

In amplification, and not in restriction of, the provisions of the preceding section, it is intended and agreed that the Grantor shall be deemed a beneficiary of the agreements and covenants provided herein, both for and in its own right, and also for the purposes of protecting the interest of the community and the other parties, public or private, in whose favor or for whose benefit these agreements and covenants have been provided. Such agreements and covenants shall run in favor of the Grantor without regard to whether the Grantor has at any time been, remains, or is an owner of any land or interest therein to, or in favor of, which such agreements and covenants relate. The Grantor shall have the right, in the event of any breach of any such agreement or covenant to exercise all the rights and remedies, and to maintain any actions or suits at law or in equity or other proper proceedings to enforce the curing of such breach of agreement or covenant, to which it or any other beneficiaries of such agreement or covenant may be entitled; provided that Grantor shall not have any right to re-enter the Property or revest in the Grantor the estate conveyed by this Deed on grounds of Grantee's failure to comply with its obligations under this Section 3.

IN WITNESS WHEREOF, the Grantor has caused this Deed to be duly executed in its behalf by its President and Executive Director this _____ day of _____, 2019.

- ☐ The Seller certifies that the Seller does not know of any wells on the described real property.
- ☐ A well disclosure certificate accompanies this document or has been electronically filed. (If electronically filed, insert WDC number: _____).

GRANTOR

ECONOMIC DEVELOPMENT AUTHORITY
OF THE CITY OF BROOKLYN CENTER,
MINNESOTA

By _____
Mike Elliott
Its: President

By _____
Cornelius Boganey
Its: Executive Director

STATE OF MINNESOTA)
) ss
COUNTY OF HENNEPIN)

This instrument was acknowledged before me on this _____ day of _____ 2019, by Mike Elliott and Cornelius Boganey, the President and Executive Director, respectively, of the Economic Development Authority of the City of Brooklyn Center, Minnesota, a public body corporate and politic under the laws of Minnesota, on behalf of the public body corporate and politic.

(Stamp)

Notary Public

This instrument was drafted by:

Kennedy & Graven, Chartered (SJS)
470 U.S. Bank Plaza
200 South Sixth Street
Minneapolis, MN 55402
(612) 337-9300

Tax Statements should be sent to:

Novak-Fleck Incorporated
8857 Zealand Avenue North
Brooklyn Park, MN 55445

EXHIBIT B
TO PURCHASE AND DEVELOPMENT AGREEMENT
FORM OF CERTIFICATE OF COMPLETION

WHEREAS, the Economic Development Authority of the City of Brooklyn Center, Minnesota, a public body, corporate and politic (the “Grantor”), conveyed land in Hennepin County, Minnesota to Novak-Fleck Incorporated, a Minnesota corporation (the “Grantee”), by a Deed recorded in the office of the County Recorder in and for the County of Hennepin and State of Minnesota, as Document Number _____ ;

and

WHEREAS, said Deed contained certain covenants and restrictions set forth in Sections 1 and 2 of said Deed; and

WHEREAS, said Grantee has performed said covenants and conditions insofar as it is able in a manner deemed sufficient by the Grantor to permit the execution and recording of this certification;

NOW, THEREFORE, this is to certify that all building construction and other physical improvements specified to be done and made by the Grantee have been completed and the above covenants and conditions in said Deed and the agreements and covenants in Sections 14 and 15 of the Agreement (as described in said Deed) have been performed by the Grantee therein, and the County Recorder in and for the County of Hennepin and State of Minnesota is hereby authorized to accept for recording and to record, the filing of this instrument, to be a conclusive determination of the satisfactory termination of the covenants and conditions of Sections 14 and 15 of the Agreement and the covenants and restrictions set forth in Sections 1 and 2 of said Deed; provided that the covenants set forth in Sections 14 (E) of the Agreement, and in Section 3 of the Deed, remain in full force and effect through the period stated thereon.

Dated: _____, 20__.

ECONOMIC DEVELOPMENT AUTHORITY OF
THE CITY OF BROOKLYN CENTER,
MINNESOTA

By _____
Its: President

By _____
Its: Executive Director

STATE OF MINNESOTA)
) ss
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me this ____ day of _____,
20__, by _____ and _____, the President and Executive
Director, respectively, of the Economic Development Authority of the City of Brooklyn Center,
Minnesota, a public body corporate and politic under the laws of the State of Minnesota, on
behalf of the public body corporate and politic.

Notary Public

This document drafted by:
KENNEDY & GRAVEN, CHARTERED (SJS)
470 U.S. Bank Plaza
200 South Sixth Street
Minneapolis, MN 55402
(612) 337-9300

Locational Map

Residential Labels

Addresses

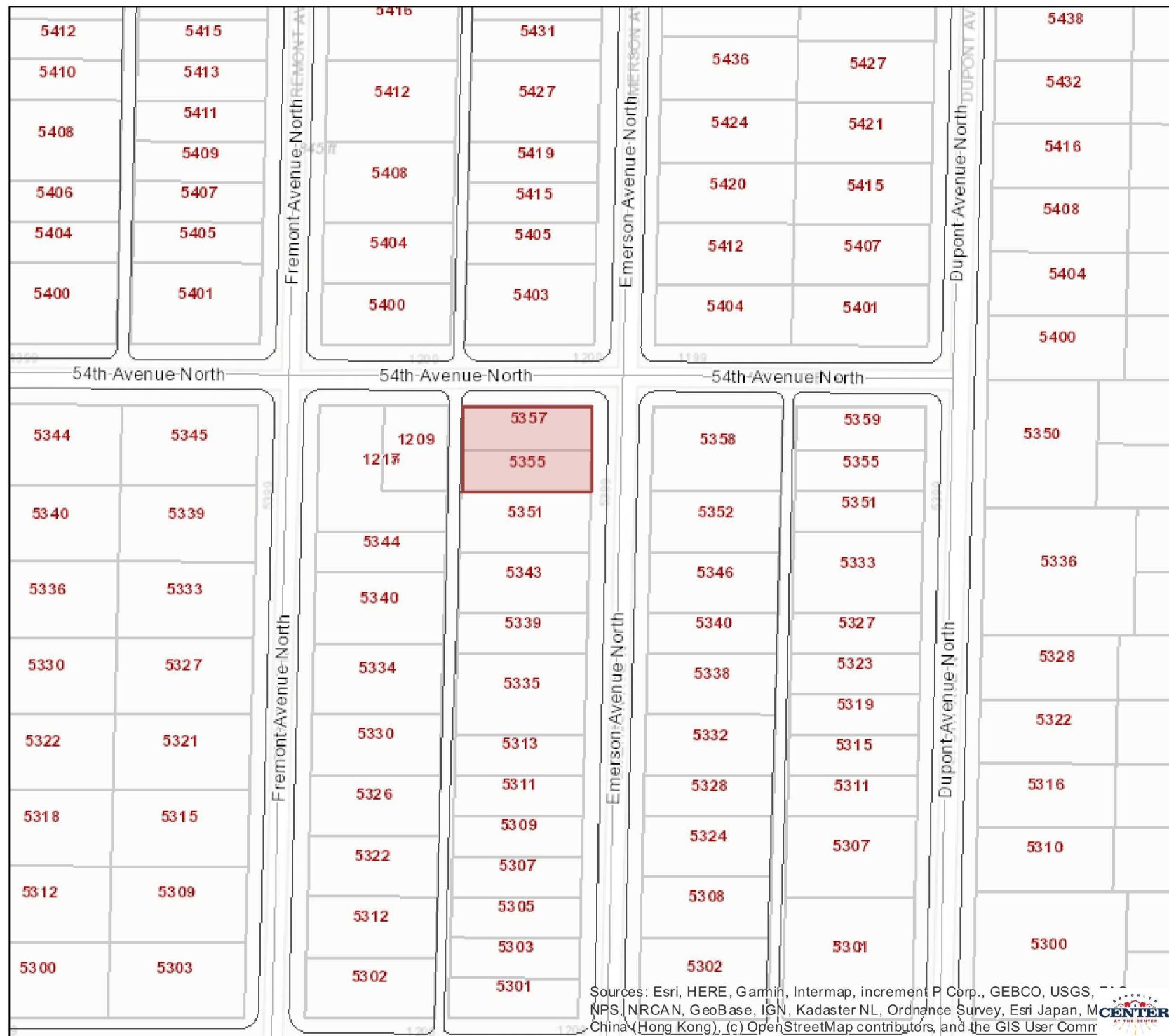
— Highways

— Streets

— Road Edge

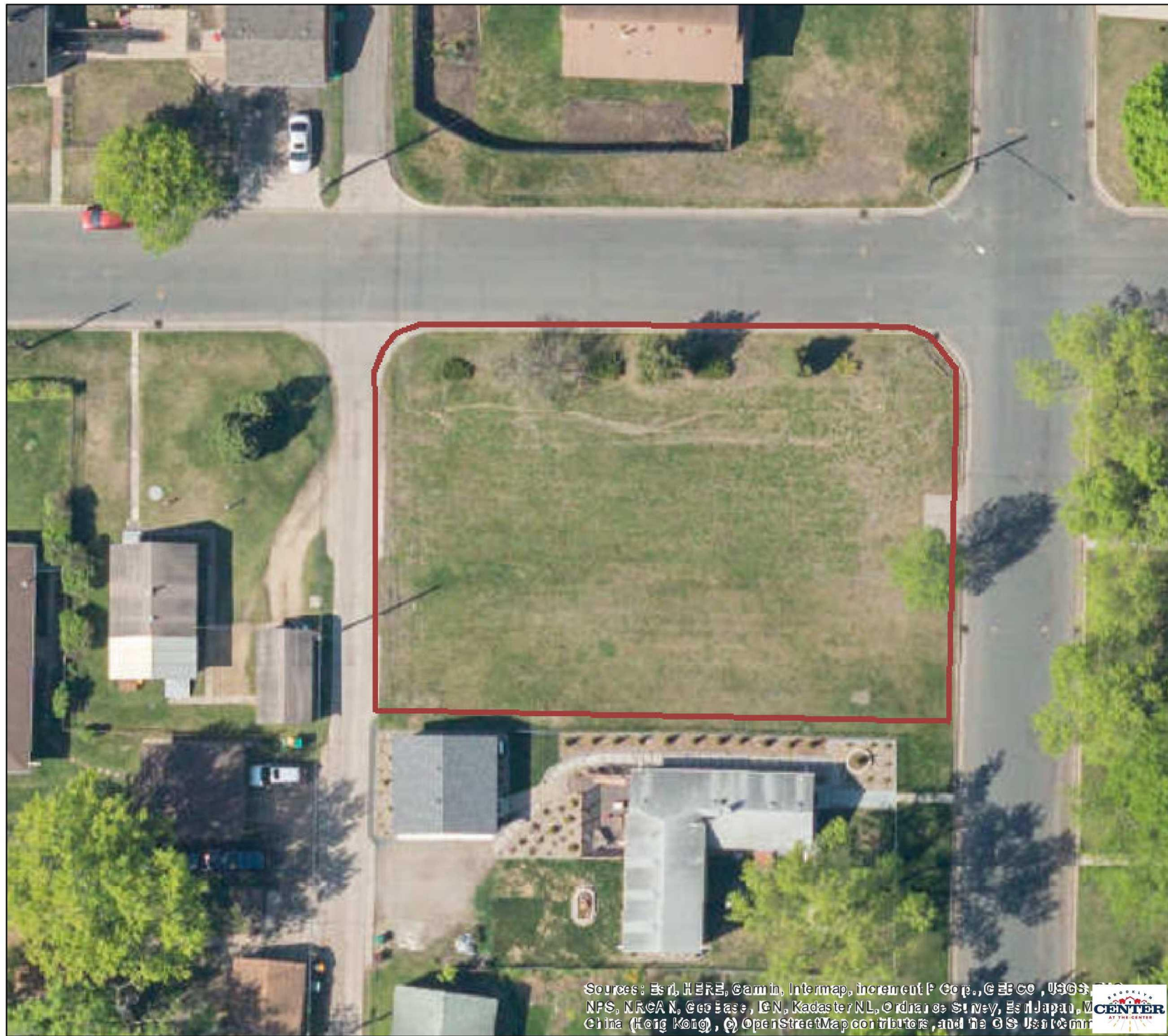
City Parks

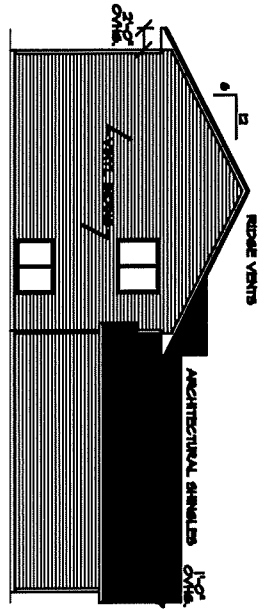
Parcels



Aerial Map

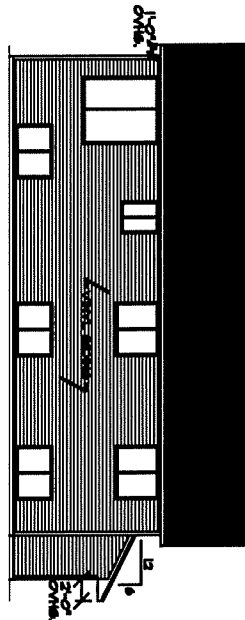
Residential Labels



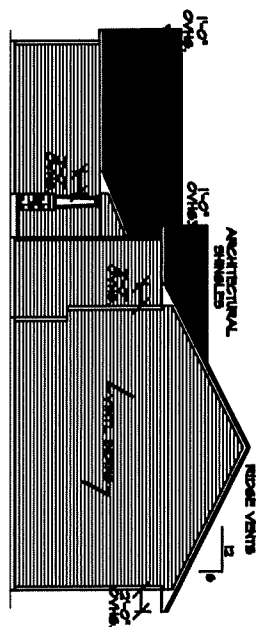


LEFT ELEVATION
SCALE 1/8"=1'-0"

1/8" = 1'-0"



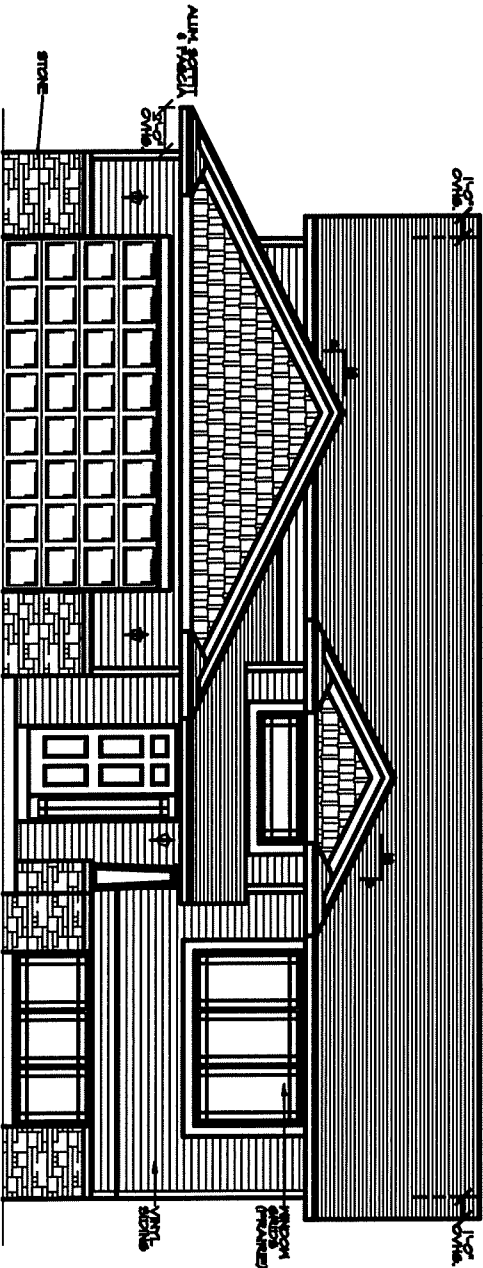
REAR ELEVATION
SCALE 1/8"=1'-0"



RIGHT ELEVATION
SCALE 1/8"=1'-0"

* Flip Plan - Garage will be right

5355 Emerson Ave N
Brooklyn Center



FRONT ELEVATION
SCALE 1/8"=1'-0"

NOTE:
-DUE TO ELECTRONIC REPRODUCTION, THIS PLAN MAY NOT SCALE CORRECTLY. THE HOUSE WILL BE BUILT ACCORDING TO THE DIMENSIONS SPECIFIED.
-ALL DIMENSIONS, CONDITIONS AND SPECIFICATIONS ARE SUBJECT TO FIELD VERIFICATION. SOME CHANGES MAY BE NECESSARY.
-ALL ELECTRICAL SYMBOLS SHOWN ARE APPROXIMATE. ACTUAL PLACEMENT WILL BE DETERMINED BY THE ELECTRICIAN PER CODE REQUIREMENTS.
-ALL SQUARE FOOTAGES ARE DEEMED RELIABLE BUT NOT GUARANTEED.
-HATCHED BOXES ON EXTERIOR WALLS (CATEGORY ONE)
-CAULK & FLASH ALL EXTERIOR OPENINGS.

NE

2nd FLOOR	1/8" = 1'-0"
1st FLOOR	1/8" = 1'-0"
Basement	1/8" = 1'-0"
Garage	1/8" = 1'-0"
Front Porch	1/8" = 1'-0"
Back Porch	1/8" = 1'-0"
Side Porch	1/8" = 1'-0"
Deck	1/8" = 1'-0"
Stairs	1/8" = 1'-0"
Windows	1/8" = 1'-0"
Doors	1/8" = 1'-0"
Chimney	1/8" = 1'-0"
Roof	1/8" = 1'-0"
Foundation	1/8" = 1'-0"
Driveway	1/8" = 1'-0"
Landscaping	1/8" = 1'-0"
Other	1/8" = 1'-0"

LOWER LEVEL FLOOR PLAN
SCALE 1/4"=1'-0"

SCALES 1/4"=1'-0"

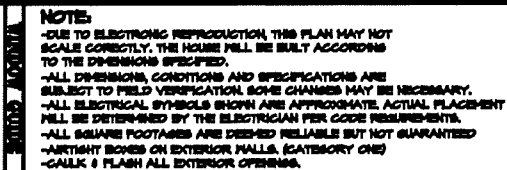
- DUE TO ELECTRONIC REPRODUCTION, THIS PLAN MAY NOT SCALE CORRECTLY. THE HOUSE WILL BE BUILT ACCORDING TO THE DIMENSIONS SPECIFIED.
- ALL DIMENSIONS, CONDITIONS AND SPECIFICATIONS ARE SUBJECT TO FIELD VERIFICATION. SOME CHANGES MAY BE NECESSARY.
- ALL ELECTRICAL SYMBOLS SHOWN ARE APPROPRIATE. ACTUAL PLACEMENT WILL BE DETERMINED BY THE ELECTRICIAN PER CODE REQUIREMENTS.
- ALL SQUARE FOOTAGES ARE DEEMED RELIABLE BUT NOT GUARANTEED
- AIR-THIGHT BOXES ON EXTERIOR WALLS. (CATEGORY ONE)
- GASKET & FLASH ALL EXTERIOR OPENINGS.

N

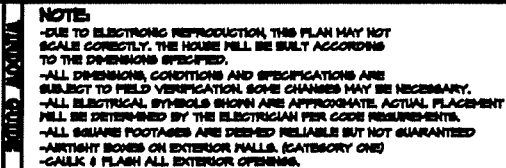
WOODRIDGE

FIRST FLOOR:	879-6445
SECOND FLOOR:	879-6445
CORNER LEVEL:	1194-44
TERRACE:	6445
PARKING:	225 Pks.

Speed
Spectra
3036 International Avenue



IN



**Council/EDA Work
Session**

City Hall Council Chambers
September 9, 2019

AGENDA



The City Council requests that attendees turn off cell phones and pagers during the meeting. A copy of the full City Council packet is available to the public. The packet ring binder is located at the entrance of the council chambers.

ACTIVE DISCUSSION ITEMS

1. 1601 James Circle Development Update
2. Mayor & City Council Office Discussion
3. Local Water Supply Plan
- Motion to approve the resolution approving the Local Water Supply Plan.

PENDING LIST FOR FUTURE WORK SESSIONS

1. Pending Items
 - Public Subsidy Policy - 9/23
 - Commemoration of 400 years of Slavery Activities - 9/23
 - Police Crisis Prevention Options - 11/12
 - Residential Design Standards
 - Livable Wages - 12/9
 - Environmental Policies and Practices - 10/28
 - Housing Policy Implementation Plan - 10/14
 - SAC Credit Discussion - 9/23
 - Options for Use of Adjacent Space to Liquor Store

MEMORANDUM - COUNCIL WORK SESSION

DATE: 9/9/2019

TO: Curt Boganey, City Manager

THROUGH: N/A

FROM: Meg Beekman, Community Development Director

SUBJECT: 1601 James Circle Development Update

Recommendation:

- Consider a development update from Mike Brady, Brady Real Estate Development, regarding a Preliminary Development Agreement for a development concept at 1601 James Circle

Background:

On April 8, 2019, the EDA entered into a Preliminary Development Agreement (attached) with Brady Real Estate Development, Inc for the redevelopment of the EDA-owned property at 1601 James Circle.

The developer has been conducting due diligence on the property since that time, as well as engaging with specific community groups related to the development. They would like to provide an update for the Council on their activities to date as well as their anticipated timeline moving forward.

Project Concept

Brady Real Estate Development, Inc is a mission-driven commercial real estate and investment company which is working towards a project at 1601 James Circle. As part of their proposal, they have partnered with Mr. Tufaa, the owner of the former Earle Brown Bowl to combine the two projects together in order to better leverage the site layout and land use as well as financials. As you may recall, Mr. Tufaa has approval from the City for a Special Use Permit (SUP) to convert the former bowling alley into an event center and restaurant. Financing challenges have led to a delay in the start of that project, which resulted in the SUP expiring.

The developer is proposing to develop an 80,000 square foot business center, leveraging the Opportunity Zone status of the property, to create a tech business incubator for small businesses, with an anchor tenant taking up a portion of the building. They intend to focus the tech incubator on first and second-generation immigrant-owned start-up businesses, though acknowledge that all would be welcome. A narrative describing the proposal in more detail is attached to this report.

