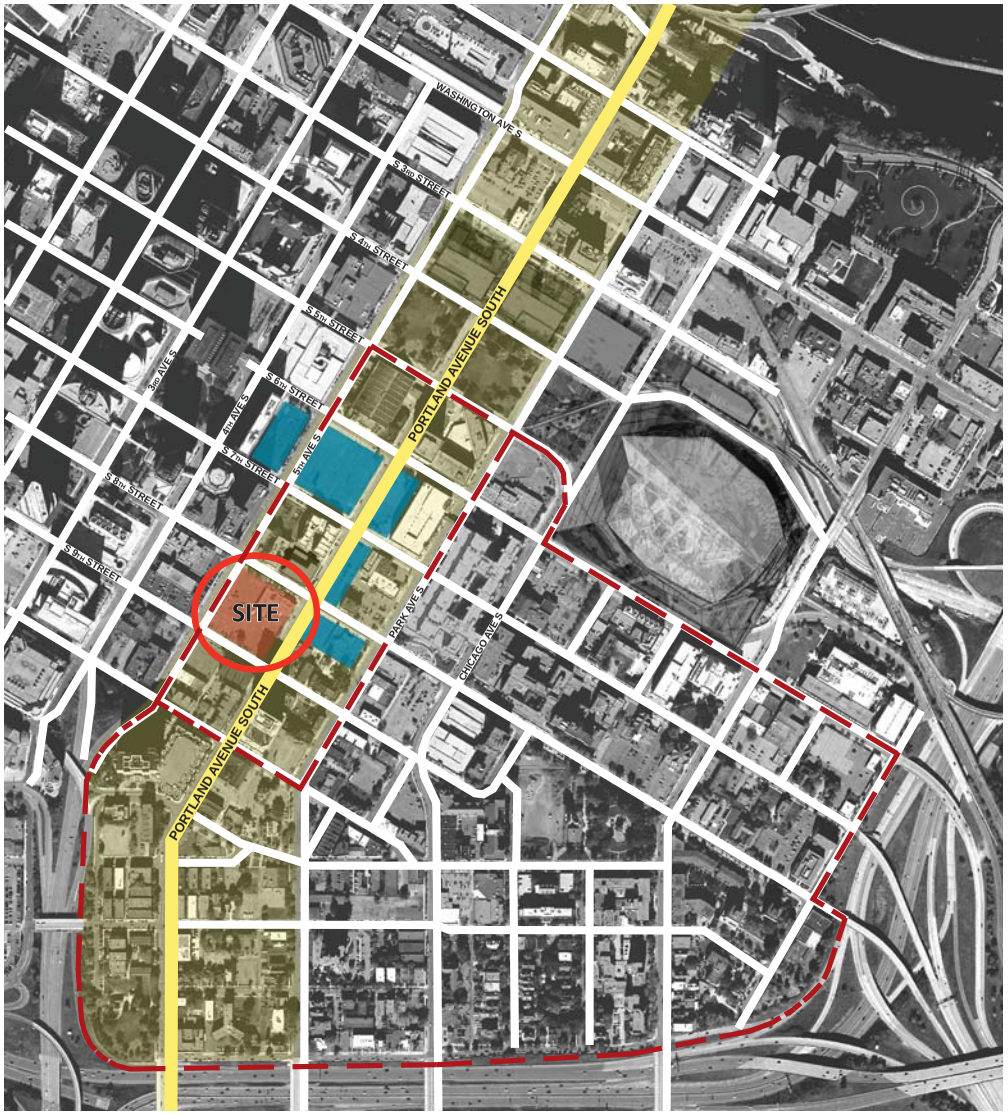
The program for this redevelopment includes three distinct and active uses:

- A new Kraus Anderson (KA) Corporate Home Office of approximately 95,000 square feet. KA has been located on this site for over 75 years.
- A new Type 1 residential midrise building of approximately 300 dwelling units.
- A new 148-key Finnegan's House Boutique Hotel/ Micro Brewery/ Innovation Center.

DESIGN GUIDANCE AND PRINCIPLES

Key Sources of Guidance include:

- **The Minneapolis Plan**
- **The Minneapolis 2025 Plan.** The proposed design is guided by the Intersections: Downtown 2025 Plan to expand the residential population of Downtown.
- **The Site's B4N Zoning.** The B4N Downtown Neighborhood District is established to provide an environment that promotes the development of higher density neighborhoods surrounding the Downtown office core.
- **City Staff guidance.** City planning staff has recommended that the design include creative high-density mix of uses. This particular area has been earmarked for new infill to fill the many surface parking lots.
- **The Elliot Park Neighborhood Master Plan (EPNI).** The block falls within the Downtown District of the Elliot Park Neighborhood. Elliot Park design guidelines suggest that this district is an appropriate location for higher densities and a mix of uses to create a vibrant and active environment. EPNI has helped shape the design concept and is supportive.
- **The Portland Avenue Residential Corridor Initiative.** The design is guided by interface with Dan Collison, The East Downtown Council, and EPNI to create a pedestrian-oriented residential streetscape along Portland Avenue which will strengthen the connection between Elliot Park and the Riverfront and add significant new residential density.
- **The East Downtown Branding and Visioning Initiative.** The design is informed by ideas that are part of the East Downtown Visioning and Branding Initiative (kickoff meeting on July 28, 2015).



POTENTIAL REDEVELOPMENT SITES

KEY OVERALL DESIGN FEATURES + CITY BUILDING BENEFITS

- **Streetscape Public Realm:**
  - Complete rebuilding and enhancements to the surrounding urban sidewalks at Portland Avenue, 9th Street, 5th Avenue and 8th Street.
  - All four sidewalk areas will feature green boulevards with street trees, new regular and decorative sidewalk pavement, street lighting, landscaping, and outdoor seating areas.
  - Additional setbacks to provide a wider, more pedestrian friendly environment.

- **Streetscape Public Realm Shaped by High Density/Active Architecture:** The architecture on all sides of the block, shaping the streetscape public realm, will feature a variety of high quality, engaging facades, multiple entry points, and significant expanses of transparent window area to create an active and comfortable public pedestrian environment.

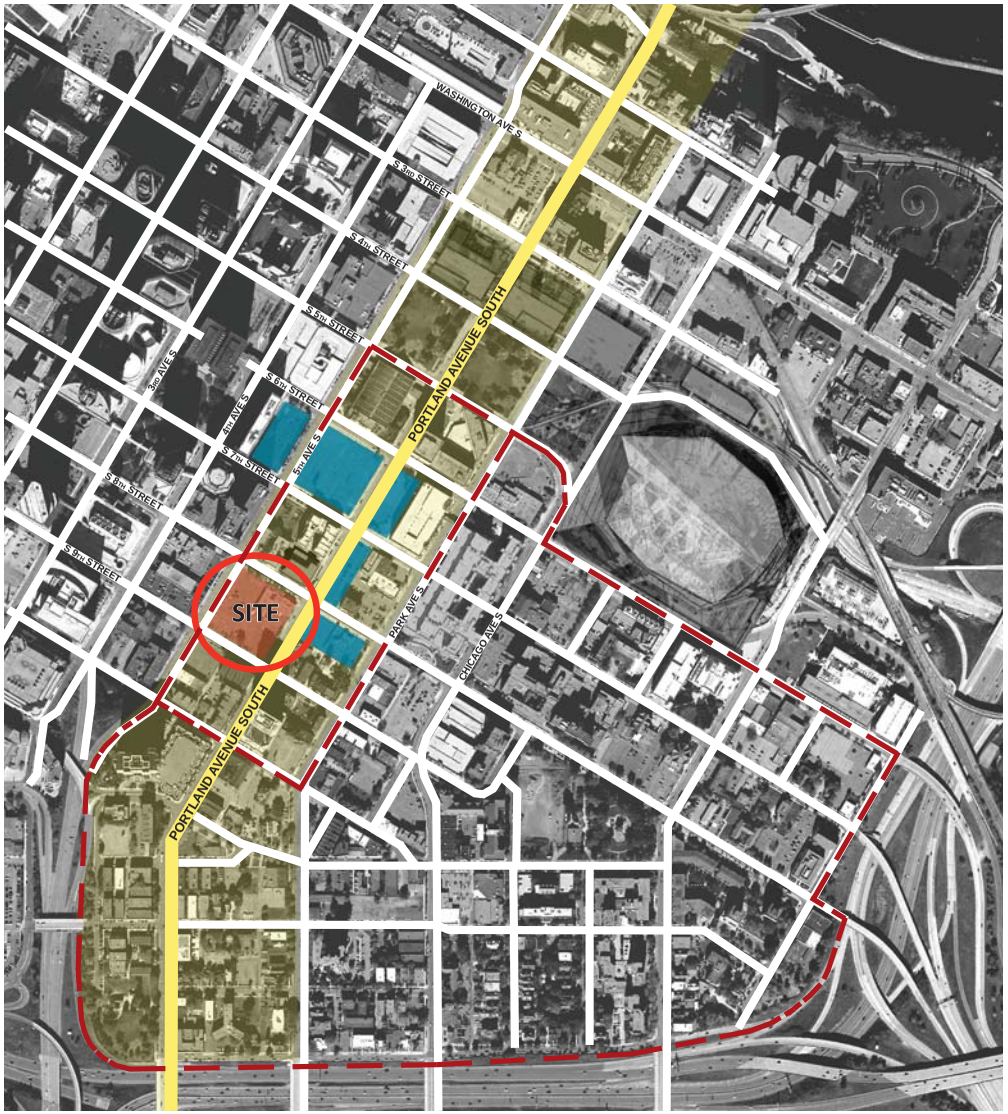
- **Pedestrian Porosity Through Site:** The site plan features exterior pedestrian access through the site at street level by means of access/egress passages along 9th Street, 8th Street, and 5th Avenue.

- **Multipurpose Service/Drop off Courtyard:** Within the site will be a multi-purpose hardscape courtyard that can be used by the surrounding new development for staging a variety of activities, gatherings and outdoor dining.
- **Parking Strategy:** All parking will be provided below street level in a two-level parking facility with limited access located off of S. 8th Street. There will be no surface parking lots. Parking for the hotel and Innovation Center will be provided through an offset, shared parking strategy.

- **Architectural Design Approach:** The overall architectural strategy features three distinctly different building aesthetics within a harmonious overall block massing approach. The visual intent is the creation of a full block redevelopment that grew organically over time. Type 1, 100-year concrete and steel construction will be used throughout.

- **Stormwater:** The Stormwater management design will follow City of Minneapolis best practices.

- **Green and Sustainable Features:** The design will offer a pedestrian and transit-oriented community that allows residents to live, work and play without the dependence on daily automobile usage. The development team is committed to the sustainable design principles reflected in the City's comprehensive plan. Our sustainable design mission is to promote livable communities through the use of energy efficient systems, green building practice, reduced dependency on automobiles, creative density, high quality pedestrian and bicycle public realm and preservation of natural resources. This mixed use project will feature a series of green elements including green construction and demolition practices, green material specifications, thermal high-efficiency windows, and exterior envelope systems, and participation in the Xcel Energy Design Assistance Program.

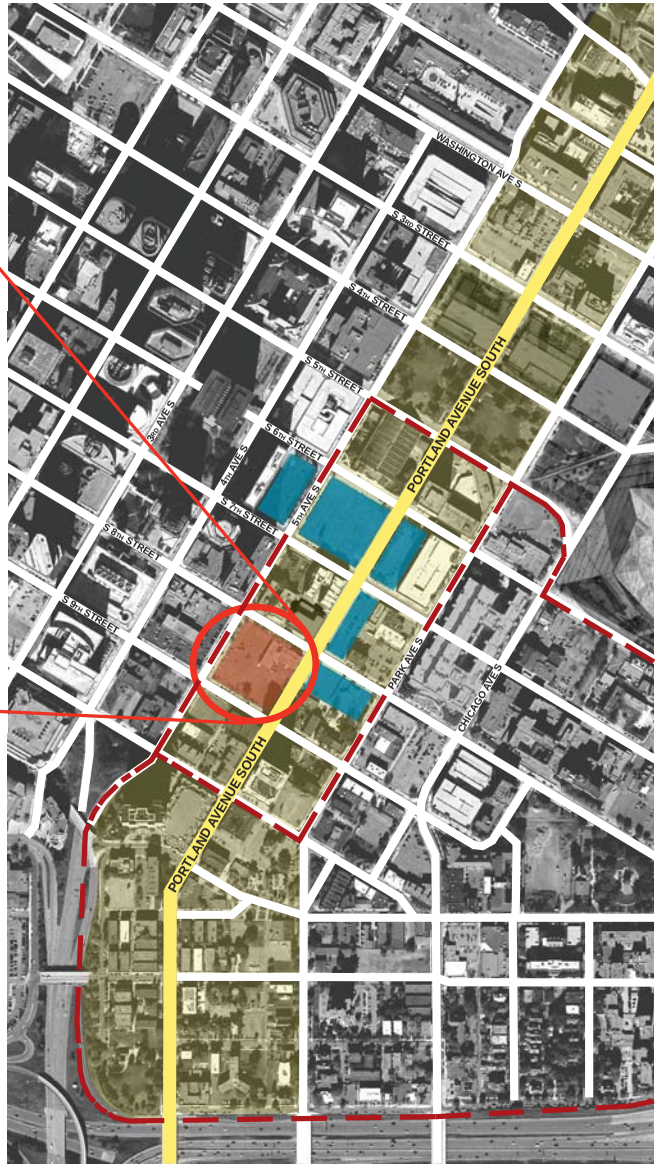


MIXED USE URBAN BLOCK DESIGN CONCEPT

KA MIXED USE REDEVELOPMENT MASTER PLAN CONCEPT

GOAL: Create a high density, vibrant, full block mixed use design informed by key city and neighbor design guidance and timeless city building principles.

