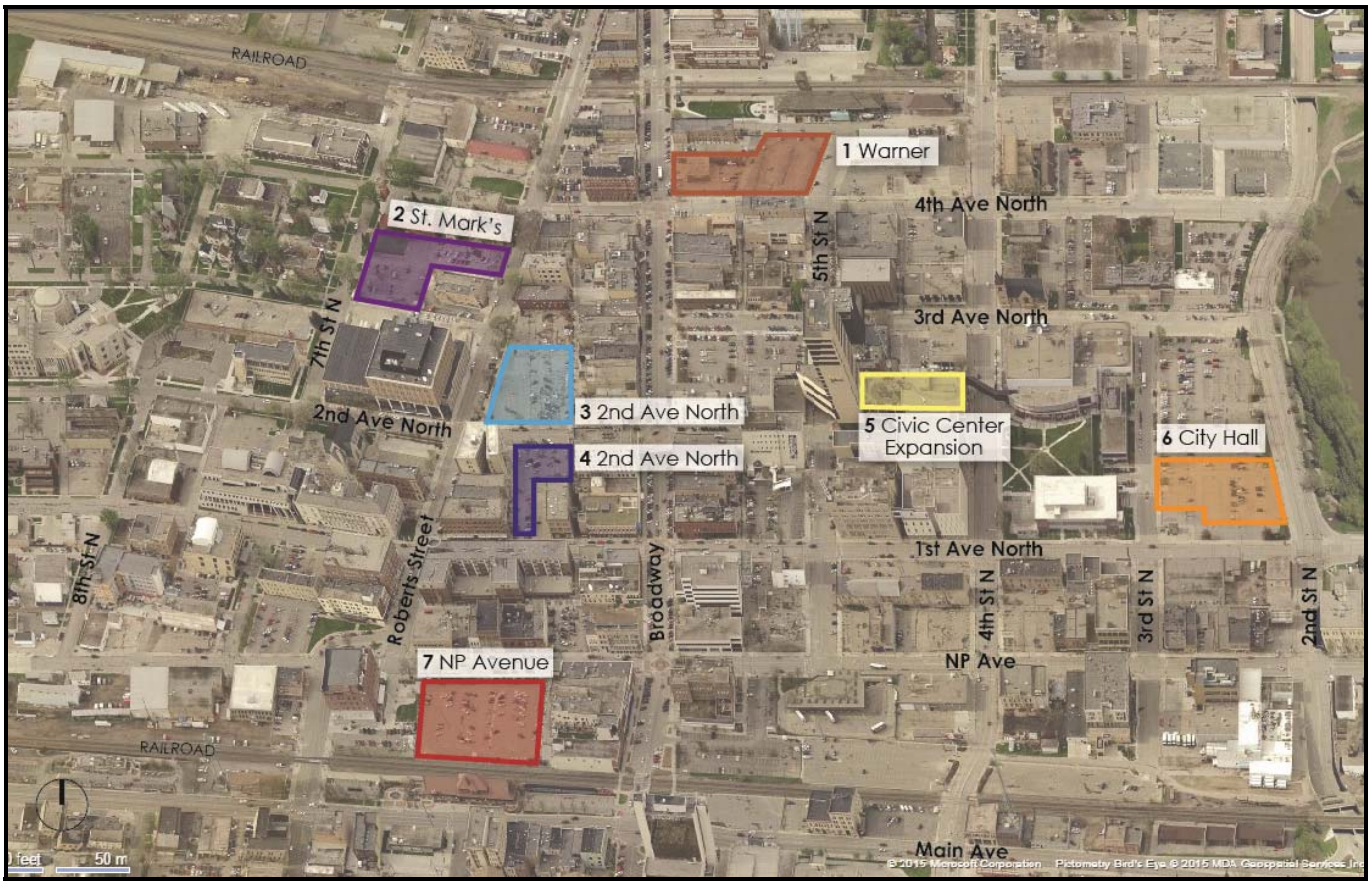
CITY OF FARGO
PARKING RAMP SITE EVALUATION



FOR:

City of Fargo
Department of Planning and Development
200 3rd Street North
Fargo, North Dakota 58102

October 5, 2015

helenske design group
architecture • construction management

Carl Walker

EXECUTIVE SUMMARY

Helenske Design Group (architect) and Carl Walker Inc. (Parking Consultant) were retained by the City of Fargo to complete a downtown parking ramp feasibility study. The overarching intent of the study is to explore various sites and concepts to determine parking capacity, identify potential mixed used development area. The study findings would support the City in facilitating construction of future downtown parking structures.

Background

As part of two previous parking studies (1999 and 2003) there was preliminary analysis on a number of sites that could potentially accommodate a parking structure. Additionally, in the last few years there has been a focus on the 2nd Ave N/Roberts St location and some very conceptual sketches have been explored; although they were very limited in detail and scope.

Based on current landscape, the Parking Commission and City Commission determined the timing was appropriate to further explore ramp locations in the downtown core with the following considerations at the forefront:

1. A recognized existing parking deficit in the 'core' (Broadway/2nd Ave) sub-area of approximately 400-600 spaces pursuant to studies completed in 2003, 2007 and 2012;
2. An understanding that strategically placed parking structures will catalyze additional economic development and investment in the downtown core; and
3. Opportunities for public/private partnerships and joint ventures on mixed-use projects.

Scope of Work

In response to the recognized needs, the scope of work for the feasibility study was developed and was split into three (3) phases. Note that this presentation is only focused on findings from Part A of the overall scope of work.

Part A. (Multiple Site Evaluation) – Part A includes general site analysis for each location and focuses on opportunities, constraints, potential spin-off benefit for adjacent redevelopment or investment as well as opportunities for mixed-use. As part of this effort, the consultant team produced a series of concepts for 6 sites as determined with City input. The development sites are discussed below.

Part B (Schematic Design) – If pursued, Part B will take 1 or 2 conceptual options to further evolve the selected options into a design. This component will include analysis of structural systems, parking control systems, technology, construction timing/phasing and cost estimates.

Part C (Architectural Services) – This component is built in to the scope as an 'optional' task if the city decides to pursue plans for any of the options that may result from the analysis, research, findings and recommendations pursuant to Part A and Part B.

Development Sites

Based on current and future needs, several potential parking garage sites were assessed. A total of seven sites were identified for the development of a new or expanded parking ramp within the next few years, with each site being located near the downtown core. The seven sites are as follows:

- Site 1: Warner Site (401 Broadway and 410 5th St N)
- Site 2: St. Marks Church Site (4th Ave & 7th St)
- Site 3: 2nd Avenue North, North Lot (2nd Ave N & Roberts Street)
- Site 4: 2nd Avenue North, South Lot (2nd Ave N)
- Site 5: Civic Center Ramp (Expansion of existing structure at 411 2nd Ave N)
- Site 6: City Hall Site (200 3rd St N, south half of City Hall site)
- Site 7: NP Avenue Site (636 NP Avenue)

Based on the dimensions and configuration of each site, several potential parking development sites (configurations) were developed at each location. Each of the development sites were reviewed for parking layout, potential mixed-use opportunities, potential construction costs, and other factors. These factors were summarized in the Parking Ramp Options Comparison Matrix located at the end of this report.

Property Ownership & Master Planning

It is important to note that this study and in particular Part A of the scope of work is an exercise in very high elevation "master planning" and feasibility analysis. A majority of the sites studied have a City of Fargo 'ownership' component although many of the concepts would also require coordination, partnerships or negotiations with adjacent private property owners. Although a majority of the private property owners that would be directly impacted by any of these concepts have been involved in the discussions to-date; this study is not intended to represent agreement or support for any of the ideas or concepts – but is solely intended to determine whether a ramp could be placed in each of the locations and related factors.

Stakeholder Involvement

As part of the process to develop the concepts for each site – the consultant team held a number of individual meetings with downtown developers and stakeholders. Additionally, a design charrette was conducted with representatives from the Downtown Community Partnership (DCP). We anticipate additional input opportunities as this discussion evolves as part of future efforts. Appendix C of this study attempts to summarize the key points from these sessions.

Critical Factors for Consideration

As further detailed in the report, from a strict feasibility perspective the two (2) most critical factors in evaluating a site for development of a parking ramp is location and site dimensions. In general, walking distances exceeding 2 or 3 blocks are considered unacceptable to most parking patrons. In terms of site dimensions, the size and shape of the ramp influences the efficiency of the ramp and ultimately its cost effectiveness.

Other considerations:

Spin-off Potential – A strategically designed parking program and parking infrastructure can act as catalyst for economic development and investment. A majority of the studied sites are in locations where the construction of a ramp would produce spin-off benefit in the form of economic development on adjacent blocks.

Mixed-Use – The ability to keep sidewalk space activated on downtown corridors is critical; specifically the Goodyear/Warner, NP Avenue and 2nd Avenue/Roberts St are locations. Each site studied offers varying degrees of opportunities for a mixture of uses. The feasibility study also analyzes opportunities to vertically mix uses or in other terms the possibility of accommodating residential development on-top of a parking ramp.

Multi-Use Ramps – If a ramp can be placed and programmed to be utilized 24/7 the efficiency and revenue generating capacity of the ramp is substantially increased. For example, a ramp associated with a hotel or event venue works well as the spaces can be rented during the day to downtown workers or hourly parkers and at night the ramp is utilized as well. Additionally, a few of these sites are better suited to handle longer-term hourly parking needs within the downtown core.

Cost per Space - The feasibility study suggests that the cost per space would be in the $20 to $25K range. Most of these sites currently accommodate surface parking and therefore the 'net' cost per space at these locations is in the range of $25-35K.

Sloping Floors towards the Streetscape – Depending on the concept and layout certain ramp concepts will have sloping floors that would abut the public right-of-way. Similar to the

Civic Center Ramp, these sloping floors are much more difficult to treat architecturally and blend into a downtown urban environment versus flat floors.

Parking Site Evaluation Conclusion

The Fargo Parking Commission's focus is to serve the Downtown Business Community and its partnership with retail, entertainment, professional and service sector businesses. Over the past fifteen years, there have been a series of parking studies completed to assist the Parking Commission in planning for the future of downtown Fargo. The earliest of these studies preceded the significant redevelopment in downtown Fargo, which sprang from the commitments made by North Dakota State University and the incentives presented by the Fargo Renaissance Zone to private sector development.

Today the urban core of downtown is dynamic and growing. To continue to make these strides it will be important that the downtown parking resources be managed and expanded in a manner to match the quality and growth of Fargo's downtown. Downtown is ready to move to next level, building on the solid foundation of diverse investment in the fabric of Fargo's downtown, and the pending public sector investment.

The near term influence of public sector projects like the new City Hall, the renovation of the Civic Center into a Arts Performance Center, and the potentials of a new Convention Center will generate significant spin off development, and with it the need to supplement the current parking inventory for downtown.

The Study presented here, illustrates the opportunity to move forward with serious consideration of parking facility development on several sites. The objective of the Study was to determine site feasibility and set the criteria around which a schematic design can be based. In addition, the study provides the background on which to promote relationships with private sector development groups to partner on the potential mixed use opportunities presented with several of the sites.

Based on discussions with City staff, downtown stake holders and the Downtown Community Partnership, the key criteria by which the sites are evaluated was prioritized and refined. The outcome defined two criteria above all others that must be achieved:

- Convenience/proximity to core demand area for both daytime business use and evening entertainment and restaurant activity with the intent to "find a 24/7 solution".
- Avoid solutions that take away infill development opportunities.

These criteria, when balanced with the priorities set out in the original scope, bring us to a slightly different position than without them. Specifically, the solutions that respond best are those that free up or leave unaffected large parcels for development, rather than limited wrap or bookend mixed use development.

A brief summary of sites that respond to these criteria:

1. **Warner Site**
   The Warner Site can meet the immediate demands for 400-600 cars and would provide convenient access and adjacency to the core demand of downtown Fargo as well as encourage spin off development. The Warner location would serve to support added demand from the future development on the US Bank Plaza and to a lesser degree, the parking required by the presence of the new City Hall. The Warner Site also provides opportunity for larger scale development adjacent to the parking facility.

2. **Saint Mark's Church Site**
   This site presents limited opportunities originally conceived along 7th Street with no connection to Roberts Street, however if the available site could be expanded to include the Salvation Army property, a much more viable opportunity would be presented. While this option is not currently available for consideration, we believe that it should be pursued in the future. Growing out of conversations with stakeholders, development groups and DCP members, this alternative solution would be able to respond to the growth that North Dakota State University envisions and reinforce the western edge of downtown Fargo's retail and entertainment business. Such a solution similar to that presented in the Site 2B illustration would serve as a bridge between the NDSU downtown campus and Roberts Street. This linkage can make a very direct connection to the alley and in turn to Broadway. The result would serve to support parking demand growth on the west edge of the commercial business core and the future spin off opportunities for housing and commercial business adjoining NDSU's campus. Pursuing an east /west site solution as described would also respond to parking demand that would arise from retaining the 2nd Avenue North site for infill development.

3. **2nd Avenue North Site**
   The land parcel owned by the City of Fargo provides limited opportunity for development as a parking ramp without added surface area from adjoining privately owned property. It is not the most efficient configuration and would result in a higher cost per parking stall and a lower net gain in parking stalls. The study solutions illustrate that the 2nd Avenue North site can produce several good mixed use options, and would serve to expand the downtown business core to the west along 2nd Avenue, provided the added land to the north could be acquired.

   Based on discussions with the DCP, current downtown developers, as well as City staff, there is a strong desire to retain the 2nd Avenue property for a future development opportunity, given the proximity to the strong business core. This approach is consistent with the belief that Fargo should have land inventory available to respond to future development needs, and recognizes the inherent value in this keystone property.

4. **2nd Avenue South Site**
   The 2nd Avenue South site is very small for an efficient and comfortable parking structure, so it is not recommended at this time for parking ramp development. It too could be a good infill development site.

5. **The Civic Ramp**
   Located adjacent to the Radisson Hotel, the ramp provides a fully public controlled option to expand parking. The original 238 stall ramp was constructed in 1986 and was designed to add an additional level, with a 71 net gain of stalls. We believe that this option should remain a high priority and be looked at when there is added parking supply in place to handle the displacement of stalls during the expansion construction. These added stalls could be brought on line if phased between the construction of a new ramp on the Warner site and an additional site once future development and demand evolved.

6. **City Hall Site**
   Our study establishes that the land remaining after the construction of the new City Hall can support a mixed used development. This location has been studied primarily to determine site proportion feasibility and position the City staff to have confidence in seeking potential private sector developers to develop the site. The added opportunity presented by the temporary City staff parking created across 1st Avenue will compliment any future development on the City Hall land. We believe that the City Hall site has limited potential to serve the core downtown demand due to the walking distance involved. Although the site has opportunities to link into the current skyway, the distance and convenience remains a concern in the context of the core downtown demand area. Development of this site should be driven by the broader development goals of the mixed use marketplace and the future needs of the Arts Performance Center and Convention Center. Further detailed study of this site would identify these potentials and should be done only when a development team has been established or solicited through an RFP process.

7. **The NP Avenue Site**
   This site is likely the easiest site to develop given the public ownership position and the cooperative nature of adjoining land owners. However, evaluating the site on the key factors of adjacency and convenience to the core demand affects the site ranking and this study would recommend that the site continue in its current use and remain in the City inventory for future development opportunity. The site presents an opportunity to expand residential, retail, commercial, and business activity along NP Avenue. The scheduled improvements to NP Avenue and the streetscape will renew the desirability of this area of downtown and weave together Broadway and Roberts Street, as well as the Broadway businesses and NDSU's Renaissance Hall. The NP site would be a logical location for a significant mixed use complex with a large public ramp component. The timing for this should be driven by either the needs of a large scale commercial user and or the maturing of the parking demand as the downtown core demand area grows to the south.

The analysis of the seven site options presented in this study has been based on fifteen years of data gathering and observations of the rebirth of downtown Fargo. No single site will satisfy the diverse parking demand of Fargo's downtown, nor would the resulting scale be appropriate for Fargo's urban character and texture. We believe a strategic approach that anchors the current edges of the demand area with 2 smaller parking structures, and inventories city owned parcels for future mixed used development, will result in a long term pattern of growth. This approach will produce convenient and affordable parking for the consumer, and provide the foundation for expansion of retail, commercial and residential needs in the downtown.

The following graphic illustrates this strategy and a path forward:

Strategic Approach

- Recognize That Meeting the Needs Of The Downtown Parking Demand Will Require Multiple Ramp Locations & Enhanced Public On & Off Street Parking Operations.
- Respect the Scale of Downtown Fargo's Architectural Street Scape By Setting Ramp Capacities That Are Appropriate To The Location and Integrate Street Level Mixed Use Retail & Commercial Mixed Use.
  - **Step 1**- Commit To Design of 2 Parking Structures to accommodate 500+ New Stalls, To Meet Current Parking Shortfall, & to Stimulate Adjacent Development & Support the Growth of the NDSU Downtown Presence.
    - Develop Economic Models For Public Funding To Develop New Parking Structures.
    - Enter Into Negotiations on Necessary Private Property to Facilitate Desired Options.
    - Encourage P3 Development Mixed Use Parking Structures.
  - **Step 2**- Facilitate Growth of Core Demand Boundary
    - Implement Construction of New Ramps
    - Seek P3 Partnership on City Hall Land.
  - **Step 3**- As Core Demand Grows & Economics Are Supported, Proceed P3 Development of 2nd Avenue and NP Land
    - Expand Civic Ramp
    - Inventory Property For Future Development Opportunities

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INTRODUCTION

The primary purpose of this study is to determine the best locations for a new parking ramp in downtown Fargo, North Dakota. The parking ramp is desired to incorporate street level commercial space and/or a mixed-use development such as office, hotel, or residential. The parking capacity will need to meet the current parking demand, as well as the demand generated by future development in the vicinity of the ramp. The seven sites identified for the development of a new parking ramp within the next few years are shown in Figure 1 on the following page and include:

- Site 1: Warner Site
- Site 2: St. Marks Church Site
- Site 3: 2nd Avenue North, North Lot
- Site 4: 2nd Avenue North, South Lot
- Site 6: City Hall Site
- Site 7: NP Avenue Site

Also shown in Figure 1 is the Civic Center Ramp (Site 5), which is being considered for vertical expansion as part of this site evaluation study, and the recognized center of downtown activity in Fargo today. A brief description of each site follows:

The Warner Site, located at the corner of 4th Avenue North and North Broadway Drive, contains approximately 93 parking spaces in a private lot owned by Warner Insurance. The site also includes an existing Goodyear Service Center building that is currently owned by the Kilbourne Group, and would require demolition to accommodate a new parking development.

The St. Marks Church Site, located between 7th Street North and Roberts Street, consists of approximately 106 private parking spaces and is currently owned by the Kilbourne Group. Alternate parking options may include portions of the adjacent Salvation Army building or the Ivers Apartments parking lot to the east.

The 2nd Avenue North, North Lot, includes an existing 100 space public lot currently owned by the City on parcel 625. The site is situated between 2nd Avenue North, Roberts Street, and a public alley. Options to include Parcel 217 to the north, which currently includes approximately 32 spaces, are included in the study as well. The Dillard trust parcels, 223 and 229, are not included in the site study, but are considered as future infill development sites and/or could possibly be used in the future to expand the parking structure horizontally to the north.

The 2nd Avenue North, South Lot, includes an existing 65 space public lot currently owned by the City on parcel 624. The site is situated between 2nd Avenue North, public alleys to the east and west, and private property to the South. Options to include the private parking lot to the South in the new ramp development are included for this site.

The City Hall Site, located between the future City Hall complex to the north and 1st Avenue North, includes approximately 172 public parking spaces developed for City Hall. The proposed development will need to consider the existing pumping station located at the south west corner of the property, which is currently scheduled for expansion in the near future as well as the new flood wall on the east side of the site.

The NP Avenue Site is located on the south side of NP Avenue between private property to the east and west and railroad tracks to the south. The public lot contains 145 public parking spaces. The private parking lot to the east contains approximately 103 parking spaces, and is also considered an option for the parking ramp development.

In addition to the proposed sites for the parking ramp site evaluation, the City is considering a vertical expansion of the existing Civic Center Parking Ramp which is located adjacent to the Radisson Hotel. The parking ramp currently provides parking for approximately 238 vehicles, and was originally designed for one level of expansion. A study to assess a second level of expansion is also being considered.