The developer is proposing to work with Mr. Tufaa to develop the event center into a shared use space, which can be utilized by tenants of the business center. Most critically, they propose a shared parking concept, which would allow a higher intensity of use on the 1601 James Circle property, increasing the amount of square footage of building space, and number of jobs per acre. Their concept also proposes a partial vacation of James Circle, allowing stormwater to be pushed into existing road right of way, and converting the existing roadway back into a cul-de-sac. It must be noted, that the City Engineer has not had an opportunity to review this concept, and request for a right of way vacation would require review and approval by the City Engineer. A concept plan is attached to this report, along with conceptual elevations of the building.

The developer has been engaging with prospective tenants and targeted communities in order to develop

creative financing structures which would allow more flexible and affordable lease models.

The developer will provide an update on their due diligence and engagement activities, as well as their financial proforma at the August 26th meeting.

Next Steps

The developer is continuing their due diligence. They anticipate a land use application for a PUD to develop the two sites in the coming month or two, along with an application for tax increment financing.

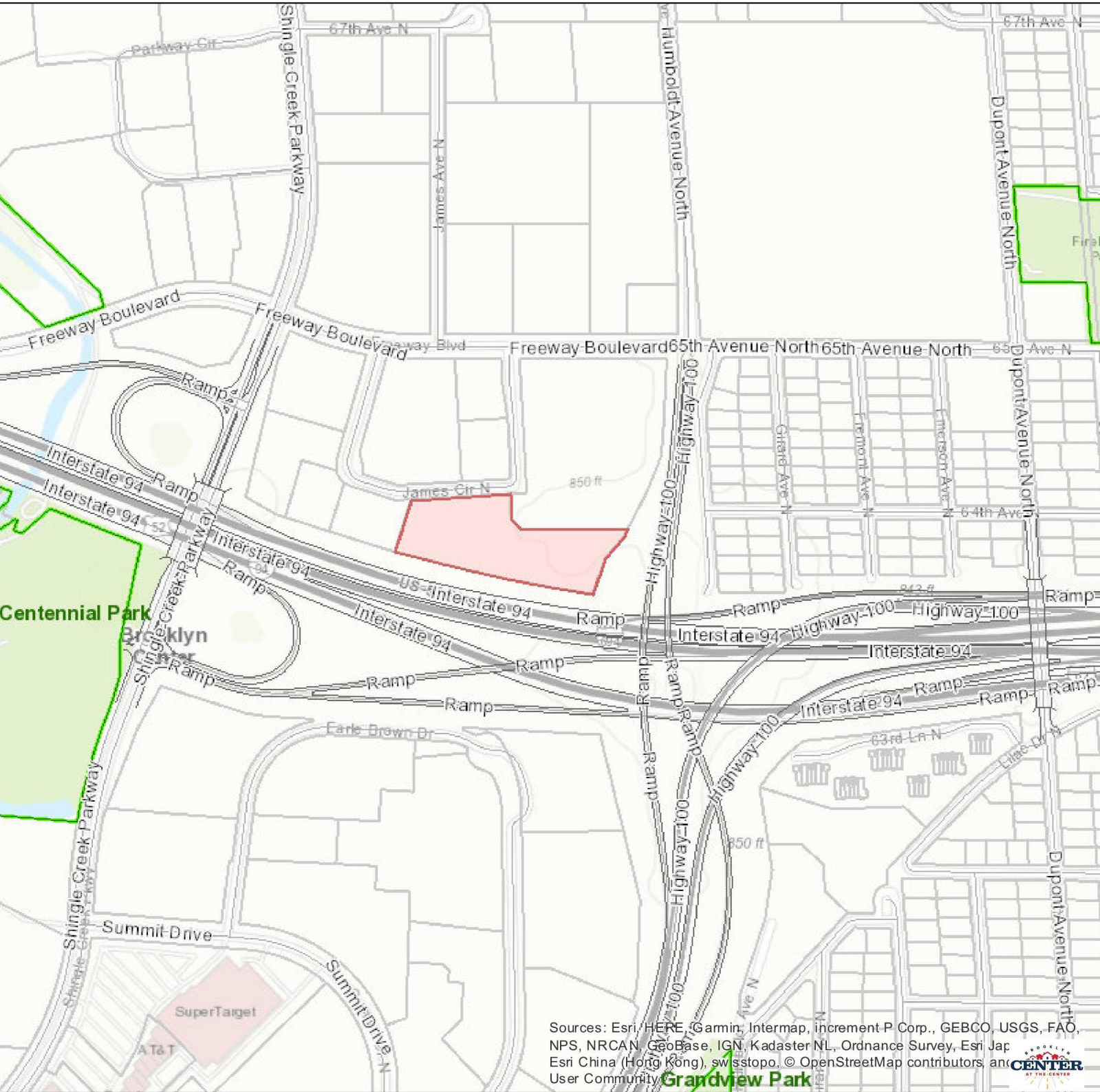
Strategic Priorities and Values:

Targeted Redevelopment

ATTACHMENTS:

Description	Upload Date	Type
Location Map	3/19/2019	Backup Material
Project Narrative	3/19/2019	Backup Material
Site Layout and Renderings	3/19/2019	Backup Material
Preliminary Development Agreement	8/19/2019	Backup Material
Powerpoint	8/28/2019	Presentation

Locational Map: 1601 James Circle North





1600 West End Tower, Utica Ave S, St Louis Park, MN 55416 612.327.2932

Brooklyn Center Business Tech Site

Brooklyn Center owns a gem in the recently established world of Opportunity Zones, bar none. Now it's time to bring that site to its highest and best use.

In drafting this OZ Legislation, Senator Tim Scott envisioned a bipartisan effort to support communities that may not organically attract real estate development and new businesses. He has realized his dream as this new incentive program, albeit awaiting the final reg's from the IRS, has overwhelming support from all parties and levels of government and investors. It is a creative solution to get dollars on the sideline back into action in what most say will be the most productive program ever. Your site next to the FBI headquarters, if developed and managed properly, will be a showpiece for the people and Brooklyn Center, Minnesota, Tim Scott, and the nation. It will foster the rise of income and purpose for those participating in its mini business community. Living wage jobs and entrepreneurial wealth be created. But this will happen only by melding the cultures of those in Brooklyn Center and attracting start up tech firms outside Brooklyn Center, all succeeding together. Opportunity Zones coupled with other government incentives provide unique ways to attract investment and make this project viable. The business world is poised to embrace diversity in the workplace. Your site can be used to accomplish multi cultural business startup growth, success and even more than we can hope or imagine as people come together and collaborate in unseen ways to realize business success together.

We have 8 OZ projects before us at the moment. Yours is our #1. To accomplish its success we need up to a year of exclusivity on the site to work out a development agreement, tenant attraction, and city/governmental approvals. The Qualified Opportunity Zone Fund, however, needs to be in place by Dec 31, 2019 to receive full benefit of the OZ incentives, which we have no doubt we will accomplish. The urgency built into the program is a good thing. We also like that maximum benefit comes from businesses and building owners that stay put for a minimum of 10 years.

Rather than going on in many words for this initial presentation, below are bullet points and renderings summarizing the vision for your site.

- Goals
 - Business Center - A model project of what is possible for Brooklyn Center, the State on MN, and the Opportunity Zone program
 - Small Business success factory - First American focus, but all are welcome
 - Tech company start ups
 - Well known tech anchor tenant for a significant portion of the building
 - Child care academy/center
 - OZ Investor projections exceeded
 - The remainder of the 20 acre site will benefit and change for the positive
 - Mr. Tufaa, whom we are assisting, will build a thriving event center with whom our tenants can rent for larger presentations and conferences.
 - The hotels - our goal is to convert at least one of the three to micro units as housing and lodging, benefitting contract and long term employees in our Center
 - The existing restaurants will attract customers and perhaps a change in branding

- Site Benefits
 - Easy site access from Interstate 94 and Highway 100
 - 134,000 cars per day for tenant visibility and seeing this Brooklyn Center showpiece, many times twice a day
 - Dynamic signage, similar to HOM Furniture's, to maximize traffic benefits, attract visitors and telegraph success
 - Prominent site entrance at the end of the cul-de-sac
 - Expressive site lighting provides visibility and security
- Building amenities
 - 3 story, high clear height ceilings, 80,000 square feet total, ample parking
 - Business Community Center
 - Tenants and guests will have well developed open and semi-private meeting spaces, indoors and outdoors, to conduct business
 - Strikingly beautiful common spaces
 - High Tech feel - (Not like a typical office building - go in, go to the elevator, go down the long hallway, go into an isolated office). The building has a presence that speaks to those that enter with more positive, cutting edge atmosphere through the architecture and tenant energy.
 - People use the modern designed common spaces for meetings and a place to get out of their office for a break
 - Large window areas provide passive energy, feed large plants and the soul
 - Energy efficiencies and partnerships with local utilities
 - Elevators situated so various configurations all work well: small units with hallways, 1/2 floors, and/or entire floor-plates all make sense, thus allowing flexibility in tenant demand, thereby shortening successful lease up of the building
- Public Private Partnership
 - Critical because this building is a showpiece and thereby needs participation from all to include the amenities and the higher than typical percentage of common space. It will pass all the "but for" tests
 - Opportunity Zone registration and compliance
 - City participation through appropriate incentives
 - Minnesota DEED (for the entrepreneur tenants)
 - LISC participation
 - Input and buy-in from Immigrant Cultural and Economic Development Organizations
- Building Exterior
 - Exterior building character reflects companies within
 - Clean and contemporary building massing and details
 - Sleek and high tech exterior building finishes
 - Card entrance system to allow all hours access
- Building Interior
 - Open and ample common spaces encourage interaction and collaboration
 - Flexible floor leasing arrangements serve nimble users
 - Vertical windows bring daylight deep into building
 - Polished concrete floors and open ceilings in key areas create a modern tech feel

- Building Users
 - First American focused business center
 - Tech and life science oriented users
 - Major tech anchor to lend credibility
 - Optional co-working component
 - Potential childcare amenity serving users and community
- Building Systems
 - State of the art data and communications systems
 - Energy efficient heating, cooling, and ventilation systems
 - Energy efficient lighting and controls
 - New technology elevators
- Costs and Incentives
 - Benson-Orth Construction is currently bidding out the building and we will have those numbers by the 25th. However, the basis of this site development is to have a building that is strikingly modern and engaging from the highway and the same once you are inside. This means in this season of risen construction costs, we will need assistance to make the project work per this vision. Our goal is to have 1 or 2 major anchor tech spin off companies that understand and appreciate the value of your site and the amenities, paying market rent. But to engage the First American generation of entrepreneurs in Brooklyn Center, we will have to have a different rent structure and for that we need your help with TIF and land write down. There may also be a need for the detention pond on the site where the FBI HQ runoff empties into to be owned by the City. We believe that reasonable assistance will make up the gap and we will deliver a new community business building as described so the City's entrepreneurs can prosper.

Julie Tanaka and Mike Brady, together, have over 55 years of commercial real estate development, property management and real estate financing experience. Julie and Mike have merged their companies, Compendium Capital and Brady Real Estate Development. Brooklyn Center will be our new headquarters, overseeing this site's management and ever seeking to see the success become the norm here.

We believe in your city. We believe in your site. We believe in the viability of this ambitious project. We believe it will bring much good to people of Brooklyn Center and the country, thus fulfilling our Mission statement, *"Transforming Communities"*.

Thank you for this opportunity.

Julie Tanaka - <http://www.compendiumbusinessstrategies.com/>

Mike Brady - <https://bradyred.com/>

Tanaka Brady company - <https://donateproperties.com/>

Tanaka Brady joint development company name TBD

Architect - Brian Lubben Building Foundry <https://www.buildingfoundry.com/>

Contractor - Benson Orth Mike Monson <http://benson-orth.com/>



Julie Tanaka

Julie has 25 years experience in commercial real estate investment, structured finance, development and workout as an executive, investment advisor and loan officer.

Through her leadership positions with banks, securities and big four accounting firms, Julie has a strong working knowledge of commercial real estate underwriting and workout, debt and equity placement, portfolio management, valuation and litigation support.

Julie earned her BS in Finance & Marketing from the University of MN School of Management and her MBA from Columbia University, NY. A twice earned "Top 20 Women in Finance", "Women to Watch" and "Minnesotans on the Move" award recipient, Julie is very active in the business community and is a board member and past President of the Minnesota Association for Corporate Growth (ACG MN).

Julie Tanaka
612-670-5203
JulieTanaka@DonateProperties.com



Mike Brady

This year marks 30 years for Mike as a Commercial Real Estate Broker, Developer, Owner and Investor; gaining acumen in various commercial real estate skill-sets. He applies his expertise to help others fulfill their goals in real estate development as well as his own socially responsible real estate developments.

His range of expertise includes: joint ventures, brokerage, land development, adaptive reuse, condo community development, historic redevelopment, city presentations and approvals, financing, equity raising, tax increment financing, management of 2.5 million s.f. real estate portfolio, tenant and landlord rep, tenant retention, property tax valuation challenges, due diligence process management, lease examination, all sides of deal negotiation, foreign land investment, deal structuring, consulting, and mentoring young commercial real estate up and comers.

Mike is grateful for much in life, especially his wife of 36 years, 3 daughters and son in laws, 9 grandchildren and great granddaughter. None of this would be, except for the transforming Love of God Mike experienced 39 years ago and continues to walk in today.

Mike Brady
612-327-2932
MikeBrady@DonateProperties.com







BC Business Tech
Brooklyn Center, MN

BUILDING FOUNDRY

**BRADY REAL ESTATE
DEVELOPMENT**

PERSPECTIVE (FROM 694 EAST)
March 15, 2019



CONCEPT PLAN ONLY

BC Business Tech
Brooklyn Center, MN

BUILDING FOUNDRY

**BRADY REAL ESTATE
DEVELOPMENT**

PERSPECTIVE (FROM 694 WEST)
March 15, 2019



BC Business Tech
Brooklyn Center, MN

BUILDING FOUNDRY

**BRADY REAL ESTATE
DEVELOPMENT**

PERSPECTIVE(FROM NEW CUL-DE SAC)
March 15, 2019

PRELIMINARY DEVELOPMENT AGREEMENT

THIS PRELIMINARY DEVELOPMENT AGREEMENT ("**Agreement**") is made and entered into this 8th day of April, 2019, by and between the Economic Development Authority of Brooklyn Center, Minnesota (the "**Authority**") with its principal office at 6301 Shingle Creek Parkway, Brooklyn Center, Minnesota 55430, and Brady Real Estate Development, Inc, a Minnesota Corporation (the "**Developer**") with its principal office at West End Tower, 1600 Utica Ave S, Suite 900, Attn: Mike Brady St Louis Park, MN 55416. The Authority and the Developer may hereinafter be referred to individually as a "party" and collectively as the "parties."

WHEREAS, the Authority is the owner of certain real property described in Exhibit A (the "**Authority Property**") located in the City of Brooklyn Center, Minnesota (the "**City**"); and

WHEREAS, the Developer has presented to the Authority a concept for the development of the Authority's Property that may be acquired by the Developer for the creation of a three-story, 81,000 gross square foot office building, and associated parking, and public infrastructure improvements including utilities, roadway adjustments and storm water ponding (the "**Development**"), which proposal contemplates the Authority's conveyance of the Authority Property to the Developer.

WHEREAS, the Authority's Board of Commissioners has reviewed the Developer's development concept and desires to enter into this Preliminary Development Agreement to allow the Developer time to negotiate the purchase of the Authority Property, conduct due diligence, and gain land use approvals from the City; and

WHEREAS, the Authority and Developer intend to proceed with the Development if: (i) a satisfactory agreement can be reached regarding the purchase price to be paid by the Developer for the Authority Property; (ii) satisfactory financing for the Development can be secured; and (iii) the City approves a land use application by the Developer, allowing the Development to proceed.

NOW, THEREFORE, in consideration of the foregoing, the Authority and the Developer hereby agree as follows:

Section 1. Preliminary Nature of Agreement. The Authority and Developer agree that this Agreement is intended to be preliminary in nature. Before the Authority and Developer can make a decision on whether to proceed with the implementation of the Development, it will be necessary to consider information relative to the land, uses, design, economics and other aspects of the Development. The purpose of this Agreement is to allow the Developer an opportunity to assemble such necessary information, to refine the above referenced development concept, to negotiate with the Authority concerning the execution of a purchase agreement (the "**Contract**"), and which, if executed, will set forth the rights and responsibilities of the Authority and the Developer with respect to the Development.

During the term of this Agreement, the Authority agrees that it will not: (i) discuss the terms of the Development with a third party without the prior written consent of Developer, except to the extent required by the Minnesota Government Data Practices Act (Minnesota Statutes, Chapter 13) or other law; or (ii) enter into or negotiate a similar agreement or any other proposals with any party other than the Developer to develop the Authority Property.

Section 2. Present Intent of Parties. The parties intend this Agreement to document their present understanding and commitments and, further, that if the following conditions are fulfilled to the mutual satisfaction of the Authority and Developer the parties will proceed in an attempt to formulate a mutually satisfactory Purchase Agreement for the Authority Property:

- (a) the Developer demonstrates the feasibility of the Development as refined pursuant to this Agreement;
- (b) the completion of all undertakings required by this Agreement in a satisfactory and timely manner;
- (c) the satisfaction of such other conditions as are determined to be appropriate by either party; and
- (d) the Development is generally consistent with the proposed concept submitted to the Authority's Board of Commissioners on March 25, 2019.

The Contracts (together with any other agreements entered into between the parties hereto contemporaneously therewith) when executed will supersede all understandings and obligations of the parties hereunder.

Section 3. Development Design. The Developer's concept for the Development on the Development Property is preliminary in nature and must be refined before implementation. The concept as proposed involves the creation of a three-story, 81,000 square foot office building with related parking and public infrastructure improvements including utilities, roadway adjustments and storm water ponding.

Section 4. Developer Undertakings. During the term of this Agreement the Developer shall do the following:

- (a) Continue to refine its site and building plans for the Development.
- (b) Continue to refine its business plan and program of the interior space, operation model for a business tech center, and partnerships with neighboring properties.
- (b) Undertake preliminary engineering, soil testing/borings and geotechnical analysis of the Development Property. For this purpose, the Developer and its contractors shall have the right to enter upon the Authority Property at reasonable times and after notice to the Authority. The Developer shall indemnify, defend and hold the Authority harmless from and against any claims or damage, of whatsoever nature,

arising out of the entry onto the Authority Property and shall repair any damage caused to the Authority Property. This obligation shall survive termination of the Agreement.

- (c) Submit to the Authority a proposed schedule for the undertaking of the Development including timing of the closing and commencement and completion of construction activities.
- (d) Using title information and a survey provided by the Authority, update evidence of title to the Authority Property and provide to the Authority any objections to title.
- (e) Seek to secure a commitment for financing sufficient for construction of the public infrastructure improvements.
- (f) Obtain environmental reports and studies provided by the Authority and such other studies and testing deemed necessary, to determine the acceptability of the environmental condition of the Authority Property.
- (g) Prepare, submit application, and receive all necessary City land use approvals related to the development of the Authority Property.
- (h) Make all required presentations to the City Council of the City, the Authority's Board of Commissioners and the City Planning Commission in connection with seeking approvals for the Development.

All of the information described above shall be prepared or collected at the sole expense of the Developer. The Developer shall have no obligation to provide the Authority or City any reports, tests, analyses or any other due diligence it has prepared internally or obtained from any third party except as specifically provided herein.

Section 5. Authority Undertakings. During the term of this Agreement, the Authority will undertake the following:

- (a) Coordinate any necessary meetings with the Authority, City Council, Planning Commission and the community.
- (b) Assist in identifying public improvements necessary to be constructed or relocated in connection with the Development including, but not limited to, utilities, roadway changes and storm water ponding.
- (c) Identify construction, permit, application, utility and any other fees and the amount of such fees that the Developer may be expected to pay in connection with the Development.
- (d) Identify the approval process and timeframes for development approvals that may be expected for the Development.

- (e) Provide to the Developer any title information and any third party reports the Authority has on hand regarding the Authority Property.
- (f) Provide to the Developer any surveys and environmental reports related to the Authority Property that are in the possession of the Authority. The Authority will, at the Developer's expense, cooperate with the Developer in pursuing any federal or State environmental approvals, permits, program enrollments or determinations requested by the Developer with respect to the Authority Property.
- (g) Coordinate with the Developer in pursuing any grants that may assist with environmental analysis, brownfield remediation, gap financing, and/or others that may be identified that would assist the Development.
- (h) Notwithstanding any provisions or understanding to the contrary, neither the City nor the Authority will exercise its condemnation powers to acquire any additional property or other real property in connection with the Development.

Section 6. Contingencies. The parties acknowledge and agree that proceeding with the Development is subject to a number of contingencies including, but not limited to, the following:

- (a) The acquisition of all or part of the Authority Property by direct purchase, on such terms and conditions as are acceptable to both parties.
- (b) The acceptance by the Developer of its environmental and geotechnical assessments and all other environmental and wetland reports and surveys certified to the Developer and its lender, deemed necessary by the Authority and the Developer for all of the property to be encompassed by the Development, which reports and surveys must be satisfactory to the Authority and the Developer.
- (c) The Authority and the Developer having obtained all necessary approvals for the Development from all appropriate governmental authorities including, but not limited to, any necessary watershed district approvals.
- (d) The Developer having obtained such land use approvals from the City as is necessary to allow the Development to move forward.
- (e) Title to the Authority Property having been found acceptable to the Developer in its sole discretion.
- (f) The Developer having conducted such soils, well, engineering, hazardous waste, environmental and other testing as it determines necessary.
- (g) The Developer having obtained financing for, at a minimum, the public infrastructure improvements acceptable to Developer and satisfactory to the Authority.

Section 7. Negotiation of Contracts. During the term of this Agreement, the Authority and the Developer shall proceed with the negotiation of Contracts relative to the Development. The decision to enter into the Contracts shall be in the sole discretion of each of the parties. The parties agree that this Agreement is not intended to bind the parties to enter into any future agreement for the sale and acquisition of the Property, but is merely intended to set forth the parties' intent to proceed with the process of negotiating an agreement for the sale of the Property development of the property. If the Developer determines during the term of this Agreement that undertaking the Development is not financially feasible, it will promptly notify the Authority of such determination in writing and the parties will terminate this Agreement.