- New KA Corporate Home Office
- New Type I Residential
- New Finnegan House Boutique Hotel/ Micro Brewery/Innovation Center



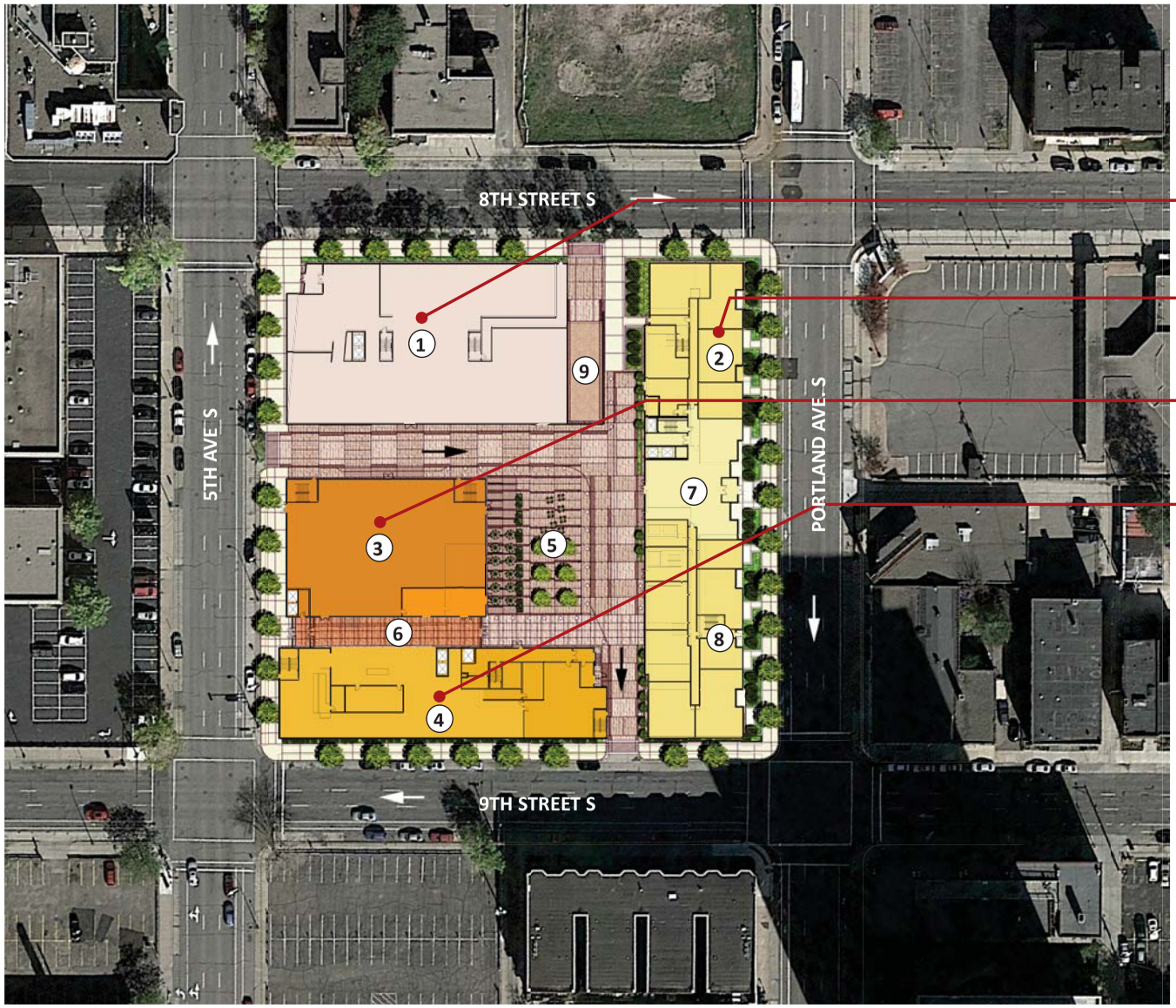
VISION FOR FINNEGAN HOUSE:

The FINNovation Lab

- **A Collaborative Community for Social Entrepreneurs.** The FINNovation Lab will be a community of companies with revenue generating, sustainable business models that create living wage jobs in the community and provide positive social impact.
- **For Businesses That Do Well and Do Good.** The FINNovation Lab will cater specifically to social entrepreneurs and innovators – businesses that do well and do good. It will provide a tailored ecosystem of support services from the start up to scaling phase of their business.
- **Designed To Enhance Collaboration And Cross Pollination Of Ideas.** The Lab space will be purposely designed to enhance collaboration and cross pollination of ideas among the diverse individuals, businesses and organizations that become a part of the lab community. It will be a hub for those passionate about social innovation, creativity and collaboration.

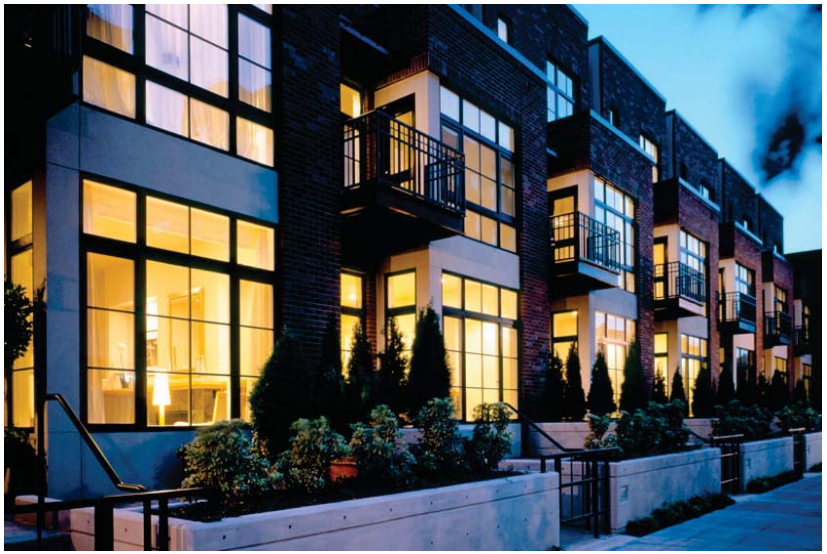
Finnegan House

- **A Destination Development Greater Than the Sum of Its Parts:** The Finnegan House umbrella combines the rapidly growing trends of the craft beer movement, collaborative workspaces, social entrepreneurship and an experiential overnight accommodations to create a positive impact on the community and greater society.
- **A Brewery Experience With Guest Rooms:** FINNEGANS, the first beer company in the world to donate 100 percent of its profits back to the community, will launch its first ever brewery and experiential brewery lodging experience with 148 guest rooms at Finnegan House.
- **Outdoor Event Space:** This community building space will also include an outdoor courtyard and event space with planned programming and events designed to engage the neighborhood and the greater community.
- **On-Site Restaurant, Bar and Caterer:** Inside Finnegan House there will be a restaurant and bar location that will provide food and beverage services to the entire facility, including catering and room service.



Key Plan

1. **K.A. CORPORATE HEADQUARTERS**
   5 floors (70' +/-)
   80,000 SF
2. **RESIDENTIAL TYPE 1**
   17 Floors over lower rise podium (190' +/-)
   300 units (+/-)
3. **FINNEGANS MICROBREWERY / INNOVATION SPACE/ EVENT CENTER**
   3 Floors (60' +/-)
4. **FINNEGANS HOTEL / RESTAURANT / BAR**
   7 Floors (90' +/-)
   148 keys (+/-)
5. **SERVICE / DROP OFF / MULTIPURPOSE COURT**
6. **ATRIUM/ INDOOR STREET**
7. **RESIDENTIAL LOBBY**
8. **GROUND FLOOR "TOWN HOME" DWELLING UNITS**
9. **VEHICULAR RAMP TO UNDERGROUND PARKING**



Urban Townhome Streetscape

Grant Park, Minneapolis

Elliot Park, Minneapolis

Park Avenue, Minneapolis

DESIGN GOALS: PORTLAND AVENUE

- **MULTIPLE ENTRIES/TOWNHOMES AND FRONT YARDS/URBAN PORCHES ALONG PORTLAND AVENUE.**
- **CONTINUE FABRIC OF ELLIOT PARK & GRANT PARK**

KEY PLAN

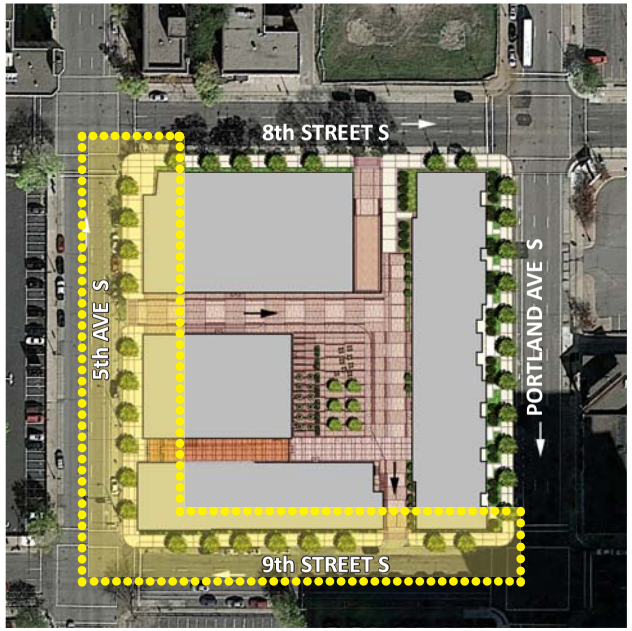
RESIDENCES

Transparent, Active Storefronts

Outdoor Seating Within Streetscape Setback

DESIGN GOALS: 9TH ST & 5TH AVE STREETSCAPE

- PROVIDE ACTIVE, TRANSPARENT, VIBRANT USES ALONG 9TH STREET AND 5TH AVE S.
- LARGE WINDOWS ON THE STREET
- OUTDOOR DINING & SEATING ALONG 5TH AVE S.
- MULTIPLE ENTRIES



KEY PLAN

DESIGN IMAGES-
9th St + 5th Ave Streetscape

FINNS
HOUSE
K
A

DESIGN IMAGES-
9th St + 5th Ave/Hotel Entrance/Front Porch

FINNEGAN
HOUSE
FINNEGANS

FINNEGANS

FINNEGANS

Lively and Cozy Gathering Experience

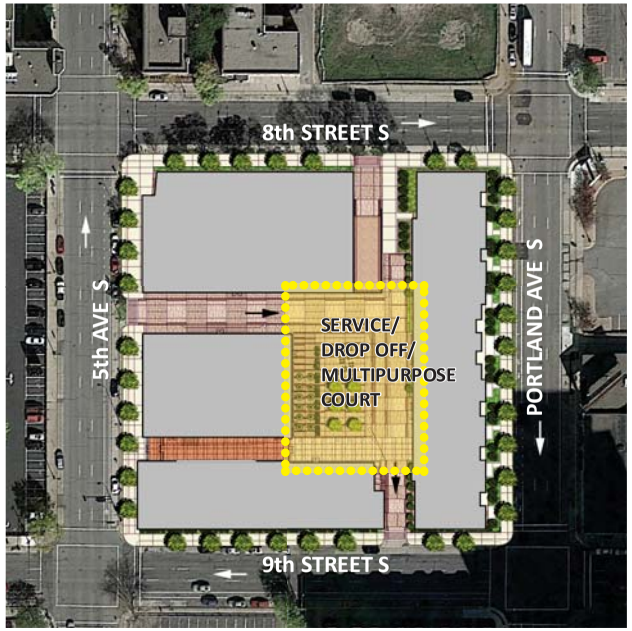
Shared Vehicular and Pedestrian Zone

Flexible Furniture Arrangements for Social Gathering

Flexible Seating, Fireplace, Trees

DESIGN GOALS: SERVICE/ DROP OFF/ MULTIPURPOSE COURT

- A SERVICE/ DROP OFF COURT DESIGNED FOR VEHICLES AND PEDESTRIANS
- CAN BE USED FOR PROGRAMMED ACTIVITIES, SOCIAL GATHERINGS AND DINING
- PROVIDES VISITOR DROP OFF AND SERVICE



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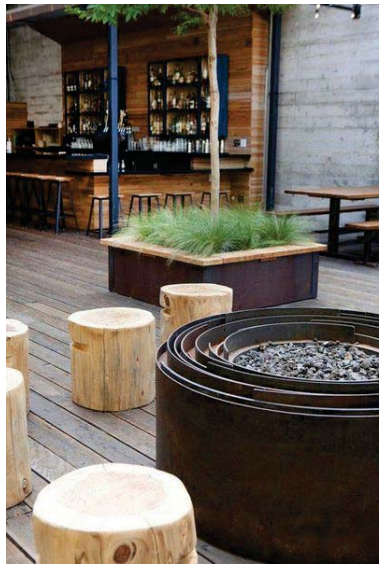

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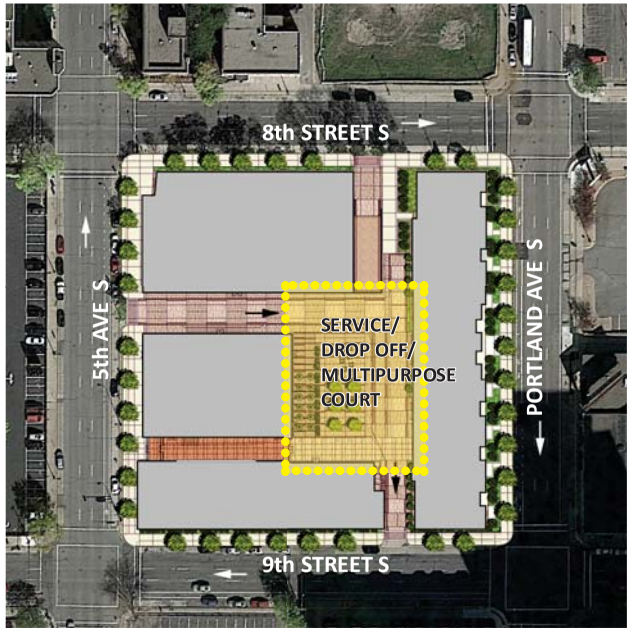


KEY PLAN

DESIGN IMAGES-
Courtyard/Multipurpose Court

DESIGN IMAGES-
Courtyard/Multipurpose Court

Open Stairs

Bridges

Common Gathering Place

DESIGN GOALS: ATRIUM

- THE ATRIUM SPACE IS THE HEART AND SOUL OF THE BREWTEL COMMUNITY
- AN INDOOR STREET CONNECTS 5TH AVE S THROUGH TO THE SERVICE DROP OFF COURT
- CONNECTS ALL PUBLIC ACTIVITIES

KEY PLAN

DESIGN GOALS: BOUTIQUE HOTEL & MICROBREWERY

- INSPIRATIONAL DESIGN
- BLENDS TRADITIONAL MATERIALS WITH CONTEMPORARY FORM

KEY PLAN

FINNEGAN
HOUSE

DESIGN IMAGES-
Atrium/Indoor Street

K/A
FINNEGANS

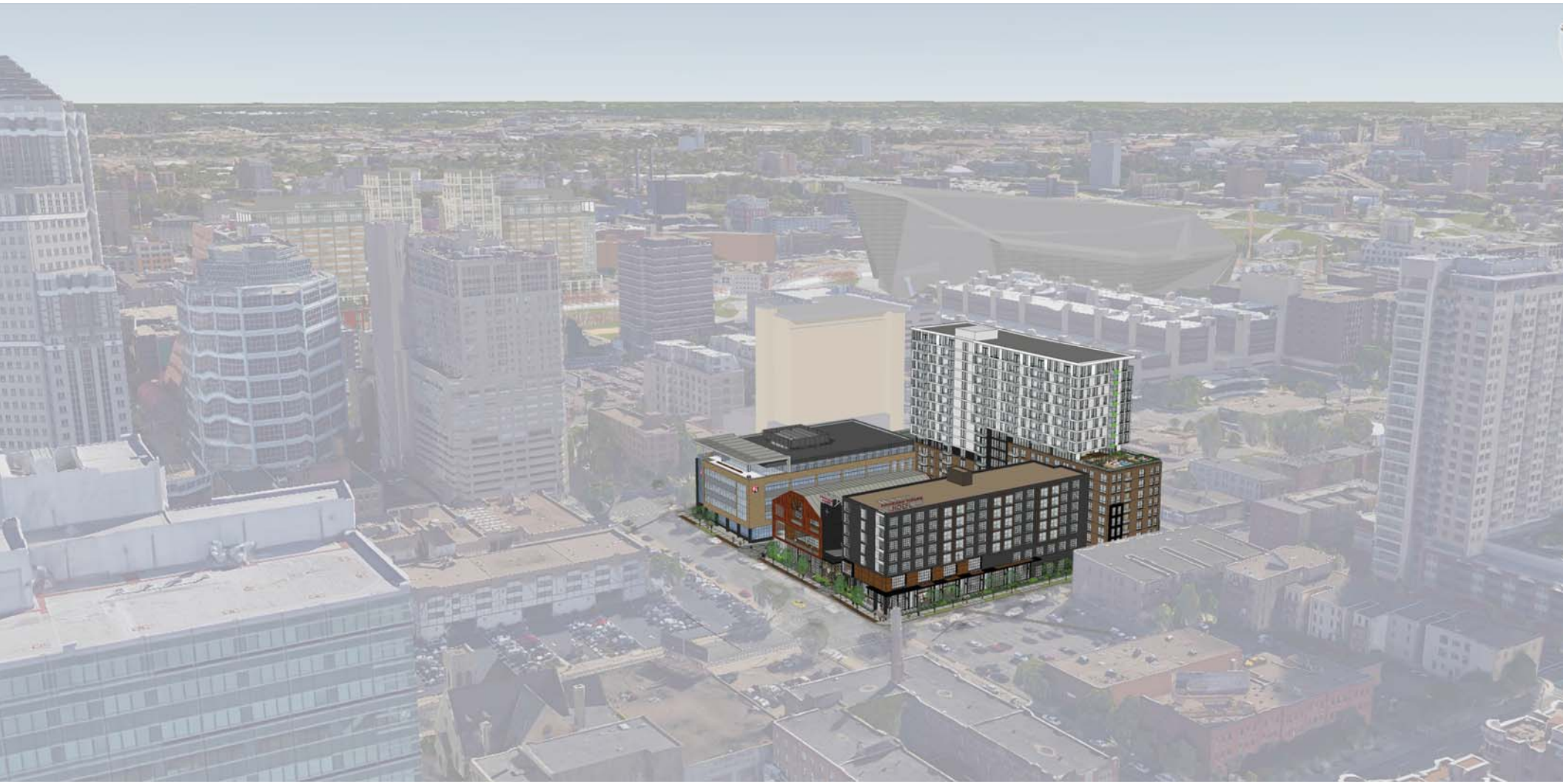
FINNEGAN HOUSE
HOTEL
FINNEGAN HOUSE

DESIGN IMAGES-
Looking toward downtown

DESIGN IMAGES-
View of downtown from Amenity Terrace

DESIGN IMAGES-
Residences along Portland

Image Landsat
Google



DESIGN IMAGES-
View Looking East

Zoning Analysis

Replatted properties	Lot Size	GFA	FAR
Residential		295,000	
Office (KA headquarters)		100,000	
Finnegan House Hotel + Brewery		142,000	
Total	108,900	537,000	4.93