Figure 1 – Downtown Fargo & Parking Structure Sites

SCOPE OF SERVICES

The site feasibility study will provide an opportunity to work with the City of Fargo to identify project and site issues, evaluate/confirm parking needs, select the preferred parking ramp options, and to develop the cost of construction. Based on the City's requirements, the study should provide:

1. A preliminary design of a parking ramp on each site, with alternative sizes (levels).
2. Opportunities for mixed uses (main floor commercial or attached hotel/housing/office).
3. An estimated cost of construction, including professional services.

In addition to evaluating sites, the study should provide a design and cost estimate to add a level or levels onto the Civic Center Ramp adjacent to the Radisson Hotel.

Following is our scope of services for Part A of this study, which includes a site feasibility analysis of the potential parking ramp sites. The goal of Part A is to select the two top rated sites which will be further developed in Part B of our services, upon approval and notice to proceed by the City. Part B will further develop the design of the top two sites through the Schematic Design phase.

1. Review site conditions considering topography, property dimensions, parcel ownership, adjacent buildings/businesses, traffic flow/patterns on adjacent streets, parker destinations, probable pedestrian flow, accessibility, functional layouts, mixed use opportunities, and other features important to the city.
2. Perform a general code review to identify issues that may affect construction and cost.
3. Prepare a site analysis summary for each specific location, to include, at minimum, consideration of general opportunities and constraints, proximity to demand, traffic patterns and access, acreage/land assembly, potential spin-off benefit/economics, opportunities for mixed-use and existing infrastructure.
4. Attend a two day working session to develop rough sketches of multiple options for each site related to the layout of parking and mixed use components.
5. Considering the four (4) primary sites for a new mixed use parking structure, develop two to three alternative parking structure layouts and circulation systems, evaluate advantages and disadvantages of each, and recommend location and layout best meeting the project criteria. We will consider:
    - Site footprint
    - Integration with the downtown community
    - Develop the conceptual planning for mixed-use development with integration of the parking structure, street level retail and/or other mixed use opportunities such as commercial, residential, and hospitality
    - Number of parking spaces provided/number of levels
    - Accessibility and proximity to parker destinations
    - Relationship of parking to the peripheral road system and destinations

- Location and size of entrances/exits
- Vehicular and pedestrian flow internal to the site
- Parking space layouts
- Location of elevator/stair cores
- Service access and facilities (trash, recycling, off street loading, if any) for mixed-use
- Parking efficiency
- Expandability
- Initial construction cost

6. For the existing Civic Center Ramp, develop parking layout drawings showing the expanded parking structure considering one or two additional levels. The layouts will include a review of entry/exit capacities, circulation, pedestrian routes, stair/elevator expansion, and parking space count, etc.
7. Prepare a comparison matrix for the selected ramps sites and alternative designs.
8. Prepare refined documents for a single design option for each site (based on selection by City staff) and put in presentation form for the Parking Commission and public use
9. Present conceptual plans developed for the various sites. These floor plan sketches to include grade-level, mixed-use spaces, typical-level and roof-level plan drawings, as well as isometric drawings for each option. Parking space count and floor area will be determined for each option considering a basement, ground level, and two supported levels as well as options if a third or fourth supported level were added.
10. Prepare a three-dimensional Sketch Up model of the selected options to help define potential architectural appearance and massing.
11. Prepare an outline of potential sustainability strategies for the project.
12. Develop a brief written description of the proposed parking structures, including a matrix summary of their features and operating characteristics. Prepare a narrative/executive summary outlining the study options and basis for recommending the selected design alternative for each site.
13. Develop a site feasibility report that summarizes design criteria, presents conceptual layouts, provides an estimate of probable construction cost, and provides a schedule to meet project requirements. Preliminary estimates of probable construction cost will be based on a "cost per square foot" and "cost per parking space" basis.
14. Submit a draft of the site feasibility study report for review and comment.
15. Submit the final report, integrating the interim report with subsequent review comments and changes that may have developed during the course of the study.

SITE EVALUATIONS

Two of the most important factors when evaluating a site for the development of a parking ramp are location and site dimensions. That is to say, any site selected for development should be in close proximity to primary destinations. Walking distances exceeding two or three blocks are considered unacceptable by most parking patrons, particularly on poor weather days. The size and shape of a site also influences the efficiency of the parking layout and its cost-effectiveness. The six sites being considered for the development of structured parking are all suitable in terms of site dimensions and topography, but the larger sites typically result in a much more efficient parking structure than do the smaller sites.

Following are additional criteria that will be used to evaluate the four sites:

- User Groups Served
- Site Visibility
- Revenue Potential of the Site
- External Traffic Flow and Conditions
- Parking Efficiencies
- Existing Spaces Replaced
- Site Access and the Intermixing of Vehicles and Pedestrians
- Visual Impact/Architectural Compatibility/Historic Integrity
- Shared-Use Capabilities
- Development Potential of the Site
- Mixed-Use Possibilities

User groups served, site visibility, and revenue potential are all related. It is generally recommended to provide a downtown parking ramp on a site that is visible from primary streets and in close proximity to downtown demand generators such that it will serve the general downtown visitor. This is particularly important with respect to revenue generation. Revenues can be maximized with shorter stays and the higher turnover of spaces.

The number of existing spaces on a site is also an important consideration. Unless the generator of parking demand on the site is also being eliminated, the existing surface spaces on a site should be replaced in the parking ramp, which can substantially increase the size of a parking facility and the cost per additional spaces gained. And in most cases, the number of spaces gained is the key contributor of a parking ramp to the potential development opportunities.

Even if a parking facility is well located relative to parking generators, it still may be inconvenient or unsuccessful if vehicles cannot enter or exit in a timely manner. Entry/exit points should be placed a minimum of 75 feet from an intersection. Other considerations are roadway width for dedicated turn lanes, the ability to provide at least two entry and exit lanes (one of which can be reversible), setbacks from curb lines for adequate turning maneuverability, and pedestrian/vehicle conflicts.

It is also preferable from a security perspective to build parking ramps in areas with higher activity levels. Perceived safety is a concern at an isolated site, particularly after dark.

Other questions to address when considering the location for a new parking ramp include:

- Will there be sufficient resources to make the parking facility architecturally compatible with surrounding buildings?
- Are there strict design guidelines that will add significant cost to the facility?
- Will the ramp height be compatible with the height of surrounding buildings?
- Will the structure block the view from windows of an adjacent building?
- Will the parking facility generally detract from existing buildings?
- Which of the sites offers the best possibility for ground-floor commercial or office space?
- What other development opportunities exist on the site (office, hotel, residential)?
- Is there a better use for the site other than parking? Parking does not always represent the highest use of a site.

It can be important to place a parking ramp on a city-owned site if the cost of land acquisition is relatively high. Adding the cost of land to project costs can make an otherwise financially feasible project infeasible.

CONCEPT PARKING PLANS

Concept parking plans have been developed for each of the six sites, as well as for the Civic Center Ramp expansion. A summary of the concept plan features for each site is provided as follows, with figures provided as noted:

- Warner Site – Concepts 1-A through 1-F
- St. Marks Site – Concepts 2-A and 2-B
- 2nd Avenue North, North Lot – Concepts 3-A through 3-E
- 2nd Avenue North, South Lot – Concepts 4-A through 4-C
- City Hall Site – Concept 6-A
- NP Avenue Site – Concepts 7-A through 7-D

In addition, a summary of the concept drawings are provided for the Civic Center Ramp, including concepts 5-A and 5-B.

Site 1: Warner Site

The following figure presents an analysis of the strengths, weaknesses, opportunities, and constraints (SWOC analysis) of the Warner Site:

Strengths	Weaknesses
- On Broadway and 4th Avenue	- Not City owned land
- Good vehicular access	- Elevator at NW corner
- Good pedestrian connection to North Broadway	- 3 blocks from elevator to Broadway & 2nd Avenue
- 297' E/W length	- Relocate electrical power lines
- No lost public parking	- Stormwater management (site greater than 1 acre)
- Favored by DPC, Private, City Staff	- Lose 93 parking spaces (not City lot)
- Cooperative land owners	
Opportunities	**Constraints**
- Mixed use potential with parking	- Acquire property & Good Year
* Street level commercial on Broadway and 4th	- N/S length only 200' (efficiency)
* 8-12 story stacked residential or hotel	- Power lines in alley through center of site
* Good Year on 5th Street	- Setback from building at NW corner
- Stimulate 4th Avenue and North side development	- Private drive to north, potentially no access
- Supply parking for block #9	- Cost impacts of residential building above parking
- Supply prospective convention center site	- Basement construction complications
- Evening use with residential building	

Warner Site – Concept 1-A

The Warner Site Concept 1-A parking ramp is depicted on Sheets 1-2 in Appendix B. The parking ramp contains 608 parking spaces in six levels (below grade level, grade level, and 4 supported levels). Concept 1-A has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 297' long. The parking efficiency of the ramp is 338 square feet per parking space. The proposed parking ramp displaces 93 existing parking spaces, for a net gain of 515 spaces. If the structure were reduced by one level, the parking count would be reduced by 118 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

It is anticipated that the north parking bay will be sloped at 6.0% from the first to the second level to accommodate a higher clearance for commercial space, with the ramp slopes at the remaining levels at 5.5%. The south bay will be flat and provide an architecturally level façade on the east, west, and south sides of the ramp. The parking ramp is anticipated to have a floor-to-floor height of 12'-6" between the first and second levels for clearance over the 10,660 square feet of commercial space on the ground level of the ramp. The floor-to-floor height between the remaining levels is 11'-4".

There is one vehicle entry/exit driveway to the ramp from 4th Avenue North, with one entry lane and two exit lanes. Inside the parking structure there are separate gated lanes for access to the basement and to the upper levels. There is one elevator located in both the northwest and southeast corners of the parking ramp and stairs are located next to the elevators. This will allow the prime corner of the structure at Broadway and 4th Avenue to be utilized for commercial space, although this would also be the preferred location for the elevator tower. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level. Concept 1-A will require the demolition of the Goodyear building.

Development Opportunity – Concept 1-A includes a future mixed-use liner building in the northeast corner that could potentially include parking, office and/or residential uses. The typical floor plan would include approximately 7,500 gross square feet. Based on initial discussions with local developers, the anticipation is that the site is most suited for a hotel or residential building.

The Concept 1-A plan for the street level is shown below in Figure 2. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report provides additional information.

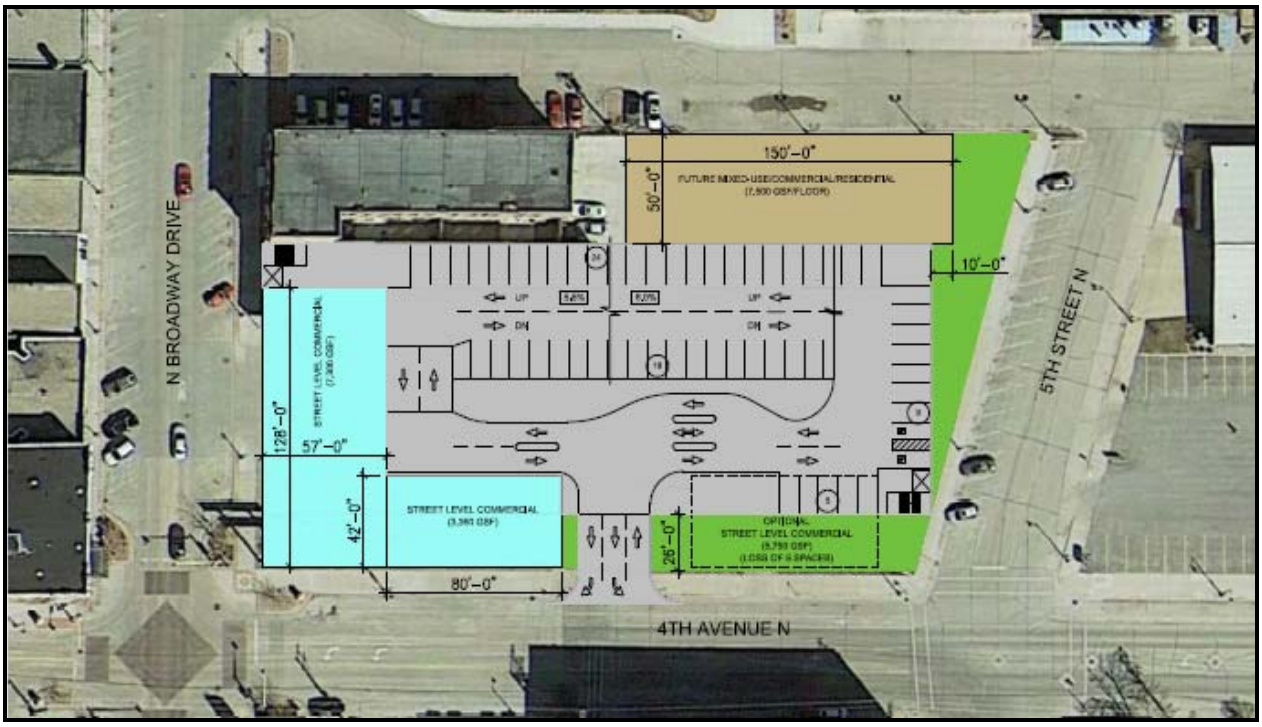


Figure 2 Concept 1-A Site/Level 1 Plan

The 15th & Pearl mixed-use development in Boulder, Colorado is a 685 space parking facility wrapped by office and retail space in a downtown environment.

Figure 3 15th & Pearl Mixed Use Facility

Warner Site – Concept 1-B

The Warner Site Concept 1-B parking ramp is depicted on Sheets 3-4 in Appendix B. The parking ramp contains 573 parking spaces in six levels (below grade level, grade level, and 4 supported levels). Concept 1-B has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 250' long. The parking efficiency of the ramp is 341 square feet per parking space. The proposed parking ramp displaces 93 existing parking spaces, for a net gain of 480 spaces. If the structure were reduced by one level, the parking count would be reduced by 98 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The north parking bay will be sloped at 5.1% and the south bay will be sloped at 2%. A slightly higher slope will be provided from the first to the second level to accommodate a higher clearance for the optional commercial space. The 2% slope in the south bay will allow for an architecturally flat façade on the on the east, west, and south sides of the ramp. The parking ramp is anticipated to have a floor-to-floor height of 12'-6" between the first and second levels, and 11'-4" at the remaining levels.

There is one vehicle entry/exit driveway to the ramp from 4th Avenue North, with one entry lane and two exit lanes. Inside the parking structure there are separate gated lanes for access to the basement and to the upper levels. There is one elevator located in both the northwest and southeast corners of the parking ramp and stairs are located next to the elevators, however the elevator at the northwest corner would best be located at the southwest corner if the optional commercial space is not included. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level. Concept 1-B will require the demolition of the Goodyear building.

Development Opportunity – Concept 1-B includes future mixed-use liner buildings in the northeast corner and on the west elevation along Broadway Drive. Based on initial discussions with the City and local developers, the liner building in the northeast corner is anticipated to be commercial or residential space. The typical floor plan would include approximately 7,500 gross square feet. The building on the west elevation would likely be a commercial office building with a typical floor plan of approximately 7,000 gross square feet per level. The lower floors of the liner buildings could potentially include parking access through the public parking structure.

The Concept 1-B plan for the street level is shown below in Figure 3. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

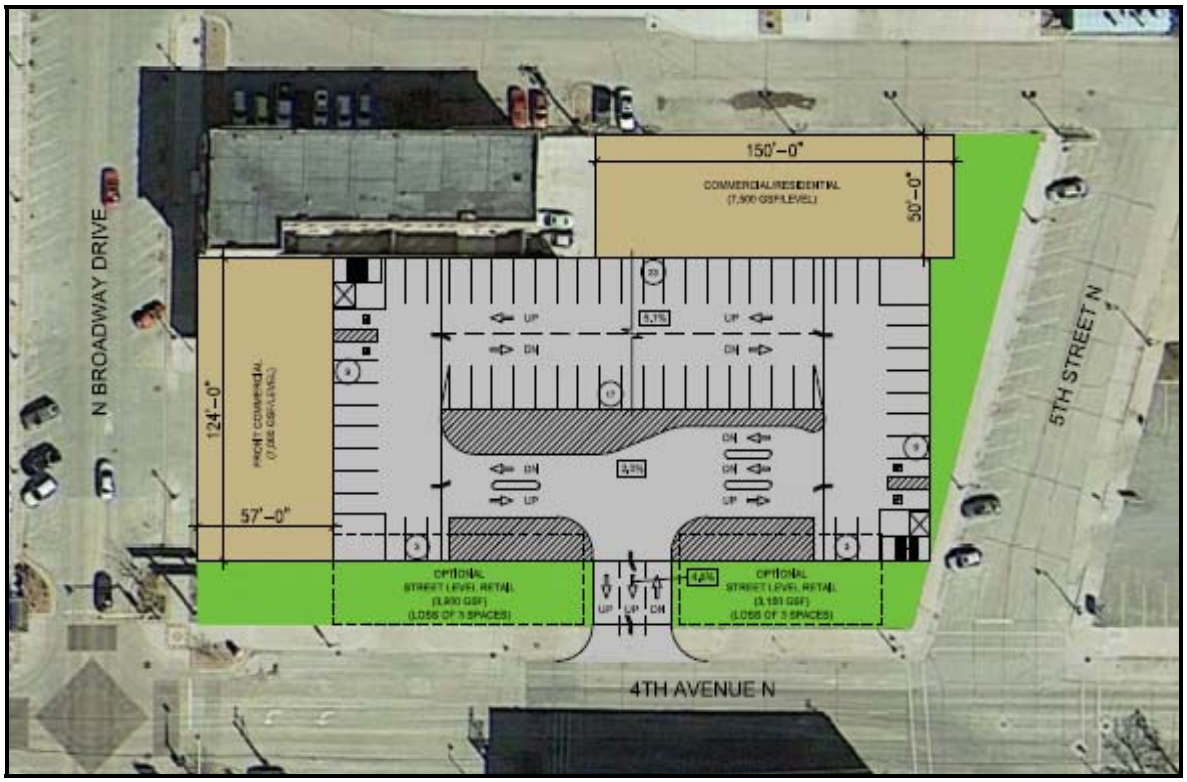


Figure 4 Concept 1-B Site/Level 1 Plan

Warner Site – Concept 1-C

The Warner Site Concept 1-C parking ramp is depicted on Sheets 5-6 in Appendix B. The parking ramp contains 584 parking spaces in six levels (below grade level, grade level, and 4 supported levels). Concept 1-C has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 290' long. This option moves the parking ramp closer to 4th Avenue, providing more separation from the building in the northwest, as well as increasing the square footage for the northeast liner building. The parking efficiency of the ramp is 343 square feet per parking space. The proposed parking ramp displaces 93 existing parking spaces, for a net gain of 491 spaces. If the structure were reduced by one level, the parking count would be reduced by 114 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

It is anticipated that the north parking bay will be sloped at 6.0% from the first to the second level to accommodate a higher clearance for commercial space, with the ramp slopes at the remaining levels at 5.7%. The south bay will be flat and provide an architecturally level façade on the east,

west, and south sides of the ramp. The parking ramp is anticipated to have a floor-to-floor height of 12'-6" between the first and second levels for clearance over the 8,190 square feet of commercial space. The floor-to-floor height between the remaining levels is 11'-4".

There is one vehicle entry/exit driveways to the ramp from 4th Avenue North, with one entry lane and two exit lanes. Inside the parking structure there are separate gated lanes for access to the basement and to the upper levels. There is one elevator located in both the northwest and southeast corners of the parking ramp and stairs are located next to the elevators. This will allow the prime corner of the structure at Broadway and 4th Avenue to be utilized for commercial space although this would also be the preferred location for the elevator tower. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level. Concept 1-C will require the demolition of the Goodyear building.

Development Opportunity – Concept 1-C includes a future mixed-use liner building in the northeast corner that could potentially include an office or residential tower and parking could be located at the lower levels of the building accessed through the parking structure. The typical floor plan would include approximately 10,200 gross square feet. Based on initial discussions with local developers, the anticipation is that the site is most suited for a commercial office or residential building.