Section 8. Effect of Approvals. No approval given by the Authority hereunder or in connection herewith shall be deemed to constitute an approval of the Development for any purpose other than as stated herein and the process outlined in this Agreement shall not be deemed to supersede any concept review, conditional use permit, vacation, subdivision, or other zoning or planning approval process of the Authority or the City relative to the development of real estate.

Section 9. Payment of Costs. Both Parties are aware of and acknowledge that contingencies and unknowns presently exist, any one or more of which could make the Development cost prohibitive, and that both parties are expending sums of money and time with full knowledge of the risks involved and that neither party shall be liable for any of the other party's expenses in any event, except (i) as otherwise provided pursuant to a separate agreement between the parties, (ii) in connection with an application for a Public Subsidy, or (iii) pursuant to required fees or costs related to applications made to the City or under City Code.

Section 10. Modifications. This Agreement may be modified and the term hereof may be extended only through written amendments hereto signed by both of the parties to this Agreement.

Section 11. Exclusive Rights. In consideration of the time, effort and expenses to be incurred by Developer in pursuing the undertakings set forth herein, the Authority hereby agrees that for the term of this Agreement it will not provide or enter into an agreement with any third party in connection with any proposed development of the Authority Property. During such period the Developer shall have the exclusive right to work with the Authority in establishing definitive Contracts for the Development Property. Said exclusive rights shall continue, unless earlier terminated as provided herein, for the period described within Section 12 of this Agreement.

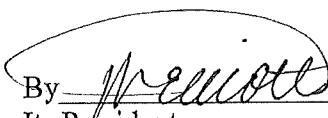
Section 12. Term and Termination. This Agreement shall be effective as of the date first written above and shall continue for one year until April 8, 2020, unless terminated earlier in accordance with Section 7. If for any reason the Contracts have not been entered into by the parties by such date, or any mutually approved extension thereof, this Agreement shall be null and void and neither party shall have any liability or obligations to the other, except as provided in Section 9 regarding Authority costs incurred prior to the termination of this Agreement.

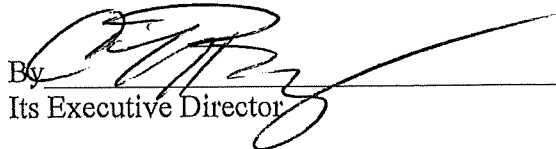
Section 13. Severability. If any portion of this Agreement is held invalid by a court of competent jurisdiction, such decision shall not affect the validity of any remaining portion of this Agreement.

Section 14. Notices. Notice, demand, or other communication from one party to the other shall be deemed effective if sent by certified mail, postage prepaid, return receipt requested or delivered personally to a party at its address in the first paragraph of this Agreement, or at such other address as such party may designate in writing to the other party.

IN WITNESS WHEREOF, the Authority has caused this Agreement to be duly executed in its name and behalf and the Developer has caused this Agreement to be duly executed in its name and behalf on or as of the date first above written

**ECONOMIC DEVELOPMENT AUTHORITY
OF BROOKLYN CENTER, MINNESOTA**

By 
Its President

By 
Its Executive Director

Brady Real Estate Development, Inc.

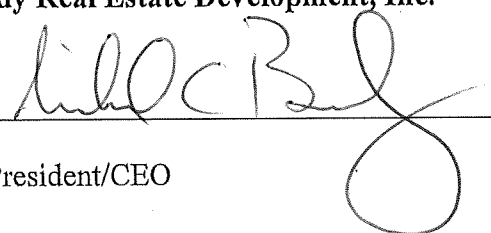
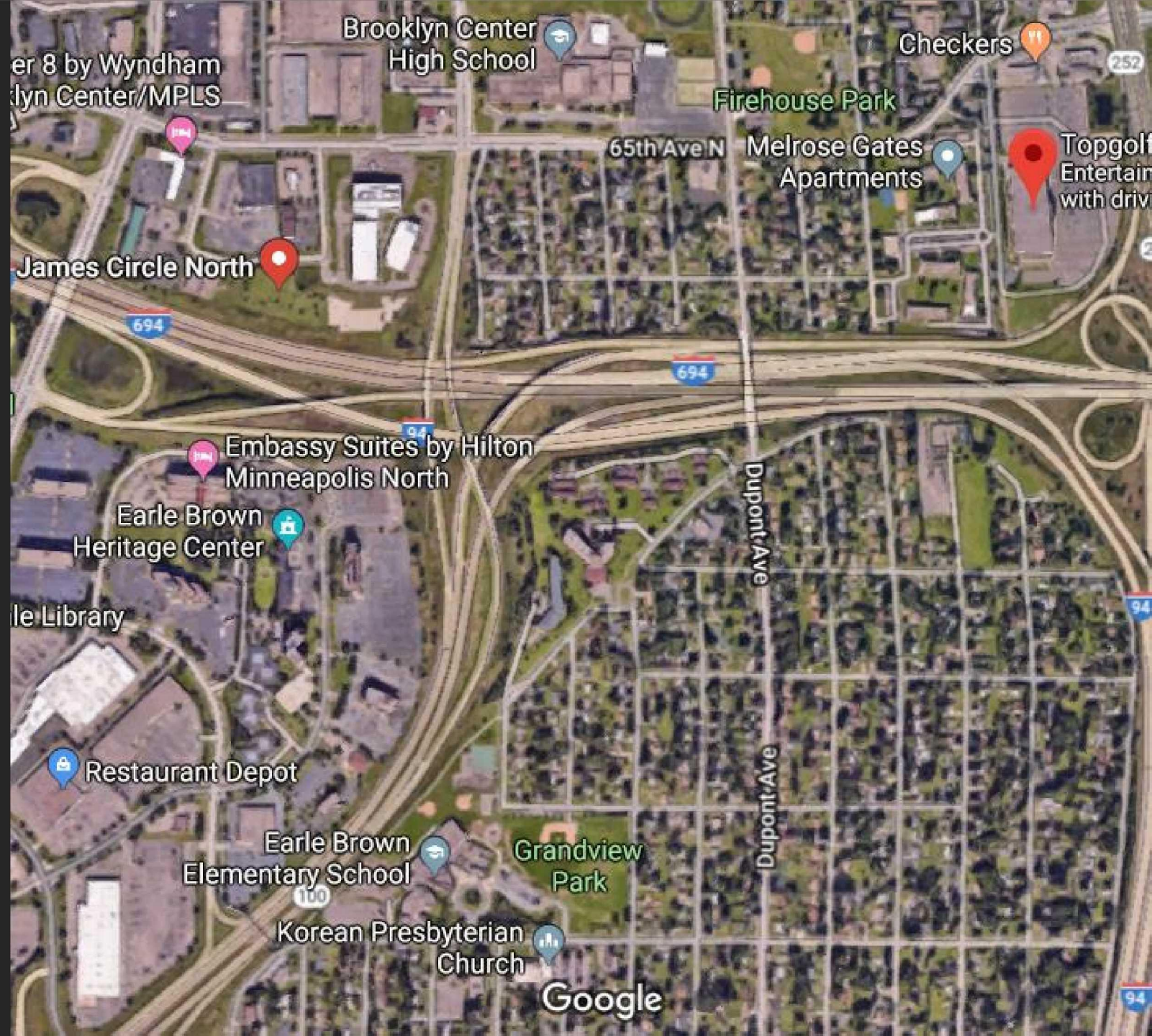
By 
Its President/CEO

EXHIBIT A
Legal Description of the Authority Property

Lot 2, Block 1, Richardson Park 3rd Addition, according to the recorded plat thereof, and situate in Hennepin County, Minnesota.

BROOKLYNS BUILDING
Brooklyn Center, MN

1601 James Circle N
Brooklyn Center, MN 55430
Hennepin County





Immigrant Focused Business Hub

AFFORDABLE
COLLABORATIVE
SERVICE RICH

OFFICE
COWORKING
INCUBATOR



Brooklyns Building Mission

BB provides the structure, i.e. real estate *and* services, for immigrant entrepreneurs to succeed. Part time and full time service provider Tenants remove entrepreneurs' roadblocks and train them to overcome hurdles. The Accelerator helps continue the growth to the establishment of secure business foundations. The facility is designed for dynamic collaboration between Tenants that fosters self initiated problem solving, creativity, and general business knowledge.

BB is affordable, beautiful, accessible, and culturally relevant.

BB is a thriving business community.

Individual and Collective Advancement

Our country's first and second generation citizens have a potential beyond our comprehension. However, that potential is often unrealized for various reasons.

Brooklyn's Building Brooklyn Center ("BB") unlocks immigrant visionaries' business hopes and desires through a building that provides structure to concentrate the energy that is currently out there; changing dynamics exponentially. Providers and entrepreneurs come together in collaboration, training, and interaction available nowhere else for this demographic. Immigrant entrepreneurs and public/private/non-profit service providers realize their goals fostering abundance.

The need is there. The expertise is there. The challenge is accomplishing the vision logistically and economically, i.e. profitably.



An aerial photograph of a city street scene, likely in an urban area. The image shows a multi-lane highway (Highway 694/94) running diagonally across the bottom. To the left of the highway, there's a large parking lot with several cars. In the background, there are various buildings, including a large white building labeled 'FEDERAL BUREAU OF INVESTIGATION' and a smaller building labeled 'Jumbo Africa'. A 'Quality Inn' is also visible. The text 'TUFAA TEMENT CENTER' is partially visible. The overall scene is a mix of commercial and institutional buildings.

Tenant Profit Sharing into Ownership

Creates Tenant
Affordability
Control
Equity
Empowerment

Cooperative ownership is a powerful and effective tool for wealth creation and investment. The developer incorporates the immense opportunities it offers at no cost to the Tenants. Cooperative ownership has the capacity to reduce poverty, enhance job creation, encourage savings, reduce business risk and improve national productivity.

In addition to the other Tenant centric features, incentives and Opportunity Zone tax savings are leveraged to benefit the Tenants' ability to receive profit sharing until the 10-year Opportunity Zone cycle occurs, and then own the property outright.

CONCEPT PLAN ONLY

Creating and Sustaining Affordability

Tenant pays
rent on time



2 x's per year profits are calculated
and 50% is shared back to tenants

An Absolute Path to Cooperative Ownership

An Option Agreement is executed up front to Sell the
Property to the Tenants in Year 10 for $\frac{1}{2}$ the actual value



Bank converts the Equity into a new mortgage
and the building is sold to the Tenants

Wealth is Created and Personal Power is Advanced

Tenants now own 100% of
the building at a 50% LTV



Rent is now permanently affordable. Equity is
established and grows with the market.

Site Benefits

- Easy site access from Interstate 94 and Highway 100
- 134,000 cars per day for Tenant visibility and seeing this Brooklyn Center showpiece, many times twice a day
- Dynamic signage, similar to HOM Furniture's, to maximize traffic benefits, attract visitors and telegraph success

Public Private Partnership

- Opportunity Zone registration and compliance
- City participation through appropriate incentives
- Minnesota DEED (for the entrepreneur Tenants)
- LISC participation
- Input and buy-in from Immigrant Cultural and Economic Development Organizations

Building Exterior

- Exterior building character reflects companies within
- Clean and contemporary building massing and details

Building amenities

- 3 story, high clear height ceilings, 81,000 square feet total, ample parking
- Tenants and guests will have well developed open and semi-private meeting spaces, indoors and outdoors, to conduct business
- High Tech feel - (Not like a typical office). The building has a presence that speaks to those that enter with more positive, cutting edge atmosphere through the architecture and Tenant energy.
- Large window areas provide passive energy, feed large plants and the soul
- Energy efficiencies and partnerships with local utilities. Long term savings and energy reduction.
- Various configurations all work well: small units with hallways, 1/2 floors, and/or entire floor-plates all make sense, thus allowing flexibility in Tenant demand, thereby shortening successful lease up of the building



Building Interior

- Open and ample common spaces encourage interaction and collaboration
- Flexible floor leasing arrangements
- Vertical windows bring daylight
- Polished concrete floors and open ceilings in key areas create a modern tech feel

Building Tenant Notes

- Major corporate anchor
- Entry level co-working to incubator to accelerator
- Immigrant friendly medical clinic amenity serving users and community
- Brady Real Estate Development, Inc. will move its permanent headquarters into the building

Building Systems

- State of the art data and communications systems
- Energy efficient heating, cooling, and ventilation systems. PACE qualified
- Energy efficient lighting and controls

Strategic Partners – 100+ years of experience

Developer

- Brady Real Estate Development - Mike Brady
Over the past 3 decades as a Commercial Real Estate Broker, Developer, Owner and Investor, BradyRED has gained acumen in various skill-sets: Joint ventures, brokerage, land development, adaptive reuse, residential community development, historic redevelopment, city processes, financing, equity raising, TIF, management, Tenant representation, property tax valuation challenges, due diligence process management, lease examination, deal structuring, consulting, and mentoring commercial real estate up and comers.

Construction

- Benson-Orth - Mike Monson
In the five decades since its founding, Benson-Orth has completed hundreds of projects including, but not limited to, shopping centers, foundries, single- and multi-story office and medical buildings, auto dealerships, hotels, heavy manufacturing buildings, and multi-family/senior housing. Projects range from small additions (5,000 SF) to large, new corporate facilities (700,000 SF) and everything in between.

Architecture

- -Building Foundry - Brian Lubben
-37 years professional experience -Long time design/build executive
-Experienced owner's and lender's rep -Former national real estate development executive
-Registered architect in multiple states -Nearing \$1 billion of construction in place
-Hundreds of successful projects throughout the United States, Asia, and Africa
-One of the real estate and building industry's most innovative problem solvers
-Entrepreneurial Operating System (EOS) / TRACTION trained and experienced

Contact Mike Brady – 612.327.2932 mikebrady@bradyred.com

Frank Ngafua, SEJI Realty, Dominion Tax Group: "I'm glad to see more options for our immigrant community in terms of office work space. I think more co-working space is needed in the Brooklyn Center area."

Jackson George, Liberian Business Association and Strategy Africa: "LIBA looks forward to collaborating with this co-working space, we are pleased to know that more opportunities for our members are becoming available in the community. Mike Brady is doing a good job seeking out input from the immigrant community on what is needed for small business and freelance professionals who need a different type of work space that is creative and accessible."

Erl Morrell-Stinson, Stellar Impact International: "As an immigrant from South Africa myself, it's great to hear that people are thinking out of the box and building spaces with the immigrant community in mind. This space will make a great context for networking and learning, as well as providing work space that's affordable for the average micro business or solopreneur."

Christy Morrell-Stinson, Significant Advantage Consulting, and SAGE Academy Public Charter High School in Brooklyn Park "I'm excited about a vibrant place to connect and work, in a really great convenient location. It's great that Mike and his team are really taking the time to reach out to the community and find out what people are looking for in a co-working space and office environment. I'm especially happy about creating new options for the small company or independent contractor and taking into consideration the diversity of people and cultures in the Brooklyns... we have a richly beautiful community and I'm glad to be part of it."

City Staff Quote

Brooklyns Building Brooklyn Center is a unique project which will advance the goals and priorities established by the City of Brooklyn Center and influence the surrounding area in an extremely positive manner. The Brooklyn Center City Council established Resident Economic Stability and Target Redevelopment as key strategic priorities, both of which Brooklyns Building advances. Brooklyns Building is a key investment for a site that has sat vacant for many years and in an area which has seen disinvestment over the same period of time. The disinvestment in the area has led to an increase in crime for the surrounding area. Brooklyns Building is seen as a catalytic project that will lead to further investment in the surrounding area and provide additional support to the surrounding businesses due to the increased number of workers and visitors this project will bring. The City of Brooklyn Center has one of the highest percentage of foreign born populations of any City located within the State of Minnesota. Many from these populations have visions and dreams of creating their own business. Brooklyns Building will provide an avenue for many to begin their entrepreneurial journey. Small locally owned businesses also are more likely to hire locally, which will provide job opportunities for existing and future residents to live and work in the same City.

While the City has additional economic development incentives that will likely go into this project, such as Tax Increment Financing, the Opportunity Zone designation has added the value to the location and is helping ensure this development will occur. The City has shown backing of this project by turning down separate offers for the site and entering into a pre-development agreement with Brady Real Estate Development. The City has been actively working with the developer and sees this development as a partnership utilizing existing programs and incentives the City offers for not only the development, but also for the entrepreneurs that will work within the building.







BC BUSINESS
TECH



Jambo Africa

Quality Inn

TUFAC EVENT CENTER

FEDERAL BUREAU OF INVESTIGATION

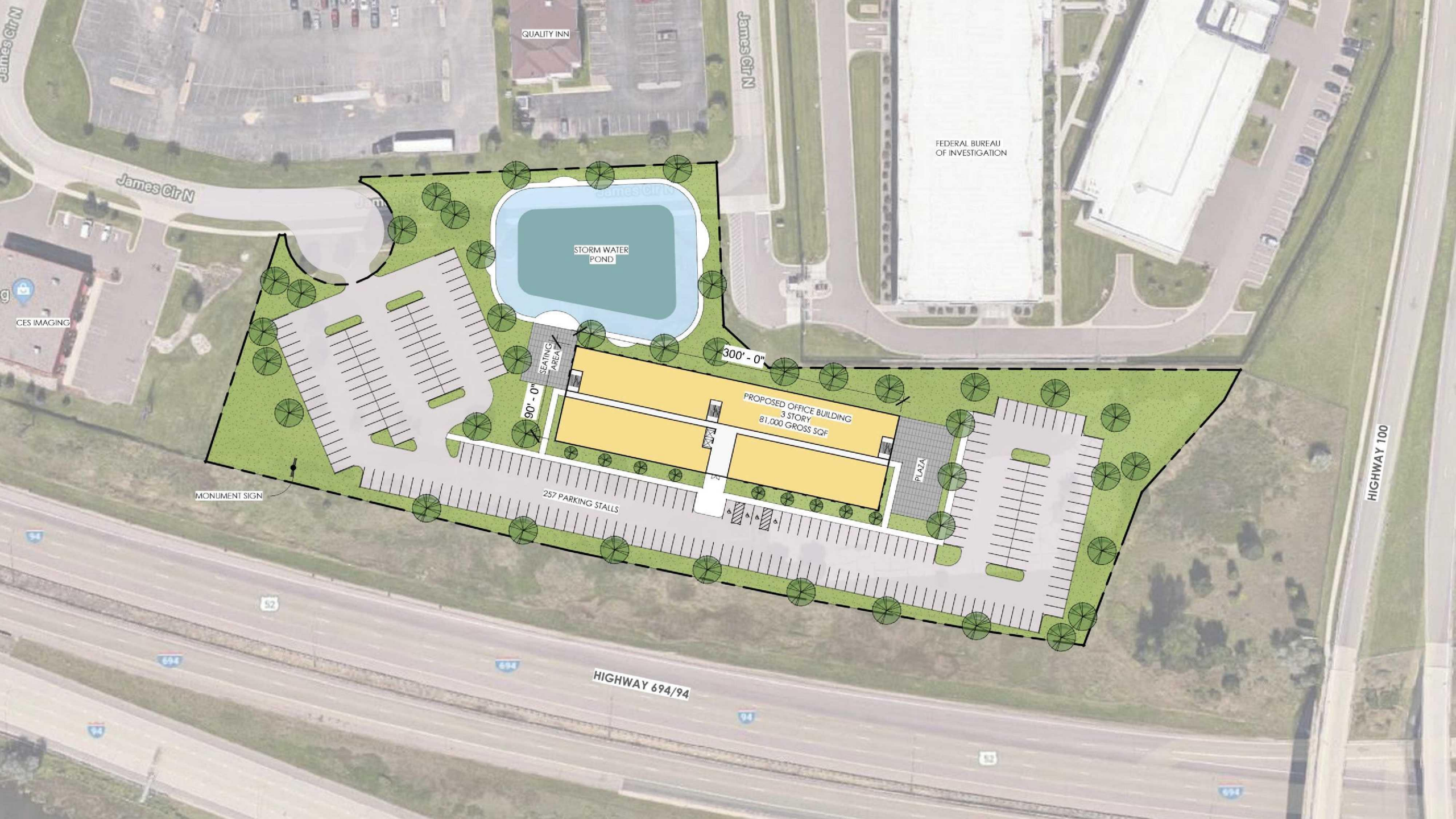
HIGHWAY 100

James City Blvd

CES Imaging

HIGHWAY 694/94

CONCEPT PLAN ONLY



James Cir N

QUALITY INN

James Cir N

FEDERAL BUREAU OF INVESTIGATION

James Cir N

STORM WATER POND

SEATING AREA

300' - 0"