Zoning District	B4N
Overlay District	Downtown Parking
Max FAR	none
Min FAR	2.0
Proposed FAR	4.93
Max Height	10 stories, 140' (increase allowed with Conditional Use Permit)
Proposed height - Residential	17 stories, 190'
Proposed height - Office	5 stories, 70'
Proposed height - Brewtel	7 stories, 88'

Parking Analysis

Required Parking	Proposed DUs, Keys, GSF or occupants	Base Zoning		Applied Zoning	
		Min	Max	Min	Max
Residential	306	*	1.6	6	490
Office (KA headquarters)	100,000	0	0.001	0	100
Office (Finnovation)	12,000		0.001		12
Hotel rooms	148	0	1	0	148
Hotel dining/meeting	200	0	30%	0	60
Brewery Production, Processing, Stor	11,759		0.0015		18
Event Center	750		30%		225
Total				6	1052

* Min 1 guest stall per 50 dwellings

Parking Provided	Stalls
Minus 2	265
Minus 1	265
Total	530

Required applications:
Site Plan Review
CUP to increase max allowable height
Variance for signage - specifics TBD
Setback along Portland greater than 8'

STREET LEVEL

LEVEL 2

0 25' 50'

K.A. BLOCK MIXED USE REDEVELOPMENT DESIGN VISION

Committee of the Whole - September 24, 2015

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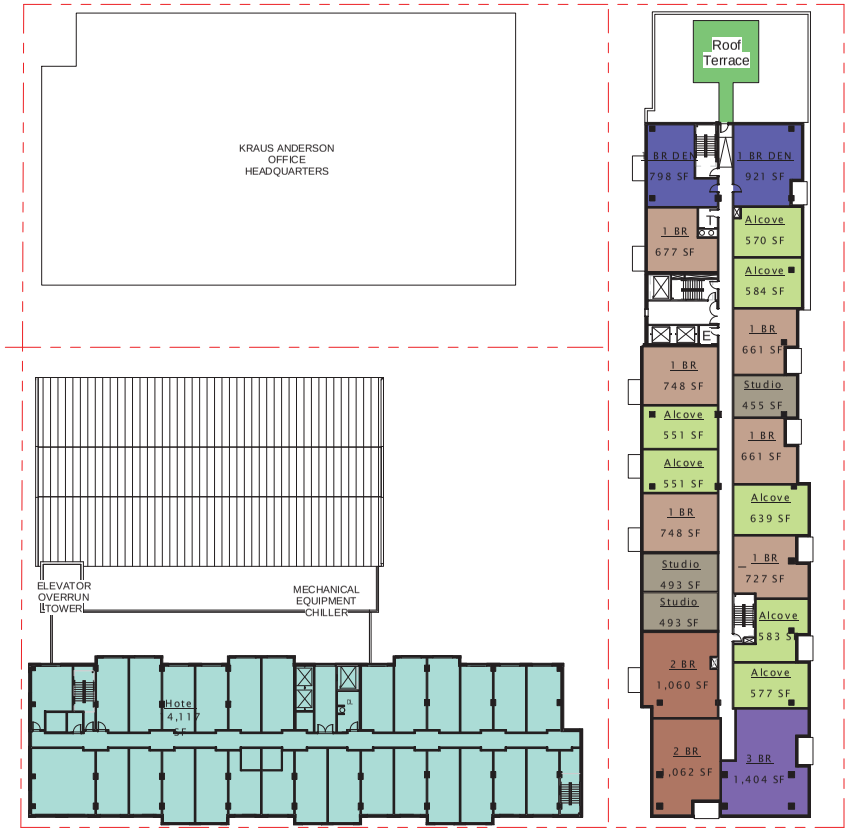
FLOOR PLANS

LEVELS 3-5



LEVEL 6

0 25' 50'

K.A. BLOCK MIXED USE REDEVELOPMENT DESIGN VISION

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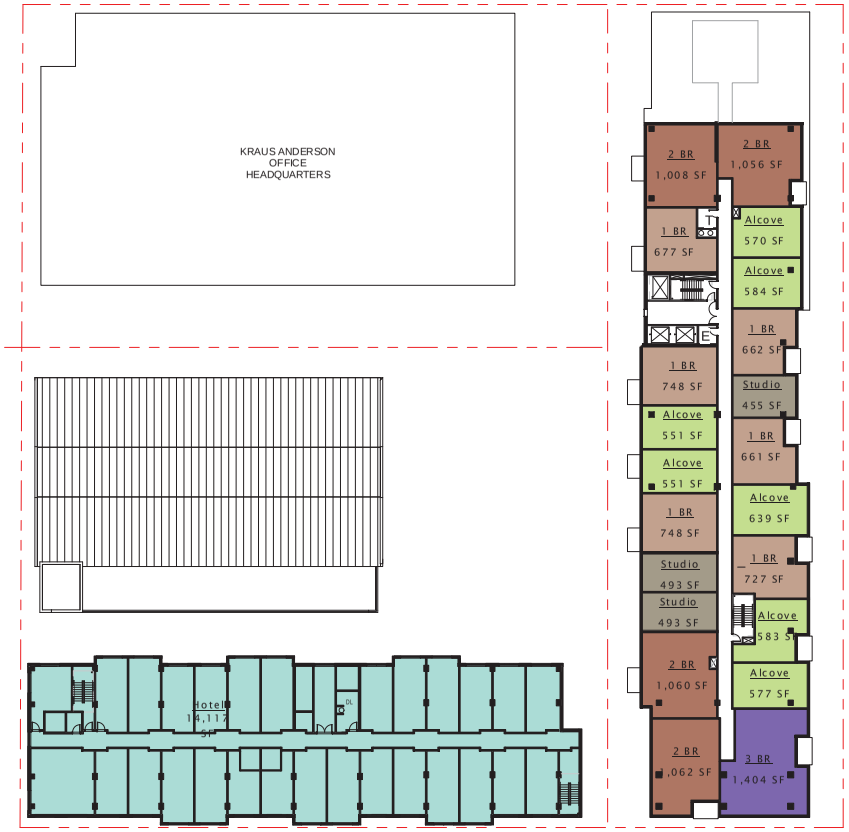
FLOOR PLANS



LEVELS 7-8

LEVEL 9

0 25' 50'

N

FLOOR PLANS

LEVELS 10-15

LEVEL 16-17 PENTHOUSE

0 25' 50'

K.A. BLOCK MIXED USE REDEVELOPMENT DESIGN VISION

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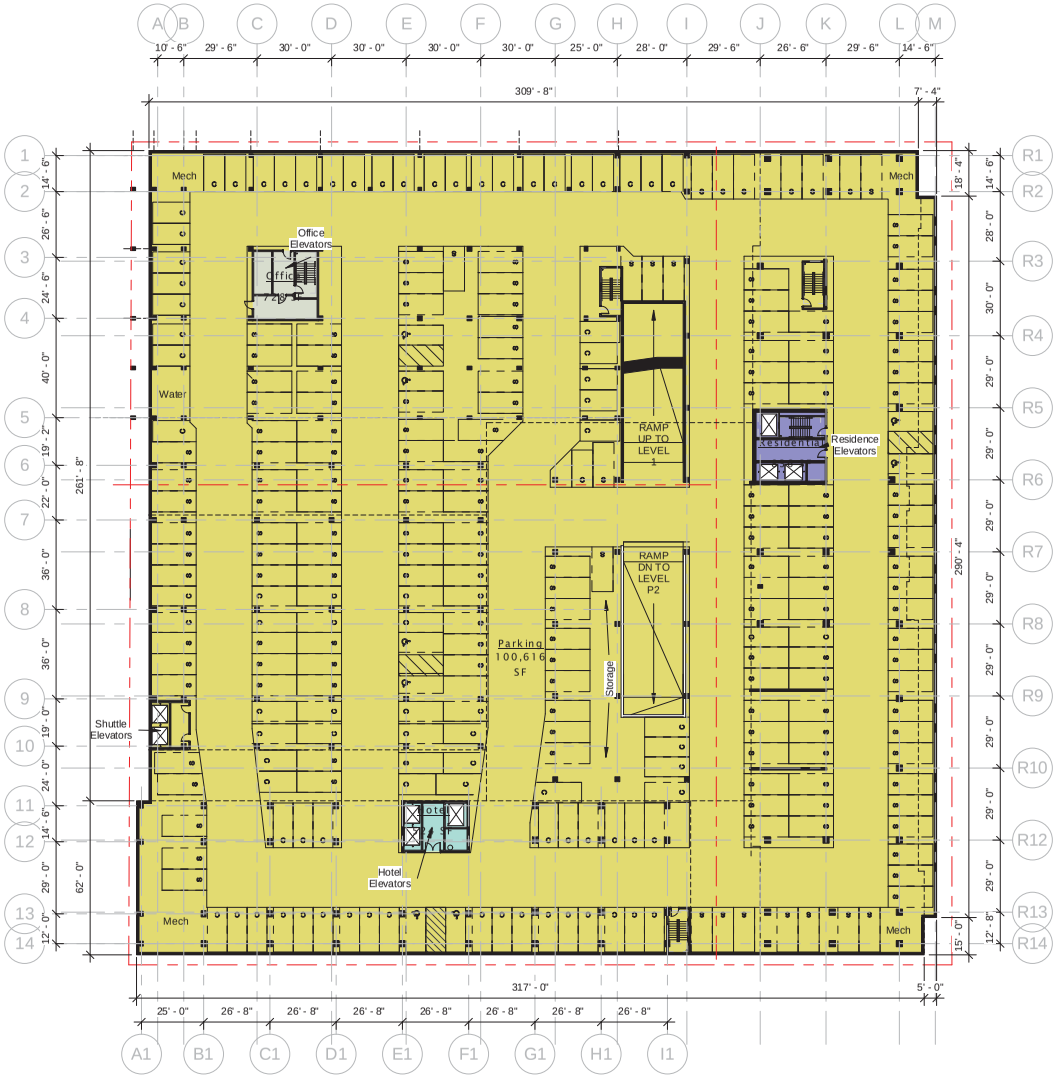
FLOOR PLANS



LEVEL P1 PARKING (P2 SIMILAR)

0 25' 50'

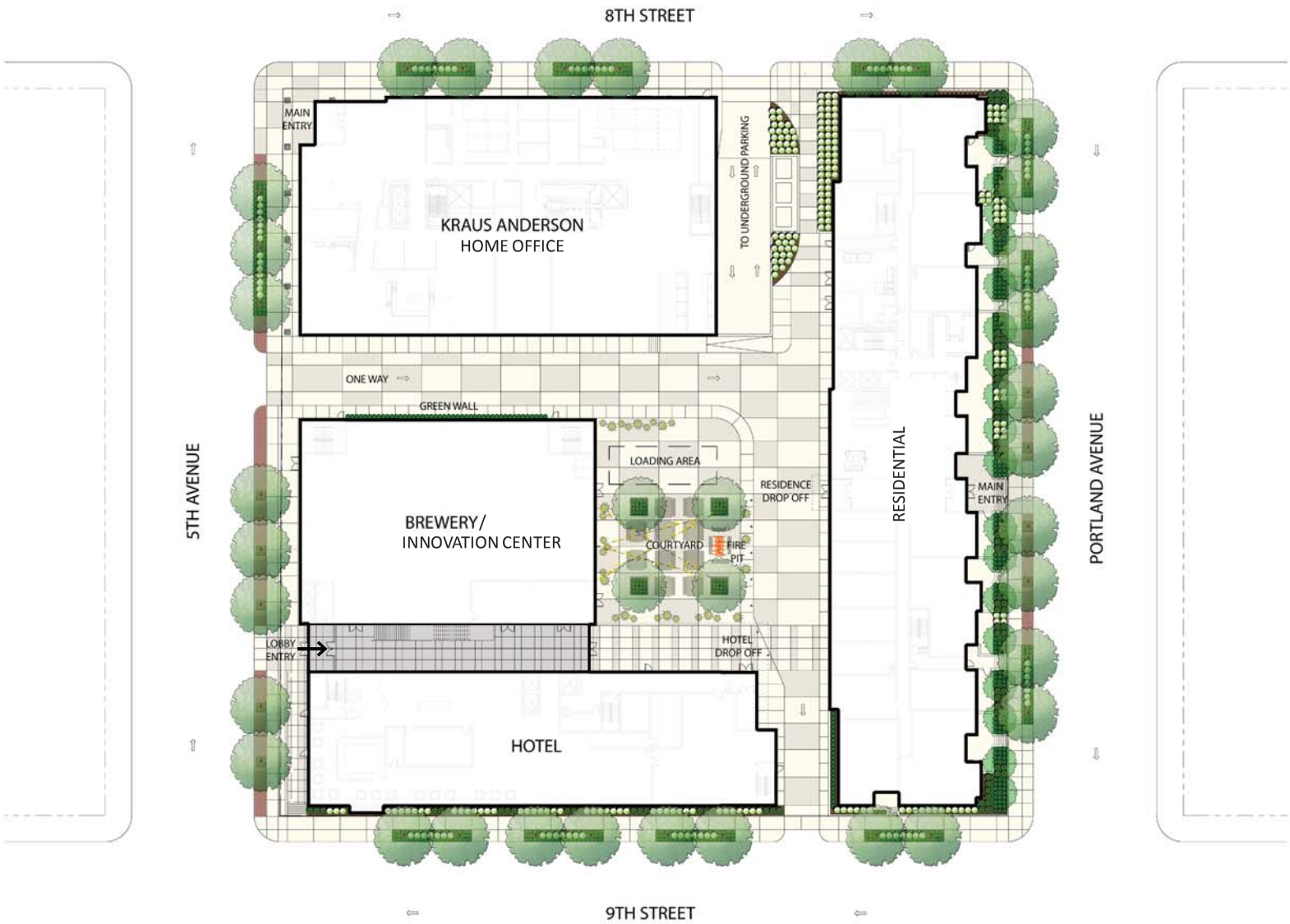
Kraus Anderson Block Residential Metrics
Minneapolis, MN