The Concept 1-C plan for the street level is shown below in Figure 4. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

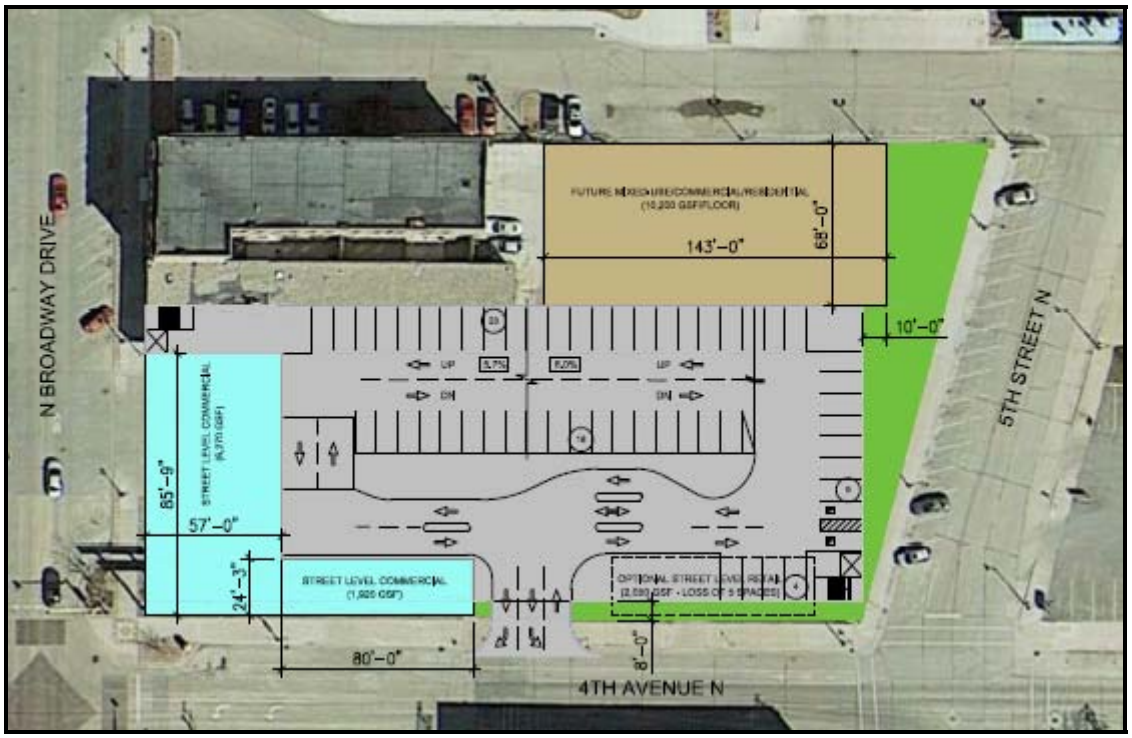


Figure 5 Concept 1-C Site/Level 1 Plan

Figure 6 MLK, Jr. Transportation Center

The Martin Luther King, Jr. Transportation Center located in Sioux City, Iowa is a 484 space parking structure with a multi-modal transportation center and retail space at street level. The five level facility blends with the scale and architecture of the surrounding neighborhood, and provides connectivity with the downtown.

Warner Site – Concept 1-D

The Warner Site Concept 1-D parking ramp is depicted on Sheets 7-8 in Appendix B. The parking ramp contains 623 parking spaces in six and a half levels (1.5 below grade levels, grade level, and 4 supported levels). Concept 1-D has two parking bays in a double threaded helix configuration in a footprint that is 114' wide by 292' long. The parking efficiency of the ramp is 326 square feet per parking space. The proposed parking ramp displaces 93 existing parking spaces, for a net gain of 530 spaces. If the structure were reduced by one level, the parking count would be reduced by approximately 105 spaces.

Traffic circulation throughout the ramp is one-way, and the parking spaces 75 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 17'-0" wide (55'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

It is anticipated that the north and south parking bays will be sloped at 6.0% from the first to the second level to accommodate a higher clearance for commercial space, with the ramp slopes at the remaining levels at 5.2%. An architectural screening is anticipated at the south façade along 4th Avenue N to hide the sloping ramp behind. The east and west facades will allow for architecturally flat facades. The parking ramp is anticipated to have a floor-to-floor height of 13'-3" between the first and second levels for clearance over the 9,640 square feet of commercial space. The floor-to-floor height between the remaining levels is 11'-4".

There are separate entry and exit lanes located on the west elevation from 5th Street N. There is one elevator located in both the northwest and southeast corners of the parking ramp and stairs are located next to the elevators. This will allow the prime corner of the structure at Broadway and 4th Avenue to be utilized for commercial space although this would also be the preferred location for the elevator tower. All levels of the parking ramp are anticipated to have sufficient openings to be

classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level. Concept 1-D will require the demolition of the Goodyear building.

Development Opportunity – Concept 1-D includes a future mixed-use liner building in the northeast corner that would potentially include an office or residential tower. The typical floor plan would include approximately 7,050 gross square feet. Based on initial discussions with local developers, the anticipation is that the site is most suited for a commercial office or residential building.

The Concept 1-D plan for the street level is shown below in Figure 5. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

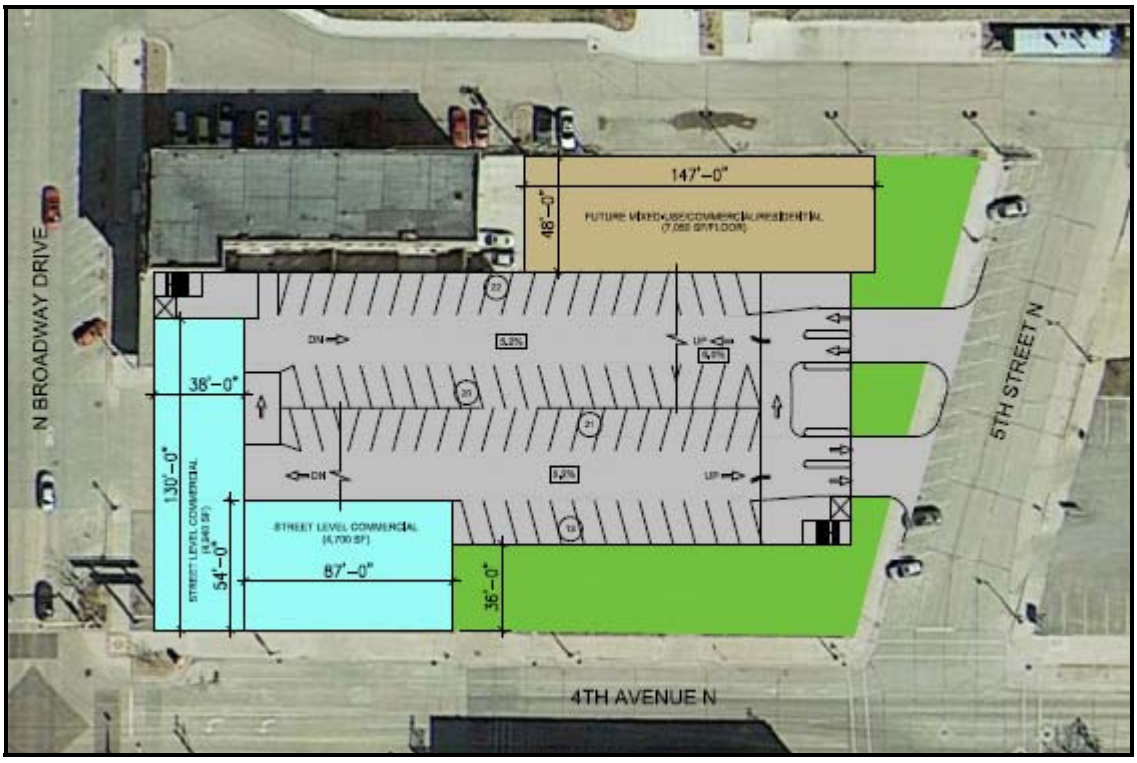


Figure 7 Concept 1-D Site/Level 1 Plan

Warner Site – Concept 1-E

The Warner Site Concept 1-E parking ramp is depicted on Sheets 9-10 in Appendix B. The parking ramp contains 565 parking spaces in eight levels (below grade level, grade level, and 6 supported levels). Concept 1-E has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 200' long. The structure is rotated 90 degrees from the previous options, and is located over the existing parking lot on the east side of the site. The parking efficiency of the ramp is 346 square feet per parking space. The proposed parking ramp displaces 93 existing parking

spaces, for a net gain of 472 spaces. If the structure were reduced by one level, the parking count would be reduced by 74 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The east and west parking bays will be sloped at 5.2% throughout the structure to provide adequate floor-to-floor heights and end bay parking for the shorter ramp length. An architectural screening is anticipated at the east and west façades to hide the sloping ramp behind. The north and south bays will allow for architecturally flat facades. The parking ramp does not include any grade level commercial space and will have a typical floor-to-floor height of 11'-4".

There is one vehicle entry/exit driveway to the ramp from 4th Avenue North, with one entry lane, one reversible lane and one exit lane. There are two elevators located in the southeast corner of the parking ramp and stairs are located next to the elevator. The parking ramp does not include any grade level commercial space. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level. Concept 1-E will not require the demolition of the Goodyear building until the future development on the west half of the site is implemented.

Development Opportunity – Concept 1-E provides the opportunity for a future mixed-use building on the west half of the site at the intersection of Broadway and 4th Avenue. Based on initial discussions with local developers, the anticipation is that the site is most suited for a commercial office or hotel/residential development.

The Concept 1-E plan for the street level is shown below in Figure 6. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

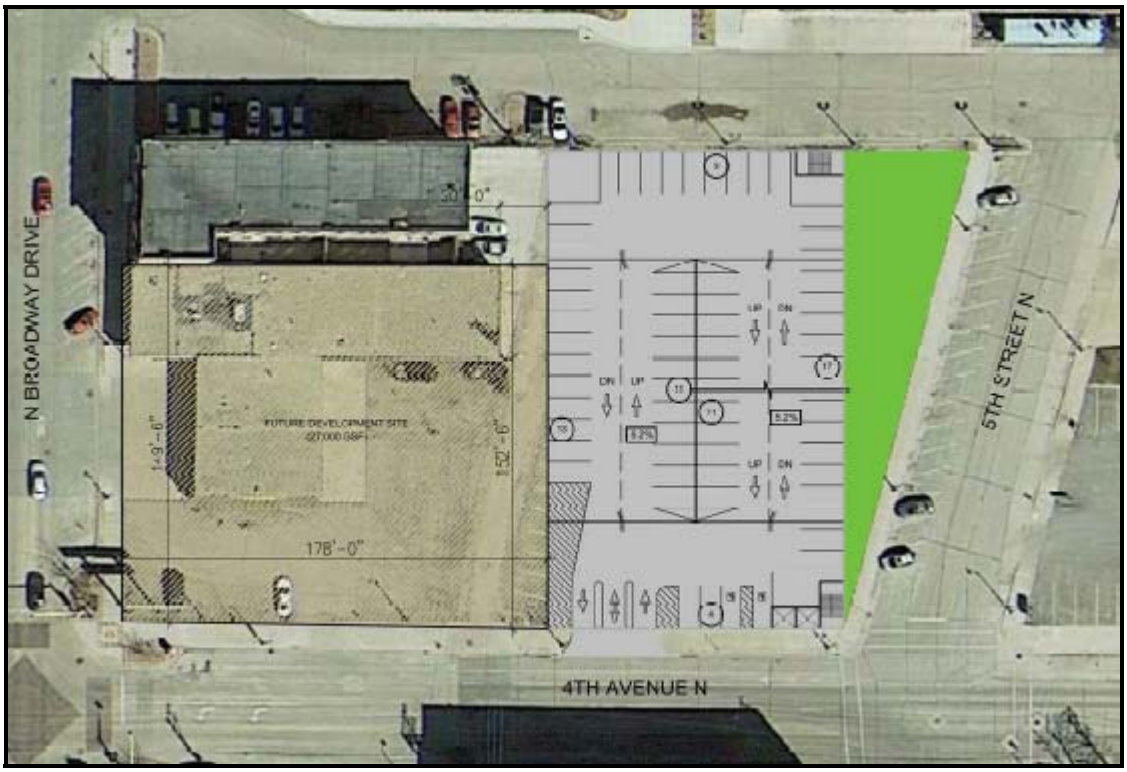


Figure 8 Concept 1-E Site/Level 1 Plan

Warner Site – Concept 1-F

The Warner Site Concept 1-F parking ramp is depicted on Sheets 11-13 in Appendix B. The parking ramp contains 629 parking spaces in six levels (below grade level, grade level, and 4 supported levels). Concept 1-E has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 200' long on the eastern half of the site. Two flat bays extend over the western half of the site with a footprint of 122' wide by 166' long. Street level commercial space is provided at the Broadway, 4th Avenue, and 5th Street elevations. The parking efficiency of the ramp is 387 square feet per parking space. The proposed parking ramp displaces 93 existing parking spaces, for a net gain of 536 spaces. If the structure were reduced by one level, the parking count would be reduced by 130 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

A 12% speed ramp is provided from Level 1 to Level 2 to provide the 14'-0" floor-to-floor height over the grade level commercial spaces. The east and west parking bays will be sloped at 5.2% throughout the remainder of the structure to provide an 11'-4" floor-to-floor heights and end bay

parking for the shorter ramp length. An architectural screening is anticipated at the east façade to hide the sloping ramp behind. The north, south, and west bays will allow for architecturally flat facades.

There are two vehicle entry/exit driveways to the ramp, with the main parking accessed from 4th Avenue North, and separate below grade parking accessed from the north. There are two elevators located in the northwest and southeast corners of the parking ramp and stairs are located next to the elevators. This will allow the prime corner of the structure at Broadway and 4th Avenue to be utilized for commercial space although this would also be the preferred location for the elevator tower. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level. Concept 1-F will require the demolition of the Goodyear building.

Development Opportunity – Concept 1-F includes the potential for a future residential tower on the west half of the site. The residential tower would be located at Broadway Drive and 4th Avenue North.

The Concept 1-F plan for the street level is shown below in Figure 7. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 9 Concept 1-F Site/Level 1 Plan

Site 2: St. Marks Site

The following figure presents the SWOC analysis of the St. Marks Site:

Strengths	Weaknesses
- No lost Public Parking	- N/S Concept not very convenient
- E/W Option access from Roberts	- 3 blocks from elevator to Broadway & 2nd Ave
- E/W pedestrian connection to Roberts & Alley	- Not City owned land
- E/W Concept 290' length	- Short N/S site is inefficient
	- Elevator not toward downtown
	- N/S Concept 215' length
	- Not Favored by DCP or City Staff
Opportunities	**Constraints**
- Mixed use potential with parking	- Acquiring property from multiple owners
* NDSU Growth	- Narrow E/W site along Salvation Army
* Stacked Residential	- Short N/S site
- Stimulate West Side development	- Commercial opportunity limited at E/W site
- Evening use w/ residential & St Marks Event Center	- Commercial opportunity not desirable at N/S site
- Trade for land with developer	- Cost impacts of residential above parking
- Provide parking for NDSU & Post Office	- Basement construction complications
- E/W Concept allows 2nd Ave for infill site	

St. Marks Site – Concept 2-A

The St. Marks Concept 2-A parking ramp is depicted on Sheets 14-15 in Appendix B. The parking ramp contains 616 parking spaces in eight levels (below grade level, grade level, and 6 supported levels). Concept 2-A has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 215' long. The parking efficiency of the ramp is 340 square feet per parking space. The proposed parking ramp displaces 106 existing parking spaces, for a net gain of 510 spaces. If the structure were reduced by one level, the parking count would be reduced by 82 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The east and west parking bays will be sloped at 4.5% and 4.8%, respectively, to provide adequate floor-to-floor heights and end bay parking for the shorter ramp length. An architectural screening may be considered at the east and west façades to hide the sloping ramp behind. The north and south bays will allow for architecturally flat facades. The parking ramp does not include any retail space and will have a typical floor-to-floor height of 11'-4".

There is one vehicle entry/exit driveway to the ramp from 7th Street N, with one entry lane, one exit lane, and one reversible lane. There is one elevator located in both the northwest and southwest corners of the parking ramp and stairs are located next to the elevators. A service drive has been provided adjacent to the St. Marks building to support the new event functions anticipated.

The parking ramp does not include any grade level commercial space due to its more remote location from the retail core of downtown. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 2-A does not include any mixed-use developments in the current parking plans. Based on initial discussions with local developers, this site is too far from the core of downtown and would generally be considered for accessory parking, and not ideal for mixed-use development.

The Concept 2-A plan for the street level is shown below in Figure 8. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 10 Concept 2-A Site/Level 1 Plan

The Stillwater Parking Structure in Stillwater, Minnesota is located on the edge of the downtown and supports downtown, hotel, and community parking needs. The parking structure provides 296 parking spaces on four levels, and was designed to blend with the adjacent residential neighborhood.

Figure 11 Concept 2-A Site/Level 1 Plan

St. Marks Site – Concept 2-B

The St. Marks Concept 2-B parking ramp is depicted on Sheets 16-17 in Appendix B. The parking ramp contains 641 parking spaces in six and one half levels (1.5 below grade level, grade level, and 4 supported levels). Concept 2-B has two parking bays in a double threaded helix configuration in a footprint that is 114' wide by 290' long. The parking efficiency of the ramp is 323 square feet per parking space. The proposed parking ramp displaces 104 existing parking spaces, for a net gain of 537 spaces. If the structure were reduced by one level, the parking count would be reduced by 109 spaces.

Traffic circulation throughout the ramp is one-way, and the parking spaces 75 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 17'-0" wide (55'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The east and west parking bays will be sloped at 5.3% to provide adequate floor-to-floor heights and end bay parking for the ramp. An architectural screening may be considered at the north and south façades to hide the sloping ramp behind. The east and west bays will allow for architecturally flat facades. The parking ramp does not include any retail space and will have a typical floor-to-floor height of 11'-4".

There are separate vehicle entry and exit locations, with entry lanes from both Roberts Street and 7th Street while the exit lanes are on 7th Street. There are two elevators located in the northeast corner and a single elevator in the northwest corner. Stairs are located next to the elevators. The parking ramp does not include any grade level commercial space. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 2-B does not include any mixed-use developments in the current parking plans. Based on initial discussions with local developers, this site is too far from the core of downtown and would generally be considered for accessory parking, and not ideal for mixed-use development.

The Concept 2-B plan for the street level is shown below in Figure 9. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 12 Concept 2-B Site/Level 1 Plan

The Van Buren Parking Structure is located in adjacent to the thriving business district in Naperville, Illinois. The 581 space, 5 level, structure provides employee and customer parking for nearby shops and restaurants. The narrow frontage with access from streets at both ends is similar to the Concept 2-B layout.

Figure 13 Van Buren Parking Structure

Site 3: ***2nd Avenue North, North Lot***

The following figure presents the SWOC analysis of the 2nd Avenue North, North Lot Site:

Strengths	Weaknesses
- Elevator 1/2 block from Broadway and 2nd Avenue	- N/S only 175' of City owned land
- Good vehicle access from 2nd Ave or Roberts	- N/S only 225' with Parcel # 217
- Great pedestrian access to Broadway	- Lose 100 public spaces in Lot 625
- Favored by DCP and City staff	- Lose 32 private spaces in Lot 217
- No storm water management (less than 1 acre site)	- Not City owned land in 3 parcels North of City Lot
- City owns parcel 625	- Low parking space count and high efficiency
- On 2nd Avenue North	- No liner building on 2nd Avenue N
Opportunities	**Constraints**
- Infill development rather than parking	- Multiple land owners and difficult land acquisition
- Trade land with land owner and private developer	- Power lines in alley
- Mixed use potential with parking	- N/S length only 175', or 225' w/ adjacent lot
* Street level/alley commercial opportunities	- Cost impacts of building above parking
* Residential above & liner building on Roberts	- Basement construction complications
- Stimulate infill development on Parcels 223 & 229	- Northside firewall or property line agreement
and City Lot 624 (South Side of 2nd)	
- Evening use from Broadway	
- Future expansion to the North	
- Supply parking for Block #9	
- Widen alley by 10' for dumpster storage	

2nd Avenue North, North Lot – Concept 3-A

The 2nd Avenue North, North Lot Site Concept 3-A parking ramp is depicted on Sheets 18-19 in Appendix B. The parking ramp contains 452 parking spaces in eight levels (below grade level, grade level, and 6 supported levels), and is located on the City owned parcel only in parking lot A. Concept 3-A has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 175' long. The parking efficiency of the ramp is 371 square feet per parking space. The proposed parking ramp displaces 100 existing parking spaces, for a net gain of 352 spaces. If the structure were reduced by one level, the parking count would be reduced by 62 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). End bay parking is provided only at the south end due to the short length of the structure, with wider end-bay drive aisles to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The parking bay will be sloped at 6.0% from the first to the second level to accommodate a higher clearance for commercial space, with the ramp slopes at the remaining levels at 5.7%. The north and south bays will be flat and provide an architecturally level façade. The east and west bays will be sloped, with the east side facing the alley and the west side adjacent to the future development. The north façade is at the interior property line so it will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner and a variance from the city may allow it to have openings until such time the ramp is expanded to the north or the property to the north is otherwise developed. The parking ramp is anticipated to have a floor-to-floor height of 12'-6" between the first and second levels for clearance over the 3,240 square feet of commercial space on the ground level of the ramp. The floor-to-floor height between the remaining levels is 11'-4".