PROPOSED OFFICE BUILDING
3 STORY
81,000 GROSS SQF

PLAZA

257 PARKING STALLS

MONUMENT SIGN

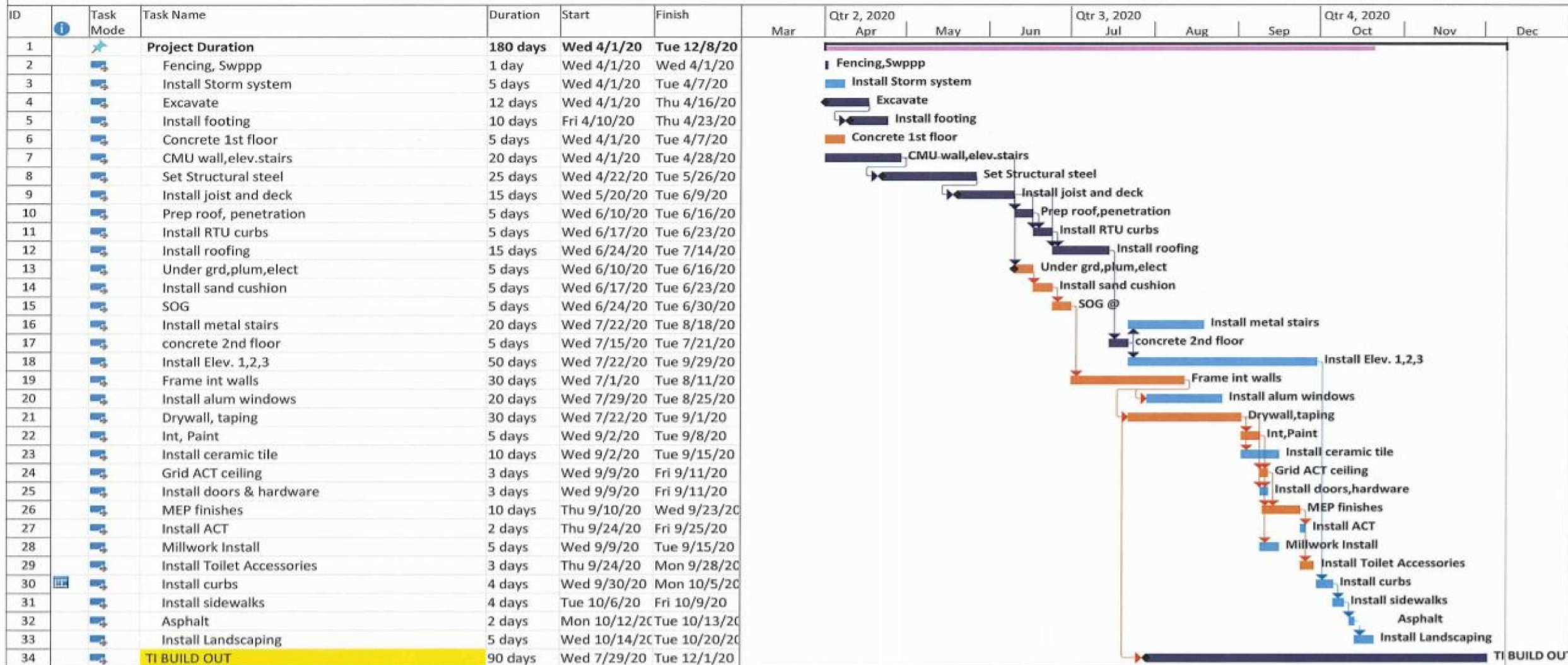
HIGHWAY 100

HIGHWAY 694/94

PRELIMINARY SCHEDULE

Brooklyn Center Business Tech Project

PRELIMINARY SCHEDULE



Task		External Tasks		Manual Task		Finish-only		Manual Progress
Split		External Milestone		Duration-only		Deadline		Critical
Milestone		Inactive Task		Manual Summary Rollup		Critical Split		Progress
Summary		Inactive Milestone		Manual Summary		Critical Split		Progress
Project Summary		Inactive Summary		Start-only		Critical Split		Progress

Property

Go to Property links

Clear results

PID: 3511921410021

1601 James Cir N
Brooklyn Center, MN 55430

Owner/Taxpayer

Owner: Econ Dev Auth Brooklyn Ctr

Taxpayer: ECON DEV AUTH BROOKLYN CTR
6301 SHINGLE CREEK PKWY
BROOKLYN CENTER MN 55430

Tax Parcel

Parcel Area: 4.93 acres
214,718 sq ft

Torrens/Abstract: Both

Addition: Richardson Park 3rd Addn

Lot: 002

Block: 001

Metes &
Bounds:

Tax Data (Assessed 2018, Payable 2019)

Market Value: \$0

Total Tax: \$0.00

Property Type: Vacant Land-Commercial

Homestead: Non-Homestead

Year Built:

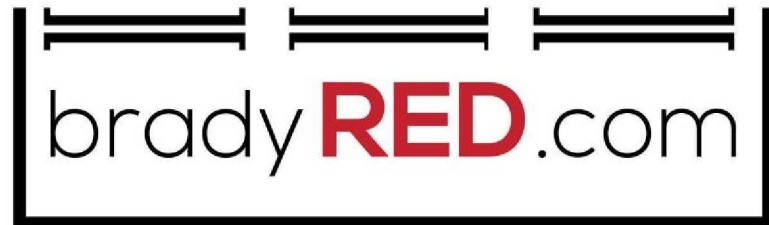
Tax Data (Assessed 2019, Payable 2020)

Market Value: \$0

Go to... +



Thank you!



Real Estate Development



MEMORANDUM - COUNCIL WORK SESSION

DATE: 9/9/2019

TO: Curt Boganey, City Manager

THROUGH: N/A

FROM:

SUBJECT: Mayor & City Council Office Discussion

Background:

MEMORANDUM - COUNCIL WORK SESSION

DATE: 9/9/2019

TO: Curt Boganey, City Manager

THROUGH: Doran Cote, Public Works Director

FROM: Andrew Hogg, Assistant City Engineer

SUBJECT: Local Water Supply Plan

Background:

In accordance with State Statute, the City is required to update the Water Supply Plan every ten years. The current update is the third generation of the City's plan and builds on the original plan approved by the City Council in April 1996, which was updated in 2007.

The Water Supply Plan provides a framework for water supply management to protect water quantity, outlines an implementation plan for education, studies, programs and capital improvements, and meets State Statutes 13.G.291. The Plan helps water suppliers prepare for droughts and water emergencies, and supports eligibility for funding requests to the Minnesota Department of Health (MDH) for the Drinking Water Revolving Fund. The Plan allows water suppliers to submit requests for new wells or expanded capacity of existing wells, simplifies the development of county comprehensive water plans and watershed plans, fulfills the contingency plan provisions required in the MDH wellhead protection and surface water protection plans, fulfills the demand reduction requirements of Minnesota Statutes, Section 103G.291 subd. 3 and 4 and upon implementation, contributes to maintaining aquifer levels, reduces potential well interference and water use conflicts, and reduces the need to drill new wells or expand system capacity.

The updated Water Supply Plan has been submitted to the Minnesota Department of Natural Resources (DNR) Watershed and the Metropolitan Council for their review and approval. The DNR has notified the City of their approval of the plan pending City Council adoption.

Strategic Priorities and Values:

Safe, Secure, Stable Community

ATTACHMENTS:

Description	Upload Date	Type
Resolution	8/20/2019	Cover Memo
Local Water Supply Plan	8/20/2019	Cover Memo
Power Point	9/5/2019	Cover Memo

Member _____ introduced the following resolution and moved its adoption:

RESOLUTION NO. _____

RESOLUTION APPROVING LOCAL WATER SUPPLY PLAN

WHEREAS, All public water suppliers in Minnesota that operate a public water distribution system, serve more than 1,000 people and/or all cities in the seven-county metropolitan area, must have a water supply plan approved by the Department of Natural Resources (DNR). In accordance with State Statute, the City must update the City's Local Water Supply Plan every ten years; and

WHEREAS, a Water Supply Plan that receives DNR approval fulfills a water supplier's statutory obligations under Minnesota Statute 13G.291; and

WHEREAS, the updated Local Water Supply Plan has been submitted to the Minnesota Department of Natural Resources for their review and the Plan has been approved.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Center, Minnesota, that:

- 1) The Brooklyn Center Local Water Supply Plan is hereby approved.

August 26, 2019

Date

Mayor

ATTEST: _____

City Clerk

The motion for the adoption of the foregoing resolution was duly seconded by member

and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

whereupon said resolution was declared duly passed and adopted.

Local Water Supply Plan Third Generation for 2016-2018

Revised October 24, 2017

Formerly called Water Emergency & Water Conservation Plan



Cover photo by Molly Shodeen



For more information on this Water Supply Plan Template, please contact the DNR Division of Ecological and Water Resources at (651) 259-5034 or (651) 259-5100.

Copyright 2015 State of Minnesota, Department of Natural Resources

This information is available in an alternative format upon request.

Equal opportunity to participate in and benefit from programs of the Minnesota Department of Natural Resources is available to all individuals regardless of race, color, creed, religion, national origin, sex, marital status, public assistance status, age, sexual orientation, disability or activity on behalf of a local human rights commission. Discrimination inquiries should be sent to Minnesota DNR, 500 Lafayette Road, St. Paul, MN 55155-4049; or the Equal Opportunity Office, Department of the Interior, Washington, DC 20240.

Table of contents

INTRODUCTION TO WATER SUPPLY PLANS (WSP)	6
Who needs to complete a Water Supply Plan	6
Groundwater Management Areas (GWMA)	6
Benefits of completing a WSP	6
WSP Approval Process	7
PART 1. WATER SUPPLY SYSTEM DESCRIPTION AND EVALUATION	9
A. Analysis of Water Demand	9
B. Treatment and Storage Capacity	11
Treatment and storage capacity versus demand	12
C. Water Sources.....	12
Limits on Emergency Interconnections	13
D. Future Demand Projections – Key Metropolitan Council Benchmark	13
Water Use Trends	13
Projection Method.....	16
E. Resource Sustainability	16
Monitoring – Key DNR Benchmark	16
Water Level Data	17
Potential Water Supply Issues & Natural Resource Impacts – Key DNR & Metropolitan Council Benchmark.....	18
Wellhead Protection (WHP) and Source Water Protection (SWP) Plans	25
F. Capital Improvement Plan (CIP)	26
Adequacy of Water Supply System.....	26
Proposed Future Water Sources.....	27
Water Source Alternatives - Key Metropolitan Council Benchmark	27
PART 2. EMERGENCY PREPAREDNESS PROCEDURES.....	28
A. Emergency Response Plan	28
B. Operational Contingency Plan	29
C. Emergency Response Procedures	29

Emergency Telephone List.....	29
Current Water Sources and Service Area	29
Procedure for Augmenting Water Supplies.....	30
Allocation and Demand Reduction Procedures.....	30
Notification Procedures.....	33
Enforcement	34
PART 3. WATER CONSERVATION PLAN	35
Progress since 2006.....	35
A. Triggers for Allocation and Demand Reduction Actions	36
B. Conservation Objectives and Strategies – Key benchmark for DNR.....	37
Objective 1: Reduce Unaccounted (Non-Revenue) Water loss to Less than 10%.....	37
Objective 2: Achieve Less than 75 Residential Gallons per Capita Demand (GPCD).....	39
Objective 3: Achieve at least 1.5% annual reduction in non-residential per capita water use.....	41
Objective 4: Achieve a Decreasing Trend in Total Per Capita Demand	42
Objective 5: Reduce Ratio of Maximum day to the Average Day Demand to Less Than 2.6	42
Objective 6: Implement Demand Reduction Measures	42
Objective 7: Additional strategies to Reduce Water Use and Support Wellhead Protection Planning	45
Objective 8: Tracking Success: How will you track or measure success through the next ten years?.....	45
C. Regulation	46
D. Retrofitting Programs.....	47
Retrofitting Programs	47
E. Education and Information Programs	47
Proposed Education Programs	48
PART 4. ITEMS FOR METROPOLITAN AREA COMMUNITIES	51
A. Water Demand Projections through 2040	51
B. Potential Water Supply Issues	51

C. Proposed Alternative Approaches to Meet Extended Water Demand Projections.....	51
D. Value-Added Water Supply Planning Efforts (Optional)	52
Source Water Protection Strategies	52
Technical assistance.....	52
GLOSSARY	53
Acronyms and Initialisms	55
APPENDICES TO BE SUBMITTED BY THE WATER SUPPLIER.....	55
Appendix 1: Well records and maintenance summaries	55
Appendix 2: Water level monitoring plan.....	55
Appendix 3: Water level graphs for each water supply well	55
Appendix 4: Capital Improvement Plan.....	55
Appendix 5: Emergency Telephone List	55
Appendix 6: Cooperative Agreements for Emergency Services	55
Appendix 7: Municipal Critical Water Deficiency Ordinance	55
Appendix 8: Graph of Ten Years of Annual Per Capita Water Demand for Each Customer Category.....	55
Appendix 9: Water Rate Structure	55
Appendix 10: Ordinances or Regulations Related to Water Use	55
Appendix 11: Implementation Checklist.....	55
Appendix 12: Sources of Information for Table 10	55

DEPARTMENT OF NATURAL RESOURCES – DIVISION OF ECOLOGICAL AND WATER RESOURCES AND METROPOLITAN COUNCIL

INTRODUCTION TO WATER SUPPLY PLANS (WSP)

Who needs to complete a Water Supply Plan

Public water suppliers serving more than 1,000 people, large private water suppliers in designated Groundwater Management Areas, and all water suppliers in the Twin Cities metropolitan area are required to prepare and submit a water supply plan.

The goal of the WSP is to help water suppliers: 1) implement long term water sustainability and conservation measures; and 2) develop critical emergency preparedness measures. Your community needs to know what measures will be implemented in case of a water crisis. A lot of emergencies can be avoided or mitigated if long term sustainability measures are implemented.

Groundwater Management Areas (GWMA)

The DNR has designated three areas of the state as Groundwater Management Areas (GWMAs) to focus groundwater management efforts in specific geographies where there is an added risk of overuse or water quality degradation. A plan directing the DNR's actions within each GWMA has been prepared. Although there are no specific additional requirements with respect to the water supply planning for communities within designated GWMAs, communities should be aware of the issues and actions planned if they are within the boundary of one of the GWMAs. The three GWMAs are the North and East Metro GWMA (Twin Cities Metro), the Bonanza Valley GWMA and the Straight River GWMA (near Park Rapids). Additional information and maps are included in the [DNR Groundwater Management Areas webpage](#).

Benefits of completing a WSP

Completing a WSP using this template, fulfills a water supplier's statutory obligations under M.S. [M.S.103G.291](#) to complete a water supply plan. For water suppliers in the metropolitan area, the WSP will help local governmental units to fulfill their requirements under M.S. 473.859 to complete a local comprehensive plan. Additional benefits of completing WSP template:

- The standardized format allows for quicker and easier review and approval
- Help water suppliers prepare for droughts and water emergencies.
- Create eligibility for funding requests to the Minnesota Department of Health (MDH) for the Drinking Water Revolving Fund.
- Allow water suppliers to submit requests for new wells or expanded capacity of existing wells.
- Simplify the development of county comprehensive water plans and watershed plans.
- Fulfill the contingency plan provisions required in the MDH wellhead protection and surface water protection plans.
- Fulfill the demand reduction requirements of Minnesota Statutes, section 103G.291 subd 3 and 4.

Upon implementation, contribute to maintaining aquifer levels, reducing potential well interference and water use conflicts, and reducing the need to drill new wells or expand system capacity.

Enable DNR to compile and analyze water use and conservation data to help guide decisions.

Conserve Minnesota's water resources

If your community needs assistance completing the Water Supply Plan, assistance is available from your area hydrologist or groundwater specialist, the MN Rural Waters Association circuit rider program, or in the metropolitan area from Metropolitan Council staff. Many private consultants are also available.

WSP Approval Process

10 Basic Steps for completing a 10-Year Water Supply Plan

1. Download the DNR/Metropolitan Council Water Supply Plan Template from the [DNR Water Supply Plan webpage](#).
2. Save the document with a file name with this naming convention:
WSP_cityname_permitnumber_date.doc.
3. The template is a form that should be completed electronically.
4. Compile the required water use data (Part 1) and emergency procedures information (Part 2)
5. The Water Conservation section (Part 3) may need discussion with the water department, council, or planning commission, if your community does not already have an active water conservation program.
6. Communities in the seven-county Twin Cities metropolitan area should complete all the information discussed in Part 4. The Metropolitan Council has additional guidance information on their [Water Supply webpage](#). All out-state water suppliers **do not** need to complete the content addressed in Part 4.
7. Use the Plan instructions and Checklist document from the [DNR Water Supply Plan webpage](#) to insure all data is complete and attachments are included. This will allow for a quicker approval process.
8. Plans should be submitted electronically using the [MPARS website](#) – no paper documents are required.
9. DNR hydrologist will review plans (in cooperation with Metropolitan Council in Metro area) and approve the plan or make recommendations.
10. Once approved, communities should complete a Certification of Adoption form, and send a copy to the DNR.

Complete Table 1 with information about the public water supply system covered by this WSP.

Table 1. General information regarding this WSP

Requested Information	Description
DNR Water Appropriation Permit Number(s)	1976-6396, 2004-3239,1963-0160
Ownership	☒ Public or ☐ Private
Metropolitan Council Area	☒ Yes or ☐ No Hennepin County
Street Address	6844 Shingle Creek Parkway
City, State, Zip	Brooklyn Center , MN 55430
Contact Person Name	Michael Weber
Title	Public Utilities Supervisor
Phone Number	763-585-7104
MDH Supplier Classification	Municipal

PART 1. WATER SUPPLY SYSTEM DESCRIPTION AND EVALUATION

The first step in any water supply analysis is to assess the current status of demand and availability. Information summarized in Part 1 can be used to develop Emergency Preparedness Procedures (Part 2) and the Water Conservation Plan (Part 3). This data is also needed to track progress for water efficiency measures.

A. Analysis of Water Demand

Complete Table 2 showing the past 10 years of water demand data.

Some of this information may be in your Wellhead Protection Plan.

If you do not have this information, do your best, call your engineer for assistance or if necessary leave blank.

If your customer categories are different than the ones listed in Table 2, please describe the differences below:

Water used for Water Supplier Services is included in Water Used for Non-Essential.

Table 2. Historic water demand (see definitions in the [glossary](#) after Part 4 of this template)

Year	Pop. Served	Total Connections	Residential Water Delivered (MG)	C/I/I Water Delivered (MG)	Water used for Non-essential	Wholesale Deliveries (MG)	Total Water Delivered (MG)	Total Water Pumped (MG)	Water Supplier Services *	Percent Unmetered/Unaccounted	Average Daily Demand (MGD)	Max. Daily Demand (MGD)	Date of Max. Demand	Residential Per Capita Demand (GPCD)	Total per capita Demand (GPCD)
2005	27432	8935	879	215	15	1109	1241	27462	---	10.6	3.4	8.3	7/8/2005	87.8	123.9
2006	27234	8904	946	68	24	1207	1317	27264	---	7.1	3.6	8.9	7/20/2006	95.2	132.5
2007	27194	8993	982	66	27	1267	1317	27224	---	2	3.6	8.5	7/28/2007	98.9	132.7
2008	27282	8986	1006.13	187.12	59.14	1252.39	1295.80	27312	---	4	3.6	7.2	7/6/2008	101.0	130.1
2009	27499	8986	959.599	261.34	8.2	1229.25	1362.77	27529	---	10	3.7	7.8	6/2/2009	95.6	135.8
2010	30140	8960	847.513	230.25	21.10	1098.67	1165.28	30170	---	6	3.2	5.8	5/28/2010	77.0	105.9
2011	30409	8887	758.88	210.91	36.72	1006.61	1072.57	30439	---	6	2.9	5.7	7/10/2011	68.4	96.6
2012	30718	8896	812.22	249.12	5.8	1067.19	1166.55	30748	---	8	3.2	7.6	8/6/2012	72.4	104.0
2013	30786	8897	753.46	237.12	16.3	1006.96	1095.14	30816	---	8	3.0	6.4	8/26/2013	67.1	97.5
2014	30740	8885	704.96	207.94	13.8	912.98	1029.25	30770	---	11	2.8	5.7	8/9/2014	62.8	91.7
2015	30761	8929	677.94	235.85	41.0	972.79	1020.13	30791	---	5	2.8	4.9	8/3/2015	60.4	90.9
Avg. 2010-2015	30592	8909	759.16	228.53	22.5	1010.87	1091.49	30622	---	7	3.0	6.0		68.0	97.8

MG – Million Gallons **MGD** – Million Gallons per Day **GPCD** – Gallons per Capita per Day

*Water used for Water Supplier Services is included in Water Used for Non-Essential.

See [Glossary](#) for definitions. A list of [Acronyms and Initialisms](#) can be found after the Glossary.

Complete Table 3 by listing the top 10 water users by volume, from largest to smallest. For each user, include information about the category of use (residential, commercial, industrial, institutional, or wholesale), the amount of water used in gallons per year, the percent of total water delivered, and the status of water conservation measures.

Table 3. Large volume users

Customer	Use Category (Residential, Industrial, Commercial, Institutional, Wholesale)	Amount Used (Gallons per Year)	Percent of Total Annual Water Delivered	Implementing Water Conservation Measures? (Yes/No/Unknown)
1. EARLE BROWN FARM APTS.	RESIDENTIAL	10,837	1.11%	NO
2. THE PINES NORTH LLC.	RESIDENTIAL	10,329	1.06%	NO
3. MEDTRONIC	COMMERCIAL	8,310	.85%	NO
4. 2200 FREEWAY PROPERTY	COMMERCIAL	7,703	.79%	NO
5. THE CREST APARTMENTS	RESIDENTIAL	5,752	.58%	NO
6. EMBASSY SUITES	COMMERCIAL	5,212	.53%	NO
7. BEACH CONDO	RESIDENTIAL	5,138	.53%	NO
8. MTC	COMMERCIAL	4,888	.50%	NO
9. SARAH HOSPITALITY	COMMERCIAL	4,582	.47%	NO
10. MEDTRONIC	COMMERCIAL	4,382	.45%	NO

B. Treatment and Storage Capacity

Complete Table 4 with a description of where water is treated, the year treatment facilities were constructed, water treatment capacity, the treatment methods (i.e. chemical addition, reverse osmosis, coagulation, sedimentation, etc.) and treatment types used (i.e. fluoridation, softening, chlorination, Fe/MN removal, coagulation, etc.). Also describe the annual amount and method of disposal of treatment residuals. Add rows to the table as needed.

Table 4. Water treatment capacity and treatment processes

Treatment Site ID (Plant Name or Well ID)	Year Constructed	Treatment Capacity (GPD)	Treatment Method	Treatment Type	Annual Volume of Residuals	Disposal Process for Residuals	Do You Reclaim Filter Backwash Water?
Brooklyn Center WTP	2015	8.5 MGD	Gravity Filters	Fe/Mn Removal	1.0 MG	Sanitary Sewer	Yes
Total	NA	8.5 MGD	NA	NA	1.0 MG	NA	NA

Complete Table 5 with information about storage structures. Describe the type (i.e. elevated, ground, etc.), the storage capacity of each type of structure, the year each structure was constructed, and the primary material for each structure. Add rows to the table as needed.

Table 5. Storage capacity, as of the end of the last calendar year

Structure Name	Type of Storage Structure	Year Constructed	Primary Material	Storage Capacity (Gallons)
Water Tower #1	Elevated storage	1958	Steel	0.5 MG
Water Tower #2	Elevated storage	1960	Steel	1.0 MG
Water Tower #3	Elevated storage	1973	Steel	1.5 MG
Clearwell/Reservoir	Ground storage	2015	Concrete	1.0 MG
Total	NA	NA	NA	4.0 MG

Treatment and storage capacity versus demand

It is recommended that total storage equal or exceed the average daily demand.