Area Summary

	Use	Total GSF	Parking GSF	Res GSF	Lobby or Amenity	Res NRSF	DUs	Parking	Efficiency
Level P2	Parking	101,641	100,795	846				266	
Level P1	Parking	101,641	100,795	846				266	
Level 1	Residential	21,031		15,673	5,358	12,579	17		80.3%
Level 2	Residential	21,031		21,031		16,090	19		76.5%
Level 3	Residential	20,957		20,957		17,911	23		85.5%
Level 4	Residential	20,957		20,957		17,911	23		85.5%
Level 5	Residential	20,957		20,957		17,911	23		85.5%
Level 6	Residential	17,880		17,880		15,279	21		85.5%
Level 7	Residential	17,880		17,880		15,279	21		85.5%
Level 8	Residential	17,880		17,880		15,279	21		85.5%
Level 9	Res/Amenity	14,227		10,679	3,548	8,348	12		78.2%
Level 10	Residential	15,157		15,157		12,786	18		84.4%
Level 11	Residential	15,157		15,157		12,786	18		84.4%
Level 12	Residential	15,157		15,157		12,786	18		84.4%
Level 13	Residential	15,157		15,157		12,786	18		84.4%
Level 14	Residential	15,157		15,157		12,786	18		84.4%
Level 15	Residential	15,157		15,157		12,786	18		84.4%
Level 16	Residential	15,157		15,157		12,782	9		84.3%
Level 17	Residential	15,157		15,157		12,782	9		84.3%
Total		497,338	201,590	285,150	8,906	238,867	306	532	83.7%

Unit Distribution Summary

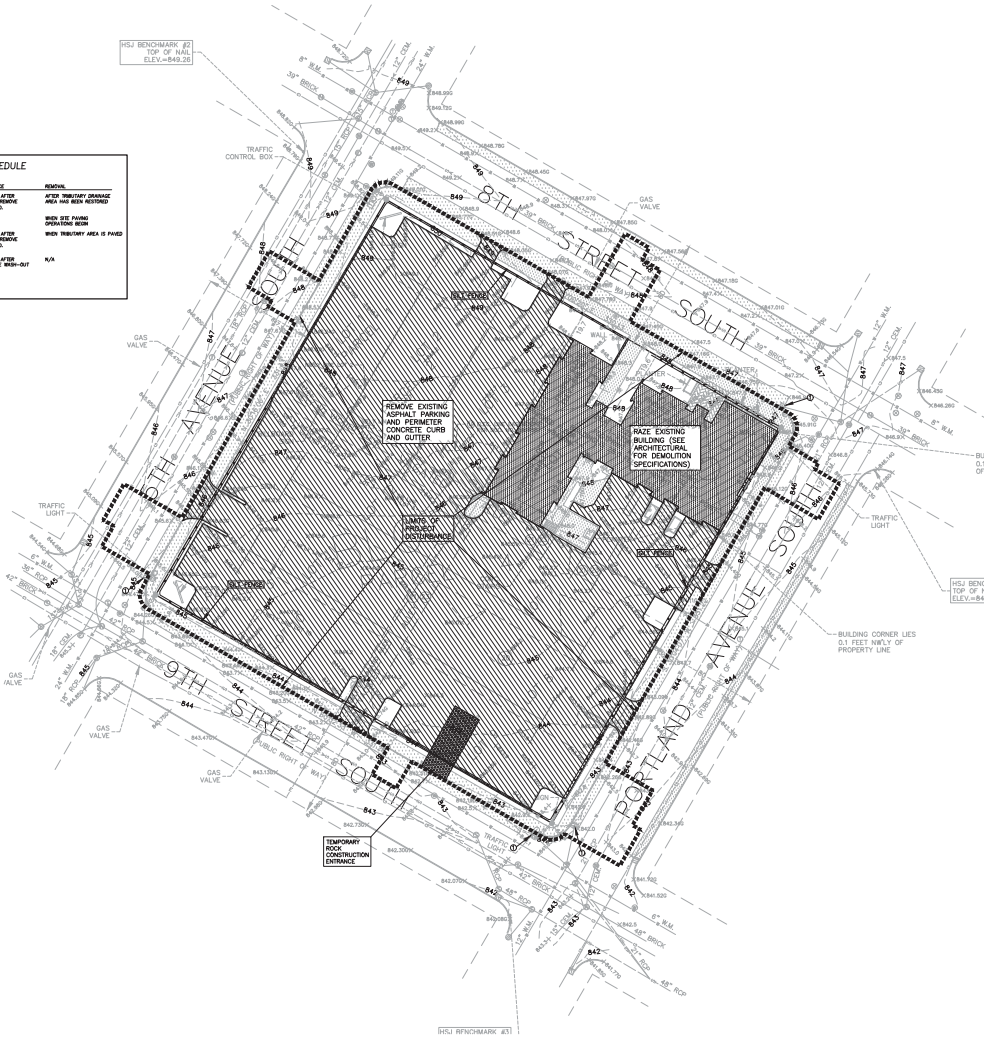
Level	Studio	Alcove	1 BR		2 BR	2 BR DEN	3 BR	Beds	Total DUs
Level 1	5	6	1		3		2	24	17
Level 2	2	6	4		5		2	28	19
Level 3	4	6	6		5		2	31	23
Level 4	4	6	6		5		2	31	23
Level 5	4	6	6		5		2	31	23
Level 6	4	6	6		4		1	27	21
Level 7	4	6	6		4		1	27	21
Level 8	4	6	6		4		1	27	21
Level 9	2	3	5		2			14	12
Level 10	4	4	6		4			22	18
Level 11	4	4	6		4			22	18
Level 12	4	4	6		4			22	18
Level 13	4	4	6		4			22	18
Level 14	4	4	6		4			22	18
Level 15	4	4	6		4			22	18
Level 16					4	2	3	21	9
Level 17					4	2	3	21	9
Total	57	75	82	0	69	4	19	414	306
%	19%	25%	27%	0%	23%	1%	6%		



DF/
DAMON FARBER
LANDSCAPE ARCHITECTS
401 2nd Avenue North, Suite 410
Minneapolis, MN 55401
p 612.332.7522

0 20' 40'
SCALE 1"=20'-0"
NORTH

KA BLOCK
REDEVELOPMENT



EROSION CONTROL SCHEDULE

ITEM	INSTALLATION	INSPECTION/MAINTENANCE	REMOVAL
SILTFENCE	PRIOR TO ANY CONSTRUCTION	INSPECT AND MAINTAIN AFTER EACH RUNOFF EVENT. REMOVE SEDIMENTS AS REQUIRED.	AFTER TRIBUTARY DRAINAGE AREA HAS BEEN RESTORED
TEMP. ROCK ENTRANCE	PRIOR TO INITIAL GRADING	INSPECT REGULARLY. MAINTAIN AS REQUIRED.	WHEN SITE PAVING OPERATIONS BEGIN
INLET PROTECTION*	PRIOR TO ANY CONSTRUCTION OR SAME DAY STRUCTURE IS CONSTRUCTED	INSPECT AND MAINTAIN AFTER EACH RUNOFF EVENT. REMOVE SEDIMENTS AS REQUIRED.	WHEN TRIBUTARY AREA IS PAVED
SEED AND MULCH	AFTER FINAL GRADING	INSPECT AND MAINTAIN AFTER HEAVY RAINS. RESTORE WASH-OUT AREAS IMMEDIATELY.	N/A

*INLET PROTECTION SHALL BE THE "SACK" TYPE AND SHALL BE INSTALLED ON ALL EXISTING AND PROPOSED CATCH BASINS EXPOSED TO CONSTRUCTION SEDIMENT.

KEYNOTES:

① –CATCH BASIN INLET PROTECTION (ACF SILT SACK, OR CITY OF MINNEAPOLIS APPROVED EQUAL). SEE DETAIL.

COORDINATE SMALL UTILITY (GAS, ELECTRIC, PHONE, CABLE, DATA, ETC.) RELOCATION WORK REQUIRED WITH LOCAL UTILITY COMPANIES.

No construction, demolition or commercial power maintenance equipment shall be operated within the city between the hours of 6:00pm and 7:00am on weekdays or during any hours on Saturdays, Sundays and state and federal holidays, except under permit. Contact Environmental Services at 612-673-3867 for permit information.

RIGHT OF WAY TREE REMOVAL: Contact Paul Martinson (612-499-9209) regarding removal or protection of trees during construction in the right of way.

MINNEAPOLIS STANDARD EROSION CONTROL NOTES:

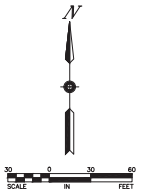
City of Minneapolis Standard Erosion Control Notes
MINNEAPOLIS STANDARD EROSION CONTROL NOTES (April 1, 2010)

1. Contractor must call for a pre-construction meeting 48 hours prior to any land disturbances. Call 612-673-3867. Failure to do so may result in fines, the revocation of permit and a stop work order being issued.
2. Install perimeter erosion control at the locations shown on the plans prior to the commencement of any land disturbance or construction activities.
3. Before beginning construction, install a temporary rock construction entrance at each point where vehicles exit the construction site. Use 2 inch or greater diameter rock in a layer at least 6 inches thick across the entire width of the entrance. Extend the rock entrance at least 20 feet into the construction site and place a geotextile fabric beneath the aggregate to prevent migration of soil into the rock from below.
4. Remove all soils and sediments tracked or otherwise deposited onto public and private pavement areas. Removal shall be on a daily basis when tracking occurs and may be ordered by Minneapolis inspectors at any time if conditions warrant. Sweeping shall be maintained throughout the duration of the construction and done in a manner to prevent dust being blown to adjacent properties.
5. Install inlet protection at all public and private catch basin inlets, which receive runoff from the disturbed areas. Catch basin inserts or other approved product are required in undisturbed areas that may receive runoff from the project area. Hay bales or filter fabric wrapped grates are not allowed for inlet protection.
6. Locate soil or dirt stockpiles no less than 25 feet from any public or private roadway or drainage channel. If remaining for more than seven days, stabilize the stockpiles by mulching, vegetative cover, tarps, or other means. Control erosion from all stockpiles by placing silt barriers around the piles. Temporary stockpiles located on paved surfaces must be no less than two feet from the drainage/gutter line and shall be covered if left more than 24 hours.
7. Maintain all temporary erosion and sediment control devices in place until the contributing drainage area has been stabilized. Inspect temporary erosion and sediment control devices on a daily basis and replace deteriorated, damaged, or rotted erosion control devices immediately.
8. Temporarily or permanently stabilize all construction areas which have undergone final grading, and all areas in which grading or site building construction operations are not actively underway against erosion due to rain, wind and running water within 7-14 days.

   Use seed and mulch, erosion control matting, and/or sodding and staking in green space areas. An early application of gravel base on areas to be paved recommended minimizing erosion potential.
9. Remove all temporary synthetic, structural, non-biodegradable erosion and sediment control devices after the site has undergone final stabilization with permanent vegetation establishment. Final stabilization for purposes of this removal is 70% established cover over denuded area.
10. Ready mixed concrete and concrete batch plants are prohibited within the public right of way. All concrete related production, cleaning and mixing activities shall be done in the designated concrete mixing/washout locations as shown in the erosion control plan. Under no circumstances may washout water drain onto the public right of way or into any public or private storm drain conveyance.
11. Changes to approved erosion control plan must be approved by the erosion control inspector prior to implementation. Contractor to provide installation and details for all proposed alternate type devices.

SITE CLEARING:

1. Perform all clearing and grubbing work in accordance with the provisions of MNDOT Standard Specification Section 2101, and the additional requirements contained herein.
2. Clearing is defined as the complete removal and disposal of all portions of natural and artificial objectionable materials, structures, trees, shrubs, bushes, windfalls, grass, sod, and other vegetation in the designated areas that exist above ground except stumps. Grubbing is defined as the excavation, removal, and disposal of all portions of natural and artificial objectionable materials, structures, trees, shrubs, bushes, windfalls, and other vegetation that exist below ground including stumps.
3. Clear and grub the construction area in advance of the grading operation.
4. Building Areas: Completely remove all stumps, roots 40 mm (1.5 inches) in diameter or larger, buried logs, and all other objectionable material occurring within the lines of the new building and to horizontal distance of 4.5 m (15 feet) beyond the building walls.
5. Other Areas: Grub all stumps, roots 40 mm (1.5 inches) in diameter or larger, buried logs, and all other objectionable material occurring within the grading limits to a depth of not less than 1 m (3.28 feet) below the existing ground surface or subgrade excavation, whichever is deeper.
6. Backfill and compact all depressions resulting from the clearing and grubbing operation with suitable material in order to make the surface conform to the original adjacent surface of the ground.
7. After the site has been cleared and prior to any cutting or filling operations, strip all topsoil and organic soils from areas to be built upon, paved, or where grades are to be changed more than 152 mm (6 inches). Strip the existing topsoil to whatever depths encountered. Prevent intermingling with underlying subsoil, or other objectionable material. Remove heavy growths of grass from areas before stripping. Where trees are to be left standing, stop topsoil stripping a sufficient distance away from the trees in order to prevent damage to the main root system.
8. Stockpile soil to be re-used in an area clear of the new construction. Remove excess soil from the site.
9. Construct stockpiles in a manner that will freely drain surface water. Maintain soil stockpiles free from debris and trash. Do not obstruct site drainage. Do not exceed a stockpile depth of 8 feet.
10. Keep the soil stockpile damp in order to prevent drying and dust.



CALL EXCAVATORS
811
Know what's below.
Call before you dig.

The underlying utility information shown on this plan is only approximate and should not be relied upon for exact locations. The guarantee of accuracy of the utility information provided by the Gopher State One Call System or Utility Protection Center Inc.

esg
www.esgarch.com

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed under the laws of the State of

Signature
Mike R. Kettler
Typed or Printed Name
40423
License # Date

Sunde Engineering, PLLC
CONSULTING CIVIL ENGINEERS
8811 NICOLLET AVENUE SOUTH
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NOT FOR CONSTRUCTION

Conceptual Pricing Set – 8/7/2015

ORIGINAL ISSUE:

REVISIONS

215503
PROJECT NUMBER

MK
DRAWN BY CHECKED BY

KEY PLAN

KA BLOCK REDEVELOPMENT

DEMOLITION PLAN

C1.1

K.A. BLOCK MIXED USE REDEVELOPMENT DESIGN VISION

Committee of the Whole - September 24, 2015

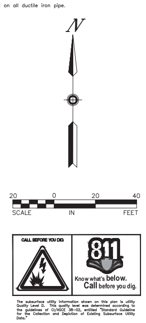
ADDITIONAL DRAWINGS
Civil

SANITARY SEWER:

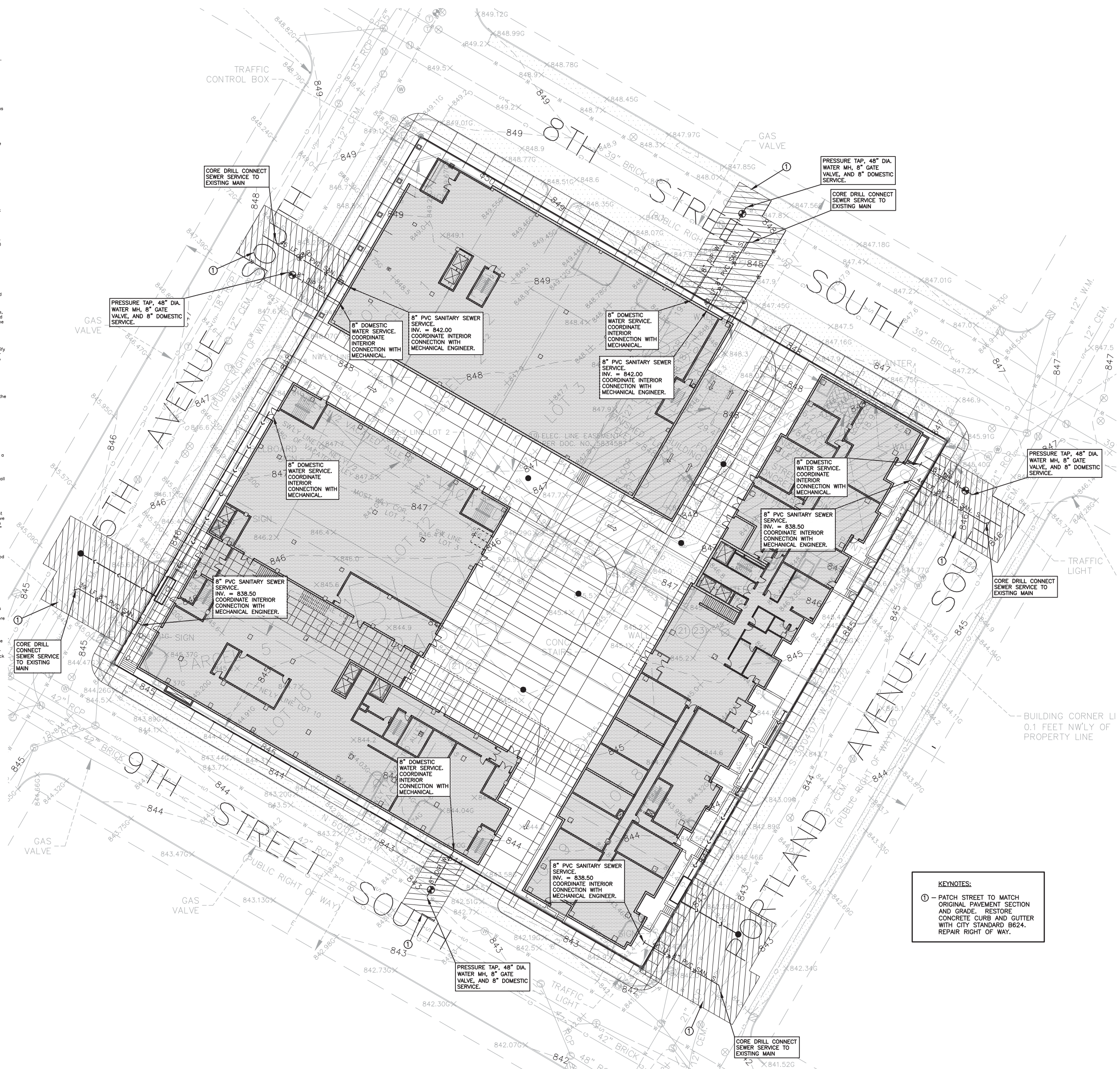
1. Pipe: Use solid-core, SDR-35, ASTM D3034 (or approved equal) Polyvinyl Chloride (PVC) Plastic Pipe for all designated PVC sanitary sewer services. Joints for all sanitary sewer shall have push-on joints with elastomeric gaskets. Use of solvent cement joints is allowed for building services. Solvent cement joints in PVC pipe must include use of a primer which is of contrasting color to the pipe and cement in accordance with Minnesota Rules, part 4715.0810, subpart 2. Pipe with solvent cement joints shall be joined with PVC cement conforming to ASTM D2564. Lay all PVC pipe on a continuous granular bed. Installation must comply with ASTM D2321.
2. Cleanouts: Install cleanouts on all sanitary sewer services in accordance with Minnesota Rules part 4715.1010. The distance between cleanouts in horizontal piping shall not exceed 100 feet for pipes 4-inch and over in size. Cleanouts shall be of the same nominal size as the pipes they serve. Include frost sleeves and concrete frame and pipe support. Install a meter box frame and solid lid (Neenah R-1914-A, or approved equal) over all cleanouts.
3. Testing: Pressure test all sanitary sewer lines in accordance with the Minnesota Rules part 4715.2820. Test all flexible sanitary sewer lines for deflection after the sewer line has been installed and backfill has been in place for at least 30 days. No pipe shall exceed a deflection of 5%. If the test fails, make necessary repairs and retest.
4. Unless otherwise indicated, use reinforced, precast, concrete maintenance holes conforming to ASTM C478, furnished with precast bases. Sanitary sewer maintenance holes shall be supplied with pre-formed inverts and flexible neoprene sleeve connections for all lateral lines 375 mm (15 inches) in diameter or less, unless otherwise indicated. Joints for all precast maintenance hole sections shall have confined, rubber "O"-ring gaskets in accordance with ASTM C923. The inside barrel diameter shall not be less than 48 inches.
5. Install flexible watertight frame/chimney seals on all sanitary sewer maintenance holes. Use either Manufactured Maintenance Hole Frame/Chimney Seals or Elastomeric Waterproofing Frame/Chimney Seals.
6. Use Neenah Foundry Co. R-1642 casting with self-sealing, solid, type B lid, or approved equal, on all sanitary sewer maintenance holes. Covers shall bear the "Sanitary Sewer" label.
7. Install detectable underground marking tape directly above all pvc, polyethylene, and other nonconductive underground utilities at a depth of 457 mm (18 inches) below finished grade, unless otherwise indicated. Bring the tape to the surface at various locations in order to provide connection points for locating underground utilities. Install blue Rhino TriView Flex Test Stations, or approved equal, with black caps at each surface location.
8. The minimum depth of cover for sanitary sewer without insulation is 5 feet. Insulate sanitary sewer services at locations where the depth of cover is less than 5 feet. Provide a minimum insulation thickness of 2 inches. The insulation must be at least 4 feet wide and centered on the pipe. Install the insulation boards 6 inches above the tops of the pipes on mechanically compacted and leveled pipe bedding material. Use high density, closed cell, rigid board material equivalent to DOW Styrofoam HI-40 plastic foam insulation.

WATER DISTRIBUTION SYSTEM:

1. Bring all site utilities to 5' outside of the building line with the exception of the water service. Extend water service into the building and up to the flange for the water meter.
2. Separation of Water and Sewer: Construct sewer and water services in accordance with Minnesota Rules, part 4715.1710, subpart 2. Provide a minimum horizontal separation of 10 feet between all water and sewer lines. At water and sewer crossings, the bottom of the water pipe located within ten feet of the point of crossing must be at least 12-inches above the top of the sewer. When this is not feasible, the sewer pipe material must conform to the requirements of Minnesota Rules, part 4715.170, subpart 2E. No joints or connections are allowed on the water line within 10-feet of the crossing.
3. Watermain Depth: Maintain 8-feet of cover over the top of the water lines to the finished grade. Verify elevation of proposed and existing water lines at all utility crossings. Install the water lines at greater depths in order to clear storm sewers, sanitary sewers, or other utilities as required. Include costs to lower water lines in the base bid.
4. Disinfection: Disinfect all completed watermains in accordance with AWWA Standard C651. If the tablet or continuous feed methods are used, disinfect using with water that contains at least 50 ppm of available chlorine in accordance with Minnesota Rules, part 4715.2250. Do not use the tablet method on solvent-welded plastic or on screwed-joint steel pipe because of the danger of fire or explosion from the reaction of the joint compounds with the calcium hypochlorite. Retain the treated water in the pipeline for at least 24 hours. Measure the chlorine residual at the end of the 24 hour period. The free chlorine residual must be at least 10 mg/l measured at any point in the line. Measurement of the chlorine concentration at regular intervals shall be in accordance with Standard Methods, AWWA M-12, or using appropriate chlorine test kits.
5. Testing: Pressure test and perform bacteriological tests on all water lines under the supervision of the City Public Works Department. Notify the City at least 24 working hours prior to any testing. Pressurize the waterline to 1034-kPa (150-psi) gauge pressure (measured at the point of lowest elevation) by means of a pump connected to the pipe in a satisfactory manner. Maintain the test pressure for a minimum of 2 hours. Do not add water to the watermain in order to maintain the required pressure during the water main pressure testing. The test section of pipe is acceptable with a pressure drop of 14 kPa (2 psi) or less.
6. Use mechanical joint restraint devices for joint restraint on all watermain bends having a vertical or horizontal deflection of 22-1/2 degrees or greater, all valves, stubs, extensions, tees, crosses, plugs, all hydrant valves, and all hydrants in accordance with City requirements. Use "Series 1100 Megalug" manufactured by EBAA Iron Inc., Eastland, Texas, or approved equal, installed in accordance with manufacturer's recommendations for restraint on Ductile Iron Pipe.
7. At all valve locations which require a 12" or smaller valve, install gate valves which are of the compression resilient seated (CRS) type. Use American Flow Control's Series 2500 Ductile Iron Resilient Wedge Gate Valve, or approved equal. Gate valves shall conform to AWWA C509. Install cast iron valve boxes conforming to ASTM A48 at each valve location. Valve boxes shall be the three-piece type with 5-1/4" shafts. Use Tyler 6860-G with No. 6 base, or equivalent. Valve boxes shall have at least 6" of adjustment above and below finished grade. Drop covers on valve boxes shall be round and bear the word "WATER" cast on the top. Use Tyler 6860-G "Stayput" covers with extended skirt, or equivalent.
8. Use Mueller H 10300 or Ford EM 2 7057, or approved equal, at all curb stop locations. Stationary rod is required on all curb stops.
9. Polyvinyl Chloride (PVC) Building Water Services: ASTM D2241 or ASTM D1785; pressure rated for water.
10. Polyvinyl Chloride (PVC) Watermain: Use AWWA C900 for all PVC watermain furnished with integral elastomeric bell and spigot joints; minimum pressure Class 150; dimension ratio not greater than 18; laying length 20 feet. Use EBAA Iron, Inc., "Series 2000 PV Megalug," or approved equal for restraint on C900 PVC watermain. Lay trace wire with all C900 PVC watermain. Use #12 copper-insulated wire rated for underground service. Connect the wire to all fire hydrants by wrapping the ends three times around the hydrant barrels just below the break off flange and continue back down to the main line. Splice the trace wire by twisting the two ends and heat shrink-wrapping the splice. Do not make more than one splice per 250 feet. Wire nut splices are not allowed. Lay the trace wire below all watermain, fittings, and hydrants.
11. Install detectable underground marking tape directly above all pvc, polyethylene, and other nonconductive underground utilities at a depth of 457 mm (18 inches) below finished grade, unless otherwise indicated. Bring the tape to the surface at various locations in order to provide connection points for locating underground utilities. Install blue Rhino TriView Flex Test Stations, or approved equal, with black caps at each surface location.
12. Use ANSI/AWWA C151/A21.51 Thickness Class 52 or Pressure Class 350 Ductile Iron Pipe (DIP) with push-on joints for all watermain. Use only stainless steel bolts and nuts on all watermain fittings, valves, and hydrants.
13. Polyethylene encasement is required on all ductile iron pipe.



The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."



KEYNOTES:

① – PATCH STREET TO MATCH ORIGINAL PAVEMENT SECTION AND GRADE. RESTORE CONCRETE CURB AND GUTTER WITH CITY STANDARD B624. REPAIR RIGHT OF WAY.

NOT FOR CONSTRUCTION

KA BLOCK
REDEVELOPMENT

esg

elness swenson graham architects inc
500 washington avenue south
minneapolis minnesota 55415
tel. 612.339.5508
fax. 612.339.5382
www.esgarch.com

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed under the laws of the State of

Signature
Mike R. Kettler
Typed or Printed Name
40425
License # Date

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DRAWN BY MK CHECKED BY
KEY PLAN

KA BLOCK REDEVELOPMENT
UTILITY PLAN
C1.3

SITE NOTES:

1. Existing boundary, location, topographic, and utility information shown on this plan is from a field survey by Sunde Land Surveying, LLC dated 11/26/13.
2. Detectable warnings are required on all public and private ramps. Place the detectable warnings at the back of curb. The ADA required truncated dome area shall be 24 inches minimum in the direction of travel and shall extend the full width (4' wide typ.) of the curb ramp. The only acceptable texture for "detectable warnings" is truncated domes. All detectable warning surface installations shall be at minimum at least as non skid as the surrounding pedestrian surfaces. Detectable warnings are to consist of raised truncated domes with a diameter of nominal 0.9", a height of nominal 0.2", and a center-to-center spacing of nominal 2.35". The truncated dome area shall contrast visually with the adjacent walking surface. Use dark grey when the adjacent sidewalk is a light grey cement color. Use light grey when the adjacent sidewalk is a dark color. Install truncated domes and all related surfaces according to the manufacturers specifications. Install Armor-Tile (www.armor-tile.com) Cast In Place Truncated Dome Detectable Warning Surface Tile, or approved equal. Refer to ADA sections 4.7.7 and 4.29.2 for additional information.
3. All materials required for this work shall be new material conforming to the requirements for class, kind, grade, size, quality, and other details specified herein or as shown on the Plans. Do not use recycled or salvaged aggregate, asphaltic pavement, crushed concrete, or scrap shingles. Unless otherwise indicated, the Contractor shall furnish all required materials.
4. All dimensions are to face of curb (where applicable), edge of pavement, or exterior face of building, unless otherwise indicated.
5. All curb radii shall be three (3) feet minimum unless otherwise noted.
6. Install and make operational all irrigation before commencing with landscaping.
7. White surface markings (letters and symbols) shall be in conformance with the Standard Alphabets for Highway Signs and Pavement Markings, FHA (HTO-20).
8. Install and maintain access roads throughout all stages of construction. Temporary access roads must be approved by the Fire Department before construction starts.
9. Fire extinguishers must be on-site and available throughout the construction site during all stages of construction.
10. Smoking is prohibited at the construction site except for approved areas designated by the Fire Department. "NO SMOKING" signs must be provided by the Contractor.
11. All cutting and welding must meet the requirements of Article 49 of the Uniform Fire Code.
12. Storage and handling of flammable liquids shall meet the requirements of Article 79 of the Uniform Fire Code.
13. Do not block access to building, fire hydrants, or other fire appliances with construction materials.
14. Provide fire lane signage as required by the Fire Department.
15. Design and maintain fire apparatus access roads throughout construction to support the imposed loads of fire apparatus in all weather driving capabilities. Minimum 7-ton road design required. Pursuant to 1997 Uniform Fire Code Section 902.2.2.2.
16. B612 CONCRETE CURB AND GUTTER IS PROPOSED FOR ALL PRIVATE PROPERTY.
17. Provide traffic control devices and signage in accordance with the Minnesota Manual on Uniform Traffic Control Devices (MMUTCD), including the Field Manual for Temporary Traffic Control Zone Layouts dated April 1995, the Minnesota Standard Signs Manuals Parts I, II, and III and the appropriate Material Specifications, and MNDOT Standard Specification Section 1710. All signs must be reflectorized.
18. Provide Advance and Construction Zone Signing including, but not limited to, signs for lane closures, low shoulder, uneven lanes, and fresh oil (other items as applicable). The number and location of these signs will be determined by the Contractors operations.
19. Portland cement concrete for curb and gutter and sidewalk shall be 3900 psi minimum 28 days compressive strength with 5.0% air entraining. Concrete aggregates shall be free of organic impurities, chert, shale, or other deleterious substances.
20. Construct all private property concrete sidewalks in accordance with MNDOT Specification 2521. All concrete sidewalks shall be as indicated on the plans, but not less than 4" thick with 6 inch x 6 inch – #10/#10 wire size woven wire mesh reinforcing.
21. Preformed expansion joints using 0.5" thickness shall be placed at each end of curb radius, at intersections, and approximately every 200 feet.
22. Contraction joints shall be spaced at 10 foot intervals in the curb and gutter.
23. For exterior concrete slabs, unless otherwise indicated, provide expansion joints at 30 foot intervals and at locations where the concrete surrounds or adjoins any existing fixed objects such as walks, walls, curbing, steps, driveways, building foundations and other ridgid structures. Divide exterior slabs into square panels of uniform size generally containing not more than 36 square feet of area.
24. Construct 2' taper at the free end of all concrete curb and gutter sections.
25. Construct all door threshold heights to within 0.5" of finished floor elevation.
26. Provide temporary street signs and addresses during construction.