There is one vehicle entry/exit driveway to the ramp from 2nd Avenue North, with only one entry lane and one exit lane due to the tight site conditions. There is one elevator located in southwest corner of the parking ramp and stairs are located in the northwest and southwest corners. This will allow the corner of the structure closest to Broadway to be utilized for commercial space although this would also be the preferred location for the elevator tower. All levels of the parking ramp are anticipated to have sufficient openings if the north façade is open to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 3-A includes a future mixed-use liner building along the Roberts Street elevation. The typical floor plan would include approximately 9,000 gross square feet. Based on initial discussions with local developers, the anticipation is that the site is most suited for a residential or commercial office building.

The Concept 3-A plan for the street level is shown below in Figure 10. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 14 Concept 3-A Site/Level 1 Plan

The South Spring Street mixed-use development located in Greenville, South Carolina, consists of a residential condominium liner building adjacent to a parking structure. The development includes 30 condo units, 900 parking spaces, and grade level office and retail space in the parking structure.

Figure 15 South Spring Street Parking Structure

2nd Avenue North, North Lot – Concept 3-B

The 2nd Avenue North, North Lot Site Concept 3-B parking ramp is depicted on Sheets 20-21 in Appendix B. The parking ramp contains 474 parking spaces in seven levels (below grade level, grade level, and 5 supported levels), and is located on the City owned parcel only in parking lot A. Concept 3-B has three parking bays in a side by side single threaded helix configuration in a footprint that is 176' wide by 175' long. The parking efficiency of the ramp is 410 square feet per parking space. The proposed parking ramp displaces 100 existing parking spaces, for a net gain of 374 spaces. If the structure were reduced by one level, the parking count would be reduced by 85 spaces.

Traffic circulation on the center ramping bay is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The outer two ramping bays have one-way traffic with 75 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module) for two-way traffic and 17'-0" wide (55'-0" parking module) for one-way traffic. The end-bay drive aisles are also one way.

End bay parking is provided only at the south end due to the short length of the structure, with wider end-bay drive aisles to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on the levels where there is adequate vertical clearance.

A 12% speed ramp is utilized from the first to the second level to accommodate a higher clearance for commercial space, with the ramp slopes at the remaining levels at 5.0%. The north and south bays will be flat and provide an architecturally level façade. The east and west bays will be sloped, with the east side facing the alley and the west side facing Roberts Street. An architectural screening may be considered at the west façade to hide the sloping ramp behind. Also, the north façade is at the interior property line so it will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner and a variance from the city may allow it to have openings until such time the ramp is expanded to the north or the property to the north is otherwise developed. The parking ramp is anticipated to have a floor-to-floor height of 14'-0" to 19'-8" between the first and second levels for clearance over the 17,825 square feet of commercial space on the ground level of the ramp. The floor-to-floor height between the remaining levels is 11'-4".

There are two vehicle entry/exit driveways to the ramp, with the main parking accessed from 2nd Avenue North with three gated lanes, and separate below grade parking accessed from Roberts Street with two gated lanes. There are two elevators and a stair located near the southeast corner of the parking ramp. They are set back from the corner of the ramp to maintain prime commercial space at the corner closest to Broadway. A second stair is provided near the southwest corner. All levels of the parking ramp are anticipated to have sufficient openings if the north façade is open to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level and perhaps Level 1.

Development Opportunity – Concept 3-B includes significant ground floor commercial space but no liner building. Based on initial discussions with the City and local developers, the potential for a small grocer, as well as commercial space along the alley may be viable options for the site. In

addition, the potential for stacked office or residential above the parking ramp can be considered, but likely at the reduction in the number of parking spaces.

The Concept 3-B plan for the street level is shown below in Figure 11. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 16 Concept 3-B Site/Level 1 Plan

The 1890 Wynkoop mixed-use development in Denver, Colorado, consists of 6 levels of parking, 1 level of retail at grade, and 3 levels of residential above the parking. Two levels of parking were constructed below grade to reduce the mass of the structure and to maintain views for adjacent buildings.

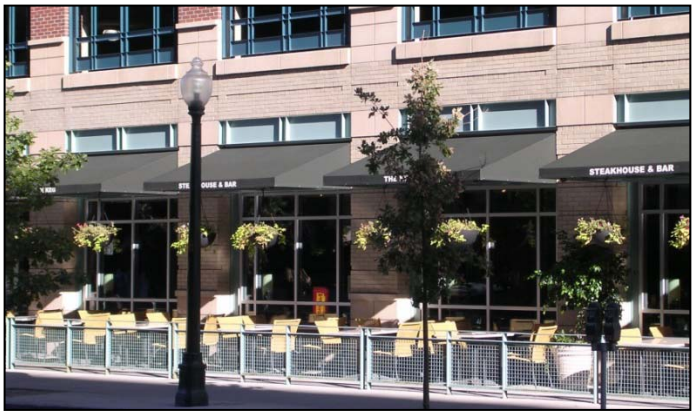


Figure 17 1890 Wynkoop Lofts

2nd Avenue North, North Lot – Concept 3-C

The 2nd Avenue North, North Lot Site Concept 3-C parking ramp is depicted on Sheets 22-23 in Appendix B. The parking ramp contains 528 parking spaces in seven levels (below grade level, grade level, and 5 supported levels), and is located on both the City owned parcel in parking lot A and the first adjacent private parcel to the north. Concept 3-C has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 225' long. The parking efficiency of the ramp is 345 square feet per parking space. The proposed parking ramp displaces 132 existing parking spaces, for a net gain of 396 spaces. If the structure were reduced by one level, the parking count would be reduced by 85 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The parking bay will be sloped at 5.0% from the first to the second level to accommodate a higher clearance for commercial space, with the ramp slopes at the remaining levels at 4.2%. The north and south bays will be flat and provide an architecturally level façade. The east and west bays will be sloped, with the east side facing the alley and the west side adjacent to the future development. The north façade is at the interior property line so it will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner and a variance from the city may allow it to have openings until such time the ramp is expanded to the north or the property to the north is otherwise developed. The parking ramp is anticipated to have a typical floor-to-floor height of 11-4", with Level 2 set back from 2nd Avenue North to provide higher 2-story clearance for the 4,830 square feet of street level retail.

There is one vehicle entry/exit driveway to the ramp from Roberts Street, with one entry lane, one exit lane, and one reversible lane. There are two elevators located in southwest corner of the parking ramp and stairs are located in the northwest and southwest corners. This will allow the corner of the structure closest to Broadway to be utilized for commercial space although this would also be the preferred location for the elevator tower. All levels of the parking ramp are anticipated to have sufficient openings if the north façade is open to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 3-C includes a future mixed-use liner building along the Roberts Street elevation. The typical floor plan would include approximately 9,000 gross square feet. Based on initial discussions with local developers, the anticipation is that the site is most suited for a residential or commercial office building.

The Concept 3-A plan for the street level is shown below in Figure 12. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

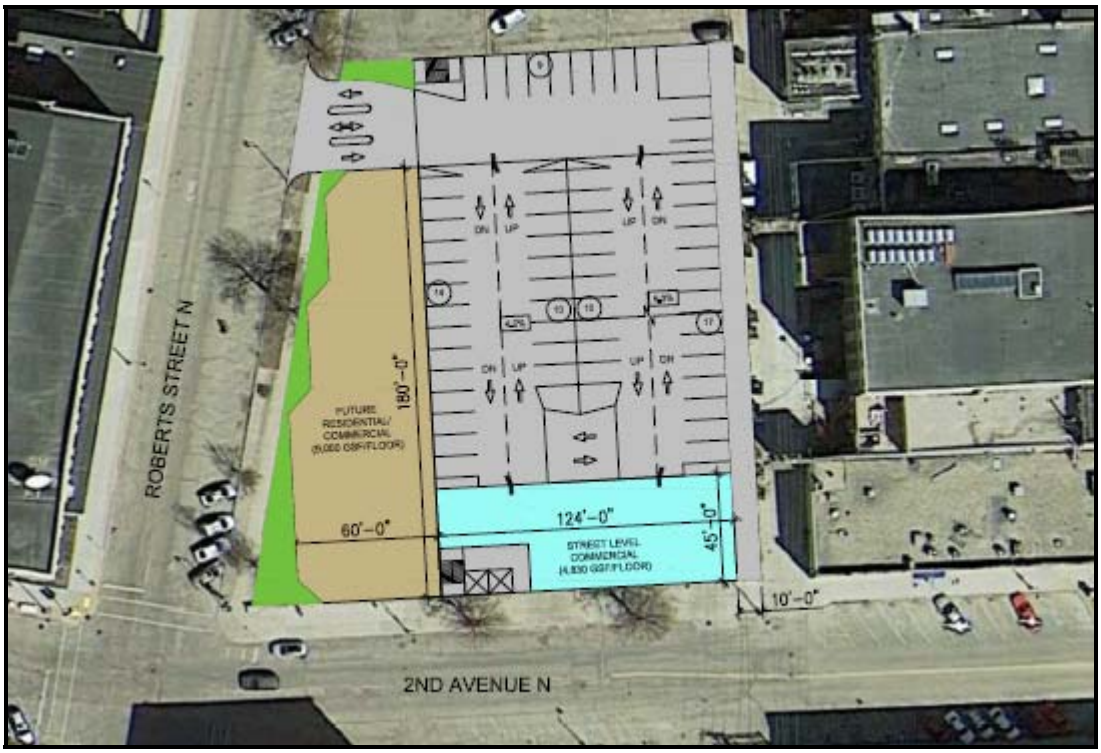


Figure 18 Concept 3-C Site/Level 1 Plan

2nd Avenue North, North Lot – Concept 3-D

The 2nd Avenue North, North Lot Site Concept 3-D parking ramp is depicted on Sheets 24-25 in Appendix B. The parking ramp contains 587 parking spaces in six levels (below grade level, grade level, and 4 supported levels), and is located on both the City owned parcel in parking lot A and the adjacent private parcel to the north. Concept 3-D has three parking bays in a side by side single threaded helix configuration in a footprint that is 176' wide by 225' long. The parking efficiency of the ramp is 355 square feet per parking space. The proposed parking ramp displaces 132 existing parking spaces, for a net gain of 455 spaces. If the structure were reduced by one level, the parking count would be reduced by 116 spaces.

Traffic circulation on the center ramping bay is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The outer two bays have one-way traffic with 75 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module) for two-way traffic and 17'-0" wide (55'-0" parking module) for one-way traffic. The end-bay drive aisles are also one way, and wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on the levels where there is adequate vertical clearance.

The center parking bay will be sloped at 6.3% from the first to the second level, with the center ramp slopes at the remaining levels at 4.2%. The ramp slopes at the east and west bays will be typical at 2.6%. The north and south bays will be flat and provide an architecturally level façade. The east

and west bays will be sloped, with the east side facing the alley and the west side facing Roberts Street and may warrant consideration of a façade treatment to conceal the sloping bays. The north façade is at the interior property line so it will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner and a variance from the city may allow it to have openings until such time the ramp is expanded to the north or the property to the north is otherwise developed. The parking ramp is anticipated to have a floor-to-floor height of 16'-2" to 20'-0" between the first and second levels for clearance over the 16,640 square feet of commercial space on the ground level of the ramp. The floor-to-floor height between the remaining levels is 11'-4".

There is one vehicle entry/exit driveway to the ramp from Roberts Street, with one entry lane, one exit lane, and one reversible lane leading to the upper levels and one entry lane and one exit lane leading to the basement. There are two elevators and a stair located near the southeast corner of the parking ramp. They are set back from the corner of the ramp to maintain prime commercial space at the corner closest to Broadway. A second stair is provided near the southwest corner. All levels of the parking ramp are anticipated to have sufficient openings if the north façade is open to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 3-D includes significant ground floor commercial/retail space but no liner building. Based on initial discussions with the City and local developers, the potential for a small grocer and/or commercial space along the street and alley, may be viable options for the site. In addition, the potential for stacked office or residential above the parking ramp can be considered but likely at the reduction in the number of parking spaces.

The Concept 3-D plan for the street level is shown below in Figure 13. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

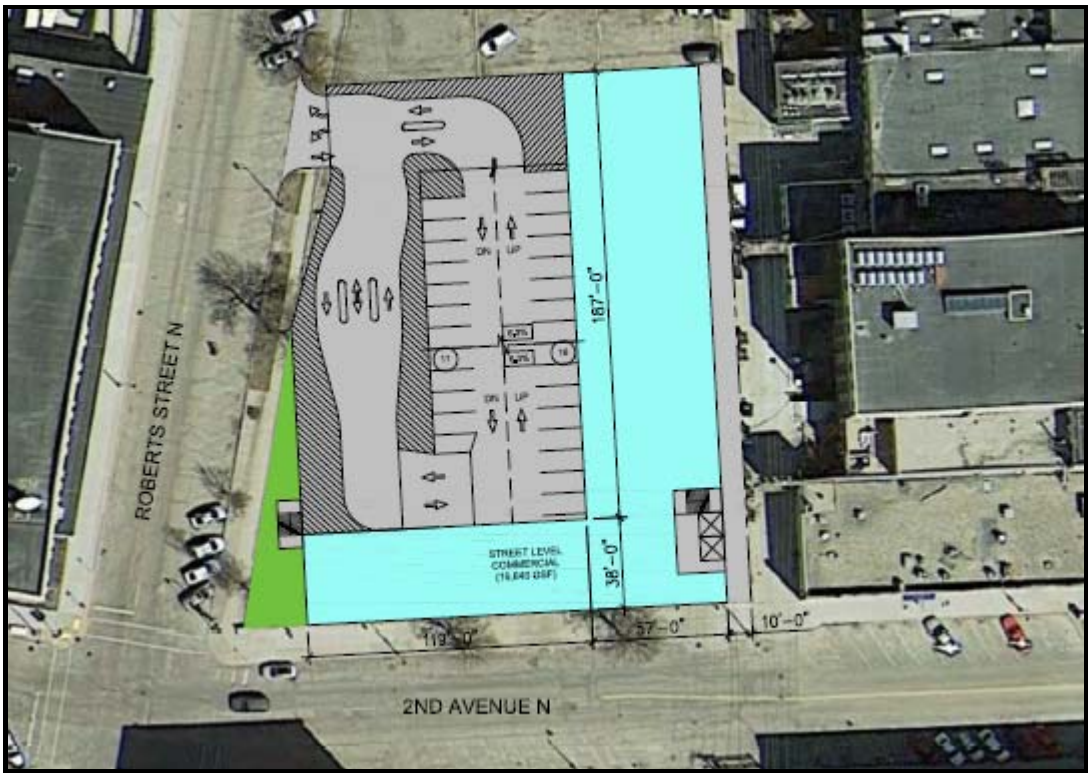


Figure 19 Concept 3-D Site/Level 1 Plan

2nd Avenue North, North Lot – Concept 3-E

The 2nd Avenue North, North Lot Site Concept 3-E parking ramp is depicted on Sheets 26-27 in Appendix B. The parking ramp contains 575 parking spaces in six levels (below grade level, grade level, and 4 supported levels), and is located on both the City owned parcel in parking lot A and the adjacent private parcel to the north. Concept 3-E has three parking bays in a side by side single threaded helix configuration in a footprint that is 176' wide by 225' long. The parking efficiency of the ramp is 368 square feet per parking space. The proposed parking ramp displaces 132 existing parking spaces, for a net gain of 443 spaces. If the structure were reduced by one level, the parking count would be reduced by 112 spaces.

Traffic circulation on the east ramping bay is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The two west bays have one-way traffic with 75 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module) for two-way traffic and 17'-0" wide (55'-0" parking module) for one-way traffic. The end-bay drive aisles are two way, and are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on the levels where there is adequate vertical clearance.

A 12% speed ramp is provided in the east bay from Level 1 to Level 2 to provide a 15'-0" minimum clearance for the commercial space. The east parking bay will be sloped at 6.0% from the first to

the basement level, with the ramp slopes at the remaining levels at 4.2%. The north and south bays will be flat and provide an architecturally level façade. The east and west bays will be sloped, with the east side facing the alley and the west side facing Roberts Street and may warrant consideration of a façade treatment to conceal the sloping bays. The north façade is at the interior property line so it will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner and a variance from the city may allow it to have openings until such time the ramp is expanded to the north or the property to the north is otherwise developed. The floor-to-floor height between the remaining levels is 11'-4".

There are two vehicle entry/exit driveways to the ramp, one from 2nd Avenue North and one from Roberts Street. There are two elevators and a stair located near the southeast corner of the parking ramp. They are set back from the corner of the ramp to maintain prime commercial space at the corner closest to Broadway. A second stair is provided in the northwest corner. All levels of the parking ramp are anticipated to have sufficient openings if the north façade is open to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 3-E includes significant ground floor commercial space, with the majority located along Roberts Street, but no liner building. Based on initial discussions with the City and local developers, the potential for a small grocer and/or commercial space may be viable options for the site. In addition, the potential for stacked office or residential above the parking ramp can be considered but likely at the reduction in the number of parking spaces.

The Concept 3-E plan for the street level is shown below in Figure 14. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 20 Concept 3-E Site/Level 1 Plan

The Monroe Center is a mixed-use, 7 level, parking structure located in the heart of downtown Grand Rapids, Michigan. The structure provides parking for 555 vehicles, and also contains more than 13,500 s.f. of street level retail space to enhance pedestrian activity in this prime downtown location.

Figure 21 Monroe Center Parking Structure

Site 4: *2nd Avenue North, South Lot*

The following figure presents the SWOC analysis of the 2nd Avenue North, South Lot Site:

Strengths	Weaknesses
- Elevator @ NE corner just 1/2 block from Broadway and 2nd Avenue North	- Only 140'x141" -- inconvenient/inefficient
	- Electric power lines in alley
- No storm water management (Site less than 1 acre)	- Lose 65 public spaces in City Lot 624
- On 2nd Avenue North	-Not favored by DCP, Private, City Staff
- Great pedestrian access to Broadway & 2nd Ave	- Dead end in Concept 2 @ each level
- City owns land for Concept 1 on Lot 624	- Low parking space content & high efficiency
	- No liner building on 2nd Avenue N
	- High cost per space
Opportunities	**Constraints**
- Good infill development sites without much parking	- Property acquisition to South for Concept 2
- Trade land with private land owners/developers	- Little opportunity for mixed use
- Mixed use potential	- Street level commercial limited
* Small street level commercial on 2nd Avenue	- No setback from alley - -more costly to build
* Residential above parking	- Basement construction complications
- Visitor Street Parking for Broadway & 2nd Avenue	

Site 4: 2nd Avenue North, South Lot – Concept 4-A

The 2nd Avenue North, South Lot Site Concept 4-A parking ramp is depicted on Sheets 28-29 in Appendix B. The parking ramp contains 288 parking spaces in eight levels (grade level and 7 supported levels), and is located on the City owned parcel 624 in parking lot B. Concept 4-A has two parking bays in a single threaded helix configuration in a footprint that is 136' wide by 140' long. The parking efficiency of the ramp is 459 square feet per parking space, the highest of all concepts. The proposed parking ramp displaces 65 existing parking spaces, for a net gain of 223 spaces. If the structure were reduced by one level, the parking count would be reduced by 42 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end bays provide wider drive aisles to improve turning maneuverability, but the short length of the structure does not accommodate end bay parking. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The parking bays will be sloped at 5.4% from the first to the second level to accommodate a higher clearance for commercial space. At the remaining levels, the west ramp is sloped at 5.4% and the east bay at 2.0%. Additional jump ramps are provided at the north and south ends to provide a floor-to-floor height of 12'-6" between the first and second levels for clearance over the 3,290 square feet of commercial space on the ground level of the ramp. The floor-to-floor height between the remaining levels is 11'-4".