Discuss the difference between current storage and treatment capacity versus the water supplier's projected average water demand over the next 10 years (see Table 7 for projected water demand):

The water treatment capacity is 8.5 MGD and the total storage capacity is 4.5 MG. Based on the projected population and the decreasing trend of per capita water demand, the Average Daily Demand is projected to be 3.0 MGD in 2025. The water treatment capacity is more than a double of the Average Daily Demand. With the storage capacity added to the water treatment capacity the resultant capacity can meet the fire flow and peak demands for the next ten years.

C. Water Sources

Complete Table 6 by listing all types of water sources that supply water to the system, including groundwater, surface water, interconnections with other water suppliers, or others. Provide the name of each source (aquifer name, river or lake name, name of interconnecting water supplier) and the Minnesota unique well number or intake ID, as appropriate. Report the year the source was installed or established and the current capacity. Provide information about the depth of all wells. Describe the status of the source (active, inactive, emergency only, retail/wholesale interconnection) and if the source facilities have a dedicated emergency power source. Add rows to the table as needed for each installation.

Include copies of well records and maintenance summary for each well that has occurred since your last approved plan in **Appendix 1**.

Table 6. Water sources and status

Resource Type (Groundwater, Surface water, Interconnection)	Resource Name	MN Unique Well # or Intake ID	Year Installed	Capacity (Gallons per Minute)	Well Depth (Feet)	Status of Normal and Emergency Operations (active, inactive, emergency only, retail/wholesale interconnection))	Does this Source have a Dedicated Emergency Power Source? (Yes or No)
Interconnection	Interconnect – Brooklyn Park					Active – Emergency Only	No
Groundwater	Well #2	00203317	1959	1200	340	Active – Emergency Only	No
Groundwater	Well #3	00203260	1960	1200	319	Active	No
Groundwater	Well #4	00203259	1960	1200	313	Active	No
Groundwater	Well #5	00203258	1966	1500	317	Active	No
Groundwater	Well #6	00203321	1965	1500	316	Active	No
Groundwater	Well #7	00203257	1971	1500	317	Active	Yes
Groundwater	Well #8	00127269	1977	1200	316	Active	No
Groundwater	Well #9	00110493	1983	1500	320	Active	Yes
Groundwater	Well #10	00468118	1990	1500	319	Active	Yes
Total	NA	NA	NA	12300	NA	NA	NA

Please see attachments for Table 6.

Limits on Emergency Interconnections

Discuss any limitations on the use of the water sources (e.g. not to be operated simultaneously, limitations due to blending, aquifer recovery issues etc.) and the use of interconnections, including capacity limits or timing constraints (i.e. only 200 gallons per minute are available from the City of Prior Lake, and it is estimated to take 6 hours to establish the emergency connection). If there are no limitations, list none.

There are no limitations on the use of the water source.

Contact Brooklyn Park and open the connecting valve. The water withdrawn from Brooklyn Park will depend on contract limits and Brooklyn Center demand. The water quality compatibility will be monitored.

D. Future Demand Projections – Key Metropolitan Council Benchmark

Water Use Trends

Use the data in Table 2 to describe trends in 1) population served; 2) total per capita water demand; 3) average daily demand; 4) maximum daily demand. Then explain the causes for upward or downward trends. For example, over the ten years has the average daily demand trended up or down? Why is this occurring?

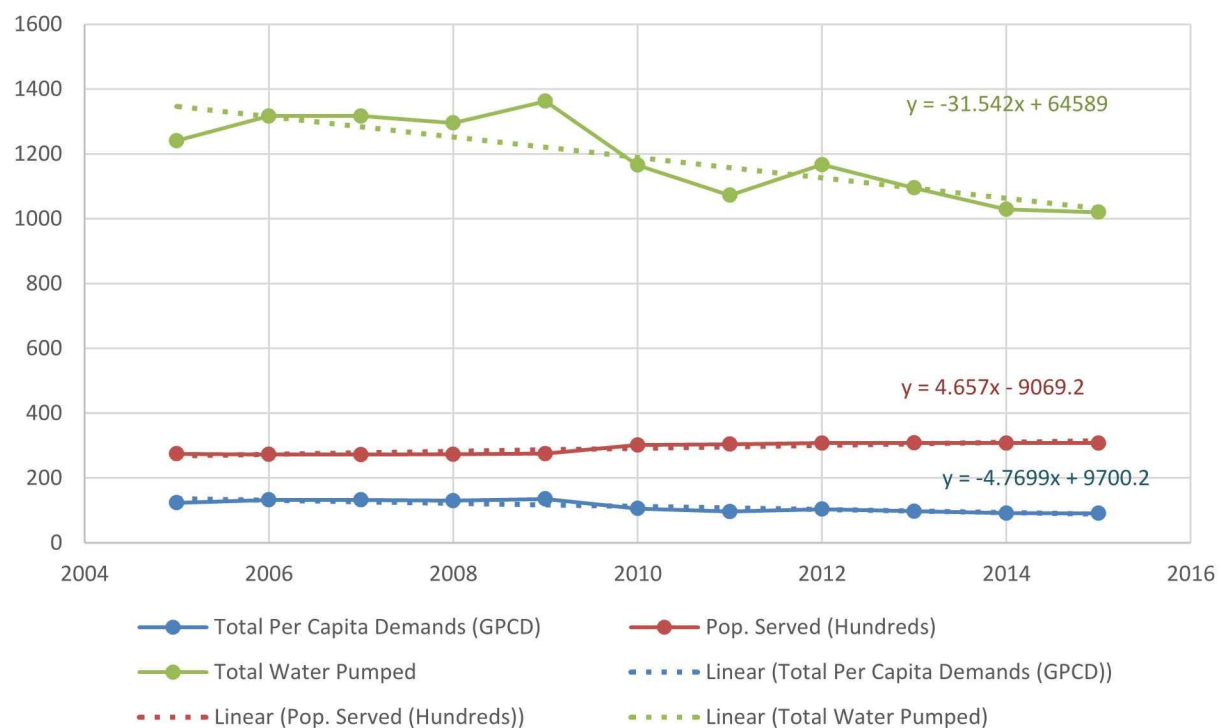
1) Population Served

Based on the population data for years 2005-2015, the population had a 9.6% increase in 2010. However, there was little increase or decrease for the rest of the range. Since 2013, there has been minimal population change ($\pm 0.2\%$).

2) Total per Capita Water Demand

Total per capita water demand has decreased by 27% over the last ten years while the population increased at 12%. Since the last Water Supply Plan, some parts of the city have been developing. Some new stores and new developments include: a beer brewery (2014), an FBI office (2012), and Caribou Coffee headquarters (2004). Despite these growths and expected higher water use, the amount of water pumped declined 18% over the last ten years. The main reason for this and the decrease in water pumped and the total per capita water demand is likely due to replacement of fixtures in older houses and business buildings with more efficient fixtures and new buildings have more efficient fixtures installed during construction.

Variation of Served Population
and Total Per Capita Water Demand

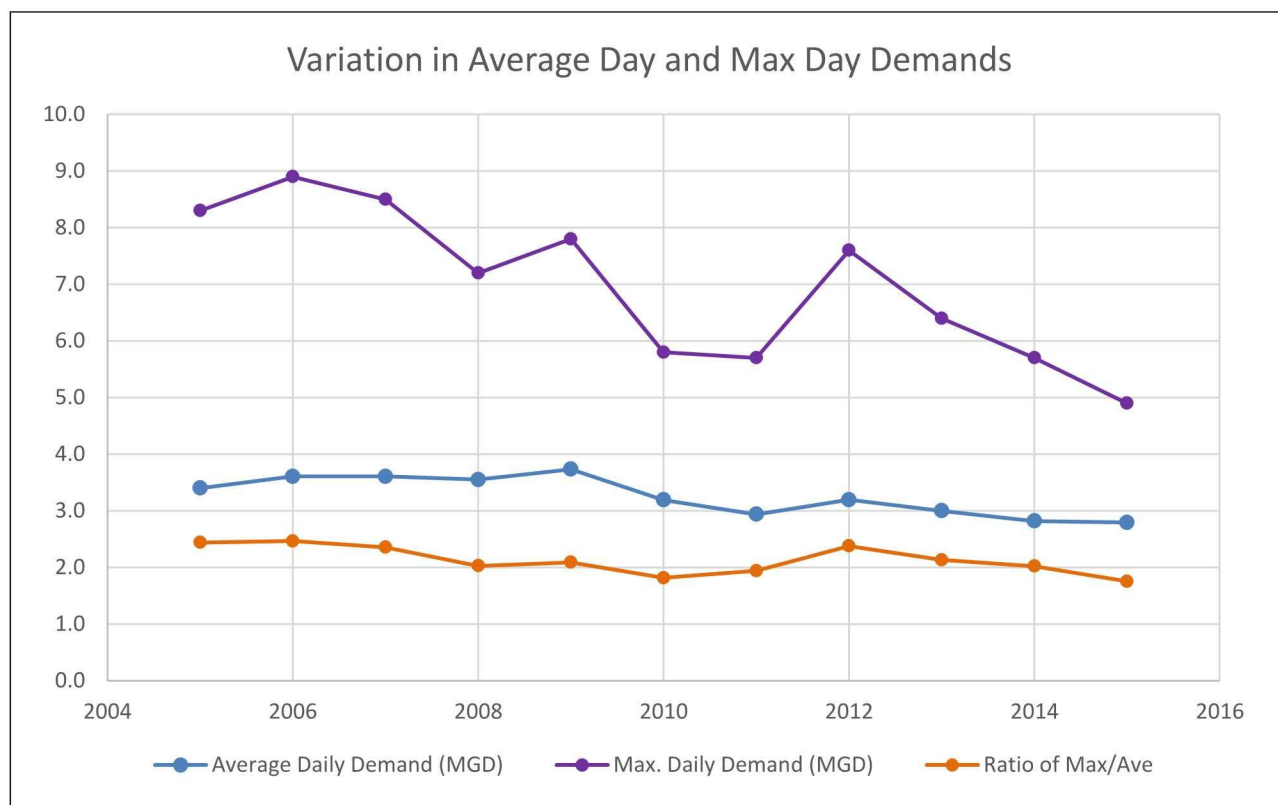


3) Average Daily Demand

Average daily demand has been decreasing at a rate of 18% per year over the last ten years and by 12.5% per year over the last 5 years. This is because the total per capita water demand has decreased significantly.

4) Maximum Daily Demand

There is some variation in Maximum Daily Demand due to weather variation; however, it has decreased overall at 41.0% per over the last ten years and by 15.5% over the last five years. Average Daily Demand has also decreased at a similar rate during the last five years. The ratio of Avg. Daily Demand to Maximum Daily Demand per year since 2011 has been steadily between 1.8 and 2.1, except for the Year 2012. It was a dry summer in 2012, which triggered a high Maximum Daily Demand and the ratio was 2.4.



Use the water use trend information discussed above to complete Table 7 with projected annual demand for the next ten years. Communities in the seven-county Twin Cities metropolitan area must also include projections for 2030 and 2040 as part of their local comprehensive planning.

Projected demand should be consistent with trends evident in the historical data in Table 2, as discussed above. Projected demand should also reflect state demographer population projections and/or other planning projections.

Table 7. Projected annual water demand

Year	Projected Total Population	Projected Population Served	Projected Total Per Capita Water Demand (GPCD)	Projected Average Daily Demand (MGD)	Projected Maximum Daily Demand (MGD)
2016	31231	31201	97.3	3.0	7.3
2017	31077	31047	96.8	3.0	7.2
2018	31254	31224	96.3	3.0	7.2
2019	31431	31401	95.8	3.0	7.2
2020	31400	31370	95.4	3.0	7.2
2021	31785	31755	94.9	3.0	7.2
2022	31962	31932	94.4	3.0	7.2
2023	32139	32109	93.9	3.0	7.2
2024	32316	32286	93.5	3.0	7.2
2025	32492	32462	93.0	3.0	7.2
2030	33000	32970	92.5	3.1	7.3
2040	35400	35370	92.1	3.3	7.8

GPCD – Gallons per Capita per Day

MGD – Million Gallons per Day

Projection Method

Describe the method used to project water demand, including assumptions for population and business growth and how water conservation and efficiency programs affect projected water demand:

Population Projection Method

Projections for the population served were based on the population estimates from the 2015 System Statement for years 2020, 2030, and 2040. 2016 population came from Metropolitan Council website. The populations for the rest of the years were estimated using a linear trend calculation.

Projected Total Per Capita Water Demand Projection Method

Following the national trend of 0.5% decrease per year, we decreased 0.5% annually. For 2016, we took the five year average between 2010-2015 and decrease the average by 0.5%.

Projected Average Daily Demand Projection Method

We multiplied the projected population by the projected total per capita water demand.

Projected Maximum Daily Demand Projection Method

Between 2011-2015, the highest Max Day to Ave Day ratio was 2.4. To see the worst-case scenario, we used 2.4 for all future years.

E. Resource Sustainability

Monitoring – Key DNR Benchmark

Complete Table 8 by inserting information about source water quality and quantity monitoring efforts. The list should include all production wells, observation wells, and source water intakes or reservoirs. Groundwater level data for DNR's statewide network of observation wells are available online through the [DNR's Cooperative Groundwater Monitoring \(CGM\) webpage](#).

Table 8. Information about source water quality and quantity monitoring

MN Unique Well # or Surface Water ID	Type of monitoring point	Monitoring program	Frequency of monitoring	Monitoring Method
00203317 Well #2	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge
00203260 Well #3	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge

MN Unique Well # or Surface Water ID	Type of monitoring point	Monitoring program	Frequency of monitoring	Monitoring Method
00203259 Well #4	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge
00203258 Well #5	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge
00203321 Well #6	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge
00203257 Well #7	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge
00127269 Well #8	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge
00110493 Well #9	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge
00468118 Well #10	☒ production well ☐ observation well ☐ source water intake ☐ source water reservoir	☒ routine MDH sampling ☐ routine water utility sampling ☐ other	☐ continuous ☐ hourly ☐ daily ☒ monthly ☐ quarterly ☐ annually	☐ SCADA ☒ grab sampling ☐ steel tape ☐ stream gauge

Water Level Data

A water level monitoring plan that includes monitoring locations and a schedule for water level readings must be submitted as **Appendix 2**. If one does not already exist, it needs to be prepared and submitted with the WSP. Ideally, all production and observation wells are monitored at least monthly.

Complete Table 9 to summarize water level data for each well being monitored. Provide the name of the aquifer and a brief description of how much water levels vary over the season (the difference between the highest and lowest water levels measured during the year) and the long-term trends for each well. If water levels are not measured and recorded on a routine basis, then provide the static water level when each well was constructed and the most recent water level measured during the same season the well was constructed. Also include all water level data taken during any well and pump maintenance. Add rows to the table as needed.

Groundwater hydrographs illustrate the historical record of aquifer water levels measured within a well and can indicate water level trends over time. For each well in your system, provide a hydrograph for the life of the well, or for as many years as water levels have been measured. Include the hydrographs in **Appendix 3**. An example of a hydrograph can be found on the. Hydrographs for DNR Observation wells can be found in the [CGM](#) discussed above.

Table 9. Water level data

Unique Well Number or Well ID	Aquifer Name	Seasonal Variation (Feet)	Long-term Trend in water level data	Water level measured during well/pumping maintenance
00203317	Jordan	10 feet	☐ Falling ☒ Stable ☐ Rising	*8/14/17 20 ft
00203260	Jordan	10 feet	☐ Falling ☒ Stable ☐ Rising	1/27/16 60.1 ft *8/14/17 43 ft.
00203259	Jordan	10 feet	☐ Falling ☒ Stable ☐ Rising	*8/14/17 40 ft.
00203258	Jordan	8 feet	☐ Falling ☒ Stable ☐ Rising	3/28/66 84.0 ft 2/4/15 87.6 ft *8/14/17 41 ft.
00203321	Jordan	10 Feet	☐ Falling ☒ Stable ☐ Rising	11/08/65 57.4 ft 3/29/16 81 ft *8/14/17 43 ft.
00203257	Jordan	8 feet	☐ Falling ☒ Stable ☐ Rising	*8/14/17 43 ft.
00127269	Jordan	7 Feet	☐ Falling ☒ Stable	5/4/77 127.8 ft 3/3/16 91.2 ft *8/14/17 43

Unique Well Number or Well ID	Aquifer Name	Seasonal Variation (Feet)	Long-term Trend in water level data	Water level measured during well/pumping maintenance
			☐ Rising	ft.
00110493	Jordan	7 Feet	☐ Falling ☒ Stable ☐ Rising	*8/41/17 44 ft.
00468118	Jordan	7 Feet	☐ Falling ☒ Stable ☐ Rising	11/19/90 85.7 ft 11/27/15 60.0 ft *8/14/17 44 ft.

*Static water level

Potential Water Supply Issues & Natural Resource Impacts – Key DNR & Metropolitan Council Benchmark

Complete Table 10 by listing the types of natural resources that are or could potentially be impacted by permitted water withdrawals in the future. You do not need to identify every single water resource in your entire community. The goal is to help you triage the most important water resources and/or the water resources that may be impacted by your water supply system – perhaps during a drought or when the population has grown significantly in ten years. This is emerging science, so do the best you can with available data. For identified resources, provide the name of specific resources that may be impacted. Identify what the greatest risks to the resource are and how the risks are being assessed. Identify any resource protection thresholds – formal or informal – that have been established to identify when actions should be taken to mitigate impacts. Provide information about the potential mitigation actions that may be taken, if a resource protection threshold is crossed. Add additional rows to the table as needed. See the glossary at the end of the template for definitions.

Some of this baseline data should have been in your earlier water supply plans or county comprehensive water plans. When filling out this table, think of what are the water supply risks, identify the resources, determine the threshold and then determine what your community will do to mitigate the impacts.

Your DNR area hydrologist is available to assist with this table.

For communities in the seven-county Twin Cities metropolitan area, the [Master Water Supply Plan Appendix 1 \(Water Supply Profiles\)](#), provides information about potential water supply issues and natural resource impacts for your community.

Steps for completing Table 10

1. Identify the potential for natural resource impacts/issues within the community

First, review available information to identify resources that may be impacted by the operation of your water supply system (such as pumping).

Potential Sources of Information:

County Geologic Atlas

Local studies

Metropolitan Council System Statement (for metro communities)

Metropolitan Council Master Water Supply Plan (for metro communities)

ACTION: Check the resource type(s) that may be impacted in the column “Resource Type”

2. *Identify where your water supply system is most likely to impact those resources (and vice versa).*

Potential Sources of Information:

Drinking Water Supply Management Areas

Geologic Atlas - Sensitivity

If no WHPA or other information exists, consider rivers, lakes, wetlands and significant within 1.5 miles of wells; and calcareous fens and trout streams within 5 miles of wells

ACTION: Focus the rest of your work in these areas.

3. *Within focus areas, identify specific features of value to the community*

You know your community best. What resources are important to pay attention to? It may be useful to check in with your community’s planning and zoning staff and others.

Potential Sources of Information:

Park plans

Local studies

Natural resource inventories

Tourist attractions/recreational areas/valued community resource

ACTION: Identify specific features that the community prioritizes in the “Resource Name” column (for example: North Lake, Long River, Brook Trout Stream, or Green Fen). If, based on a review of available information, no features are likely to be at risk, note “None”.

4. *Identify what impact(s) the resource is at risk for*

Potential Sources of Information:

Wellhead Protection Plan

Water Appropriation Permit

County Geologic Atlas

MDH or PCA reports of the area

Metropolitan Council System Statement (for metro communities)

Metropolitan Council Master Water Supply Plan (for metro communities)

ACTION: Check the risk type in the column “Risk”. If, based on a review of available information, no risk is identified, note “None anticipated”.

5. *Describe how the risk was assessed*

Potential Sources of Information:

Local studies

Monitoring data (community, WMO, DNR, etc.)

Aquifer testing

County Geologic Atlas or other hydrogeologic studies

Regional or state studies, such as DNR's report 'Definitions and Thresholds for Negative Impacts to Surface Waters'
Well boring logs

ACTION: Identify the method(s) used to identify the risk to the resource in the "Risk Assessed Through" column

6. *Describe protection threshold/goals*

What is the goal, if any, for protecting these resources? For example, is there a lower limit on acceptable flow in a river or stream? Water quality outside of an accepted range? A lower limit on acceptable aquifer level decline at one or more monitoring wells? Withdrawals that exceed some percent of the total amount available from a source? Or a lower limit on acceptable changes to a protected habitat?

Potential Sources of Information:

County Comprehensive Water Plans
Watershed Plans or One Watershed/One Plan
Groundwater or Aquifer Plans
Metropolitan Master Plans
DNR Thresholds study
Community parks, open space, and natural resource plans

ACTION: Describe resource protection goals in the "Describe Resource Protection Threshold" column or reference an existing plan/document/webpage

7. *If a goal/threshold should trigger action, describe the plan that will be implemented.*

Identify specific action, mitigation measures or management plan that the water supplier will implement, or refer to a partner's plan that includes actions to be taken.

Potential Sources of Information:

County Comprehensive Water Plans
Watershed Plans or One Watershed/One Plan
Groundwater or Aquifer Plans
Metropolitan Master Plans
Studies such as DNR Thresholds study

ACTION: Describe the mitigation measure or management plan in the "Mitigation Measure or Management Plan" column.

8. *Describe work to evaluate these risks going forward.*

For example, what is the plan to regularly check in to stay current on plans or new data?

Identify specific action that the water supplier will take to identify the creation of or change to goals/thresholds, or refer to a partner's plan that includes actions to be taken.

Potential Sources of Information:

County Comprehensive Water Plans

Watershed Plans or One Watershed/One Plan
Groundwater or Aquifer Plans
Metropolitan Master Plans
Studies such as DNR Thresholds study

ACTION: Describe what will be done to evaluate risks going forward, including any changes to goals or protection thresholds in the “Describe how Changes to Goals are monitored” column.