CITY OF MINNEAPOLIS: RIGHT OF WAY

1. An encroachment permit shall be required for all streetscape elements in the Public righ-of-way such as: plants & shrubs, planters, tree grates and other landscaping items, sidewalk furniture (including bike racks and bollards), and sidewalk elements other than standard concrete walkways such as pavers, stairs, raised landings, retaining walls, access ramps, and railings (NOTE: railings may not extend into the sidewalk pedestrian area). Contact Bob Boblett at (612) 673-2428 for further information.
2. Any elements of an earth retention system and related operations (such as construction crane boom swings) that fall within the Public right-of-way will require an encroachment permit application. If there are to be any earth retention systems which will extend outside the property line of the development then a plan must be submitted showing details of the system. All such elements shall be removed from the Public right-of-way following construction with the exception of tie-backs which may remain but must be uncoupled and de-tensioned. Please contact Bob Boblett at (612) 673-2428 for further information.
3. Any elements of an earth retention system and related excavations that fall within the Public right-of-way will require a "Right-of-Way Excavation Permit".
4. Contact Dallas Hildebrand at (612) 673-5615 prior to construction for the temporary removal/relocation of any City of Minneapolis signal system that may be in the way of construction.
5. Contact Doug Maday at (612) 673-5755 prior to construction for the removal of any City of Minneapolis right-of-way signs that may be in the way of construction.
6. An obstruction permit is required anytime construction work is performed in the Public right-of-way. Contact Scott Kramer at (612) 673-2383 regarding details of sidewalk and lane closures. See http://minneapolis.mn.roway.net/ for a permit.

GENERAL:

1. Comply with the work safety practices specified by the Occupational Safety and Health Administration (OSHA). Comply with all applicable local, state, and federal safety regulations. OSHA prohibits entry into "confined spaces," such as manholes and inlets (see 29 CFR Section 1910.146), without undertaking certain specific practices and procedures. Construction safety is solely the responsibility of the Contractor, who is also solely responsible for the means, methods, and sequencing of the construction operations.
2. Existing boundary, location, topographic, and utility information shown on this plan is from a field survey by Harry S. Johnson Surveying dated 8/26/13.
3. Refer to the architectural plans for building and stoop dimensions, site layout and dimensions, pavement sections and details, striping, and other site features.
4. Perform all construction work in accordance with State and Local requirements.
5. A licensed surveyor shall perform construction staking. The Contractor shall provide and be responsible for the staking. Verify all plan and detail dimensions prior to construction staking. Stake the limits of walkways and curbing prior to valvebox, maintenance hole, and catchbasin installation. Adjust valvebox and maintenance hole locations in order to avoid conflicts with curb and gutter. Adjust catchbasin locations in order to align properly with curb and gutter.
6. Provide temporary fences, barricades, coverings, and other protections in order to preserve existing items to remain, and to prevent injury or damage to person or property.
7. Connect to existing sanitary sewer and storm sewer MH's by coredrilling. Use water tight saddle encased in Type N air entrained concrete. Use saws or drills that provide water to the blade. Meet all City standards and specifications for the the connection. Reconstruct inverts after installation. Use water stop gaskets in order to provide watertight seals when penetrating a structure wall with a pipe. Take measurements before beginning construction to ensure that service connections do not cut into maintenance access structure joints or pipe barrel joints.
8. Testing and Inspections: All plumbing installations, including water and sewer services, must be tested and inspected in accordance with the requirements of the Minnesota Plumbing Code (Minnesota Rules Chapter 4715). Coordinate testing and inspection with the State Health Department and the City Public Works Department. No drainage or plumbing work may be covered prior to completing the required tests and inspections.
9. Perform trench excavations for all utilities in accordance with the requirements of O.S.H.A. 29 CFR, Part 1926, Subpart P, "Excavations and Trenches." (www.osha.gov)
10. Coordinate building utility connection locations at 5 ft. out from the proposed building with the with the interior Plumbing Contractor prior to construction. Verify water and sewer service locations, sizes, and elevations with the Mechanical Engineer prior to construction.
11. Contact utility companies for locations of all public and private utilities within the work area prior to beginning construction. Contact GOPHER STATE ONE CALL at (651) 454-0002 in the Minneapolis/St. Paul metro area, or 1-800-252-1166 elsewhere in Minnesota for exact locations of existing utilities at least 48 working hours (not including weekends and holidays) before beginning any construction in accordance with Minnesota Statute 216D. Obtain ticket number and meet with representatives of the various utilities at the site. Provide the Owner with the ticket number information. Gopher State One Call is a free service that locates municipal and utility company lines, but does not locate private utility lines. Use an independent locator service or other means in order to obtain locations of private utility lines including, but not limited to, underground electric cables, telephone, TV, and lawn sprinkler lines.
12. Where existing gas, electric, cable, or telephone utilities conflict with the Work, coordinate the abandonment, relocation, offset, or support of the existing utilities with the appropriate local utility companies. Coordinate new gas meter and gas line installation, electric meter and electric service installation, cable service, and telephone service installation with the local utility companies.
13. Arrange for and secure suitable disposal areas off-site. Dispose of all excess soil, waste material, debris, and all materials not designated for salvage. Waste material and debris includes trees, stumps, pipe, concrete, asphaltic concrete, cans, or other waste material from the construction operations. Obtain the rights to any waste area for disposal of unsuitable or surplus material either shown or not shown on the plans. All work in disposing of such material shall be considered incidental to the work. All disposal must conform to applicable solid waste disposal permit regulations. Obtain all necessary permits at no cost to the OWNER.
14. All materials required for this work shall be new material conforming to the requirements for class, kind, grade, size, quality, and other details specified herein or as shown on the Plans. Do not use recycled or salvaged aggregate, asphaltic pavement, crushed concrete, or scrap shingles. Unless otherwise indicated, the Contractor shall furnish all required materials.
15. Restore the public right-of-way at temporary construction entrance locations. Replace any concrete curb and gutter, bituminous pavement, sidewalk, or vegetative cover damaged by the construction activity. Restore damaged turf with sod within the public right-of-way. The work area shown is general and may need to be adjusted in the field.
16. Provide traffic control in accordance with local authorities and the Minnesota Manual on Uniform Traffic Control Devices (MMUTCD), including the Field Manual for Temporary Traffic Control Zone Layouts dated January 2001.
17. Provide and maintain temporary drainage throughout construction until the permanent drainage system and structures are in place and operational. Install temporary ditches, piping, pumps, or other means as necessary in order to insure proper drainage at all times. Provide low points at building pads or roadways with positive outfalls.
18. Protect sub grades from damage by surface water runoff.
19. Full design strength is not available in bituminous pavement areas until the final lift of asphalt is compacted into place. Protect pavement areas from overloading by delivery trucks, construction equipment, and other vehicles.
20. When sawing or drilling concrete or masonry, use saws that provide water to the blade.
21. Adjust all curb stops, valve boxes, maintenance hole castings, catchbasin castings, cleanout covers, and similar items to finished grade.
22. 2% maximum slope in all directions in handicapped accessible parking areas.
23. Install all pipe with the ASTM identification numbers on the top for inspection. Commence pipe laying at the lowest point in the proposed sewer line. Lay the pipe with the bell end or receiving groove end of the pipe pointing upgrade. When connecting to an existing pipe, uncover the existing pipe in order to allow any adjustments in the proposed line and grade before laying any pipe. Do not lay pipes in water or when the trench conditions are unsuitable for such work.
24. Obtain and pay for all permits, tests, inspections, etc. required by agencies that have jurisdiction over the project. Execute and inspect work in accordance with all local and state codes, rules, ordinances, or regulations pertaining to the particular type of work involved.
25. Obtain permission from the City for work in the public right-of-way.
26. Construct sanitary sewer, watermain, and storm sewer utilities in accordance with the City Engineer's Association of Minnesota Standard Specifications sections 2600, 2611, and 2621 dated 1999, or the latest revised edition.
27. The Contractor shall be responsible for the design and construction of the proposed retaining walls. A Minnesota Licensed Civil Engineer must design and sign the retaining wall design. The Contractor shall be responsible for all costs associated with the retaining wall system design and construction, and shall include the costs of submitting detailed plans and specifications for the retaining wall system to the Owner for review.
28. Use City of Minneapolis standard castings on all public utilities.

SITE GRADING:

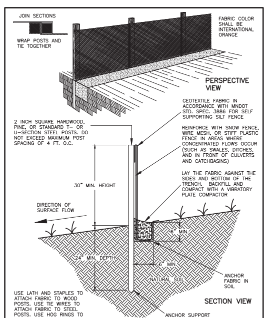
1. Visit the site. Become familiar with the site and existing site conditions including available soil reports. Examine all local conditions at the site, and assume responsibility as to the grades, contours, and the character of the earth, existing conditions, and other items that may be encountered during excavation work above or below the existing grades. Review the drawings and specifications covering this work and become familiar with the anticipated site conditions.
2. Unless otherwise noted, all proposed grades shown are finished grades. Finished grades at points between spot elevations or contours are determined by uniform slopes between the given grades. All proposed spot elevations shown at curblines are to bottom of curb (gutterline) unless otherwise indicated.
3. At locations where new work connects to existing work, field verify existing elevations and grades prior to beginning the new work. Match existing grades at construction limits.
4. Remove all unsuitable material (organic soils, uncontrolled fill, debris, and natural or artificial obstructions) in the zone from 1 m (3.28 feet) below the finished subgrade to finished subgrade in the proposed pavement areas.
5. Compact backfill in all utility trenches to 95% Standard Proctor maximum dry density (ASTM D698-78 or AASHTO T-99) from the pipe zone to within 1 m (3.28 feet) below the finished subgrade, and 100% Standard Proctor maximum dry density in the final 1 m (3.28 feet). Provide density tests in backfills and fills placed beneath footings, slabs, and pavements. At least one compaction test is required for every 100 feet of trench at vertical intervals not exceeding one foot.
6. Compact all fill placed in pavement areas in accordance with MNDOT Standard Specification 2105.3.F1 (Specified Density Method). Compact all fill placed under buildings in accordance with the recommendations of the Geotechnical Engineer.
7. Comply with the requirements of O.S.H.A. 29 CFR, Part 1926, Subpart P, "Excavations and Trenches." (www.osha.gov)
8. Construct all proposed sideslopes with grades not exceeding 3:1 (3 horizontal to 1 vertical), unless otherwise indicated.
9. Provide positive drainage away from buildings at all times.
10. Test roll the building and pavement areas in the presence of the Geotechnical Engineer. Perform base preparation and test rolling prior to curb and gutter construction, placing of gravel base, sand/gravel sub-base, bituminous stabilized base, or plant mixed bituminous base on all street and pavement areas. Test roll the area between 300 mm (12 inches) outside of the back of the curbs on either side of the paved areas. Use a heavy pneumatic-tired roller, towed by suitable tractive equipment, with two wheels spaced not less than 1,800 mm (71 inches) apart (transversely center to center), tire size equal to 18x24 or 18x25 (18" wide) inflated to a pressure of 650 kPa (94 psi), and a gross mass of the roller not less than 13.5 metric tons (14.9 tons) and not more than 13.7 metric tons (15.1 tons). Test roll the above specified area in a manner such that each part of the area comes in contact with one of the tires at least once. Operate the heavy roller at a speed of not less than 4 km/h (2.5 mph) and not more than 8 km/h (5 mph). The subgrade shall be considered unstable if, at the time that the heavy roller passes over the subgrade, the surface shows yielding or rutting of more than 50 mm (2 inches), measured from the original surface to the bottom of the rut. Correct any soft spots or displacements which appear during the test rolling by scarifying, aerating or watering, and recompacting as required to obtain stability; or by excavating to solid material and backfilling with material suitable for base construction. Remove material such as vegetation, rubbish, large stones, peat, and wet clay. Retest the area after correction.
11. Perform soil correction procedures and compaction in accordance with the soils report.
12. Coordinate inspection and approval of all subgrades within the building and pavement areas with the Geotechnical Engineer. Coordinate inspection and approval of all fill materials prior to placement within the building and pavement areas with the Geotechnical Engineer. Use only uncontaminated fill material.
13. Conduct all grading operations in a manner that minimizes the potential for site erosion.
14. Grade the site to the finished elevations shown on the plan. Import embankment material, or remove and dispose of excess excavation material as required. Provide waste areas or disposal sites for excess material including, but not limited to, excavated material or broken concrete that is not desirable to be incorporated into the work involved on this project. Determination of material import and export quantities is solely the responsibility of the Contractor and the cost of material import and export is incidental to the contract.
15. In areas where fill is placed on slopes steeper than 5:1, horizontally bench the slopes in order to increase the bond between the slope and the proposed embankment.
16. Structurally support exterior steps, stoops, and slabs at each entry into the building on frost-depth foundations bearing on footings at least 5 feet below final grade. Securely tie the foundation walls to the footings with steel reinforcing so that any frozen soil adhering to them does not heave them off of their footings. Place insulation along all sides of the vertical foundation walls in order to prevent adfreezing of the backfill to the walls. Provide at least 4 inches of void space between the bottoms of the step, stoop, or slab and the underlying soil in order to allow for soil heave. Dowl all abutting walkways into the stoops.
17. Tolerances: The completed subgrade under slabs and pavement areas shall be compacted, free from irregular surface changes, and fine-graded not more than 16 mm (0.05 feet) above or below the specified subgrade elevation. The completed subgrade in other areas shall be compacted, free from irregular surface changes, and fine-graded not more than 31 mm (0.10 feet) above or below the specified subgrade elevation. The completed top of topsoil shall be compacted, free from irregular surface changes, and fine-graded not more than 16 mm (0.05 feet) above or below the specified finished grade elevation.
18. Choose equipment and work procedures that will not disturb the subgrade soils. Route construction traffic away from foundation soils and areas of pavements and slabs in order to minimize soil disturbance. If the construction equipment causes rutting or soil pumping, then switch to other types of equipment or methods. The Contractor is solely responsible for the proper selection of construction equipment in order to avoid disturbing soils on the site.
19. It is typical to abbreviate spot elevations. Elevations shown as 86.2 or 83.1 are understood to mean 886.2 or 883.1 respectively.

Upon the project's completion the General Contractor, Property Owner or Responsible Party shall provide to the Department of Public Works a Final Stormwater Management Report including record drawings. This report will serve as a means of verification that the intent of the approved stormwater management design has been met. This final report shall substantiate that all aspects of the original design have been adequately provided for by the construction of the project.

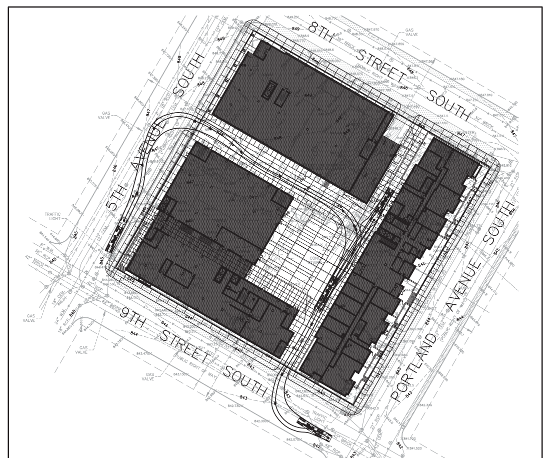
The Contractor, Property Owner or Responsible Party shall contact Minneapolis Surface Waters and Sewers 48 hours prior to any excavation or construction related to or in the location of the proposed Stormwater Management BMP (i.e. UNDERGROUND STORAGE TANKS). Contact Paul Chellsen, 612-673-2406 or paul.chellsen@minneapolismn.gov

CONSTRUCT PUBLIC SIDEWALKS IN ACCORDANCE WITH CITY OF MPLS "SPECIFICATIONS FOR MONOLITHIC CONCRETE SIDEWALK"

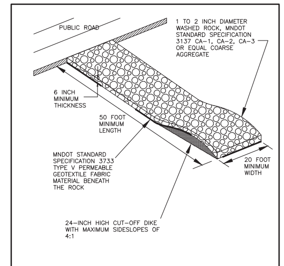
No construction, demolition or commercial power maintenance equipment shall be operated within the city between the hours of 6:00pm and 7:00am on weekdays or during any hours on Saturdays, Sundays and state and federal holidays, except under permit. Contact Environmental Services at 612-673-3867 for permit information.