There is one vehicle entry/exit driveway to the ramp from 2nd Avenue North, with one entry lane and one exit lane. There is one elevator located in northeast corner of the parking ramp and stairs are located in the northeast and southeast corners. The structure will be sloped at the perimeter, and may warrant consideration of a façade treatment to conceal the sloping bays. The south façade is at the interior property line so it will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner and a variance from the city may allow it to have openings until such time the ramp is expanded to the south or the property to the south is otherwise developed. The west façade is also near an interior property line along the west alley, which is approximately 15' wide. Elimination of the interior area light well from the current design may allow the separation to meet the 20' setback to allow openings in the façade, which will need to be confirmed during schematic design if this option is progressed. This will allow all levels of the parking ramp to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, however, code verification is required.

Development Opportunity – Concept 4-A includes street level commercial, but no liner building. Potential for a residential or office building above the parking ramp is feasible. This site would also be considered a viable option for the City to make a land swap to obtain property more suitable for mixed use parking structure development.

The Concept 4-A plan for the street level is shown below in Figure 15. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 22 Concept 4-A Site/Level 1 Plan

2nd Avenue North, South Lot – Concept 4-B

The 2nd Avenue North, South Lot Site Concept 4-B parking ramp is depicted on Sheets 30-31 in Appendix B. The parking ramp contains 490 parking spaces in eight levels (grade level and 7 supported levels), and is located on the City owned parcel 624 in parking lot B and private parcels 617/621. Concept 4-B has two parking bays in a single threaded helix configuration like Concept 4-A in a footprint that is 136' wide by 140' long, with an additional single dead-end parking bay that is 64' wide by 150' long located to the south. The parking efficiency of the ramp is 398 square feet per parking space. The proposed parking ramp displaces 107 existing parking spaces, for a net gain of 383 spaces. If the structure were reduced by one level, the parking count would be reduced by 72 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end bays provide wider drive aisles to improve turning maneuverability, but the short length of the structure does not accommodate end bay parking. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The parking bays will be sloped at 5.4% from the first to the second level to accommodate a higher clearance for commercial space. At the remaining levels, the west ramp is sloped at 5.4% and the east bay at 2.0%, with the dead-end bay designed as flat. Additional jump ramps are provided at

the north and south ends of the single helix section to provide a floor-to-floor height of 12'-6" between the first and second levels for clearance over the 3,290 square feet of commercial space on the ground level of the ramp. The floor-to-floor height between the remaining levels is 11'-4".

There is one vehicle entry/exit driveway to the ramp from 2nd Avenue North, with one entry lane and one exit lane. There is one elevator and stair located in both the northeast and southwest corners of the parking ramp. The structure will be sloped at the perimeter of the north lot, and may warrant consideration of a façade treatment to conceal the sloping bays. The west façade is also near an interior property line along the west alley, which is approximately 15' wide. Elimination of the interior area light well from the current design may allow the separation to meet the 20' setback to allow openings in the façade, which will need to be confirmed during schematic design if this option is progressed. This will allow all levels of the parking ramp to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, however, code verification is required.

Development Opportunity – Concept 4-B includes street level commercial, but no liner building. Potential for a residential or office building above the parking ramp is feasible. This site would also be considered a viable option for the City to make a land swap to obtain property more suitable for mixed use parking structure development.

The Concept 4-B plan for the street level is shown below in Figure 16. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

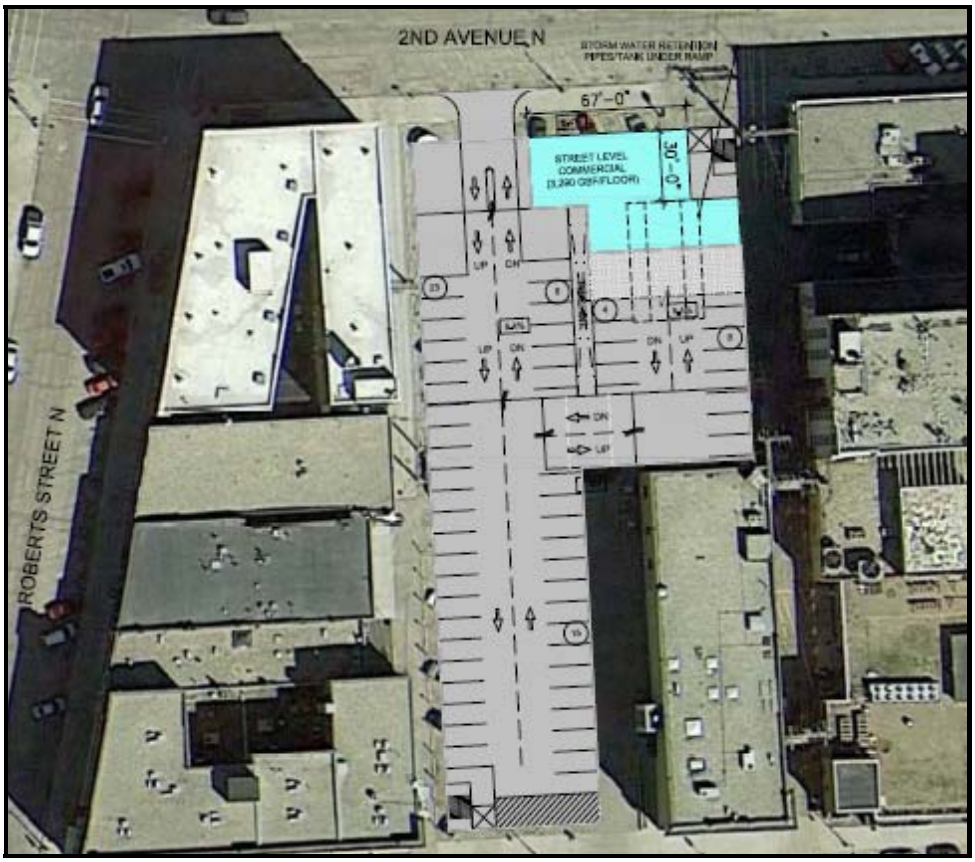


Figure 23 Concept 4-B Site/Level 1 Plan

2nd Avenue North, South Lot – Concept 4-C

The 2nd Avenue North, South Lot Site Concept 4-C parking ramp is depicted on Sheets 32-33 in Appendix B. The parking ramp contains 478 parking spaces in seven levels (below grade level, grade level, and 5 supported levels), and is located on the City owned parcel 624 in parking lot B and private parcels 617/621. It is similar to Concept 4-B except it has no commercial space and it includes a basement. Concept 4-C has two parking bays in a single threaded helix configuration in a footprint that is 136' wide by 140' long, with an additional single dead-end parking bay that is 64' wide by 150' long. The parking efficiency of the ramp is 397 square feet per parking space. The proposed parking ramp displaces 107 existing parking spaces, for a net gain of 371 spaces. If the structure were reduced by one level, the parking count would be reduced by 72 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end bays provide wider drive aisles to improve turning maneuverability, but the short length of the structure does not accommodate end bay parking. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The west bay is sloped at 5.4% and the east bay at 2.0%, with the dead-end bay designed as flat. Additional jump ramps are provided at the north and south ends to provide a floor-to-floor height of 11'-4" throughout the structure. Commercial space is not provided in this concept.

There is one vehicle entry/exit driveway to the ramp from 2nd Avenue North, with one entry lane and one exit lane. There is one elevator located in both the northeast and southwest corners of the parking ramp. The structure will be sloped at the perimeter of the north lot, and may warrant consideration of a façade treatment to conceal the sloping bays. The west façade is also near an interior property line along the west alley, which is approximately 15' wide. Elimination of the interior area light well from the current design may allow the separation to meet the 20' setback to allow openings in the façade, which will need to be confirmed during schematic design if this option is progressed. This will allow all levels of the parking ramp to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, however, code verification is required.

Development Opportunity – Concept 4-C includes no street level commercial or liner building. Potential for a residential or office building above the parking ramp is feasible. This site would also be considered a viable option for the City to make a land swap to obtain property more suitable for mixed use parking structure development.

The Concept 4-C plan for the street level is shown below in Figure 17. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

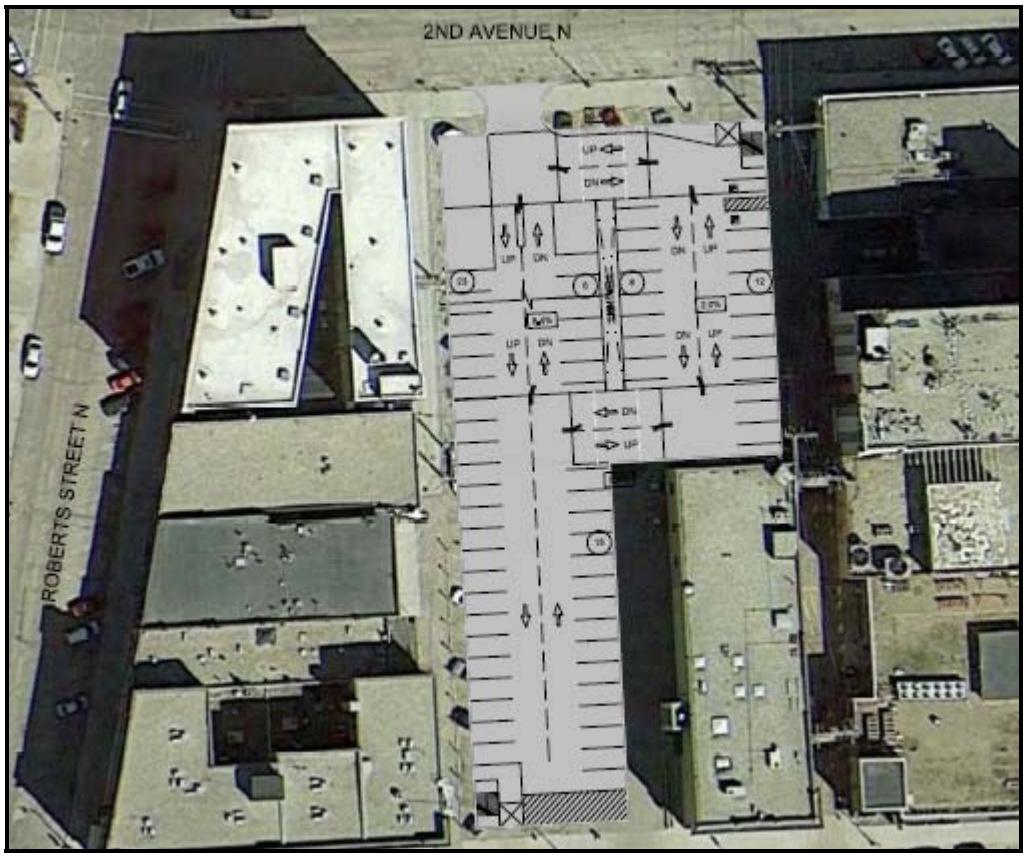


Figure 24 Concept 4-C Site/Level 1 Plan

Site 5: ***Civic Center Ramp***

The following figure presents the SWOC analysis of the Civic Center Ramp:

Strengths	Weaknesses
- Elevator inside Radisson and only 1 1/2 blocks to Broadway & 2nd Avenue North	- Not designed for 2-levels of vertical expansion
- Designed for 1-level of vertical expansion	- Code changes may require adding lateral bracing or shear walls
- City owned -- No property acquisition	- Higher cost/SF (perhaps)
- No storm water management	
- Located on 2nd Avenue North	
* Good access for vehicles and pedestrians	
- Gain of 71 spaces for 1 additional level	
Opportunities	**Constraints**
- Provide parking for Block 9, City Hall & Broadway	- Disrupt existing operation during construction
- Expand with steel frame and concrete slab	- No added mixed-use potential
- Enhance facade appearance	- Setback added levels from Radisson
- Add new elevator(s) in PS	- Add no new elevators in ramp
	* Access to hotel from added levels
	- Add a reversible entry/exit lane

Civic Center – Concept 5-A

The Civic Center Concept 5-A parking ramp expansion is depicted on Sheet 34 in Appendix B. This option includes a one level vertical expansion of the existing Civic Center Ramp. The existing parking ramp contains 238 parking spaces on four levels (grade level and 3 supported levels) and is located to the east of the Radisson Hotel on 2nd Avenue North. The ramp has two parking bays in a double threaded helix configuration in a footprint that is 108' wide by 236' long. The addition of one level of parking would increase the total parking count by 71 spaces, for a total parking count of 309 vehicles. The parking efficiency of the expanded level would be 310 square feet per space.

Traffic circulation throughout the ramp is one-way, with 60 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 16'-0" wide (53'-0" parking module). The end-bay drive aisles are 18'-4" to match the existing structure. Accessible spaces will be increased in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

There is one vehicle entry/exit driveway to the ramp from 2nd Avenue North, with one entry lane and one exit lane. Existing stairs are located in the northeast and southwest corners of the garage. Elevator access for the garage is located in the adjacent hotel building. A new stair is included to connect the new Level 5 with the existing Level 4.

The new ramp slopes and façade appearance will match the existing structure. An upgrade to the existing façade appearance may be considered with the expansion. The existing parking ramp is classified as an "open" parking structure, and the additional level of expansion would be designed to meet this requirement as well. Fire sprinklers or mechanical ventilation is not anticipated.

The Concept 5-A plans for the single level of expansion and isometric is shown below in Figure 18. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

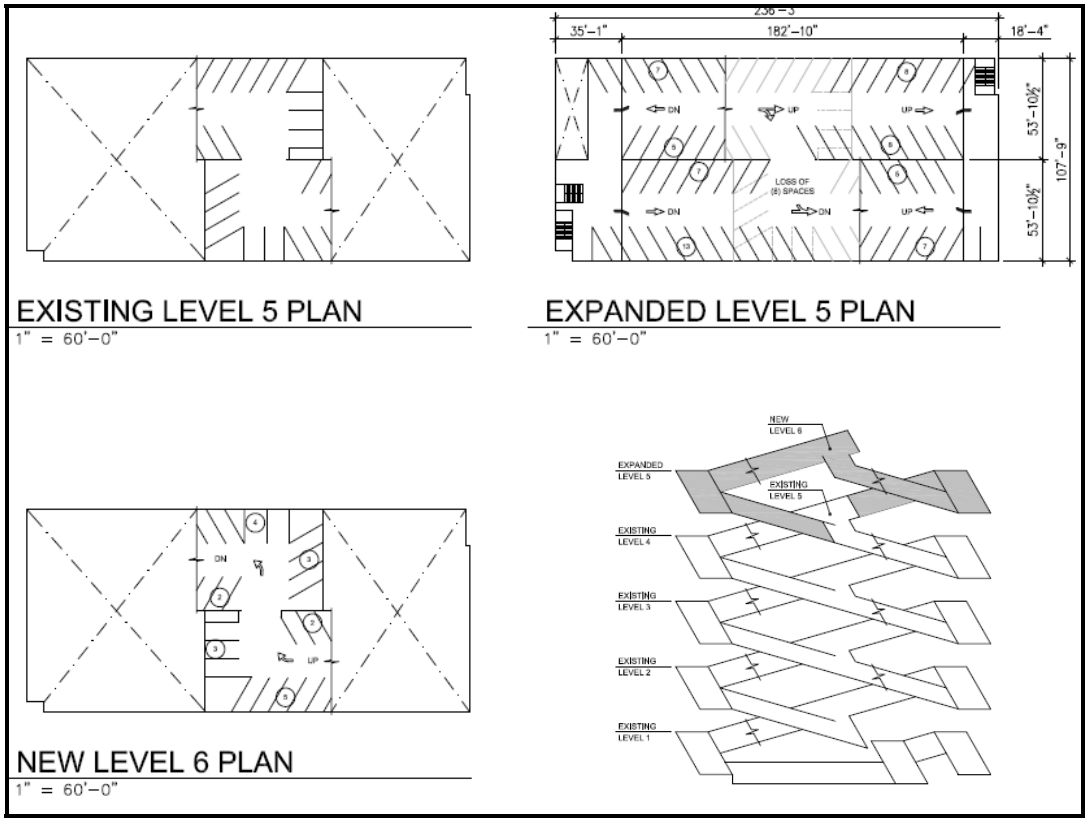
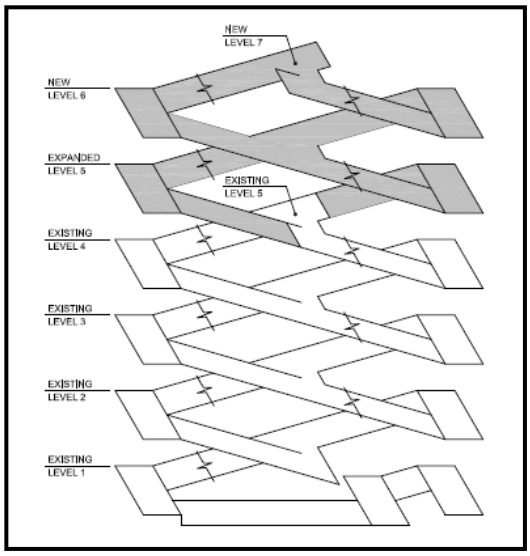


Figure 25 Concept 5-A Site Plans & Isometric

Civic Center – Concept 5-B

The Civic Center Concept 5-B parking ramp expansion is depicted on Sheet 35 in Appendix B. This option is similar to 5-A, but includes a two level expansion of the existing Civic Center Ramp. The addition of two levels of parking would increase the total parking count by 147 spaces, for a total parking count of 385 vehicles. The parking efficiency of the expanded level would be 315 square feet per space. The remaining features of Concept 5-B will be the same as 5-A.



The Concept 5-B plans for the two level expansion and isometric is shown below in Figure 19. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

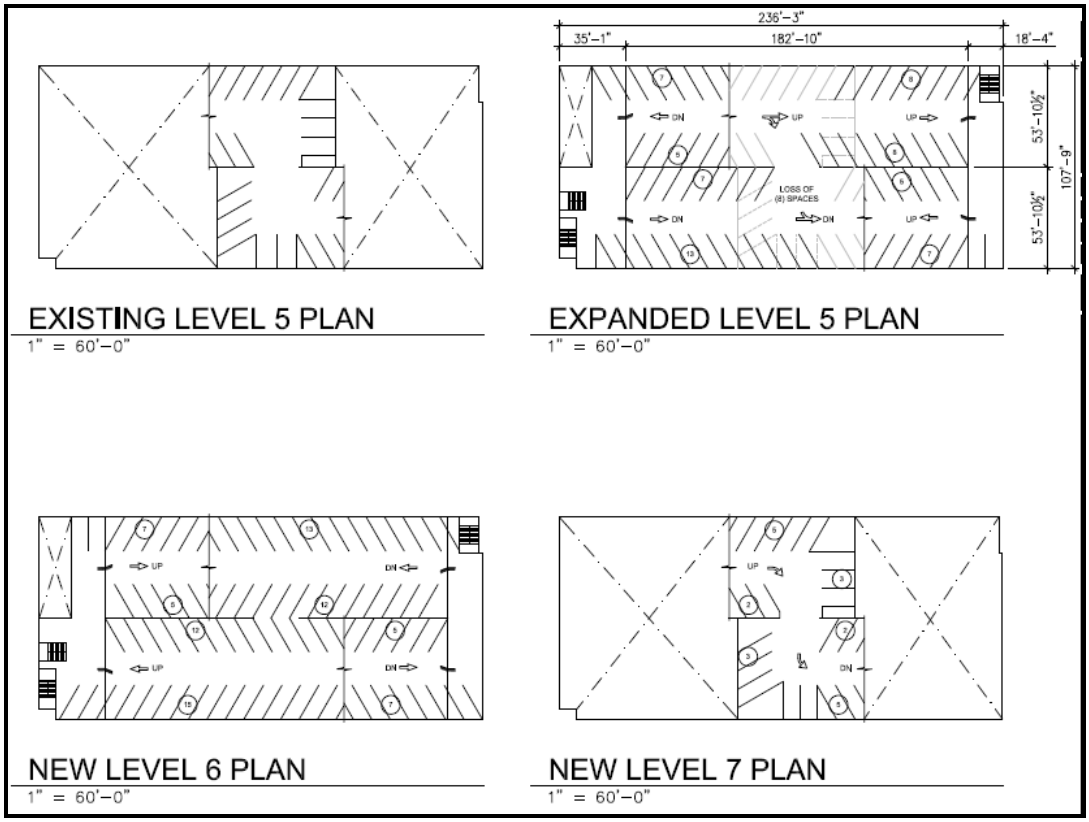


Figure 26 Concept 5-B Site Plans & Isometric

Site 6: ***City Hall Site***

The following figure presents the SWOC analysis of the City Hall Site:

Strengths	Weaknesses
- Provides needed parking for City Hall, Library,	- Access from 1st Avenue N not ideal
Civic Center, and Public Health Clinic	- Does not serve retail/entertainment for downtown
- City owns land - no land acquisition	- Lose 172 public parking spaces
- Site is over 280' long E/W	- Stormwater management (site greater than 1 acre)
- Good parking efficiency	
Opportunities	**Constraints**
- Mixed use potential with parking	- Expanded lift station location
* Stacked hotel atop parking structure	- Size and location of buried of utility pipes
* Street Level Commercial	- Cost impacts of residential building above parking
* Liner building at southeast corner fronting 1st	- Basement construction complications
- Stimulate East Side development	
- Evening use with hotel	

City Hall – Concept 6-A

The City Hall Concept 6-A parking ramp is depicted on Sheets 36-37 in Appendix B. The parking ramp contains 553 parking spaces in six levels (below grade level, grade level, and 4 supported levels) and is located at the south end of parking lot E south of the proposed new City Hall building. Concept 6-A has two parking bays in a single threaded helix configuration in a footprint that is 124' wide by 252' long. The parking efficiency of the ramp is 325 square feet per parking space. The proposed parking ramp displaces 172 existing parking spaces, for a net gain of 381 spaces. If the structure were reduced by one level, the parking count would be reduced by 99 spaces.