Table 10. Natural resource impacts (*List specific resources in Appendix 12)

Resource Type	Resource Name	Risk	Risk Assessed Through *	Describe Resource Protection Threshold or Goal *	Mitigation Measures or Management Plan	Describe How Thresholds or Goals are Monitored
☒ River or stream	Mississippi River	☐ None anticipated ☒ Flow/water level decline ☐ Degrading water quality trends ☐ Impacts on endangered, threatened, or special concern species habitat ☐ Other: _____	☒ Geologic atlas or other mapping ☐ Modeling ☐ Modeling ☐ Monitoring ☐ Aquifer testing ☐ WRAPS or other watershed report ☐ Proximity (<1.5 miles) ☐ Other: _____	☐ Not applicable ☒ Additional data is needed to establish with Shingle Creek Watershed District ☐ See report: _____ ☐ No data available ☐ Other: _____	☐ Not applicable ☒ Change groundwater pumping ☒ Increase conservation ☐ Other: _____	☐ Not applicable ☐ Newly collected data will be analyzed ☒ Regular check-in with these partners: <u>DNR</u> ☐ Other: _____
☐ Calcareous fen	NA	☒ None anticipated ☐ Flow/water level decline ☐ Degrading water quality trends ☐ Impacts on endangered, threatened, or special concern species habitat ☐ Other: _____	☒ Geologic atlas or other mapping ☐ Modeling ☐ Modeling ☐ Monitoring ☐ Aquifer testing ☐ WRAPS or other watershed Report ☐ Proximity (<5 miles) ☐ Other: _____ ☐ Other: _____	☒ Not applicable ☐ Additional data is needed to establish ☐ See report: _____ ☐ Other: _____	☒ Not applicable ☐ Change groundwater pumping ☐ Increase conservation ☐ Other: _____	☒ Not applicable ☐ Newly collected data will be analyzed ☐ Regular check-in with these partners: _____ ☐ Other: _____

Resource Type	Resource Name	Risk	Risk Assessed Through *	Describe Resource Protection Threshold or Goal *	Mitigation Measures or Management Plan	Describe How Thresholds or Goals are Monitored
☒ Lake	Twin Lakes	☐ None anticipated ☒ Flow/water level decline ☐ Degrading water quality trends ☐ Impacts on endangered, threatened, or special concern species habitat ☐ Other: _____	☒ Geologic atlas or other mapping ☐ Modeling ☐ Modeling ☐ Monitoring ☐ Aquifer testing ☐ WRAPS or other watershed report ☐ Proximity (<1.5 miles) ☐ Other: _____	☐ Not applicable ☒ Additional data is needed to establish with Shingle Creek Watershed District ☐ See report: _____ ☐ No data available ☐ Other: _____	☐ Not applicable ☒ Change groundwater pumping ☒ Increase conservation ☐ Other: _____	☐ Not applicable ☐ Newly collected data will be analyzed ☒ Regular check-in with these partners: <u>DNR</u> ☐ Other: _____
☒ Lake	Palmer Lake	☐ None anticipated ☒ Flow/water level decline ☐ Degrading water quality trends ☐ Impacts on endangered, threatened, or special concern species habitat ☐ Other: _____	☒ Geologic atlas or other mapping ☐ Modeling ☐ Modeling ☐ Monitoring ☐ Aquifer testing ☐ WRAPS or other watershed report ☐ Proximity (<1.5 miles) ☐ Other: _____	☐ Not applicable ☒ Additional data is needed to establish with Shingle Creek Watershed District ☐ See report: _____ ☐ No data available ☐ Other: _____	☐ Not applicable ☒ Change groundwater pumping ☒ Increase conservation ☐ Other: _____	☐ Not applicable ☒ Newly collected data will be analyzed ☒ Regular check-in with these partners: <u>Shingle Creek Watershed District and DNR</u> ☐ Other: _____

Resource Type	Resource Name	Risk	Risk Assessed Through *	Describe Resource Protection Threshold or Goal *	Mitigation Measures or Management Plan	Describe How Thresholds or Goals are Monitored
☒ Creek	Shingle Creek	☐ None anticipated ☒ Flow/water level decline ☐ Degrading water quality trends ☐ Impacts on endangered, threatened, or special concern species habitat ☐ Other: _____	☒ Geologic atlas or other mapping ☐ Modeling ☐ Modeling ☐ Monitoring ☐ Aquifer testing ☐ WRAPS or other watershed report ☐ Proximity (<1.5 miles) ☐ Other: _____	☐ Not applicable ☒ Additional data is needed to establish with Shingle Creek Watershed District ☐ See report: _____ ☐ No data available ☐ Other: _____	☐ Not applicable ☒ Change groundwater pumping ☒ Increase conservation ☐ Other: _____	☐ Not applicable ☐ Newly collected data will be analyzed ☒ Regular check-in with these partners: <u>DNR</u> ☐ Other: _____
☒ Aquifer	Jordan	☐ None anticipated ☒ Flow/water level decline ☐ Degrading water quality trends ☐ Impacts on endangered, threatened, or special concern species habitat ☐ Other: _____	☒ Geologic atlas or other mapping ☒ Modeling ☒ Monitoring ☒ Aquifer testing ☐ Proximity (obwell < 5 miles) ☐ Other: _____	☐ Not applicable ☒ Additional data is needed to establish ☐ See report: _____ ☐ Other: _____	☐ Not applicable ☒ Change groundwater pumping ☒ Increase conservation ☐ Other: _____	☐ Not applicable ☒ Newly collected data will be analyzed ☒ Regular check-in with these partners: <u>DNR</u> ☐ Other: _____

Wellhead Protection (WHP) and Source Water Protection (SWP) Plans

Complete Table 11 to provide status information about WHP and SWP plans.

The emergency procedures in this plan are intended to comply with the contingency plan provisions required in the Minnesota Department of Health's (MDH) Wellhead Protection (WHP) Plan and Surface Water Protection (SWP) Plan.

Table 11. Status of Wellhead Protection and Source Water Protection Plans

Plan Type	Status	Date Adopted	Date for Update
WHP	☐ In Process ☒ Completed ☐ Not Applicable	11/20/2015	11/20/2025
SWP	☐ In Process ☐ Completed ☒ Not Applicable		

WHP – Wellhead Protection Plan **SWP** – Source Water Protection Plan

F. Capital Improvement Plan (CIP)

Please note that any wells that received approval under a ten-year permit, but that were not built, are now expired and must submit a water appropriations permit.

Adequacy of Water Supply System

Complete Table 12 with information about the adequacy of wells and/or intakes, storage facilities, treatment facilities, and distribution systems to sustain current and projected demands. List planned capital improvements for any system components, in chronological order. Communities in the seven-county Twin Cities metropolitan area should also include information about plans through 2040.

The assessment can be the general status by category; it is not necessary to identify every single well, storage facility, treatment facility, lift station, and mile of pipe.

Please attach your latest Capital Improvement Plan as **Appendix 4**.

Table 12. Adequacy of Water Supply System

System Component	Planned action	Anticipated Construction Year	Notes
Wells/Intakes	☐ No action planned - adequate ☒ Repair/replacement ☐ Expansion/addition	2017/2018	Wells #4, #9, #6, and #8 Rehab
Water Storage Facilities	☐ No action planned - adequate ☒ Repair/replacement ☐ Expansion/addition	2017/2018	Tower #3-2017 Tower #2-2018 Tower #1-2020
Water Treatment Facilities	☒ No action planned - adequate ☐ Repair/replacement ☐ Expansion/addition		Built in 2015

System Component	Planned action	Anticipated Construction Year	Notes
Distribution Systems (Pipes, valves, etc.)	☐ No action planned - adequate ☒ Repair/replacement ☐ Expansion/addition	2018	Firehouse Park Project Annually, a section of the water distribution system is repaired in the road reconstruction area.
Pressure Zones	☒ No action planned - adequate ☐ Repair/replacement ☐ Expansion/addition		
Other: N/A	☐ No action planned - adequate ☐ Repair/replacement ☐ Expansion/addition		

Proposed Future Water Sources

Complete Table 13 to identify new water source installation planned over the next ten years. Add rows to the table as needed.

Table 13. Proposed future installations/sources

Source	Installation Location (approximate)	Resource Name	Proposed Pumping Capacity (gpm)	Planned Installation Year	Planned Partnerships
Groundwater	N/A				
Surface Water	N/A				
Interconnection to another supplier	53 rd & Dupont	Minneapolis Interconnection	2500 gpm	2018?	Minneapolis

Water Source Alternatives - Key Metropolitan Council Benchmark

Do you anticipate the need for alternative water sources in the next 10 years? Yes ☐ No ☒

For metro communities, will you need alternative water sources by the year 2040? Yes ☐ No ☒

If you answered yes for either question, then complete table 14. If no, insert NA.

Complete Table 14 by checking the box next to alternative approaches that your community is considering, including approximate locations (if known), the estimated amount of future demand that could be met through the approach, the estimated timeframe to implement the approach, potential partnerships, and the major benefits and challenges of the approach. Add rows to the table as needed.

For communities in the seven-county Twin Cities metropolitan area, these alternatives should include approaches the community is considering to meet projected 2040 water demand.

Table 14. Alternative water sources

Alternative Source Considered	Source and/or Installation Location (approximate)	Estimated Amount of Future Demand (%)	Timeframe to Implement (YYYY)	Potential Partners	Benefits	Challenges
☐ Groundwater	N/A					
☐ Surface Water	N/A					
☐ Reclaimed stormwater	N/A					
☐ Reclaimed wastewater	N/A					
☐ Interconnection to another supplier	N/A					

PART 2. EMERGENCY PREPAREDNESS PROCEDURES

The emergency preparedness procedures outlined in this plan are intended to comply with the contingency plan provisions required by MDH in the WHP and SWP. Water emergencies can occur as a result of vandalism, sabotage, accidental contamination, mechanical problems, power failings, drought, flooding, and other natural disasters. The purpose of emergency planning is to develop emergency response procedures and to identify actions needed to improve emergency preparedness. In the case of a municipality, these procedures should be in support of, and part of, an all-hazard emergency operations plan. Municipalities that already have written procedures dealing with water emergencies should review the following information and update existing procedures to address these water supply protection measures.

A. Emergency Response Plan

Section 1433(b) of the Safe Drinking Water Act, (Public Law 107-188, Title IV- Drinking Water Security and Safety) requires community water suppliers serving over 3,300 people to prepare an Emergency Response Plan. MDH recommends that Emergency Response Plans are updated annually.

Do you have an Emergency Response Plan? Yes ☒ No ☐

Have you updated the Emergency Response Plan in the last year? Yes ☒ No ☐

When did you last update your Emergency Response Plan? In Process

Complete Table 15 by inserting the noted information regarding your completed Emergency Response Plan.

Table 15. Emergency Response Plan contact information

Emergency Response Plan Role	Contact Person	Contact Number	Phone	Contact Email
Emergency Response Lead	JEREMY HULKE	763-549-3610		JHULKE@CI.BROOKLYN-CENTER.MN.US

Emergency Response Plan Role	Contact Person	Contact Number	Phone	Contact Email
Alternate Emergency Response Lead	GARY HENDRICKSON	763-549-3611		GHENDRICKSON@CI.BROOKLYN-CENTER.MN.US

B. Operational Contingency Plan

All utilities should have a written operational contingency plan that describes measures to be taken for water supply mainline breaks and other common system failures as well as routine maintenance.

Do you have a written operational contingency plan? Yes ☒ No ☐

At a minimum, a water supplier should prepare and maintain an emergency contact list of contractors and suppliers.

C. Emergency Response Procedures

Water suppliers must meet the requirements of MN Rules 4720.5280. Accordingly, the Minnesota Department of Natural Resources (DNR) requires public water suppliers serving more than 1,000 people to submit Emergency and Conservation Plans. Water emergency and conservation plans that have been approved by the DNR, under provisions of Minnesota Statute 186 and Minnesota Rules, part 6115.0770, will be considered equivalent to an approved WHP contingency plan.

Emergency Telephone List

Prepare and attach a list of emergency contacts, including the MN Duty Officer (1-800-422-0798), as **Appendix 5**. An [Emergency Contact List template](#) is available at the [MnDNR Water Supply Plans webpage](#).

The list should include key utility and community personnel, contacts in adjacent water suppliers, and appropriate local, state and federal emergency contacts. Please be sure to verify and update the contacts on the emergency telephone list and date it. Thereafter, update on a regular basis (once a year is recommended). In the case of a municipality, this information should be contained in a notification and warning standard operating procedure maintained by the Emergency Manager for that community. Responsibilities and services for each contact should be defined.

Current Water Sources and Service Area

Quick access to concise and detailed information on water sources, water treatment, and the distribution system may be needed in an emergency. System operation and maintenance records should be maintained in secured central and back-up locations so that the records are accessible for emergency purposes. A detailed map of the system showing the treatment plants, water sources, storage facilities, supply lines, interconnections, and other information that would be useful in an emergency should also be readily available. It is critical that public water supplier representatives and emergency response personnel communicate about the response procedures and be able to easily obtain this kind of information both in electronic and hard copy formats (in case of a power outage).

Do records and maps exist? Yes ☒ No ☐

Can staff access records and maps from a central secured location in the event of an emergency?

Yes ☒ No ☐

Does the appropriate staff know where the materials are located?

Yes ☒ No ☐

Procedure for Augmenting Water Supplies

Complete Tables 16 – 17 by listing all available sources of water that can be used to augment or replace existing sources in an emergency. Add rows to the tables as needed.

In the case of a municipality, this information should be contained in a notification and warning standard operating procedure maintained by the warning point for that community. Municipalities are encouraged to execute cooperative agreements for potential emergency water services and copies should be included in **Appendix 6**. Outstate Communities may consider using nearby high capacity wells (industry, golf course) as emergency water sources.

WSP should include information on any physical or chemical problems that may limit interconnections to other sources of water. Approvals from the MDH are required for interconnections or the reuse of water.

Table 16. Interconnections with other water supply systems to supply water in an emergency

Other Water Supply System Owner	Capacity (GPM & MGD)	Note Any Limitations On Use	List of services, equipment, supplies available to respond
City of Brooklyn Park	2500GPM 3.6 MGD	CAPACITY MIGHT CHANGE DEPENDING ON SEASON	VALVE WRENCH, TRUCK, PERSONNEL

GPM – Gallons per minute MGD – million gallons per day

Table 17. Utilizing surface water as an alternative source

Surface Water Source Name	Capacity (GPM)	Capacity (MGD)	Treatment Needs	Note Any Limitations On Use
Insert name of surface water source here	N/A			

If not covered above, describe additional emergency measures for providing water (obtaining bottled water, or steps to obtain National Guard services, etc.)

NA

Allocation and Demand Reduction Procedures

Complete Table 18 by adding information about how decisions will be made to allocate water and reduce demand during an emergency. Provide information for each customer category, including its

priority ranking, average day demand, and demand reduction potential for each customer category. Modify the customer categories as needed, and add additional lines if necessary.

Water use categories should be prioritized in a way that is consistent with Minnesota Statutes 103G.261 (#1 is highest priority) as follows:

1. Water use for human needs such as cooking, cleaning, drinking, washing and waste disposal; use for on-farm livestock watering; and use for power production that meets contingency requirements.
2. Water use involving consumption of less than 10,000 gallons per day (usually from private wells or surface water intakes)
3. Water use for agricultural irrigation and processing of agricultural products involving consumption of more than 10,000 gallons per day (usually from private high-capacity wells or surface water intakes)
4. Water use for power production above the use provided for in the contingency plan.
5. All other water use involving consumption of more than 10,000 gallons per day.
6. Nonessential uses – car washes, golf courses, etc.

Water used for human needs at hospitals, nursing homes and similar types of facilities should be designated as a high priority to be maintained in an emergency. Lower priority uses will need to address water used for human needs at other types of facilities such as hotels, office buildings, and manufacturing plants. The volume of water and other types of water uses at these facilities must be carefully considered. After reviewing the data, common sense should dictate local allocation priorities to protect domestic requirements over certain types of economic needs. Water use for lawn sprinkling, vehicle washing, golf courses, and recreation are legislatively considered non-essential.

Table 18. Water use priorities

Customer Category	Allocation Priority	Average Daily Demand (GPD)	Short-Term Emergency Demand Reduction Potential (GPD)
Residential	1	2,079,896	519,974
Institutional	N/A	---	---
Commercial	5	626,114	156,529
Industrial	N/A	---	---
Wholesale	N/A	---	---
Non-Essential	6	61,516	15,379
Water Supplier Services	3	237,273	0
TOTAL	---	3,004,799	691,882

GPD – Gallons per Day

Tip: Calculating Emergency Demand Reduction Potential

The emergency demand reduction potential for all uses will typically equal the difference between maximum use (summer demand) and base use (winter demand). In extreme emergency situations, lower priority water uses must be restricted or eliminated to protect priority domestic water requirements. Emergency demand reduction potential should be based on average day demands for

customer categories within each priority class. Use the tables in Part 3 on water conservation to help you determine strategies.

Complete Table 19 by selecting the triggers and actions during water supply disruption conditions.

Table 19. Emergency demand reduction conditions, triggers and actions (Select all that may apply and describe)

Emergency Triggers	Short-term Actions	Long-term Actions
☒ Contamination ☒ Loss of production ☒ Infrastructure failure ☐ Executive order by Governor ☐ Other: _____	☒ Supply augmentation through <u>Interconnection with Brooklyn Park</u> ☒ Adopt (if not already) and enforce a critical water deficiency ordinance to penalize lawn watering, vehicle washing, golf course and park irrigation & other nonessential uses. ☒ Water allocation through <u>drinking water and hygiene</u> ☐ Meet with large water users to discuss their contingency plan.	☒ Supply augmentation through <u>Interconnection with Brooklyn Park</u> ☒ Adopt (if not already) and enforce a critical water deficiency ordinance to penalize lawn watering, vehicle washing, golf course and park irrigation & other nonessential uses. ☒ Water allocation through <u>water trucks</u> ☐ Meet with large water users to discuss their contingency plan.

Notification Procedures

Complete Table 20 by selecting trigger for informing customers regarding conservation requests, water use restrictions, and suspensions; notification frequencies; and partners that may assist in the notification process. Add rows to the table as needed.

Table 20. Plan to inform customers regarding conservation requests, water use restrictions, and suspensions

Notification Trigger(s)	Methods (select all that apply)	Update Frequency	Partners
☒ Short-term demand reduction declared (< 1 year)	☒ Website ☒ Email list serve ☒ Social media (e.g. Twitter, Facebook) ☐ Direct customer mailing, ☒ Press release (TV, radio, newspaper), ☐ Meeting with large water users (> 10% of total city use) ☐ Other: _____	☐ Daily ☒ Weekly ☐ Monthly ☐ Annually	Brooklyn Center PD/FD
☒ Long-term Ongoing demand reduction declared	☒ Website ☒ Email list serve ☒ Social media (e.g. Twitter, Facebook) ☐ Direct customer mailing, ☒ Press release (TV, radio, newspaper), ☒ Meeting with large water users (> 10% of total city use) ☐ Other: _____	☒ Daily ☐ Weekly ☐ Monthly ☐ Annually	Brooklyn Center PD/FD All City Staff involved
☒ Governor's critical water deficiency declared	☒ Website ☒ Email list serve ☒ Social media (e.g. Twitter, Facebook)	☒ Daily ☐ Weekly ☐ Monthly ☐ Annually	Brooklyn Center PD/FD All City Staff involved Neighboring Cities

Notification Trigger(s)	Methods (select all that apply)	Update Frequency	Partners
	☒ Direct customer mailing, ☒ Press release (TV, radio, newspaper), ☒ Meeting with large water users (> 10% of total city use) ☐ Other: _____		

Enforcement

Prior to a water emergency, municipal water suppliers must adopt regulations that restrict water use and outline the enforcement response plan. The enforcement response plan must outline how conditions will be monitored to know when enforcement actions are triggered, what enforcement tools will be used, who will be responsible for enforcement, and what timelines for corrective actions will be expected.

Affected operations, communications, and enforcement staff must then be trained to rapidly implement those provisions during emergency conditions.

Important Note:

Disregard of critical water deficiency orders, even though total appropriation remains less than permitted, is adequate grounds for immediate modification of a public water supply authority's water use permit (2013 MN Statutes 103G.291)

Does the city have a critical water deficiency restriction/official control in place that includes provisions to restrict water use and enforce the restrictions? (This restriction may be an ordinance, rule, regulation, policy under a council directive, or other official control) Yes ☒ No ☐

If yes, attach the official control document to this WSP as **Appendix 7**.

If no, the municipality must adopt such an official control within 6 months of submitting this WSP and submit it to the DNR as an amendment to this WSP.

Irrespective of whether a critical water deficiency control is in place, does the public water supply utility, city manager, mayor, or emergency manager have standing authority to implement water restrictions? Yes ☒ No ☐

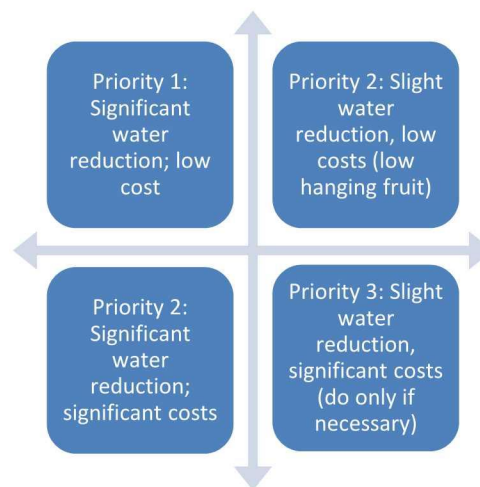
If yes, cite the regulatory authority reference: City Ordinance 4-202.

If no, who has authority to implement water use restrictions in an emergency?

NA

PART 3. WATER CONSERVATION PLAN

Minnesotans have historically benefited from the state's abundant water supplies, reducing the need for conservation. There are however, limits to the available supplies of water and increasing threats to the quality of our drinking water. Causes of water supply limitation may include: population increases, economic trends, uneven statewide availability of groundwater, climatic changes, and degraded water quality. Examples of threats to drinking water quality include: the presence of contaminant plumes from past land use activities, exceedances of water quality standards from natural and human sources, contaminants of emerging concern, and increasing pollutant trends from nonpoint sources.