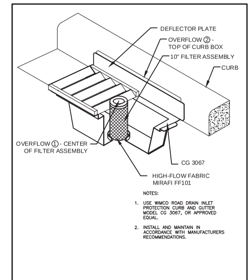
SILT FENCE INSTALLATION



TURNING MOVEMENT DIAGRAM



TEMPORARY ROCK CONSTRUCTION ENTRANCE



CATCHBASIN INLET PROTECTION

KA BLOCK
REDEVELOPMENT

esg

elness swenson graham architects inc
500 washington avenue south
minneapolis minnesota 55415
tel. 612.339.5508
fax. 612.339.5382
www.esgarch.com

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed under the laws of the State of

Signature
Mike R. Kettler
Typed or Printed Name
40425 6/1/15
License # Date

Sunde Engineering, PLLC.
CONSULTING CIVIL ENGINEERS
10830 NESBITT AVENUE SOUTH
BLOOMINGTON, MINNESOTA 55437
(952) 881-3344 TELEPHONE
(952) 881-1913 FAX
www.sundecivil.com

NOT FOR CONSTRUCTION

Conceptual Pricing Set – 8/7/2015

ORIGINAL ISSUE:
REVISIONS

215503
PROJECT NUMBER

DRAWN BY:
CHECKED BY: MK

KEY PLAN

KA BLOCK REDEVELOPMENT

NOTES AND DETAILS

C1.4

GENERAL REQUIREMENTS:

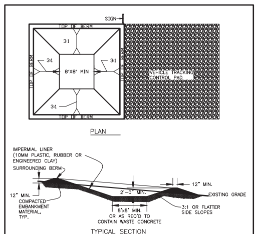
1. Apply for and obtain the GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY from the Minnesota Pollution Control Agency.
2. Perform all construction activity in accordance with the Minnesota Pollution Control Agency GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY issued August 1, 2013 and all subsequent amendments thereto.
3. Stormwater Pollution Prevention Plan (SWPPP): The SWPPP includes this narrative, the Grading, Utility, and Erosion Control Plans, Notes, Detail sheets, and Stormwater Management Calculations..
4. Keep a copy of the SWPPP, all changes to it, and inspections and maintenance records at the site during the construction. The SWPPP must be available for review. The SWPPP can be kept in the field office or in an on-site vehicle. If there will not be a trailer or a project manager on site, then place the SWPPP in an accessible on-site container.
5. The Contractor must designate a person knowledgeable and experienced in the application of erosion prevention and sediment control BMPs who will oversee the implementation of the SWPPP, and the installation, inspection, and maintenance of the erosion prevention and sediment control BMPs before and during construction.
6. The person who will oversee implementation of the SWPPP must have daily access to the SWPPP documentation.
7. Individuals preparing the SWPPP for the project, overseeing implementation of the SWPPP, revising and amending the SWPPP, and at least one individual on the project performing installation, inspection, maintenance, and repairs of BMP's must be trained. The training must be done by a local, state, federal agencies; professional organization; or other entities with expertise in erosion prevention, sediment control, or permanent storm water management. Training documentation must be in or with the SWPPP or be available within 72 hours upon request.

POLLUTION PREVENTION MANAGEMENT MEASURES:

1. Solid Waste: Dispose of collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris, and other wastes properly off-site in compliance with Minnesota Pollution Control Agency requirements.
2. Hazardous Materials: Properly store oil, gasoline, paint and any hazardous substances in order to prevent spills, leaks or other discharge. Include secondary containment. Restrict access to storage areas in order to prevent vandalism. Storage and disposal of hazardous materials must be in compliance with MPCA regulations.
3. Other Materials: Dispose of unused building materials, garbage, trash, cleaning wastes, toxic materials, and wastewater properly off-site and in compliance with Minnesota Pollution Control Agency disposal requirements.
4. Furnish suitable trash containers and regularly remove the accumulated trash from the premises.
5. Do not allow solid waste, hazardous materials, and other materials shall to be carried by runoff into a receiving water or storm sewer system.
6. Limit external washing of trucks and other construction vehicles to a defined area of the site. Wash vehicles only on an area stabilized with stone that drains into an approved sediment trapping device. Contain runoff and properly dispose of waste. Engine degreasing is prohibited.
7. Concrete Washout Operations: Contain all liquid and solid wastes generated by concrete washout operations in a leak-proof containment facility or impermeable liner. Do not allow the liquid and solid wastes to contact the ground. Prevent runoff from the concrete washout operations or areas. Dispose of liquid and solid wastes properly in compliance with Minnesota Pollution Control Agency regulations. Install a sign adjacent to each washout facility in order to inform concrete equipment operators to utilize the proper facilities.
8. Sanitary and Septic Waste: Furnish and install detached portable toilet facilities at the construction site. The portable toilets shall be conveniently located for the use of all workers on the project. Maintain the facilities in a clean, dry, sanitary condition in accordance with Minnesota Department of Health requirements.

EROSION PREVENTION PRACTICES:

1. Delineate the location of areas not to be disturbed (e.g. with flags, stakes, signs, silt fence, etc.) on the development site before work begins.
2. Avoid removal of trees and surface vegetation wherever possible. Schedule construction in order to expose the smallest practical area of soil at any given time. Implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion.
3. Following initial soil disturbance or redisturbance, complete permanent or temporary stabilization against erosion due to rain, wind, and running water as soon as possible, but in no case later than 14 calendar days, on all disturbed or graded areas including stormwater management pond sideslopes. This requirement does not apply to those areas that are currently being used for material storage or for those areas on which grading, site building, or other construction activities are actively underway.
4. Provide temporary grass seed cover on all topsoil stockpiles and other areas of stockpiled excavated material in order to prevent soil erosion and rapid runoff during the construction period. Prolonged periods of open, bare earth without grass cover will not be permitted. Stabilize all disturbed greenspace areas with a minimum of 4" topsoil immediately after final subgrade completion. Seed and mulch, or sod and stake these areas within 48 hours after completion of final grading work (weather permitting).
5. Stabilize all disturbed areas to be paved using early application of gravel base.
6. Apply necessary moisture to the construction area and haul roads in order to prevent the spread of dust.



CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SEE EROSION CONTROL PLAN FOR LOCATIONS OF CONCRETE WASHOUT AREA(S). TO BE PLACED A MIN. OF 50' FROM DRAINAGEWAYS, BODIES OF WATER, AND INLETS.)
2. THE CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL PAD IS REQ'D AT THE ACCESS POINT(S).
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA(S), AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREAS TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

6. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
7. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
8. WHEN CONCRETE WASHOUT AREA(S) IS REMOVED, THE DISTURBED AREA SHALL BE STABILIZED PER SITE EROSION CONTROL MEASURES.
9. INSPECT WEEKLY AND DURING AND AFTER ALL STORM EVENTS. CLEAN-OUT OR COVER WASHOUT AREA PRIOR TO PREDICTED STORM EVENTS TO PREVENT OVER-FLOW.

CONCRETE WASHOUT AREA

SEDIMENT CONTROL PRACTICES:

1. Implement sediment control practices in order to minimize sediment from entering surface waters, including curb and gutter systems and storm drain inlets.
2. Install all temporary or permanent sediment control measures including silt fence at perimeter of construction, rock construction entrances, sediment filters, and silt sacks prior to beginning site clearing, grading, or other land-disturbing activity.
3. Establish sediment control practices on all down gradient perimeters before any up gradient land disturbing activities begin. These practices must remain in place until final stabilization has been established.
4. The timing of the installation of sediment control practices may be adjusted in order to accommodate short-term activities, but sediment control practices must be installed before the next precipitation event even if the short-term activity is not complete.
5. If the down gradient treatment system becomes overloaded, install additional up gradient sediment control practices or redundant BMPs in order to eliminate the overloading.
6. Install check dams, diversion swales, or other grade control practices in order to ensure sheet flow and prevent rills (for slope lengths greater than 75 feet with a grade of 3:1 or steeper).
7. Prior to beginning site clearing and grading, protect all storm sewer inlets that receive runoff from disturbed areas. In order to prevent sediment from entering the storm sewer system, seal all storm sewer inlets that are not needed for site drainage during construction. Protect all other storm sewer inlets by installing sediment control devices, silt sacks, or staked silt fence. Straw bales or fabric under the grates are not acceptable forms of inlet protection. Protect new storm sewer inlets as they are completed. Maintain storm sewer inlet protection in place until all sources with potential for discharging to the inlets are stabilized.
8. Before beginning construction, install a TEMPORARY ROCK CONSTRUCTION ENTRANCE at each point where vehicles exit the construction site. Use 25 mm (1 inch) to 50 mm (2 inch) diameter rock, MNDOT Standard Specification 3137 CA-1, CA-2, CA-3, or equal Coarse Aggregate. Place the aggregate in a layer at least 152 mm (6 inches) thick across the entire width of the entrance. Extend the rock entrance at least 15 m (50 feet) into the construction zone. Use a MNDOT Standard Specification 3733 Type V permeable geotextile fabric material beneath the aggregate in order to prevent migration of soil into the rock from below. Maintain the entrance in a condition that will prevent tracking or flowing of sediment onto paved roadways. Provide periodic top dressing with additional stone as required. Close entrances not protected by temporary rock construction entrances to all construction traffic.
9. If necessary, clean the wheels of construction vehicles in order to remove soils before the vehicles leave the construction site. Wash vehicles only on an area stabilized with stone that drains into an approved sediment trapping device.
10. Remove all soils and sediments tracked or otherwise deposited onto adjacent property, pavement areas, sidewalks, streets, and alleys. Removal shall be on a daily basis throughout the duration of the construction. Clean paved roadways by shoveling or wet-sweeping. Do not dry sweep. If necessary, scrape paved surfaces in order to loosen compacted sediment material prior to sweeping. Haul sediment material to a suitable disposal area. Street washing is allowed only after sediment has been removed by shoveling or sweeping.
11. Soil Stockpiles: Install siltfence or other effective sediment controls around all temporary soil stockpiles. Locate soil or dirt stockpiles such that the downslope drainage length is no less than 8 m (25 feet) from the toe of the pile to a surface water, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater. If remaining for more than 7 days, stabilize the stockpiles by mulching, vegetative cover, tarps, or other means. During street repair, cover construction soil or dirt stockpiles located closer than 8 m (25 feet) to a roadway or drainage channel with tarps, and protect storm sewer inlets with silt sacks or staked siltfence.
12. Silt Fence: Install silt fence along the contour (on a level horizontal plane) with the ends turned up (J-hooks) in order to help pond water behind the fence. Install the silt fence on the uphill side of the support posts. Provide a post spacing of 1.2 m (4 feet) or less. Drive posts at least 0.6 m (2 feet) into the ground. Anchor the silt fence fabric in a trench at least 152 mm (6 inches) deep and 152 mm (6 inches) wide dug on the upslope side of the support posts. Lay the fabric in the trench and then backfill and compact with a vibratory plate compactor. Make any splices in the fabric at a fence post. At splices, overlap the fabric at least 152 mm (6 inches), fold it over, and securely fasten it to the fence post. Silt fence supporting posts shall be 51 mm (2 inch) square or larger hardwood, pine, or standard T- or U-section steel posts. T- or U-section steel posts shall weigh not less than 1.8602 kg per meter (1.25 lb per lineal foot). Posts shall have a minimum length of 1524 mm (5 feet). Posts shall have projections to facilitate fastening the fabric and prevent slippage. Geotextile fabric shall meet the requirements of MNDOT Standard Specification 3886 for preassembled silt fence, furnished in a continuous roll in order to avoid splices. Geotextile fabric shall be uniform in texture and appearance and have no defects, flaws, or tears. The fabric shall contain sufficient ultraviolet (UV) ray inhibitor and stabilizers to provide a minimum two-year service life outdoors. Fabric color shall be international orange.
13. Reinforce erosion control facilities in areas where concentrated flows occur (such as swales, ditches, and areas in front of culverts and catchbasins) by backing them with snow fence, wire mesh, or stiff plastic mesh reinforcement until paving and turf establishment operations have been completed. Posts for the reinforcing fence shall be 100 mm (4 inch) diameter wood posts, or standard steel fence posts weighing not less than 0.59 kg (1.3 lbs) per lineal foot, with a minimum length of 762 mm (30 inches) plus burial depth. Space posts for the reinforcing fence at intervals of 3 m (10 feet) or less. Drive posts for the reinforcing fence at least 0.6 m (2 feet) into the ground.
14. Coordinate a meeting between a representative of the grading contractor, the Owner of the project, and the City staff in order to review the erosion control plan and the requirements of the City prior to any work on the site. Notify the City staff immediately after the erosion control measures are installed. Do not begin grading work until the City staff approves the installed erosion control measures.
15. Maintain all temporary erosion and sediment control devices in place until the contributing drainage area has been stabilized (hard-surfaced areas paved and vegetation established in greenspace). Repair any rilling, gully formation, or washouts. After final establishment of permanent stabilization, remove all temporary synthetic, structural, and nonbiodegradable erosion and sediment control devices and any accumulated sediments. Dispose-of off site.

DEWATERING AND BASIN DRAINING:

1. If dewatering is required and sump pumps are used, all pumped water must be discharged through an erosion control facility (temporary sedimentation basin, grit chamber, sand filter, upflow chamber, hydro-cyclone, swirl concentrator, dewatering bag or other appropriate facility) prior to leaving the construction site. Proper energy dissipation must be provided at the outlet of the pump system.
2. Discharge all water from dewatering activities in a manner that does not cause nuisance conditions on down gradient properties causing significant adverse impact.

FINAL STABILIZATION:

1. Complete all soil disturbing activities at the site and stabilize all soils by a uniform perennial vegetative cover with a density of 70% over the entire pervious surface area, or other equivalent means necessary in order to prevent soil failure under erosive conditions.
2. Verify that the permanent stormwater treatment system is completed in accordance with the design and specifications. Remove all sediment from conveyance systems.
3. Remove all temporary synthetic, structural, non-biodegradable erosion and sediment control devices after the site has undergone final stabilization with permanent vegetation establishment. Final stabilization for purposes of this removal is 70% established cover over denuded area.