Traffic circulation throughout the ramp is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The south bay is sloped at 5.0% and the north bay is sloped at 2.0% to provide a floor-to-floor height of 11'-4". An architectural screening may be considered at the south façade to hide the sloping ramp behind. The north, east, and west bays will allow for architecturally flat facades.

There is one vehicle entry/exit driveway to the ramp from 3rd Street North, with one entry lane, one exit lane, and one reversible lane. There is one elevator located in the northwest corner of the parking ramp and stairs are located in the northwest and southeast corners of the ramp.

All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 6-A includes the potential for a liner building in the south east corner that could include grade level commercial space and other uses on above grade floors. Based on initial discussions with local developers, this site is ideal for a hotel development atop the parking structure that could support the convention center, although the number of parking spaces would be reduced to accommodate additional columns to support the hotel and for additional elevators and stairs for hotel use.

The Concept 6-A plan for the street level is shown below in Figure 20. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 27 Concept 6-A Site/Level 1 Plan

Site 7: ***NP Avenue Site***

The following figure presents the SWOC analysis of the NP Avenue Site:

Strengths	Weaknesses
- Cooperative land owners	- Eastern 40% of lot owned privately
- Large, efficient size site	- 3 blocks from elevator to Broadway/2nd Ave North
- Good vehicle access from NP Ave and 8th Street	- Stormwater management (site greater than 1 acre)
- No building demolition	- Lose 145 public spaces in Lot 636/650
- Flat façade toward NP Ave	
- Favored by DCP, Private & City staff	

Opportunities	Constraints
- Mixed Use Potential	- Railroad tracks on South Side
* Street level commercial on NP Avenue	- Basement construction complications
* Stacked residential above PS	- Planned NP Avenue reconstruction
* Cooperative project with adjacent land owner	- Cost impacts of residential building above parking
- Stimulate NP and South downtown development	
and potential NDSU parking	
- Evening use with entertainment district & residential	
- 2nd vehicular driveway to 8th Street	

NP Avenue – Concept 7-A

The NP Avenue Concept 7-A parking ramp is depicted on Sheets 38-39 in Appendix B. The parking ramp contains 493 parking spaces in four levels (below grade level, grade level, and 2 supported levels), and is located on the City owned parcel in parking lot F. Concept 7-A has three parking bays in a side by side single threaded helix configuration in a footprint that is 174' wide by 250' long. The parking efficiency of the ramp is 338 square feet per parking space. The proposed parking ramp displaces 145 existing parking spaces, for a net gain of 348 spaces. If the structure were reduced/increased by one level, the parking count would be reduced by 142 spaces.

Traffic circulation on the grade level and in the center bay of the other levels is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The outer two bays have one-way traffic with 70 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module) for two-way traffic and 16'-0"

wide (54'-0" parking module) for one-way traffic. The end-bay drive aisles are also one way, and wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on the levels where there is adequate vertical clearance.

The center parking bay will be sloped at 5.9% from the first to the second level, with the center ramp slopes at other levels at 5.0%. The ramp slopes at the east and west bays will be 2.1% at the grade level and 1.5% at the other levels. The north and south bays will be flat and provide an architecturally level façade. The east and west bays will be sloped, but with the lower slope should be able to achieve an architecturally flat facade. The parking ramp is anticipated to have a floor-to-floor height of 14'-0" between the first and second levels for clearance over the 4,800 square feet of commercial space on the ground level of the ramp. The floor-to-floor height between the remaining levels is 11'-4".

The primary vehicle entry/exit driveway to the ramp is from NP Avenue, with one entry lane, one exit lane, and one reversible lane. A secondary entry/exit driveway is provided from 8th Street in the southwest corner of the site with one entry and one exit lane. There are two elevators and a stair located in northeast corner of the parking ramp. A second stair is provided in the northwest corner. The east and west façades are at the interior property lines so they will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owners and a variance from the city may allow it to have openings until such time the ramp is expanded to the east or the property to the east or west is otherwise developed. All levels of the parking ramp are anticipated to have sufficient openings if either the east or west façade is open to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 7-A includes ground floor commercial space facing NP Avenue but there is no liner building. Based on initial discussions with the City and local developers, the private lot located to the east of the garage would be an option for development.

The Concept 7-A plan for the street level is shown below in Figure 21. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

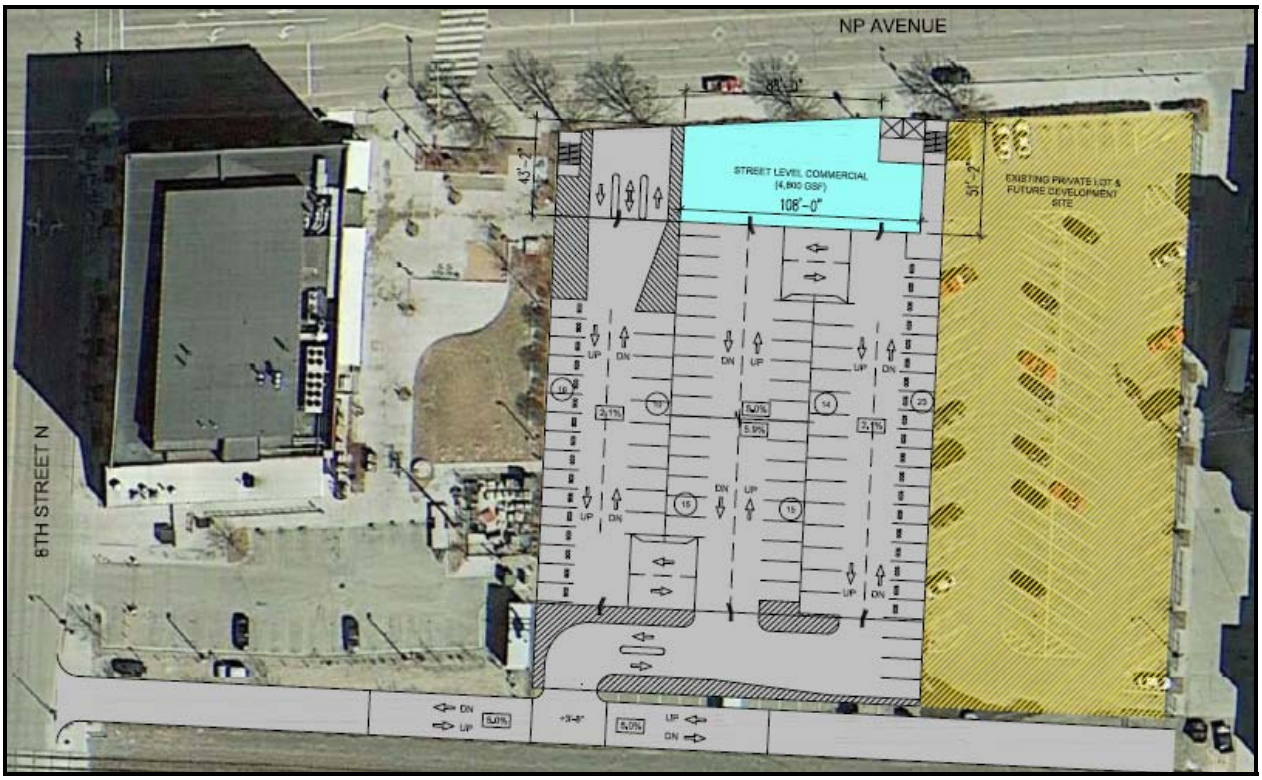


Figure 28 Concept 7-A Site/Level 1 Plan

NP Avenue – Concept 7-B

The NP Avenue Concept 7-B parking ramp is depicted on Sheets 40-41 in Appendix B. The parking ramp contains 504 parking spaces in five levels (below grade level, grade level, and 3 supported levels), and is located on the City owned parcel in parking lot F. Concept 7-B has three parking bays in a side by side single threaded helix configuration in a footprint that is 174' wide by 200' long, with a liner building along the NP Avenue elevation. The parking efficiency of the ramp is 338 square feet per parking space. The proposed parking ramp displaces 145 existing parking spaces, for a net gain of 359 spaces. If the structure were reduced/increased by one level, the parking count would be reduced by 107 spaces.

Traffic circulation on the grade level and in the center bay of the other levels is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The outer two bays have one-way traffic with 70 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 24'-0" wide (60'-0" parking module) for two-way traffic and 16'-0" wide (54'-0" parking module) for one-way traffic. The end-bay drive aisles are also one way, and wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on the levels where there is adequate vertical clearance.

The center parking bay will be sloped at 6.0% from the first to the second level, with the slopes at the remaining levels at 4.7%. The north and south bays will be flat and provide an architecturally level façade. The east and west bays will be sloped, with the east side facing the alley and the west side facing an adjacent building, and may warrant consideration of a façade treatment to conceal the sloping bays. The parking ramp is anticipated to have a floor-to-floor height of 11'-4" between levels.

The primary vehicle entry/exit driveway to the ramp is from NP Avenue, with one entry lane, one exit lane, and one reversible lane. A secondary entry/exit lane is provided from 8th Street in the southwest corner of the site with one entry and one exit lane. There are two elevators and a stair located in northeast corner of the parking ramp, set in back of the liner building such that an exit corridor through the liner building to the NP Avenue sidewalk is required. A second stair is provided in the northwest corner. The east and west façades are at the interior property lines so they will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owners and a variance from the city may allow it to have openings until such time the ramp is expanded to the east or the property to the east or west is otherwise developed. All levels of the parking ramp are anticipated to have sufficient openings if either the east or west façade is open to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 7-B includes a potential residential or office liner building facing NP Avenue, providing 10,000 gross square feet per level. The primary vehicle entry/exit lanes and the pedestrian corridor are located in the ground floor area of the commercial liner building. Based on initial discussions with the City and local developers, the private lot located to the east of the garage would be an option for development.

The Concept 7-B plan for the street level is shown below in Figure 22. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

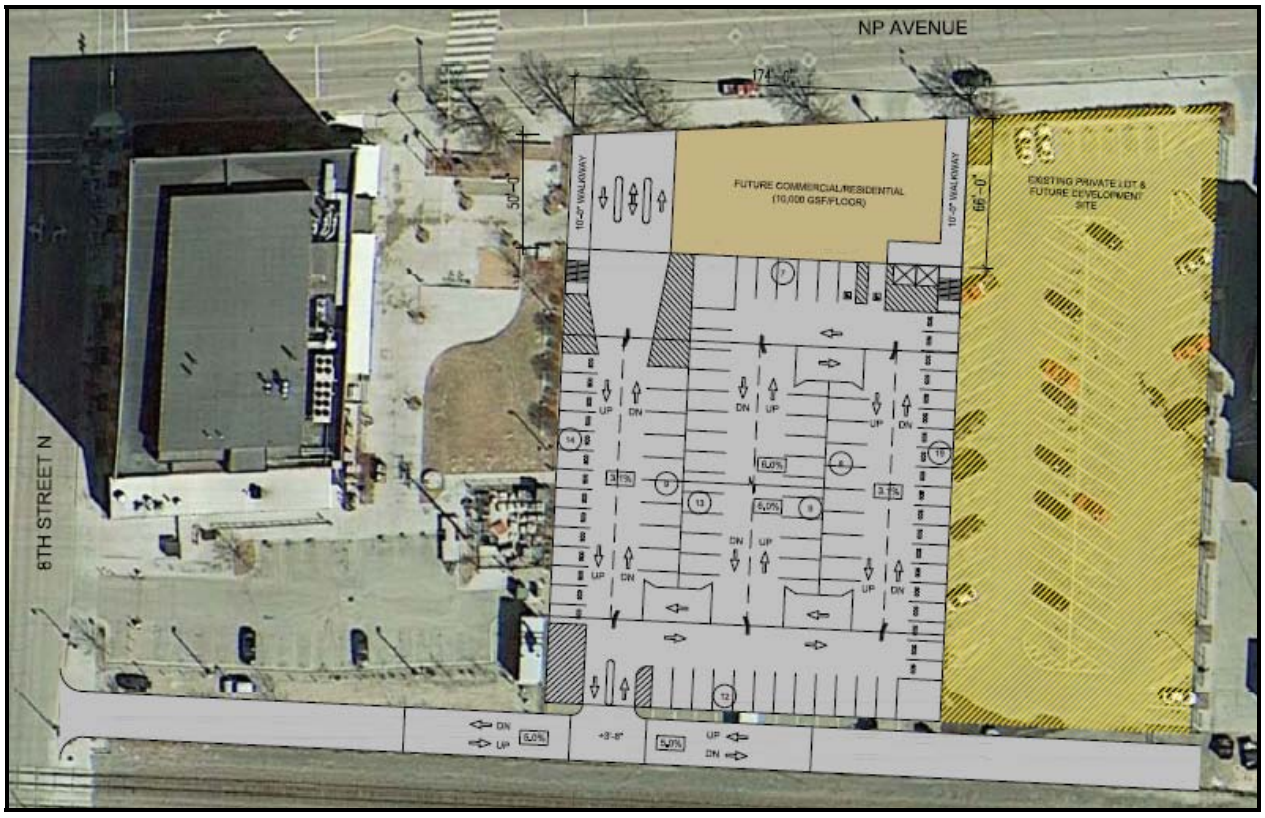


Figure 29 Concept 7-B Site/Level 1 Plan

NP Avenue – Concept 7-C

The NP Avenue Concept 7-C parking ramp is depicted on Sheets 42-44 in Appendix B. The parking ramp contains 626 parking spaces in four levels (below grade level, grade level, and 2 supported levels), and is located on the City owned parcel in parking lot F, as well as the private parcel to the east. Concept 7-C has three parking bays in a side by side single threaded helix configuration in a footprint that is 179' wide by 290' long, with a liner building along the NP Avenue elevation. The parking efficiency of the ramp is 316 square feet per parking space. The proposed parking ramp displaces 248 existing parking spaces, for a net gain of 378 spaces. If the structure were reduced/increased by one level, the parking count would be modified by 169 spaces.

Traffic circulation on the grade level and in the center bay of the other levels is two-way, and the parking spaces are perpendicular to the drive aisles (i.e. 90-degree). The outer two bays have one-way traffic with 75 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 25'-0" wide (61'-0" parking module) for two-way traffic and 18'-0" wide (56'-0" parking module) for one-way traffic. The end-bay drive aisles are also one way, and wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on the levels where there is adequate vertical clearance.

The center parking bay will be sloped at 5.7% at all levels, and the north and south bays are flat. With the center ramping bay, an architecturally level façade can be provided on all four sides of the ramp. The parking ramp is anticipated to have a floor-to-floor height of 11'-4" between levels.

The primary vehicle entry/exit driveway to the ramp is from NP Avenue, with one entry lane, one exit lane, and one reversible lane. A secondary entry/exit lane is provided from 8th Street in the southwest corner of the site with one entry and one exit lane. There are two elevators and a stair located in northeast corner of the parking ramp, set in back of the liner building. A second stair is provided in the northwest corner with pedestrian discharge to the alley unless a corridor is provided at the ground level of the liner building as in Concept 7-B. The north façade abuts the liner building and the west façade is at an interior property line so they will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner to the west and a variance from the city may allow it to have openings until such time the property to the west is otherwise developed. Alternately, the parking structure could be moved southward such that it is separated from the liner building by 20', similar to Concept 7-D, to allow the north façade to have openings. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 7-C includes a potential residential or office liner building facing NP Avenue, providing 18,600 gross square feet per level. The primary vehicle entry/exit lanes and at least one pedestrian corridor are located in the ground floor area of the commercial liner building. In addition, the site also presents an opportunity to provide a stacked residential building with an amenity level over the top of the parking ramp as shown in the plans. In this case, due to the angled parking spaces used in the north and south bays, the building(s) atop the parking structure would need to have columns that align with parking structure columns or else the columns would need to transfer at the podium level (first floor of the stacked building). The elevator cores for the stacked buildings are shown to be located within the liner building footprint because they would displace parking if they were located inside the parking structure footprint. Service access for trash and recycling may be needed within the footprint of the parking structure or liner building.

The Concept 7-C plan for the street level is shown below in Figure 23. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 30 Concept 7-C Site/Level 1 Plan

The Centre at Overton Park mixed-use development in Lubbock, Texas, contains 653 parking spaces wrapped by a residential development and grade level retail. The mixed-use project provides parking for the adjacent hotel, retail, and university facilities.

Figure 31 Centre at Overton Park

NP Avenue – Concept 7-D

The NP Avenue Concept 7-D parking ramp is depicted on Sheets 45-47 in Appendix B. The parking ramp contains 572 parking spaces in four levels (below grade level, grade level, and 2 supported levels), and is located on the City owned parcel in parking lot F, as well as the private parcel to the east. Concept 7-D has three parking bays in a double threaded helix configuration, with a flat bay to the north, in a footprint that is 168' wide by 290' long. A liner building is conceptually shown to the north, with a 20' courtyard between the ramp and building so the north façade of the parking structure could remain open. The parking efficiency of the ramp is 331 square feet per parking space. The proposed parking ramp displaces 248 existing parking spaces, for a net gain of 324 spaces. If the structure were reduced/increased by one level, the parking count would be modified by 158 spaces.

Traffic circulation throughout the ramp is one-way, and the parking spaces are 70 degree angled parking spaces. The standard parking spaces are 9'-0" x 18'-0" and the standard drive aisles are 16'-0" wide (54'-0" parking module). The end-bay drive aisles are wider to improve turning maneuverability. Accessible spaces are provided in accordance with the IBC Code, including van accessible spaces on levels where there is adequate vertical clearance.

The ramping bays will be sloped at 5.3% at all levels, and the north bay will be flat. The east and west bays will also be flat. The south bay facing the railroad tracks and Main Street will be sloped and may warrant consideration of a façade treatment to conceal the sloping bay. The parking ramp is anticipated to have a floor-to-floor height of 11'-4" between levels.

The primary vehicle entry/exit driveway to the ramp is from NP Avenue, with one entry lane, one exit lane, and one reversible lane. A secondary entry/exit lane is provided from 8th Street in the southwest corner of the site with one entry and one exit lane. There are two elevators and a stair located in northeast corner of the parking ramp, set in back of the liner building with pedestrian discharge to the alley unless a corridor is provided at the ground level of the liner building as in Concept 7-B. A second stair is provided in the northwest corner. The north façade is set back 20' from the liner building so it can be open while the west façade is at an interior property line so it will be required by code to have a solid fire rated wall or else an agreement with the adjacent property owner to the west and a variance from the city may allow it to have openings until such time the property to the west is otherwise developed. All levels of the parking ramp are anticipated to have sufficient openings to be classified as "open" and not require fire sprinklers or mechanical ventilation, with the exception of the basement level.

Development Opportunity – Concept 7-D includes a potential residential or office liner building facing NP Avenue, providing 22,000 gross square feet per level. The primary vehicle entry/exit lanes and at least one pedestrian corridor are located in the ground floor area of the commercial liner building. In addition, the site also presents an opportunity to provide a stacked residential building with an amenity level over the top of the parking ramp as shown in the plans. In this case, due to the angled parking spaces, the building(s) atop the parking structure would need to have columns that align with parking structure columns or else the columns would need to transfer at the podium level (first floor of the stacked building). The elevator cores for the stacked buildings are shown to be located within the liner building footprint because they would displace parking if they were

located inside the parking structure footprint. Service access for trash and recycling may be needed within the footprint of the parking structure or liner building.