There are many incentives for conserving water; conservation:

- reduces the potential for pumping-induced transfer of contaminants into the deeper aquifers, which can add treatment costs
- reduces the need for capital projects to expand system capacity
- reduces the likelihood of water use conflicts, like well interference, aquatic habitat loss, and declining lake levels
- conserves energy, because less energy is needed to extract, treat and distribute water (and less energy production also conserves water since water is used to produce energy)
- maintains water supplies that can then be available during times of drought

It is therefore imperative that water suppliers implement water conservation plans. The first step in water conservation is identifying opportunities for behavioral or engineering changes that could be made to reduce water use by conducting a thorough analysis of:

- Water use by customer
- Extraction, treatment, distribution and irrigation system efficiencies
- Industrial processing system efficiencies
- Regulatory and barriers to conservation
- Cultural barriers to conservation
- Water reuse opportunities

Once accurate data is compiled, water suppliers can set achievable goals for reducing water use. A successful water conservation plan follows a logical sequence of events. The plan should address both conservation on the supply side (leak detection and repairs, metering), as well as on the demand side (reductions in usage). Implementation should be conducted in phases, starting with the most obvious and lowest-cost options. In some cases, one of the early steps will be reviewing regulatory constraints to water conservation, such as lawn irrigation requirements. Outside funding and grants may be available for implementation of projects. Engage water system operators and maintenance staff and customers in brainstorming opportunities to reduce water use. Ask the question: "How can I help save water?"

Progress since 2006

Is this your community's first Water Supply Plan? Yes ☐ No ☒

If yes, describe conservation practices that you are already implementing, such as: pricing, system improvements, education, regulation, appliance retrofitting, enforcement, etc.

NA

If no, complete Table 21 to summarize conservation actions taken since the adoption of the 2006 water supply plan.

Table 21. Implementation of previous ten-year Conservation Plan

2006 Plan Commitments	Action Taken?
Change water rates structure to provide conservation pricing	☒ Yes ☐ No
Water supply system improvements (e.g. leak repairs, valve replacements, etc.) Leak survey completed every year. Road Reconstruction projects	☒ Yes ☐ No
Educational efforts	☐ Yes ☒ No
New water conservation ordinances Resolution 09-154 Effective 1/1/2010	☒ Yes ☐ No
Rebate or retrofitting Program (e.g. for toilet, faucets, appliances, showerheads, dish washers, washing machines, irrigation systems, rain barrels, water softeners, etc.)	☐ Yes ☒ No
Enforcement	☒ Yes ☐ No
Describe other Sprinkling Ban ODD/Even	☒ Yes ☐ No

What are the results you have seen from the actions in Table 21 and how were results measured?

People watering in the morning and night not during the day. Less unaccounted water, we are finding leaks before they ever surface.

A. Triggers for Allocation and Demand Reduction Actions

Complete table 22 by checking each trigger below, as appropriate, and the actions to be taken at various levels or stages of severity. Add in additional rows to the table as needed.

Table 22. Short and long-term demand reduction conditions, triggers and actions

Objective	Triggers	Actions
Protect surface water flows	☐ Low stream flow conditions	☐ Increase promotion of conservation

Objective	Triggers	Actions
	☐ Reports of declining wetland and lake levels ☐ Other: _____	measures ☐ Other: _____
Short-term demand reduction (less than 1 year)	☒ Extremely high seasonal water demand (more than double winter demand) ☒ Loss of treatment capacity ☒ Lack of water in storage ☐ State drought plan ☐ Well interference ☐ Other: _____	☒ Adopt (if not already) and enforce the critical water deficiency ordinance to restrict or prohibit lawn watering, vehicle washing, golf course and park irrigation & other nonessential uses. ☐ Supply augmentation through _____ ☐ Water allocation through _____ ☐ Meet with large water users to discuss user's contingency plan.
Long-term demand reduction (>1 year)	☒ Per capita demand increasing ☐ Total demand increase (higher population or more industry). Water level in well(s) below elevation of _____ ☐ Other: _____	☒ Develop a critical water deficiency ordinance that is or can be quickly adopted to penalize lawn watering, vehicle washing, golf course and park irrigation & other nonessential uses. ☒ Enact a water waste ordinance that targets overwatering (causing water to flow off the landscape into streets, parking lots, or similar), watering impervious surfaces (streets, driveways or other hardscape areas), and negligence of known leaks, breaks, or malfunctions. ☐ Meet with large water users to discuss user's contingency plan. ☒ Enhanced monitoring and reporting: audits, meters, billing, etc.
Governor's "Critical Water Deficiency Order" declared	☐ Describe	☒ Describe Suspend lawn watering, vehicle washing, golf course and park irrigation and other non-essential uses

B. Conservation Objectives and Strategies – *Key benchmark for DNR*

This section establishes water conservation objectives and strategies for eight major areas of water use.

Objective 1: Reduce Unaccounted (Non-Revenue) Water loss to Less than 10%

The Minnesota Rural Water Association, the Metropolitan Council and the Department of Natural Resources recommend that all water uses be metered. Metering can help identify high use locations and times, along with leaks within buildings that have multiple meters.

It is difficult to quantify specific unmetered water use such as that associated with firefighting and system flushing or system leaks. Typically, water suppliers subtract metered water use from total water pumped to calculate unaccounted or non-revenue water loss.

Is your five-year average (2005-2014) unaccounted Water Use in Table 2 higher than 10%?

Yes ☐ No ☒

What is your leak detection monitoring schedule? (e.g. Monitor 1/3rd of the city lines per year)

The current Leak Detection schedule: half the City a year

Water Audits - are designed to help quantify and track water losses associated with water distribution systems and identify areas for improved efficiency and cost recovery. The American Water Works Association (AWWA) has a recommended water audit methodology which is presented in [AWWA's M36 Manual of Water Supply Practices: Water Audits and Loss Control Programs](#). AWWA also provides a free spreadsheet-based water audit tool that water suppliers can use to conduct their own water audits. This free water audit tool can be found on AWWA's [Water Loss Control webpage](#). Another resource for water audit and water loss control information is [Minnesota Rural Water Association](#).

What is the date of your most recent water audit? 2017

Frequency of water audits: ☒ yearly ☐ other (specify frequency) _____

Leak detection and survey: ☒ every year ☐ every other year ☐ periodic as needed

Year last leak detection survey completed: 2017

If Table 2 shows annual water losses over 10% or an increasing trend over time, describe what actions will be taken to reach the <10% loss objective and within what timeframe

NA

Metering -AWWA recommends that every water supplier install meters to account for all water taken into its system, along with all water distributed from its system at each customer's point of service. An effective metering program relies upon periodic performance testing, repair, maintenance or replacement of all meters. Drinking Water Revolving Loan Funds are available for purchase of new meters when new plants are built. AWWA also recommends that water suppliers conduct regular water audits to account for unmetered unbilled consumption, metered unbilled consumption and source water and customer metering inaccuracies. Some cities install separate meters for interior and exterior water use, but some research suggests that this may not result in water conservation.

Complete Table 23 by adding the requested information regarding the number, types, testing and maintenance of customer meters.

Table 23. Information about customer meters

Customer Category	Number of Customers	Number of Metered Connections	Number of Automated Meter Readers	Meter testing intervals (years)	Average age/meter replacement schedule (years)
Residential	8417	8417	8417	As Needed	8 years old/15-20
Irrigation meters	178	178	178	As Needed	8 years old/15-20

Customer Category	Number of Customers	Number of Metered Connections	Number of Automated Meter Readers	Meter testing intervals (years)	Average age/meter replacement schedule (years)
Institutional	37	37	37	As Needed	8 years old/15-20
Commercial	313	313	313	As Needed	8 years old/15-20
Industrial	0	0	0	NA	NA
Public facilities	159	159	159	As Needed	8 years old/15-20
Other	N/A	---	---	---	___ / ___
TOTALS	9104	9104	9104	NA	NA

For unmetered systems, describe any plans to install meters or replace current meters with advanced technology meters. Provide an estimate of the cost to implement the plan and the projected water savings from implementing the plan.

NA

Table 24. Water source meters

	Number of Meters	Meter testing schedule (years)	Number of Automated Meter Readers	Average age/meter replacement schedule (years)
Water source (wells/intakes)	9	1	0	15-20 years old/With every well rehabilitation, which is every 6 years
Treatment plant	1	1	1	New in 2015/ Every 15-20years

Objective 2: Achieve Less than 75 Residential Gallons per Capita Demand (GPCD)

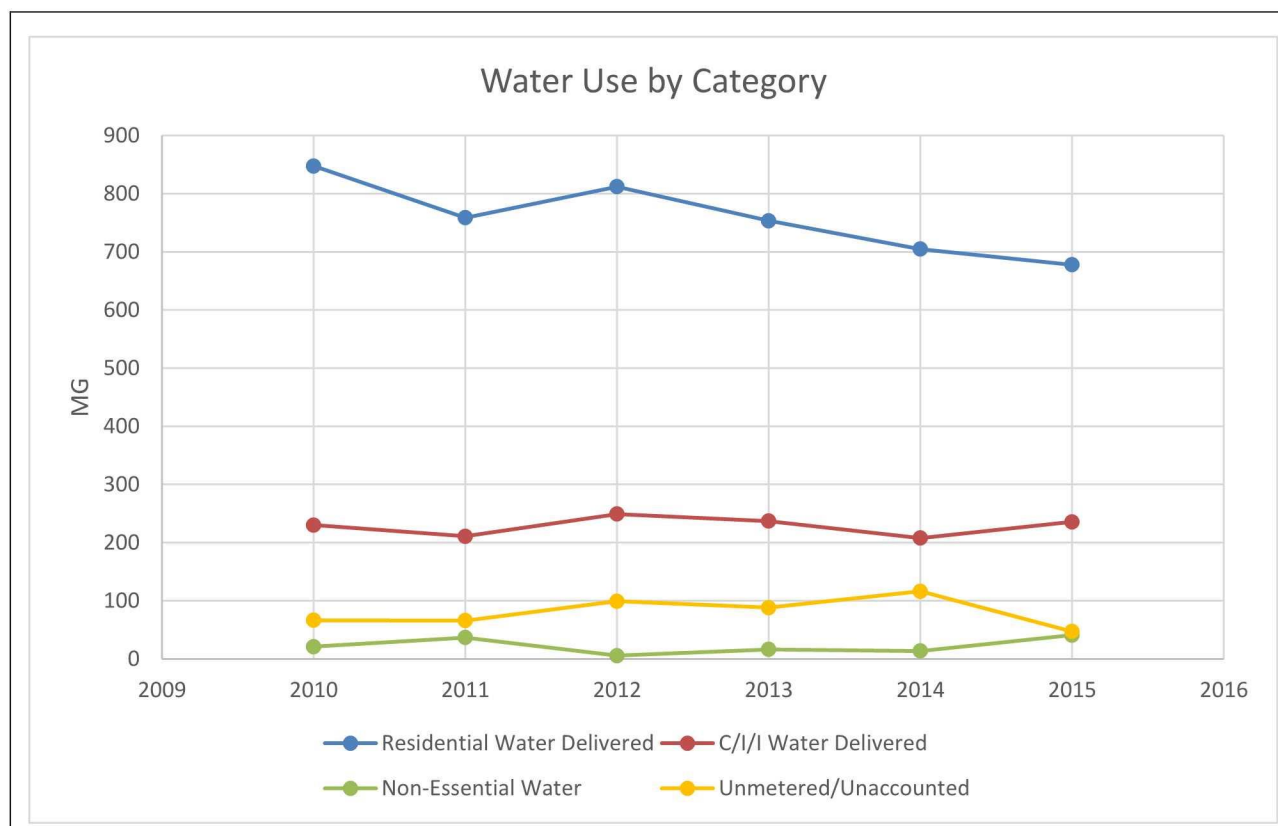
The 2002 average residential per capita demand in the Twin Cities Metropolitan area was 75 gallons per capita per day.

Is your average 2010-2015 residential per capita water demand in Table 2 more than 75? Yes ☐ No ☒

What was your 2010 – 2015 five-year average residential per capita water demand? 68 g/person/day

Describe the water use trend over that timeframe:

Water use in Brooklyn Center has decreased over the last six years despite the increase in number of service connections. During the years of 2010 to 2015, least squares linear regression indicates that the best fit values increased 2% for serviced population and decreased 12% for total water pumped. Least squares linear regression for 2010-2015 also shows that water use declined for residential use at 19%, increased for non-essential use at 20%, increased for unmetered use at 26%, and remained relatively unchanged for C/I/I. The use of higher efficiency appliances and our customers being aware to conserve water probably have attributed to the decline.



Complete Table 25 by checking which strategies you will use to continue reducing residential per capita demand and project a likely timeframe for completing each checked strategy (Select all that apply and add rows for additional strategies):

Table 25. Strategies and timeframe to reduce residential per capita demand

Strategy to reduce residential per capita demand	Timeframe for completing work
☐ Revise city ordinances/codes to encourage or require water efficient landscaping.	
☐ Revise city ordinance/codes to permit water reuse options, especially for non-potable purposes like irrigation, groundwater recharge, and industrial use. Check with plumbing authority to see if internal buildings reuse is permitted	
☒ Revise ordinances to limit irrigation. Describe the restricted irrigation plan: No watering Noon-5pm	2018
☐ Revise outdoor irrigation installations codes to require high efficiency systems (e.g. those with soil moisture sensors or programmable watering areas) in new installations or system replacements.	
☒ Make water system infrastructure improvements	2018
☐ Offer free or reduced cost water use audits) for residential customers.	
☒ Implement a notification system to inform customers when water availability conditions change.	2018

Strategy to reduce residential per capita demand	Timeframe for completing work
☐ Provide rebates or incentives for installing water efficient appliances and/or fixtures indoors (e.g., low flow toilets, high efficiency dish washers and washing machines, showerhead and faucet aerators, water softeners, etc.)	
☐ Provide rebates or incentives to reduce outdoor water use (e.g., turf replacement/reduction, rain gardens, rain barrels, smart irrigation, outdoor water use meters, etc.)	
☐ Identify supplemental Water Resources	
☐ Conduct audience-appropriate water conservation education and outreach.	
☐ Describe other plans	

Objective 3: Achieve at least 1.5% annual reduction in non-residential per capita water use
(For each of the next ten years, or a 15% total reduction over ten years.) This includes commercial, institutional, industrial and agricultural water users.

Complete Table 26 by checking which strategies you will used to continue reducing non-residential customer use demand and project a likely timeframe for completing each checked strategy (add rows for additional strategies).

Where possible, substitute recycled water used in one process for reuse in another. (For example, spent rinse water can often be reused in a cooling tower.) Keep in mind the true cost of water is the amount on the water bill PLUS the expenses to heat, cool, treat, pump, and dispose of/discharge the water. Don't just calculate the initial investment. Many conservation retrofits that appear to be prohibitively expensive are actually very cost-effective when amortized over the life of the equipment. Often reducing water use also saves electrical and other utility costs. Note: as of 2015, water reuse, and is not allowed by the state plumbing code, M.R. 4715 (a variance is needed). However, several state agencies are addressing this issue.

Table 26. Strategies and timeframe to reduce institutional, commercial industrial, and agricultural and non-revenue use demand

Strategy to reduce total business, industry, agricultural demand	Timeframe for completing work
☐ Conduct a facility water use audit for both indoor and outdoor use, including system components	
☒ Install enhanced meters capable of automated readings to detect spikes in consumption	Ongoing
☐ Compare facility water use to related industry benchmarks, if available (e.g., meat processing, dairy, fruit and vegetable, beverage, textiles, paper/pulp, metals, technology, petroleum refining etc.)	
☐ Install water conservation fixtures and appliances or change processes to conserve water	
☒ Repair leaking system components (e.g., pipes, valves)	Ongoing-Leak Detection annually
☐ Investigate the reuse of reclaimed water (e.g., stormwater, wastewater effluent, process wastewater, etc.)	
☐ Reduce outdoor water use (e.g., turf replacement/reduction, rain gardens, rain barrels, smart irrigation, outdoor water use meters, etc.)	

Strategy to reduce total business, industry, agricultural demand	Timeframe for completing work
☐ Train employees how to conserve water	
☒ Implement a notification system to inform non-residential customers when water availability conditions change.	2018
☐ Nonpotable rainwater catchment systems intended to supply uses such as water closets, urinals, trap primers for floor drains and floor sinks, industrial processes, water features, vehicle washing facilities, cooling tower makeup, and similar uses shall be approved by the commissioner. Plumbing code 4714.1702, Published October 31, 2016	
☐ Describe other plans:	

Objective 4: Achieve a Decreasing Trend in Total Per Capita Demand

Include as **Appendix 8** one graph showing total per capita water demand for each customer category (i.e., residential, institutional, commercial, industrial) from 2005-2014 and add the calculated/estimated linear trend for the next 10 years.

Describe the trend for each customer category; explain the reason(s) for the trends, and where trends are increasing.

After looking at the graph it will be apparent that the residential trend is moving downward because of more efficient appliances and water conservation practices. Both WSS and AG the trends are increasing more irrigations are being installed and weather dependent. For the Commercial trend we are seeing increase in commercial properties which typically use more water for production.

Objective 5: Reduce Ratio of Maximum day (peak day) to the Average Day Demand to Less Than 2.6

Is the ratio of average 2005-2014 maximum day demand to average 2005-2014 average day demand reported in Table 2 more than 2.6? Yes ☒ No ☐

Calculate a ten-year average (2005 – 2014) of the ratio of maximum day demand to average day demand: 2.2 (2.0 for 2010-2015 Average Ratio)

The position of the DNR has been that a peak day/average day ratio that is above 2.6 for in summer indicates that the water being used for irrigation by the residents in a community is too large and that efforts should be made to reduce the peak day use by the community.

It should be noted that by reducing the peak day use, communities can also reduce the amount of infrastructure that is required to meet the peak day use. This infrastructure includes new wells, new water towers which can be costly items.

Objective 6: Implement Demand Reduction Measures

Water Conservation Program

Municipal water suppliers serving over 1,000 people are required to adopt demand reduction measures that include a conservation rate structure, or a uniform rate structure with a conservation program that achieves demand reduction. These measures must achieve demand reduction in ways that reduce water demand, water losses, peak water demands, and nonessential water uses. These measures must be approved before a community may request well construction approval from the Department of Health or before requesting an increase in water appropriations permit volume ([Minnesota Statutes, section 103G.291, subd. 3 and 4](#)). Rates should be adjusted on a regular basis to ensure that revenue of the system is adequate under reduced demand scenarios. If a municipal water supplier intends to use a Uniform Rate Structure, a community-wide Water Conservation Program that will achieve demand reduction must be provided.

Current Water Rates

Include a copy of the actual rate structure in **Appendix 9** or list current water rates including base/service fees and volume charges below.

Volume included in base rate or service charge: 1,000 gallons or ____ cubic feet ____ other

Frequency of billing: ☐ Monthly ☐ Bimonthly ☒ Quarterly ☐ Other: _____

Water Rate Evaluation Frequency: ☒ every year ☐ every ____ years ☐ no schedule

Date of last rate change: 1/1/2017

Table 27. Rate structures for each customer category (Select all that apply and add additional rows as needed)

Customer Category	Conservation Billing Strategies in Use *	Conservation Neutral Billing Strategies in Use **	Non-Conserving Billing Strategies in Use ***
Residential	☐ Monthly billing ☒ Increasing block rates (volume tiered rates) ☐ Seasonal rates ☐ Time of use rates ☐ Water bills reported in gallons ☐ Individualized goal rates ☐ Excess use rates ☐ Drought surcharge ☐ Use water bill to provide comparisons ☒ Service charge not based on water volume ☒ Other (describe) Minimum quarterly charge based on meter size	☐ Uniform ☒ Odd/even day watering	☐ Service charge based on water volume ☐ Declining block ☐ Flat ☐ Other (describe)
Commercial/ Industrial/ Institutional	☐ Monthly billing ☒ Increasing block rates (volume tiered rates) ☐ Seasonal rates	☐ Uniform	☐ Service charge based on water volume ☐ Declining block ☐ Flat

Customer Category	Conservation Billing Strategies in Use *	Conservation Neutral Billing Strategies in Use **	Non-Conserving Billing Strategies in Use ***
	☐ Time of use rates ☐ Water bills reported in gallons ☐ Individualized goal rates ☐ Excess use rates ☐ Drought surcharge ☐ Use water bill to provide comparisons ☒ Service charge not based on water volume ☒ Other (describe) Minimum quarterly charge based on meter size		☐ Other (describe)
☐ Other			

*** Rate Structures components that may promote water conservation:**

Monthly billing: is encouraged to help people see their water usage so they can consider changing behavior.

Increasing block rates (also known as a tiered residential rate structure): Typically, these have at least three tiers: should have at least three tiers.

- The first tier is for the winter average water use.
- The second tier is the year-round average use, which is lower than typical summer use. This rate should be set to cover the full cost of service.
- The third tier should be above the average annual use and should be priced high enough to encourage conservation, as should any higher tiers. For this to be effective, the difference in block rates should be significant.

Seasonal rate: higher rates in summer to reduce peak demands

Time of Use rates: lower rates for off peak water use

Bill water use in gallons: this allows customers to compare their use to average rates

Individualized goal rates: typically used for industry, business or other large water users to promote water conservation if they keep within agreed upon goals. **Excess Use rates:** if water use goes above an agreed upon amount this higher rate is charged

Drought surcharge: an extra fee is charged for guaranteed water use during drought

Use water bill to provide comparisons: simple graphics comparing individual use over time or compare individual use to others.

Service charge or base fee that does not include a water volume – a base charge or fee to cover universal city expenses that are not customer dependent and/or to provide minimal water at a lower rate (e.g., an amount less than the average residential per capita demand for the water supplier for the last 5 years)

Emergency rates -A community may have a separate conservation rate that only goes into effect when the community or governor declares a drought emergency. These higher rates can help to protect the city budgets during times of significantly less water usage.

****Conservation Neutral****

Uniform rate: rate per unit used is the same regardless of the volume used

Odd/even day watering –This approach reduces peak demand on a daily basis for system operation, but it does not reduce overall water use.

***** Non-Conserving *****

Service charge or base fee with water volume: an amount of water larger than the average residential per capita demand for the water supplier for the last 5 years

Declining block rate: the rate per unit used decreases as water use increases.

Flat rate: one fee regardless of how much water is used (usually unmetered).

Provide justification for any conservation neutral or non-conserving rate structures. If intending to adopt a conservation rate structure, include the timeframe to do so:

NA

Objective 7: Additional strategies to Reduce Water Use and Support Wellhead Protection Planning

Development and redevelopment projects can provide additional water conservation opportunities, such as the actions listed below. If a Uniform Rate Structure is in place, the water supplier must provide a Water Conservation Program that includes at least two of the actions listed below. Check those actions that you intent to implement within the next 10 years.