SOIL STABILIZATION:

1. Water and maintain seeded or sodded areas on a timely day-to-day basis. In the event of a seeding failure, reseed and remulch the areas where the original seed has failed to grow and perform additional watering as necessary at no additional cost to the Owner. Promptly replace all sod that dries out to the point where it is presumed dead and all sod that has been damaged, displaced, weakened, or heavily infested with weeds at no additional cost to the Owner.
2. In areas to be temporarily seeded, use introduced seed mixture equivalent to MNDOT No. 250. Apply seed mixture at a rate of 78.4 kg per hectare (70 lbs per acre) in accordance with MNDOT Standard Spec. 2575. Incorporate a Type 3 fertilizer (slow release type with 10 week residual) consisting of 22-5-10 (%N-P-K) into the soil at an application rate of 392 kg per hectare (350 lbs per acre) by disking prior to seeding.
3. Establish native seed mix in accordance with MNDOT Standard Spec. 2575.3. Use a Truax type, or equal interseeder drill with at least two seed boxes: a small/fine seed box and a large/fluffy seed box. Drill large/fluffy seeds to a final planting depth of 10 mm (1/2 inch) to 25 mm (1 inch) deep from the large/fluffy seed box. Split the drill rates in half and make two passes over the site in order to decrease competition in drill rows. Scatter small/fine seeds over the soil surface by drop-seeding from the small/fine seed box, or broadcast. Coordinate with the seed vendor to keep the large/fluffy seeds separate from the small/fine seeds so that they may be installed from separate seed boxes. Lightly harrow or rake the site following the seeding operation. Pack the site following harrowing in order to ensure a firm seed-bed.
4. In areas to be permanently stabilized, landscape with decorative rock, plantings, and sod (refer to Landscape Plan for design and details).
5. In seeded areas with slopes equal to or flatter than 4:1, apply MNDOT Standard Spec. 3882 Type 1 mulch uniformly over the soil surface by hand or machine within 24 hours after seeding in accordance with MNDOT Standard Spec. 2575.3. Apply mulch at a rate of 4.5 metric tons per hectare (2 tons per acre). Immediately after placement, anchor all mulch material into the soil by crimping (straight disking) in a direction perpendicular to that of the overland storm water flow. Punch the mulch into the soil to a depth of 2 to 3 inches with a disk spacing of 8" or less.
6. Pervious areas shall have a minimum of 6" of topsoil for final stabilization.

MATERIALS:

1. Storm Sewer Inlet Protection: The following are approved inlet sediment control devices:
   a. Road Drain Top Slab Model RD 23 (fits rough opening for 2'x3' inlet), Road Drain Top Slab Model RD 27 (fits rough opening for 27" inlet), or Road Drain Top Slab Model CG 3067 (fits Neenah Casting with 35-1/4"x17-3/4" dimensions) manufactured by WIMCO, 799 Theis Drive, Shakopee, MN, 55379, Phone (952) 233-3055.
   b. Silt Sack: Regular flow (40 gal/min/sq. ft). Average width strength equal to 165.0 lbs/in, ASTM D-4884. Rectangular siltsack on rectangular inlets. Round siltsack on round inlets. Use ACF Environmental, Inc., 2831 Cardwell Road, Richmond, VA 23234, Phone (800) 448-3636, or approved equal.
   c. InfraSafe Sediment Control Barrier. Install geotextile sock on the outside of the barrier in order to trap additional fines. Standard frames are available to fit 24" to 30" diameter and 2'x3' openings. Distributed by ROYAL ENTERPRISES AMERICA, 30622 Forest Boulevard, Stacy, MN, 55079, Phone (651) 462-2130.
   d. Ridge Bag Rock Log. Use rock logs only for curb inlets after pavement is in place. Manufactured by RED BARN RIDGE, 3135 County Road 136, Saint Cloud, MN, 35301, Phone (320) 253-3744.
2. Topsoil: Topsoil used for finish grading of areas to be turfed or planted shall meet the requirements of MNDOT Standard Specification 3877 for topsoil borrow modified to contain no more than 35% sand. Topsoil shall be reasonably free of subsoil, heavy clay, coarse sand, stones, and other objects over 51 mm (2 inches) in diameter; and without plants, roots, sticks, and other objectionable material.
3. Mulch: MNDOT Standard Specification 3882 Type 1 mulch material.
4. Geotextile Fabric for Subgrade Stabilization (if required): MNDOT Standard Specification 3733 Type V permeable geotextile material.
5. Supporting Posts for Siltfence: 51 mm (2 inch) square or larger hardwood, pine, or standard T- or U-section steel posts. T- or U-section steel posts shall weigh not less than 1.8602 kg per meter (1.25 lb per lineal foot). Posts shall have a minimum length of 1524 mm (5 feet). Posts shall have projections to facilitate fastening the fabric and prevent slippage.
6. Siltfence Fabric: MNDOT Standard Specification 3886 self supporting silt fence. Furnish in a continuous roll in order to avoid splices. Geotextile fabric shall be uniform in texture and appearance and have no defects, flaws, or tears. The fabric shall contain sufficient ultraviolet (UV) ray inhibitor and stabilizers to provide a minimum two-year service life outdoors. Fabric color shall be international orange.
7. Aggregate for Temporary Rock Construction Entrance: 25 mm (1 inch) to 50 mm (2 inch) diameter rock, MNDOT Standard Specification 3137 CA-1, CA-2, or CA-3 Coarse Aggregate, or equal.
8. Geotextile Fabric for Temporary Rock Construction Entrance: MNDOT Standard Specification 3733 Type V permeable geotextile fabric material.
9. Temporary Seed: MNDOT Standard Spec. 3876 No. 250.
10. Fertilizer: Slow release type with 10 week residual consisting of 22-5-10 (%N-P-K).
11. Biodegradable Erosion Control Blankets: In accordance with MNDOT Standard Specification 3885.
12. Staples: Staples used to anchor erosion control blankets shall be U-shaped, 3 mm diameter or heavier steel wire. The span width at the crown shall be a minimum of 25 mm (1 inch). Staples shall have a length of 250 mm (10 inches) or more from top to bottom after bending.

IMPERVIOUS SURFACE	
PRE-CONSTRUCTION	POST-CONSTRUCTION
2.52 acres	2.52 acres

INSPECTIONS AND MAINTENANCE REQUIREMENTS:

1. Inspect the entire construction site at least once every 7 days during active construction and within 24 hours after a rainfall event greater than 0.25 inches in a 24-hour period. Following an inspection that occurs within 24 hours after a rainfall event, the next inspection must be conducted within 7 days after that rainfall event.
2. Inspect all erosion prevention and sediment control BMPs and stabilized areas.
3. Record all inspections and maintenance conducted during construction in writing and keep these records with the SWPPP. The inspections and maintenance records must include date and time of inspections, date and amount of all rainfall events greater than 0.25 inches in a 24-hour period, name of persons(s) conducting inspections, findings of inspections, recommendations for corrective actions, and any corrective actions taken.
4. Inspect all erosion prevention and sediment control BMPs in order to ensure integrity and effectiveness. Repair, replace, or supplement any nonfunctional BMPs with functional BMPs within 24 hours after discovery, or as soon as field conditions allow access unless another time frame is specified.
5. Remove accumulated sediment deposits from behind erosion and sediment control devices as needed. Do not allow sediment to accumulate to a depth of more than one-third of the height of the erosion and sediment control devices. Repair, replace, or supplement deteriorated, damaged, rotted, or missing erosion control devices within 24 hours of discovery, or as soon as field conditions allow access.
6. Repair, replace, or supplement all silt fences when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.
7. Clean storm sewer catch basins and other drainage facilities as required in order to maintain their effectiveness. Removal must be completed within 72 hours, or as soon as field conditions allow access.
8. Inspect surface waters (including drainage ditches and conveyance systems) evidence of erosion and sediment deposition. Remove all deltas and sediment deposited. Stabilize areas where sediment removal results in exposed soil. Removal and stabilization must be completed within 7 days of discovery unless precluded by legal, regulatory, or physical access constraints. If precluded, removal and stabilization must take place within 7 days of obtaining access.
9. Inspect construction site vehicle exit locations for evidence of off-site sediment tracking onto paved surfaces. Remove all soils and sediments tracked or otherwise deposited onto adjacent property, pavement areas, sidewalks, streets, and alleys. Removal shall be on a daily basis throughout the duration of the construction. Clean paved roadways by shoveling or wet-sweeping. Do not dry sweep. If necessary, scrape paved surfaces in order to loosen compacted sediment material prior to sweeping. Haul sediment material to a suitable disposal area. Street washing is allowed only after sediment has been removed by shoveling or sweeping.
10. Perform any corrective measures ordered by the City of Minneapolis (LGA for permitting and compliance)within 24 hours of notification. Install any additional erosion protection or sediment control measures deemed necessary by the City of Minneapolis within 24 hours of notification.

MINNEAPOLIS STANDARD EROSION CONTROL NOTES:

City of Minneapolis Standard Erosion Control Notes
MINNEAPOLIS STANDARD EROSION CONTROL NOTES (April 1, 2010)

1. Contractor must call for a pre-construction meeting 48 hours prior to any land disturbances. Call 612-673-3867. Failure to do so may result in fines, the revocation of permit and a stop work order being issued.
3. Install perimeter erosion control at the locations shown on the plans prior to the commencement of any land disturbance or construction activities.
4. Before beginning construction, install a temporary rock construction entrance at each point where vehicles exit the construction site. Use 2 inch or greater diameter rock in a layer at least 6 inches thick across the entire width of the entrance. Extend the rock entrance at least 50 feet into the construction zone using a geo-textile fabric beneath the aggregate to prevent migration of soil into the rock from below.
5. Remove all soils and sediments tracked or otherwise deposited onto public and private pavement areas. Removal shall be on a daily basis when tracking occurs and may be ordered by Minneapolis inspectors at any time if conditions warrant. Sweeping shall be maintained throughout the duration of the construction and done in a manner to prevent dust being blown to adjacent properties.
6. Install inlet protection at all public and private catch basin inlets, which receive runoff from the disturbed areas. Catch basin inserts or other approved product are required in undisturbed areas that may receive runoff from the project area. Hay bales or filter fabric wrapped grates are not allowed for inlet protection.
7. Locate soil or dirt stockpiles no less than 25 feet from any public or private roadway or drainage channel. If remaining for more than seven days, stabilize the stockpiles by mulching, vegetative cover, tarps, or other means. Control erosion from all stockpiles by placing silt barriers around the piles. Temporary stockpiles located on paved surfaces must be no less than two feet from the drainage/gutter line and shall be covered if left more than 24 hours.
8. Maintain all temporary erosion and sediment control devices in place until the contributing drainage area has been stabilized. Inspect temporary erosion and sediment control devices on a daily basis and replace deteriorated, damaged, or rotted erosion control devices immediately.
9. Temporarily or permanently stabilize all construction areas which have undergone final grading, and all areas in which grading or site building construction operations are not actively underway against erosion due to rain, wind and running water within 7-14 days.
10. Use seed and mulch, erosion control matting, and/or sodding and staking in green space areas. An early application of gravel base on areas to be paved recommended minimizing erosion potential.
11. Remove all temporary synthetic, structural, non-biodegradable erosion and sediment control devices after the site has undergone final stabilization with permanent vegetation establishment. Final stabilization for purposes of this removal is 70% established cover over denuded area.
12. Ready mixed concrete and concrete batch plants are prohibited within the public right of way. All concrete related production, cleaning and mixing activities shall be done in the designated concrete mixing/washout locations as shown in the erosion control plan. Under no circumstance may washout water drain onto the public right of way or into any public or private storm drain conveyance.
12. Changes to approved erosion control plan must be approved by the erosion control inspector prior to implementation. Contractor to provide installation and details for all proposed alternate type devices.

EROSION AND SEDIMENT CONTROL DEVICE OPERATION SCHEDULE			
ITEM	INSTALLATION	INSPECTION/MAINTENANCE	REMOVAL
Siltfence	Install prior to any construction.	Inspect a minimum of once every 7 days or 24 hours after a rain event greater than 0.25-inches in a 24-hour period. Remove sediments as required. Repair, replace, or supplement non-functional siltfence within 24 hours of discovery.	After disturbed areas have been stabilized.
Temporary Rock Construction Entrance	Install prior to any construction.	Inspect daily. Maintain as required. Inspect for evidence of off-site sediment tracking. Remove any tracked sediment on a daily basis.	When site paving operations begin.
Storm Sewer Inlet Protection	Install prior to any construction or same day that the structure is constructed. Install on all existing and proposed catch basins exposed to construction sediment.	Inspect a minimum of once every 7 days or 24 hours after a rain event greater than 0.25-inches in a 24-hour period. Remove sediments as required. Make any necessary repairs within 24 hours of discovery.	After disturbed areas have been stabilized.
Temporary or Permanent Soil Stabilization	Install within 14 calendar days of the initial soil disturbance for all unworked exposed soil areas.	Inspect a minimum of once every 7 days or 24 hours after a rain event greater than 0.25-inches in a 24-hour period. Make any necessary repairs within 24 hours of discovery.	N/A
Protection of Temporary Stockpiles	Immediately install siltfence, or other effective sediment controls, around all temporary soil stockpiles.	Inspect a minimum of once every 7 days or 24 hours after a rain event greater than 0.25-inches in a 24-hour period. Remove sediments as required. Make any necessary repairs within 24 hours of discovery.	After stockpiles have been removed.
Temporary or Permanent Energy Dissipation at Pipe Outlets	Install within 24 hours.	Inspect a minimum of once every 7 days or 24 hours after a rain event greater than 0.25-inches in a 24-hour period. Make any necessary repairs within 24 hours of discovery.	N/A
Protection of Surface Waters (Including drainage ditches and conveyance systems)	N/A	Inspect a minimum of once every 7 days or 24 hours after a rain event greater than 0.25-inches in a 24-hour period. Remove all deltas and sediment deposited. Restabilize the areas where sediment removal results in exposed soil. Remove and stabilize within 7 days of discovery.	N/A

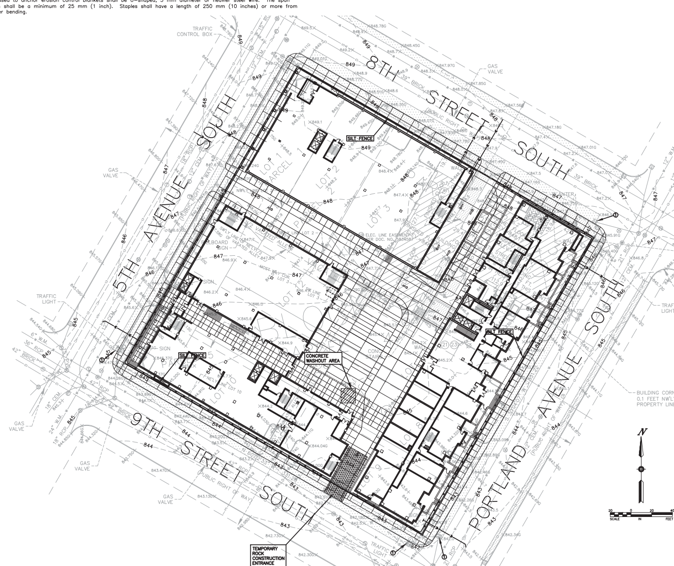
SWPPP CONTACT INFORMATION		
AGENCY / POSITION	CONTACT PERSON	PHONE NUMBERS
Owner*		
Contractor**		
TBD Erosion Control Installer		
Damon Farber Associates 401 2nd Ave. North #410 Minneapolis, MN 55401 Landscape Architect	Jesse Symynkywicz	612-332-7522 office
SUNDE ENGINEERING, PLLC. 10830 Nesbitt Avenue South Bloomington, MN 55437 SWPPP Designer	Brian Mundstock	(952) 881-3344 office (952) 881-1913 fax

Party responsible for long term operation and maintenance of the permanent stormwater management system.

Party responsible for overseeing the implementation of the SWPPP.

ESTIMATED PRELIMINARY EROSION AND SEDIMENT CONTROL BMP QUANTITIES*	
ITEM	QUANTITY
Temporary Rock Construction Entrance	1
Silt Sack Inlet Protection	4
Erosion Control Blanket	N/A
Stone Riprap	N/A
Siltfence	1260 lineal feet

* BMP quantities are subject to change. Provide additional temporary BMPs as necessary based on actual site conditions.



KA BLOCK
REDEVELOPMENT

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I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed under the laws of the State of

Signature
Mike R. Kettler
Typed or Printed Name
40425
License # Date

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Set - 8/7/2015

ORIGINAL ISSUE:
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215503
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MK
CHECKED BY
KEY PLAN

KA BLOCK REDEVELOPMENT

EROSION CONTROL AND STORMWATER POLLUTION PREVENTION PLAN

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