The Concept 7-D plan for the street level is shown below in figure 24. The remaining drawings are provided in Appendix B in an 11" x 17" scalable format. Further, the Parking Ramp Options Comparison Matrix located at the end of this report includes additional information.

Figure 32 Concept 7-D Site/Level 1 Plan

The Weston Commerce parking structure in Grand Rapids, Michigan, contains 380 parking spaces on 3 levels. The structure supports a residential and commercial liner building with direct access at each level from the parking structure.

Figure 33 Weston Commerce

PARKING RAMP COMPARISON

A Parking Ramp Concepts Comparison Matrix of the proposed parking ramp and development options has been prepared to provide a side by side comparison of each concept. The following discussion presents a summary and discussion of the information and project costs provided in the matrix.

Summary of Proposed Ramps

In general, each of the parking ramp concepts have been compared based on an extensive list of factors including site potential, parking layouts, efficiency, current ownership, parking demand, and development opportunities. Specifically, the Matrix provides a detailed comparison of information such as:

- Number of parking spaces attained
- Net gain of parking spaces after subtracting out existing parking lot spaces that are displaced
- Parking area efficiency
- Extent of ground level commercial space
- Property ownership status (public or private)
- Ramp slope
- Height of top level
- Percentage of spaces on non-ramping floors for enhanced user comfort
- Number of dead ends
- Parking geometrics
- Parking demand in site influence area
- Proximity to the 2nd Avenue North and Broadway intersection
- Traffic access
- Construction costs
- Development opportunities

Each of the parking ramp sites have been ranked based on the comparison of each of the above factors in relation to satisfying the parking demand of the downtown core. Based on this analysis, the sites have been ranked as follows:

1. 2nd Avenue North, North Lot
2. Warner Site
3. Civic Center Ramp Expansion
4. St. Marks Concept 2-B
5. NP Avenue
6. 2nd Avenue North, South Lot and St. Marks Concept 2-A
7. City Hall Site

This ranking applies to the projected development of the downtown core, and depending on the factors that may apply to a specific area or need, may not apply to all development opportunities.

Construction Costs

The Parking Ramp Concepts Comparison Matrix shown in Appendix A presents conceptual comparative construction cost estimates for the parking ramp concepts. These costs are intended to be "order of magnitude" estimates for comparison between the alternatives and are not intended to be detailed construction cost estimates. The costs are based on square foot unit costs from similar parking ramp projects transposed to current dollars and Fargo, ND using historical ENR Building Cost Indices and MEANS Construction Cost Data City Index Factors. These unit costs may not fully consider the current competitive construction market and could vary depending on when construction bids are received.

The estimated costs are for comparison between the concepts and preliminary budgeting purposes; the actual cost will vary depending on the level of architectural detail and other features specific to this project. Items that have been excluded from the construction cost estimate are:

- Land acquisition
- Development Costs…
- City administrative costs
- Soft costs such as design fees, survey, environmental reports, geotechnical investigation
- Construction material testing
- Unforeseen below grade conditions such as environmental remediation
- Utility relocation
- Vertical expansion provisions
- Cost escalation

The City of Fargo may want to include horizontal or vertical expansion of the parking ramp alternatives in the project program. The ultimate (expanded) size of the alternatives may be limited by the traffic flow capacity of the vehicular circulation system or building height. Typically, for user convenience, the height of single helix type parking ramps is limited to six or seven levels. If provisions were included to allow a future 2-level vertical expansion, the base costs shown could increase 3-4%.

The methodology for estimating the conceptual construction costs was to use square foot unit costs for the base parking ramp and commercial space and then add to that the cost for other non-standard items. Based on the ramp sized and sites developed, the majority of the ramp sites will have similar efficiencies and economy of scale. The exception is the 2nd Avenue North, South Lot site, which due to the smaller size and lower efficiency, the base cost was increased by 5%. Other non-standard items that were added to the base cost include:

- Commercial shell space at the ground level. This space is unfinished and only includes emergency lighting and utility stub-ins, but no HVAC equipment. It is enclosed with glass storefront at the exterior and masonry walls at the interior and has a concrete slab with a trench for future utility installation.

- Excavation and backfill costs considering up to a 20' deep excavation to provide a below grade parking level. There has been no geotechnical information provided to us,

and based the site boundaries, the pricing includes costs for excavation support at the perimeter.

- A premium cost has been applied to the options that consider a potential vertical development above the parking ramp. This cost includes increased foundation and column sizes, as well as provisions for higher lateral loads.
- A storm water management system allowance has been provided for each site that includes over 1 acre of disturbed area.
- A premium was added for an "architecturally enhanced" facility rather than an "average" façade treatment. The "average" appearance would be a façade with a cast-in-place or precast concrete spandrels with some color and reveal pattern while an "architecturally enhanced" façade would have brick and/or metal treatment integrated with the base façade. The enhanced façade is also anticipated to have more façade area than the basic horizontal spandrels common in some parking ramps. The variability in footprint size impacts the ratio of façade area to footprint area, so the façade premium is based on façade area rather than floor area.
- Demolition costs for existing parking lots and the Goodyear Service Center building. The actual costs for demolition can vary widely depending on factors such as: salvage value of materials, demolition methods used with corresponding levels of disruption, availability and proximity of disposal sites, presence of asbestos and other hazardous materials, utilities abandonment and/or relocation, foundation burial verses removal, etc. The allowances for the demolition should be considered conceptual in nature. A more detailed estimate of the demolition costs should be developed as the design process for the parking ramps moves beyond the conceptual stage.

The Parking Ramp Concepts Comparison Matrix provides the Total Parking Ramp Construction Cost and the cost per Ramp Parking Space and Net Parking Space gained. Also, the Matrix provides a Total Project Cost that includes a construction contingency and preliminary soft costs that include land acquisition and City of Fargo administrative, legal, and financing costs.

CONCLUSIONS/RECOMMENDATIONS

Parking Site Evaluation Conclusion

The Fargo Parking Commission's focus is to serve the Downtown Business Community and its partnership with retail, entertainment, professional and service sector businesses. Over the past fifteen years, there have been a series of parking studies completed to assist the Parking Commission in planning for the future of downtown Fargo. The earliest of these studies preceded the significant redevelopment in downtown Fargo, which sprang from the commitments made by North Dakota State University and the incentives presented by the Fargo Renaissance Zone to private sector development.

Today the urban core of downtown is dynamic and growing. To continue to make these strides it will be important that the downtown parking resources be managed and expanded in a manner to match the quality and growth of Fargo's downtown. Downtown is ready to move to next level, building on the solid foundation of diverse investment in the fabric of Fargo's downtown, and the pending public sector investment.

The near term influence of public sector projects like the new City Hall, the renovation of the Civic Center into a Arts Performance Center, and the potentials of a new Convention Center will generate significant spin off development, and with it the need to supplement the current parking inventory for downtown.

The Study presented here, illustrates the opportunity to move forward with serious consideration of parking facility development on several sites. The objective of the Study was to determine site feasibility and set the criteria around which a schematic design can be based. In addition, the study provides the background on which to promote relationships with private sector development groups to partner on the potential mixed use opportunities presented with several of the sites.

Based on discussions with City staff, downtown stake holders and the Downtown Community Partnership, the key criteria by which the sites are evaluated was prioritized and refined. The outcome defined two criteria above all others that must be achieved:

- Convenience/proximity to core demand area for both daytime business use and evening entertainment and restaurant activity with the intent to "find a 24/7 solution".
- Avoid solutions that take away infill development opportunities.

These criteria, when balanced with the priorities set out in the original scope, bring us to a slightly different position than without them. Specifically, the solutions that respond best are those that free up or leave unaffected large parcels for development, rather than limited wrap or bookend mixed use development.

A brief summary of sites that respond to these criteria:

8. **Warner Site**
   The Warner Site can meet the immediate demands for 400-600 cars and would provide convenient access and adjacency to the core demand of downtown Fargo as well as encourage spin off development. The Warner location would serve to support added demand from the future development on the US Bank Plaza and to a lesser degree, the parking required by the presence of the new City Hall. The Warner Site also provides opportunity for larger scale development adjacent to the parking facility.

9. **Saint Mark's Church Site**
   This site presents limited opportunities originally conceived along 7th Street with no connection to Roberts Street, however if the available site could be expanded to include the Salvation Army property, a much more viable opportunity would be presented. While this option is not currently available for consideration, we believe that it should be pursued in the future. Growing out of conversations with stakeholders, development groups and DCP members, this alternative solution would be able to respond to the growth that North Dakota State University envisions and reinforce the western edge of downtown Fargo's retail and entertainment business. Such a solution similar to that presented in the Site 2B illustration would serve as a bridge between the NDSU downtown campus and Roberts Street. This linkage can make a very direct connection to the alley and in turn to Broadway. The result would serve to support parking demand growth on the west edge of the commercial business core and the future spin off opportunities for housing and commercial business adjoining NDSU's campus. Pursuing an east /west site solution as described would also respond to parking demand that would arise from retaining the 2nd Avenue North site for infill development.

10. **2nd Avenue North Site**
    The land parcel owned by the City of Fargo provides limited opportunity for development as a parking ramp without added surface area from adjoining privately owned property. It is not the most efficient configuration and would result in a higher cost per parking stall and a lower net gain in parking stalls. The study solutions illustrate that the 2nd Avenue North site can produce several good mixed use options, and would serve to expand the downtown business core to the west along 2nd Avenue, provided the added land to the north could be acquired.

    Based on discussions with the DCP, current downtown developers, as well as City staff, there is a strong desire to retain the 2nd Avenue property for a future development opportunity, given the proximity to the strong business core. This approach is consistent with the belief that Fargo should have land inventory available to respond to future development needs, and recognizes the inherent value in this keystone property.

11. **2nd Avenue South Site**
    The 2nd Avenue South site is very small for an efficient and comfortable parking structure, so it is not recommended at this time for parking ramp development. It too could be a good infill development site.

12. **The Civic Ramp**
    Located adjacent to the Radisson Hotel, the ramp provides a fully public controlled option to expand parking. The original 238 stall ramp was constructed in 1986 and was designed to add an additional level, with a 71 net gain of stalls. We believe that this option should remain a high priority and be looked at when there is added parking supply in place to handle the displacement of stalls during the expansion construction. These added stalls could be brought on line if phased between the construction of a new ramp on the Warner site and an additional site once future development and demand evolved.

13. **City Hall Site**
    Our study establishes that the land remaining after the construction of the new City Hall can support a mixed used development. This location has been studied primarily to determine site proportion feasibility and position the City staff to have confidence in seeking potential private sector developers to develop the site. The added opportunity presented by the temporary City staff parking created across 1st Avenue will compliment any future development on the City Hall land. We believe that the City Hall site has limited potential to serve the core downtown demand due to the walking distance involved. Although the site has opportunities to link into the current skyway, the distance and convenience remains a concern in the context of the core downtown demand area. Development of this site should be driven by the broader development goals of the mixed use marketplace and the future needs of the Arts Performance Center and Convention Center. Further detailed study of this site would identify these potentials and should be done only when a development team has been established or solicited through an RFP process.

14. **The NP Avenue Site**
    This site is likely the easiest site to develop given the public ownership position and the cooperative nature of adjoining land owners. However, evaluating the site on the key factors of adjacency and convenience to the core demand affects the site ranking and this study would recommend that the site continue in its current use and remain in the City inventory for future development opportunity. The site presents an opportunity to expand residential, retail, commercial, and business activity along NP Avenue. The scheduled improvements to NP Avenue and the streetscape will renew the desirability of this area of downtown and weave together Broadway and Roberts Street, as well as the Broadway businesses and NDSU's Renaissance Hall. The NP site would be a logical location for a significant mixed use complex with a large public ramp component. The timing for this should be driven by either the needs of a large scale commercial user and or the maturing of the parking demand as the downtown core demand area grows to the south.

The analysis of the seven site options presented in this study has been based on fifteen years of data gathering and observations of the rebirth of downtown Fargo. No single site will satisfy the diverse parking demand of Fargo's downtown, nor would the resulting scale be appropriate for Fargo's urban character and texture. We believe a strategic approach that anchors the current edges of the demand area with 2 smaller parking structures, and inventories city owned parcels for future mixed used development, will result in a long term pattern of growth. This approach will produce convenient and affordable parking for the consumer, and provide the foundation for expansion of retail, commercial and residential needs in the downtown.

The following graphic illustrates this strategy and a path forward:

Strategic Approach

- Recognize That Meeting the Needs Of The Downtown Parking Demand Will Require Multiple Ramp Locations & Enhanced Public On & Off Street Parking Operations.
- Respect the Scale of Downtown Fargo's Architectural Street Scape By Setting Ramp Capacities That Are Appropriate To The Location and Integrate Street Level Mixed Use Retail & Commercial Mixed Use.
  - **Step 1**- Commit To Design of 2 Parking Structures to accommodate 500+ New Stalls, To Meet Current Parking Shortfall, & to Stimulate Adjacent Development & Support the Growth of the NDSU Downtown Presence.
    - Develop Economic Models For Public Funding To Develop New Parking Structures.
    - Enter Into Negotiations on Necessary Private Property to Facilitate Desired Options.
    - Encourage P3 Development Mixed Use Parking Structures.
  - **Step 2**- Facilitate Growth of Core Demand Boundary
    - Implement Construction of New Ramps
    - Seek P3 Partnership on City Hall Land.
  - **Step 3**- As Core Demand Grows & Economics Are Supported, Proceed P3 Development of 2nd Avenue and NP Land
    - Expand Civic Ramp
    - Inventory Property For Future Development Opportunities

City of Fargo Parking Ramp Concepts Comparison Matrix

4/6/2015

helenske design group
architecture • construction management

Carl Walker

Line #	Parking Ramp Shape	Site 1 - Warner						Site 2 - St Mark's	
		Concept 1-A	Concept 1-B	Concept 1-C	Concept 1-D	Concept 1-E	Concept 1-F	Concept 2-A	Concept 2-B
									
1	**General Parking Ramp Statistics**								
2	Number of Ramp Spaces	**608**	**573**	**584**	**623**	**565**	**629**	**616**	**641**
3	Existing Parking Public or Private	**Private**	**Private**	**Private**	**Private**	**Private**	**Private**	**Private**	**Private**
4	Existing Parking Spaces Displaced	93	93	93	93	93	93	106	104
5	**Net Gain of Spaces =**	**515**	**480**	**491**	**530**	**472**	**536**	**510**	**537**
6	Dimensions of Parking Ramp	**124' X 297'**	**124' X 250'**	**124' X 290'**	**114' X 292'**	**124' X 200'**	**124' X 200' + 122' X 166'**	**124' X 215'**	**114' X 290'**
7	Ramping System	Single Threaded Helix	Single Threaded Helix	Single Threaded Helix	Double Threaded Helix	Single Threaded Helix	Single Threaded Helix	Single Threaded Helix	Double Threaded Helix
8	Basement Level (Y/N)	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
9	Number of Levels Above Grade	**4**	**4**	**4**	**4.5**	**6**	**4**	**6**	**4.5**
10	Total Number of Levels	**6**	**6**	**6**	**6.5**	**8**	**6**	**8**	**6.5**
11	**Parking Efficiency**								
12	Total Parking Ramp Area (SF)	205,350	195,200	200,150	203,050	195,300	243,300	209,250	207,000
13	Total Street Level Commercial Area (SF) Inside Parking Structure	10,660	0	8,190	9,640	0	35,400	0	0
14	**Total Area (SF) =**	216,010	195,200	208,340	212,690	195,300	278,700	209,250	207,000
15	Parking Ramp Efficiency (Sq. Ft./Space)	338	341	343	326	346	387	340	323
16	**Property Status**								
17	Land Ownership	Private X 2	Private X 2	Private X 2	Private X 2	Private X 2	Private X 2	Private	Private X 2
18	Property Acquisition Issues	Yes X 2	Yes X 2	Yes X 2	Yes X 2	TBD	Yes X 2	Yes	Yes X 2
19	**Parking Demand in Site Influence Area (2-Blocks in Each Direction)**								
20	Existing Influence Area Surplus / (Deficit)								
21	Estimated Future Influence Area Surplus / (Deficit)								
22	**General Items**								
23	User Comfort and Convenience of Circulation & Ramping System	Excellent	Excelent	Excellent	Okay	Good	Fair	Good	Fair
24	Distance from Elevator to 2nd Ave. & Broadway Central Intersection	3 Blocks	3 Blocks	3 Blocks	3 Blocks	3 Blocks	3 Blocks	3 Blocks	3 Blocks
25	Skywalk Adjacency?	No	No	No	No	No	No	No	No
26	Potential Spin Off Opportunities (H=Housing, I=Institutional, C=Commercial & Retail)	H & C	H & C	H & C	H & C	H & C	H & C	H & I	H & I
27	Liner Building Floor Area (Levels/Area)								
28	Concept at Appropriate Contextual Height?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
29	Architectural Treatment of Sloping Floor Facing Toward Street	North Side	South Side	North Side	North & South Sides	East & West Sides	East Side	East & West Sides	North & South Sides
30	Site Area (If > 1 Acre then On-Site Storm Water Mgmt Required)	1.31 ac	1.31 ac	1.31 ac	1.31 ac	1.31 ac	1.31 ac	.83 ac	1.17 ac
31	Overhead Electric Power Line Impacts?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
32	Future Parking Expansion Capability (Horz. Or Vertical)	Vertical	Vertical	Vertical	Vertical	None	Vertical	None	Vert. & Horz.
33	**Traffic Access**								
34	Convenient Traffic Access for Users?	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
35	Traffic Access Congestion?	No	No	No	No	No	No	No	No
36	Entry Lane Street Access	4th Ave. N	4th Ave. N	4th Ave. N	5th St. N	4th Ave. N	4th Ave. N & Depot	7th St. N	Roberts & 7th St. N
37	Exit Lane Street Access	4th Ave. N	4th Ave. N	4th Ave. N	5th St. N	4th Ave. N	4th Ave. N & Depot	7th St. N	7th St. N
38	**Vertical Circulation**								
39	12% Express (Non-parking) Ramp Area (SF)	0%	0%	0%	0%	0%	3%	0%	0%
40	Parking Ramp Slopes	5.5%-6.0%	2.0%-5.1%	5.7%-6.0%	5.2%-6.0%	5.2%	5.2%-12.0%	4.5%-4.8%	5.3%
41	Floor Elevation of Top Level (Feet)	46.50	57.83	46.50	51.00	68.00	53.67	73.33	52.92
42	Parapet Elevation of Top Level (Feet)	50.25	61.58	50.25	54.75	71.75	57.42	77.09	56.67
43	Percentage of Area on Non-Ramping Floors @ Typ. Level	69%	26%	69%	26%	48%	50%	43%	25%
44	Dead End(s)	2	2	2	0	2	2	2	0
45	**Parking Geometrics & Circulation**								
46	Number of Bays	2	2	2	2	2	4	2	2
47	Angle of Parking	90 Degree	90 Degree	90 Degree	75 Degree	90 Degree	90 Degree	90 Degree	75 Degree
48	1-Way or 2-Way Traffic Flow	2 Way	2 Way	2 Way	1 Way	2 Way	2 Way	2 Way	1 Way
49									
50	**Site Comparative Ranking for Satisfying the Parking Demand of the Downtown Core Parking**								
51	Site Ranking (1 = Best & 7 = Worst)	2	2	2	2	2	2	6	4
52	**Comments**								
53	**Conceptual Comparative Construction Cost**								
54	**Parking Ramp Construction Cost**								
55	Base Parking Ramp Unit Cost ($/SF)[2]	52.50	52.50	52.50	52.50	52.50	52.50	52.50	52.50
56	Premium for Vertical Development ($/SF)						2.75		
57	Base Parking Ramp Cost	$10,780,875	$10,248,000	$10,507,875	$10,660,125	$10,253,250	$13,442,325	$10,985,625	$10,867,500
58	Street Level Commercial Shell Cost at $80/SF	$852,800	$0	$655,200	$771,200	$0	$2,832,000	$0	$0
59	Below Grade Premium	26.30	26.30	26.30	26.30	26.30	26.30	26.30	26.30
60	Footprint Area for Below Grade	36,800	12,600	36,000	33,300	24,800	45,100	26,700	33,100
61	Below Grade Cost Premium	$967,840	$331,380	$946,800	$875,790	$652,240	$1,186,130	$702,210	$870,530
62	Storm Water Management System Allowance ($250k/acre)	$327,500	$327,500	$327,500	$327,500	$327,500	$327,500	$0	$292,500
63	Façade Area (SF)	27,400	23,000	27,000	28,500	32,100	42,400	42,700	26,900
64	Façade Premium Cost at $30/SF	$822,000	$690,000	$810,000	$855,000	$963,000	$1,272,000	$1,281,000	$807,000
65	**Site Work Construction Cost**								
66	Demolition of Parking Lot at $250/space	$23,250	$23,250	$23,250	$23,250	$23,250	$23,250	$26,500	$26,000
67	Demolition of Existing Building(s)	$35,400	$35,400	$35,400	$35,400	$35,400	$35,400		
68	**Total Parking Ramp Construction Cost =**	**$13,809,665**	**$11,655,530**	**$13,306,025**	**$13,548,265**	**$12,254,640**	**$19,118,605**	**$12,995,335**	**$12,863,530**
69	Total Parking Ramp Cost per SF =	$63.93	$59.71	$63.87	$63.70	$62.75	$68.60	$62.10	$62.14
70	Cost Per Ramp Parking Space (Including Commercial) =	$22,713	$20,341	$22,784	$21,747	$21,690	$30,395	$21,096	$20,068
71	Cost Per Net Parking Space (Including Commercial) =	$26,815	$24,282	$27,100	$25,563	$25,963	$35,669	$25,481	$23,954
72	Preliminary Soft Costs (@ 15%)= [1]	$2,071,400	$1,748,300	$1,995,900	$2,032,200	$1,838,200	$2,867,800	$1,949,300	$1,929,500
	Owners Construction Phase Contingency (@ 3%) =	$414,300	$349,700	$399,200	$406,400	$367,600	$573,600	$389,900	$385,900
73	Conceptual Design Cost Contingency (@ 10%) =	$1,381,000	$1,165,600	$1,330,600	$1,354,800	$1,225,500	$1,911,900	$1,299,500	$1,286,400
74	**Total Project Cost =**	**$17,676,365**	**$14,919,130**	**$17,031,725**	**$17,341,665**	**$15,685,940**	**$24,471,905**	**$16,634,035**	**$16,465,330**