Table 28. Additional strategies to Reduce Water Use & Support Wellhead Protection

☒	Participate in the GreenStep Cities Program, including implementation of at least one of the 20 "Best Practices" for water
☐	Prepare a master plan for smart growth (compact urban growth that avoids sprawl)
☐	Prepare a comprehensive open space plan (areas for parks, green spaces, natural areas)
☒	Adopt a water use restriction ordinance (lawn irrigation, car washing, pools, etc.)
☐	Adopt an outdoor lawn irrigation ordinance
☐	Adopt a private well ordinance (private wells in a city must comply with water restrictions)
☒	Implement a stormwater management program
☐	Adopt non-zoning wetlands ordinance (can further protect wetlands beyond state/federal laws- for vernal pools, buffer areas, restrictions on filling or alterations)
☐	Adopt a water offset program (primarily for new development or expansion)
☐	Implement a water conservation outreach program
☐	Hire a water conservation coordinator (part-time)
☒	Implement a rebate program for water efficient appliances, fixtures, or outdoor water management
☐	Other

Objective 8: Tracking Success: How will you track or measure success through the next ten years?

By seeing a reduction in our daily demand to complete the goal of under 2.6 MGD

Tip: The process to monitor demand reduction and/or a rate structure includes:

- The DNR Hydrologist will call or visit the community the first 1-3 years after the water supply plan is completed.
- They will discuss what activities the community is doing to conserve water and if they feel their actions are successful. The Water Supply Plan, Part 3 tables and responses will guide the discussion.

For example, they will discuss efforts to reduce unaccounted for water loss if that is a problem, or go through Tables 33, 34 and 35 to discuss new initiatives.

- c) The city representative and the hydrologist will discuss total per capita water use, residential per capita water use, and business/industry use. They will note trends.
- d) They will also discuss options for improvement and/or collect case studies of success stories to share with other communities. One option may be to change the rate structure, but there are many other paths to successful water conservation.
- e) If appropriate, they will cooperatively develop a simple work plan for the next few years, targeting a couple areas where the city might focus efforts.

C. Regulation

Complete Table 29 by selecting which regulations are used to reduce demand and improve water efficiencies. Add additional rows as needed.

Copies of adopted regulations or proposed restrictions or should be included in **Appendix 10** (a list with hyperlinks is acceptable).

Table 29. Regulations for short-term reductions in demand and long-term improvements in water efficiencies

Regulations Utilized	When is it applied (in effect)?
☐ Rainfall sensors required on landscape irrigation systems	☐ Ongoing ☐ Seasonal ☐ Only during declared Emergencies
☐ Water efficient plumbing fixtures required	☐ New development ☐ Replacement ☐ Rebate Programs
☐ Critical/Emergency Water Deficiency ordinance	☐ Only during declared Emergencies
☒ Watering restriction requirements (time of day, allowable days, etc.)	☒ Odd/even ☐ 2 days/week ☐ Only during declared Emergencies
☐ Water waste prohibited (for example, having a fine for irrigators spraying on the street)	☐ Ongoing ☐ Seasonal ☐ Only during declared Emergencies
☐ Limitations on turf areas (requiring lots to have 10% - 25% of the space in natural areas)	☐ New development ☐ Shoreland/zoning ☐ Other
☐ Soil preparation requirements (after construction, requiring topsoil to be applied to promote good root growth)	☐ New Development ☐ Construction Projects ☐ Other
☐ Tree ratios (requiring a certain number of trees per square foot of lawn)	☐ New development ☐ Shoreland/zoning ☐ Other
☐ Permit to fill swimming pool and/or requiring pools to be covered (to prevent evaporation)	☐ Ongoing ☐ Seasonal ☐ Only during declared Emergencies
☐ Ordinances that permit stormwater irrigation, reuse of water, or other alternative water use (Note: be sure to check current plumbing codes for updates)	☐ Describe

D. Retrofitting Programs

Education and incentive programs aimed at replacing inefficient plumbing fixtures and appliances can help reduce per capita water use, as well as energy costs. It is recommended that municipal water suppliers develop a long-term plan to retrofit public buildings with water efficient plumbing fixtures and appliances. Some water suppliers have developed partnerships with organizations having similar conservation goals, such as electric or gas suppliers, to develop cooperative rebate and retrofit programs.

A study by the AWWA Research Foundation (Residential End Uses of Water, 1999) found that the average indoor water use for a non-conserving home is 69.3 gallons per capita per day (gpcd). The average indoor water use in a conserving home is 45.2 gpcd and most of the decrease in water use is related to water efficient plumbing fixtures and appliances that can reduce water, sewer and energy costs. In Minnesota, certain electric and gas providers are required (Minnesota Statute 216B.241) to fund programs that will conserve energy resources and some utilities have distributed water efficient showerheads to customers to help reduce energy demands required to supply hot water.

Retrofitting Programs

Complete Table 30 by checking which water uses are targeted, the outreach methods used, the measures used to identify success, and any participating partners.

Table 30. Retrofitting programs (Select all that apply) Currently there is no retrofitting program.

Water Use Targets	Outreach Methods	Partners
☐ Low flush toilets, ☐ Toilet leak tablets, ☐ Low flow showerheads, ☐ Faucet aerators;	☐ Education about ☐ Free distribution of ☐ Rebate for ☐ Other	☐ Gas company ☐ Electric company ☐ Watershed organization
☐ Water conserving washing machines, ☐ Dish washers, ☐ Water softeners;	☐ Education about ☐ Free distribution of ☐ Rebate for ☐ Other	☐ Gas company ☐ Electric company ☐ Watershed organization
☐ Rain gardens, ☐ Rain barrels, ☐ Native/drought tolerant landscaping, etc.	☐ Education about ☐ Free distribution of ☐ Rebate for ☐ Other	☐ Gas company ☐ Electric company ☐ Watershed organization

Briefly discuss measures of success from the above table (e.g. number of items distributed, dollar value of rebates, gallons of water conserved, etc.):

NA

E. Education and Information Programs

Customer education should take place in three different circumstances. First, customers should be provided information on how to conserve water and improve water use efficiencies. Second, information should be provided at appropriate times to address peak demands. Third, emergency

notices and educational materials about how to reduce water use should be available for quick distribution during an emergency.

Proposed Education Programs

Complete Table 31 by selecting which methods are used to provide water conservation and information, including the frequency of program components. Select all that apply and add additional lines as needed.

Table 31. Current and Proposed Education Programs

Education Methods	General summary of topics	#/Year	Frequency
Billing inserts or tips printed on the actual bill	When to irrigate, What not to flush, Ways to save water	Twice	☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Consumer Confidence Reports		Once	☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Press releases to traditional local news outlets (e.g., newspapers, radio and TV)			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Social media distribution (e.g., emails, Facebook, Twitter)	Video	Once	☐ Ongoing ☒ Seasonal ☐ Only during declared emergencies
Paid advertisements (e.g., billboards, print media, TV, radio, web sites, etc.)			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Presentations to community groups			☐ Ongoing ☒ Seasonal ☐ Only during declared emergencies
Staff training			☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Facility tours	Cub scouts, Rotary club	Twice	☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Displays and exhibits			☐ Ongoing ☒ Seasonal ☐ Only during declared emergencies

Education Methods	General summary of topics	#/Year	Frequency
Marketing rebate programs (e.g., indoor fixtures & appliances and outdoor practices)			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Community news letters			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Direct mailings (water audit/retrofit kits, showerheads, brochures)			☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Information kiosk at utility and public buildings			☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Public service announcements			☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Cable TV Programs			☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Demonstration projects (landscaping or plumbing)			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
K-12 education programs (Project Wet, Drinking Water Institute, presentations)			☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Community events (children's water festivals, environmental fairs)			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Community education classes			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Water week promotions	Public Works Week	Once	☐ Ongoing ☒ Seasonal ☐ Only during declared emergencies
Website (include address:)			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies

Education Methods	General summary of topics	#/Year	Frequency
Targeted efforts (large volume users, users with large increases)			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Notices of ordinances	On Website		☒ Ongoing ☐ Seasonal ☐ Only during declared emergencies
Emergency conservation notices			☐ Ongoing ☐ Seasonal ☒ Only during declared emergencies
Other:			☐ Ongoing ☐ Seasonal ☐ Only during declared emergencies

Briefly discuss what future education and information activities your community is considering in the future:

More tours of our new Water treatment Plant. Making businesses and people aware on conservation of water and how to use it properly.

PART 4. ITEMS FOR METROPOLITAN AREA COMMUNITIES

Minnesota Statute 473.859 requires WSPs to be completed for all local units of government in the seven-county Metropolitan Area as part of the local comprehensive planning process.



Much of the information in Parts 1-3 addresses water demand for the next 10 years. However, additional information is needed to address water demand through 2040, which will make the WSP consistent with the Metropolitan Land Use Planning Act, upon which the local comprehensive plans are based.

This Part 4 provides guidance to complete the WSP in a way that addresses plans for water supply through 2040.

A. Water Demand Projections through 2040

Complete Table 7 in Part 1D by filling in information about long-term water demand projections through 2040. Total Community Population projections should be consistent with the community's system statement, which can be found on the Metropolitan Council's website and which was sent to the community in September 2015.

Projected Average Day, Maximum Day, and Annual Water Demands may either be calculated using the method outlined in *Appendix 2* of the *2015 Master Water Supply Plan* or by a method developed by the individual water supplier.

B. Potential Water Supply Issues

Complete Table 10 in Part 1E by providing information about the potential water supply issues in your community, including those that might occur due to 2040 projected water use.

The [Master Water Supply Plan](#) provides information about potential issues for your community in *Appendix 1 (Water Supply Profiles)*. This resource may be useful in completing Table 10.

You may document results of local work done to evaluate impact of planned uses by attaching a feasibility assessment or providing a citation and link to where the plan is available electronically.

C. Proposed Alternative Approaches to Meet Extended Water Demand Projections

Complete Table 12 in Part 1F with information about potential water supply infrastructure impacts (such as replacements, expansions or additions to wells/intakes, water storage and treatment capacity, distribution systems, and emergency interconnections) of extended plans for development and redevelopment, in 10-year increments through 2040. It may be useful to refer to information in the community's local Land Use Plan, if available.

Complete Table 14 in Part 1F by checking each approach your community is considering to meet future demand. For each approach your community is considering, provide information about the amount of

future water demand to be met using that approach, the timeframe to implement the approach, potential partners, and current understanding of the key benefits and challenges of the approach.

As challenges are being discussed, consider the need for: evaluation of geologic conditions (mapping, aquifer tests, modeling), identification of areas where domestic wells could be impacted, measurement and analysis of water levels & pumping rates, triggers & associated actions to protect water levels, etc.

D. Value-Added Water Supply Planning Efforts (Optional)

The following information is not required to be completed as part of the local water supply plan, but completing this can help strengthen source water protection throughout the region and help Metropolitan Council and partners in the region to better support local efforts.

Source Water Protection Strategies

Does a Drinking Water Supply Management Area for a neighboring public water supplier overlap your community? Yes ☒ No ☐

If you answered no, skip this section. If you answered yes, please complete Table 32 with information about new water demand or land use planning-related local controls that are being considered to provide additional protection in this area.

Table 32. Local controls and schedule to protect Drinking Water Supply Management Areas

Local Control	Schedule to Implement	Potential Partners
☒ None at this time		
☒ Comprehensive planning that guides development in vulnerable drinking water supply management areas	Wellhead Protection Plan-2015	
☐ Zoning overlay		
☐ Other:		

Technical assistance

From your community's perspective, what are the most important topics for the Metropolitan Council to address, guided by the region's Metropolitan Area Water Supply Advisory Committee and Technical Advisory Committee, as part of its ongoing water supply planning role?

- ☒ Coordination of state, regional and local water supply planning roles
- ☐ Regional water use goals
- ☒ Water use reporting standards
- ☐ Regional and sub-regional partnership opportunities
- ☒ Identifying and prioritizing data gaps and input for regional and sub-regional analyses
- ☐ Others: _____

GLOSSARY

Agricultural/Irrigation Water Use - Water used for crop and non-crop irrigation, livestock watering, chemigation, golf course irrigation, landscape and athletic field irrigation.

Average Daily Demand - The total water pumped during the year divided by 365 days.

Calcareous Fen - Calcareous fens are rare and distinctive wetlands dependent on a constant supply of cold groundwater. Because they are dependent on groundwater and are one of the rarest natural communities in the United States, they are a protected resource in MN. Approximately 200 have been located in Minnesota. They may not be filled, drained or otherwise degraded.

Commercial/Institutional Water Use - Water used by motels, hotels, restaurants, office buildings, commercial facilities and institutions (both civilian and military). Consider maintaining separate institutional water use records for emergency planning and allocation purposes. Water used by multi-family dwellings, apartment buildings, senior housing complexes, and mobile home parks should be reported as Residential Water Use.

Commercial/Institutional/Industrial (C/I/I) Water Sold - The sum of water delivered for commercial/institutional or industrial purposes.

Conservation Rate Structure - A rate structure that encourages conservation and may include increasing block rates, seasonal rates, time of use rates, individualized goal rates, or excess use rates. If a conservation rate is applied to multifamily dwellings, the rate structure must consider each residential unit as an individual user. A community may have a separate conservation rate that only goes into effect when the community or governor declares a drought emergency. These higher rates can help to protect the city budgets during times of significantly less water usage.

Date of Maximum Daily Demand - The date of the maximum (highest) water demand. Typically this is a day in July or August.

Declining Rate Structure - Under a declining block rate structure, a consumer pays less per additional unit of water as usage increases. This rate structure does not promote water conservation.

Distribution System - Water distribution systems consist of an interconnected series of pipes, valves, storage facilities (water tanks, water towers, reservoirs), water purification facilities, pumping stations, flushing hydrants, and components that convey drinking water and meeting fire protection needs for cities, homes, schools, hospitals, businesses, industries and other facilities.

Flat Rate Structure - Flat fee rates do not vary by customer characteristics or water usage. This rate structure does not promote water conservation.

Industrial Water Use - Water used for thermonuclear power (electric utility generation) and other industrial use such as steel, chemical and allied products, paper and allied products, mining, and petroleum refining.

Low Flow Fixtures/Appliances - Plumbing fixtures and appliances that significantly reduce the amount of water released per use are labeled "low flow". These fixtures and appliances use just enough water to be effective, saving excess, clean drinking water that usually goes down the drain.

Maximum Daily Demand - The maximum (highest) amount of water used in one day.

Metered Residential Connections - The number of residential connections to the water system that have meters. For multifamily dwellings, report each residential unit as an individual user.

Percent Unmetered/Unaccounted For - Unaccounted for water use is the volume of water withdrawn from all sources minus the volume of water delivered. This value represents water "lost" by miscalculated water use due to inaccurate meters, water lost through leaks, or water that is used but unmetered or otherwise undocumented. Water used for public services such as hydrant flushing, ice skating rinks, and public swimming pools should be reported under the category "Water Supplier Services".

Population Served - The number of people who are served by the community's public water supply system. This includes the number of people in the community who are connected to the public water supply system, as well as people in neighboring communities who use water supplied by the community's public water supply system. It should not include residents in the community who have private wells or get their water from neighboring water supply.

Residential Connections - The total number of residential connections to the water system. For multifamily dwellings, report each residential unit as an individual user.

Residential Per Capita Demand - The total residential water delivered during the year divided by the population served divided by 365 days.

Residential Water Use - Water used for normal household purposes such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns and gardens. Should include all water delivered to single family private residences, multi-family dwellings, apartment buildings, senior housing complexes, mobile home parks, etc.

Smart Meter - Smart meters can be used by municipalities or by individual homeowners. Smart metering generally indicates the presence of one or more of the following:

Smart irrigation water meters are controllers that look at factors such as weather, soil, slope, etc. and adjust watering time up or down based on data. Smart controllers in a typical summer will reduce water use by 30%-50%. Just changing the spray nozzle to new efficient models can reduce water use by 40%.

Smart Meters on customer premises that measure consumption during specific time periods and communicate it to the utility, often on a daily basis.

A communication channel that permits the utility, at a minimum, to obtain meter reads on demand, to ascertain whether water has recently been flowing through the meter and onto the premises, and to issue commands to the meter to perform specific tasks such as disconnecting or restricting water flow.

Total Connections - The number of connections to the public water supply system.

Total Per Capita Demand - The total amount of water withdrawn from all water supply sources during the year divided by the population served divided by 365 days.

Total Water Pumped - The cumulative amount of water withdrawn from all water supply sources during the year.

Total Water Delivered - The sum of residential, commercial, industrial, institutional, water supplier services, wholesale and other water delivered.

Ultimate (Full Build-Out) - Time period representing the community's estimated total amount and location of potential development, or when the community is fully built out at the final planned density.

Unaccounted (Non-revenue) Loss - See definitions for "percent unmetered/unaccounted for loss".

Uniform Rate Structure - A uniform rate structure charges the same price-per-unit for water usage beyond the fixed customer charge, which covers some fixed costs. The rate sends a price signal to the customer because the water bill will vary by usage. Uniform rates by class charge the same price-per-unit for all customers within a customer class (e.g. residential or non-residential). This price structure is generally considered less effective in encouraging water conservation.

Water Supplier Services - Water used for public services such as hydrant flushing, ice skating rinks, public swimming pools, city park irrigation, back-flushing at water treatment facilities, and/or other uses.

Water Used for Nonessential Purposes - Water used for lawn irrigation, golf course and park irrigation, car washes, ornamental fountains, and other non-essential uses.

Wholesale Deliveries - The amount of water delivered in bulk to other public water suppliers.

Acronyms and Initialisms

AWWA – American Water Works Association
C/I/I – Commercial/Institutional/Industrial
CIP – Capital Improvement Plan
GIS – Geographic Information System
GPCD – Gallons per capita per day
GWMA – Groundwater Management Area – North and East Metro, Straight River, Bonanza,
MDH – Minnesota Department of Health
MGD – Million gallons per day

MG – Million gallons
MGL – Maximum Contaminant Level
MnTAP – Minnesota Technical Assistance Program (University of Minnesota)
MPARS – MN/DNR Permitting and Reporting System (new electronic permitting system)
MRWA – Minnesota Rural Waters Association
SWP – Source Water Protection
WHP – Wellhead Protection

APPENDICES TO BE SUBMITTED BY THE WATER SUPPLIER

Appendix 1: Well records and maintenance summaries

Go to [Part 1C](#) for information on what to include in appendix

Appendix 2: Water level monitoring plan

Go to [Part 1E](#) for information on what to include in appendix

Appendix 3: Water level graphs for each water supply well

Go to [Part 1E](#) for information on what to include in appendix

Appendix 4: Capital Improvement Plan

Go to [Part 1E](#) for information on what to include in appendix

Appendix 5: Emergency Telephone List

Go to [Part 2C](#) for information on what to include in appendix

Appendix 6: Cooperative Agreements for Emergency Services

Go to [Part 2C](#) for information on what to include in appendix

Appendix 7: Municipal Critical Water Deficiency Ordinance

Go to [Part 2C](#) for information on what to include in appendix

Appendix 8: Graph of Ten Years of Annual Per Capita Water Demand for Each Customer Category

Go to [Objective 4 in Part 3B](#) for information on what to include in appendix

Appendix 9: Water Rate Structure

Go to [Objective 6 in Part 3B](#) for information on what to include in appendix

Appendix 10: Ordinances or Regulations Related to Water Use

Go to [Objective 7 in Part 3B](#) for information on what to include in appendix

Appendix 11: Implementation Checklist

Provide a table that summarizes all the actions that the public water supplier is doing, or proposes to do, with estimated implementation dates.

Appendix 12: Sources of Information for Table 10

Provide links or references to the information used to complete Table 10. If the file size is reasonable, provide source information as attachments to the plan.

Brooklyn Center Water Supply Plan

Previously called Water Emergency and Conservation Plan



City Council Work Session, September 9, 2019
Doran M. Cote P.E., Director of Public Works

Introduction to Water Supply Plans

- All water suppliers in the Twin Cities metropolitan area are required to prepare and submit a water supply plan
- The goal of the WSP is to help water suppliers: 1) implement long term water sustainability and conservation measures; and 2) develop critical emergency preparedness measures.
- Completing a WSP fulfills a water supplier's statutory obligations under M.S. [M.S.103G.291](#) to complete a water supply plan.
- For water suppliers in the metropolitan area, the WSP will help local governmental units to fulfill their requirements under M.S. 473.859 to complete a local comprehensive plan.
- Brooklyn Center's Water Supply Plan has been approved by the Minnesota Department of Natural Resources (DNR) and the Metropolitan Council.



Benefits of Completing a WSP

- Enable DNR to compile and analyze water use and conservation data to help guide decisions.
- Help water suppliers prepare for droughts and water emergencies.
- Create eligibility for funding requests to the Minnesota Department of Health (MDH) for the Drinking Water Revolving Fund.
- Allow water suppliers to submit requests for new wells or expanded capacity of existing wells.
- Simplify the development of county comprehensive water plans and watershed
- Fulfill the demand reduction requirements of Minnesota Statutes, section 103G.291 subd 3 and 4.
- Fulfill the contingency plan provisions required in the MDH wellhead protection and surface water protection plans.
- Upon implementation, contribute to maintaining aquifer levels, reducing potential well interference and water use conflicts, and reducing the need to drill new wells or expand system capacity.
- Conserve Minnesota's water resources



Elements of the Local Water Supply Plan

- Analysis of Water Demand
- Treatment and Storage Capacity – treatment and storage vs demand
- Water Sources – limits on emergency interconnections
- Future Demand Projections – water use and trends
- Resource Sustainability – monitoring and water level data
- Capital Improvement Plan – adequacy of water supply system and proposed future water sources
- Emergency Preparedness Procedures
- Water Conservation Plan
- Appendices



MEMORANDUM - COUNCIL WORK SESSION

DATE: 9/9/2019

TO: Curt Boganey, City Manager

THROUGH: Dr. Reggie Edwards, Deputy City Manager

FROM: Barb Suciu, City Clerk

SUBJECT: Pending Items

Recommendation:

- Public Subsidy Policy - 9/23
- Commemoration of 400 years of Slavery Activities - 9/23
- Police Crisis Prevention Options - 11/12
- Residential Design Standards
- Livable Wages - 12/9
- Environmental Policies and Practices - 10/28
- Housing Policy Implementation Plan - 10/14
- SAC Credit Discussion - 9/23
- Options for Use of Adjacent Space to Liquor Store

Background:

Strategic Priorities and Values:

Operational Excellence