Notes:

1. Excludes land acquisition and City of Fargo administration, legal, and financing costs.

2. Assumes March 2016 start of construction.

City of Fargo Parking Ramp Concepts Comparison Matrix

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Line #	Parking Ramp Shape	Site 3 - 2nd Avenue North					Site 4 - 2nd Avenue South		
		Concept 3-A	Concept 3-B	Concept 3-C	Concept 3-D	Concept 3-E	Concept 4-A	Concept 4-B	Concept 4-C
									
1	**General Parking Ramp Statistics**								
2	Number of Ramp Spaces	**452**	**474**	**526**	**587**	**575**	**288**	**490**	**478**
3	Existing Parking Public or Private	**Public**	**Public**	**Public/Private**	**Public/Private**	**Public/Private**	**Public**	**Public/Private**	**Public/Private**
4	Existing Parking Spaces Displaced	100	100	132	132	132	65	107	107
5	**Net Gain of Spaces =**	**352**	**374**	**394**	**455**	**443**	**223**	**383**	**371**
6	Dimensions of Parking Ramp	**124' X 175'**	**176' X 175'**	**124' X 225'**	**176' X 225'**	**176' X 225'**	**136' X 140'**	**136' X 140' + 64' X 150'**	**136' X 140' + 64' X 150'**
7	Ramping System	Single Threaded Helix	Side by Side Helix	Single Threaded Helix	Side by Side Helix	Side by Side Helix	Single Threaded Helix	Single Threaded Helix	Single Threaded Helix
8	Basement Level (Y/N)	**Y**	**Y**	**Y**	**Y**	**Y**	**N**	**N**	**Y**
9	Number of Levels Above Grade	**6**	**5**	**5**	**4**	**4**	**7**	**7**	**5**
10	Total Number of Levels	**8**	**7**	**7**	**6**	**6**	**8**	**8**	**7**
11	**Parking Efficiency**								
12	Total Parking Ramp Area (SF)	167,810	194,475	181,470	208,260	211,760	132,200	194,910	190,000
13	Total Street Level Commercial Area (SF) Inside Parking Structure	3,240	17,825	4,830	16,640	10,660	3,290	3,290	0
14	**Total Area (SF) =**	171,050	212,300	186,300	224,900	222,420	135,490	198,200	190,000
15	Parking Ramp Efficiency (Sq. Ft./Space)	371	410	345	355	368	459	398	397
16	**Property Status**								
17	Land Ownership	Public	Public	Public/Private	Public/Private	Public/Private	Public	Public/Private	Public/Private
18	Property Acquisition Issues	No	No	Yes	Yes	Yes	No	Yes	Yes
19	**Parking Demand in Site Influence Area (2-Blocks in Each Direction)**								
20	Existing Influence Area Surplus / (Deficit)								
21	Estimated Future Influence Area Surplus / (Deficit)								
22	**General Items**								
23	User Comfort and Convenience of Circulation & Ramping System	Okay	Okay	Good	Good	Good	Poor	Poor	Poor
24	Distance from Elevator to 2nd Ave. & Broadway Central Intersection	1.5 Blocks	0.5 Block	1.5 Blocks	0.5 Block	0.5 Block	0.5 Block	0.5 Block	0.5 Block
25	Skywalk Adjacency?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
26	Potential Spin Off Opportunities (H=Housing, I=Institutional, C=Commercial & Retail)	H , I & C	H , I & C	H , I & C	H , I & C	H , I & C	H & I	H & I	H & I
27	Liner Building Floor Area (Levels/Area)								
28	Concept at Appropriate Contextual Height?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
29	Architectural Treatment of Sloping Floor Facing Toward Street	East & West Sides	East & West Sides	East & West Sides	East & West Sides	East & West Sides	All Four Sides	Three Sides	Three Sides
30	Site Area (If > 1 Acre then On-Site Storm Water Mgmt Required)	.77 ac	.77 ac	.97 ac	.97 ac	.97 ac	.5 ac	.73 ac	.73 ac
31	Overhead Electric Power Line Impacts?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
32	Future Parking Expansion Capability (Horz. Or Vertical)	Horizontal	Vert. & Horz.	Vert. & Horz.	Vert. & Horz.	Vert. & Horz.	Horizontal	None	None
33	**Traffic Access**								
34	Convenient Traffic Access for Users?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	Traffic Access Congestion?	Yes	Yes	No	No	Yes	No	No	No
36	Entry Lane Street Access	2nd Ave. N	2nd Ave. N & Roberts	Roberts St. N	Roberts St. N	2nd Ave. N & Roberts	2nd Ave. N	2nd Ave. N	2nd Ave. N
37	Exit Lane Street Access	2nd Ave. N	2nd Ave. N & Roberts	Roberts St. N	Roberts St. N	2nd Ave. N & Roberts	2nd Ave. N	2nd Ave. N	2nd Ave. N
38	**Vertical Circulation**								
39	12% Express (Non-parking) Ramp Area (SF)	0%	7%	0%	0%	4%	0%	0%	0%
40	Parking Ramp Slopes	5.7%-6.0%	5.0%-12.0%	4.2%-5.0%	2.0%-5.0%-6.3%	5.5%-6.0%	2.0%-5.4%	2.0%-5.4%	2.0%-5.4%
41	Floor Elevation of Top Level (Feet)	74.33	65.00	58.67	54.00	54.67	82.00	82.00	56.67
42	Parapet Elevation of Top Level (Feet)	78.08	68.75	61.42	57.75	58.42	85.75	85.75	60.42
43	Percentage of Area on Non-Ramping Floors @ Typ. Level	41%	29%	37%	31%	30%	34%	50%	50%
44	Dead End(s)	2	0	2	0	2	2	2	2
45	**Parking Geometrics & Circulation**								
46	Number of Bays	2	3	2	3	3	2	2	2
47	Angle of Parking	90 Degree	75/90 Degree	90 Degree	75/90 Degree	75/90 Degree	90 Degree	90 Degree	90 Degree
48	1-Way or 2-Way Traffic Flow	2 Way	1 Way/2 Way	2 Way	1 Way/2 Way	1 Way/2 Way	2 Way	2 Way	2 Way
49									
50	**Site Comparative Ranking for Satisfying the Parking Demand of the Downtown Core Parking**								
51	Site Ranking (1 = Best & 7 = Worst)	1	1	1	1	1	6	6	6
52	**Comments**								
53	**Conceptual Comparative Construction Cost**								
54	**Parking Ramp Construction Cost**								
55	Base Parking Ramp Unit Cost ($/SF)[2]	52.50	52.50	52.50	52.50	52.50	55.15	55.15	55.15
56	Premium for Vertical Development ($/SF)		2.75		2.75	2.75	2.75	2.75	2.75
57	Base Parking Ramp Cost	$8,810,025	$10,744,744	$9,527,175	$11,506,365	$11,699,740	$7,654,380	$11,285,289	$11,001,000
58	Street Level Commercial Shell Cost at $80/SF	$259,200	$1,426,000	$386,400	$1,331,200	$852,800	$263,200	$263,200	$0
59	Below Grade Premium	26.30	26.30	26.30	26.30	26.30	27.60	27.60	27.60
60	Footprint Area for Below Grade	21,700	30,800	31,600	39,600	39,600	19,000	28,600	28,600
61	Below Grade Cost Premium	$570,710	$810,040	$831,080	$1,041,480	$1,041,480	$524,400	$789,360	$789,360
62	Storm Water Management System Allowance ($250k/acre)	$0	$0	$250,000	$250,000	$250,000	$0	$0	$0
63	Façade Area (SF)	33,000	36,200	29,100	33,300	33,700	11,700	30,000	21,100
64	Façade Premium Cost at $30/SF	$990,000	$1,086,000	$873,000	$999,000	$1,011,000	$351,000	$900,000	$633,000
65	**Site Work Construction Cost**								
66	Demolition of Parking Lot at $250/space	$25,000	$25,000	$33,000	$33,000	$33,000	$16,250	$26,750	$26,750
67	Demolition of Existing Building(s)								
68	**Total Parking Ramp Construction Cost =**	**$10,654,935**	**$14,091,784**	**$11,900,655**	**$15,161,045**	**$14,888,020**	**$8,809,230**	**$13,264,599**	**$12,450,110**
69	Total Parking Ramp Cost per SF =	$62.29	$66.38	$63.88	$67.41	$66.94	$65.02	$66.93	$65.53
70	Cost Per Ramp Parking Space (Including Commercial) =	$23,573	$29,730	$22,625	$25,828	$25,892	$30,588	$27,071	$26,046
71	Cost Per Net Parking Space (Including Commercial) =	$30,270	$37,679	$30,205	$33,321	$33,607	$39,503	$34,633	$33,558
72	Preliminary Soft Costs (@ 15%)=[1]	$1,598,200	$2,113,800	$1,785,100	$2,274,200	$2,233,200	$1,321,400	$1,989,700	$1,867,500
	Owners Construction Phase Contingency (@ 3%) =	$319,600	$422,800	$357,000	$454,800	$446,600	$264,300	$397,900	$373,500
73	Conceptual Design Cost Contingency (@ 10%) =	$1,065,500	$1,409,200	$1,190,100	$1,516,100	$1,488,800	$880,900	$1,326,500	$1,245,000
74	**Total Project Cost =**	**$13,638,235**	**$18,037,584**	**$15,232,855**	**$19,406,145**	**$19,056,620**	**$11,275,830**	**$16,978,699**	**$15,936,110**

Notes:

1. Excludes land acquisition and City of Fargo administration, legal, and financing costs.

2. Assumes March 2016 start of construction.

City of Fargo Parking Ramp Concepts Comparison Matrix

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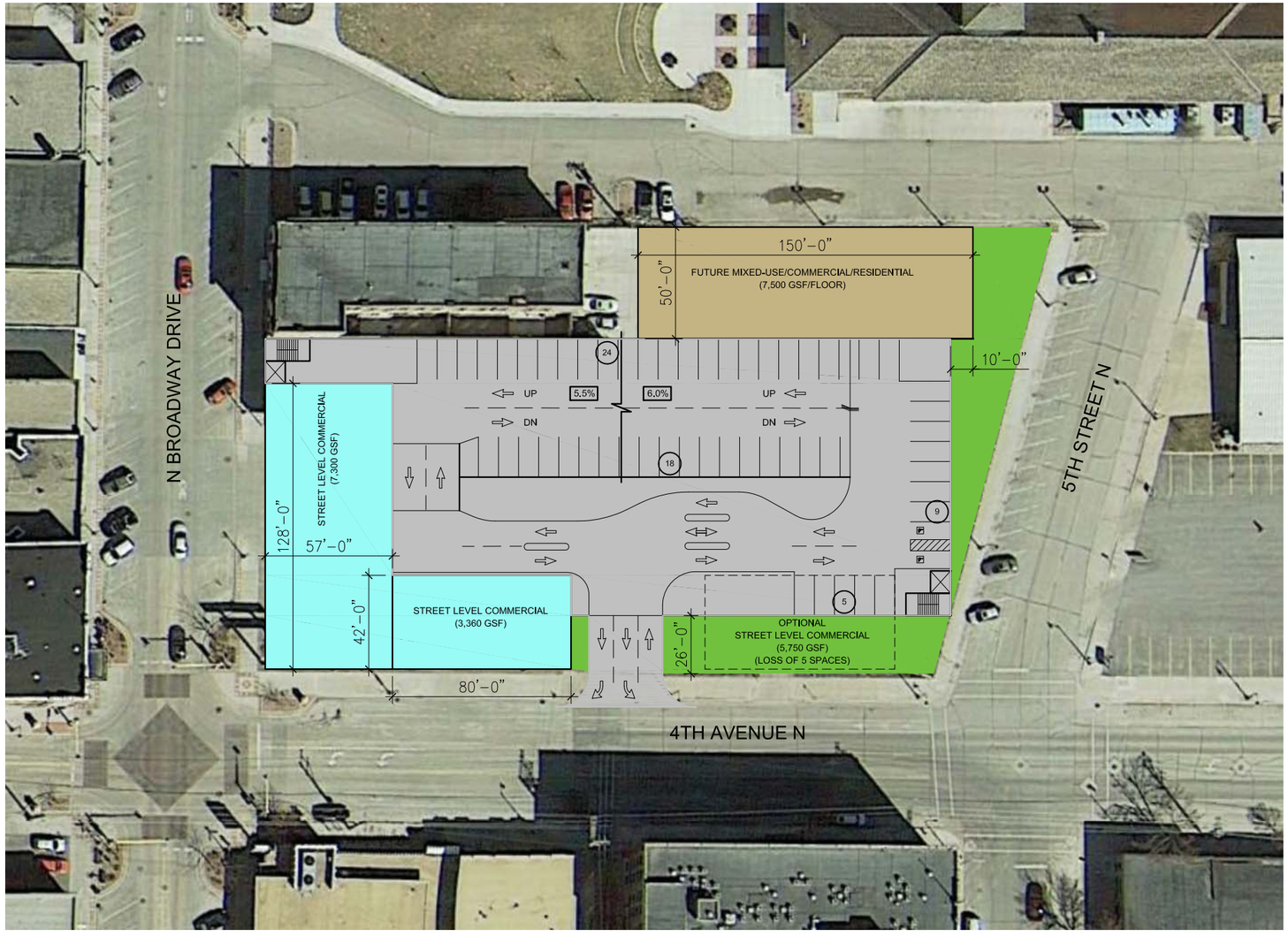
Line #	Parking Ramp Shape	Site 5 - Civic Ctr Ramp		Site 6 - City Hall	Site 7 - NP Avenue			
		Concept 5-A	Concept 5-B	Concept 6-A	Concept 7-A	Concept 7-B	Concept 7-C	Concept 7-D
1	**General Parking Ramp Statistics**							
2	Number of Ramp Spaces	**79**	**155**	**553**	**493**	**504**	**626**	**572**
3	Existing Parking Public or Private	**Public**	**Public**	**Public**	**Public**	**Public**	**Public/Private**	**Public/Private**
4	Existing Parking Spaces Displaced	8	8	172	145	145	248	248
5	**Net Gain of Spaces =**	**71**	**147**	**381**	**348**	**359**	**378**	**324**
6	Dimensions of Parking Ramp	**107.75' x 236.25'**	**124' X 297'**	**124' X 252'**	**174' X 250'**	**174' X 200'**	**179' X 290'**	**168' X 290'**
7	Ramping System	Double Threaded Helix	Double Threaded Helix	Single Threaded Helix	Side by Side Helix	Side by Side Helix	Side by Side Helix	Double Threaded Helix
8	Basement Level (Y/N)	**n/a**	**n/a**	**Y**	**Y**	**Y**	**Y**	**Y**
9	Number of Levels Above Grade	**4.5**	**5.5**	**4**	**2**	**3**	**2**	**2**
10	Total Number of Levels	**5.5**	**6.5**	**6**	**4**	**5**	**4**	**4**
11	**Parking Efficiency**							
12	Total Parking Ramp Area (SF)	24,500	49,000	179,600	166,400	170,200	197,600	189,100
13	Total Street Level Commercial Area (SF) Inside Parking Structure	0	0	0	4,800	0	0	0
14	**Total Area (SF) =**	24,500	49,000	179,600	171,200	170,200	197,600	189,100
15	Parking Ramp Efficiency (Sq. Ft./Space)	310	316	325	338	338	316	331
16	**Property Status**							
17	Land Ownership	Public	Public	Public	Public	Public	Public/Private	Public/Private
18	Property Acquisition Issues	No	No	No	No	No	No	No
19	**Parking Demand in Site Influence Area (2-Blocks in Each Direction)**							
20	Existing Influence Area Surplus / (Deficit)							
21	Estimated Future Influence Area Surplus / (Deficit)							
22	**General Items**							
23	User Comfort and Convenience of Circulation & Ramping System	Okay	Okay	Excellent	Excellent	Okay	Excellent	Good
24	Distance from Elevator to 2nd Ave. & Broadway Central Intersection	1.5 Blocks	1.5 Blocks	4 Blocks	3 Blocks	3 Blocks	3 Blocks	3 Blocks
25	Skywalk Adjacency?	Yes	Yes	Yes	No	No	No	No
26	Potential Spin Off Opportunities (H=Housing, I=Institutional, C=Commercial & Retail)	None	None	H , I & C	H & C	H & C	H & C	H & C
27	Liner Building Floor Area (Levels/Area)							
28	Concept at Appropriate Contextual Height?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
29	Architectural Treatment of Sloping Floor Facing Toward Street	North & South Sides	North & South Sides	North & South Sides	East & West Sides	East & West Sides	None	South Side
30	Site Area (If > 1 Acre then On-Site Storm Water Mgmt Required)	n/a	n/a	1.22 ac	1.03 ac	1.03 ac	1.70 ac	1.70 ac
31	Overhead Electric Power Line Impacts?	No	No	No	No	No	Yes	Yes
32	Future Parking Expansion Capability (Horz. Or Vertical)	None	None	Vert. & Horz.	Vert. & Horz.	Vert. & Horz.	Vertical	Vertical
33	**Traffic Access**							
34	Convenient Traffic Access for Users?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	Traffic Access Congestion?	No	No	No	No	No	No	No
36	Entry Lane Street Access	2nd Ave. N	2nd Ave. N	3rd St. N	NP Ave. & 8th St. N	NP Ave. & 8th St. N	NP Ave. & 8th St. N	NP Ave. & 8th St. N
37	Exit Lane Street Access	2nd Ave. N	2nd Ave. N	3rd St. N	NP Ave. & 8th St. N	NP Ave. & 8th St. N	NP Ave. & 8th St. N	NP Ave. & 8th St. N
38	**Vertical Circulation**							
39	12% Express (Non-parking) Ramp Area (SF)	0%	0%	0%	0%	0%	0%	0%
40	Parking Ramp Slopes	6.0%	6.0%	2.0%-5.0%	1.5%-5.9%	3.1%-6.0%	5.7%	5.3%
41	Floor Elevation of Top Level (Feet)	55.00	66.00	51.00	27.92	39.67	34.00	34.00
42	Parapet Elevation of Top Level (Feet)	58.75	69.75	54.75	31.67	43.42	37.75	37.75
43	Percentage of Area on Non-Ramping Floors @ Typ. Level	30%	30%	36%	31%	40%	24%	51%
44	Dead End(s)	0	0	2	0	0	0	0
45	**Parking Geometrics & Circulation**							
46	Number of Bays	2	2	2	3	3	3	3
47	Angle of Parking	75 Degree	75 Degree	90 Degree	70/90 Degree	70/90 Degree	75/90 Degree	70 Degree
48	1-Way or 2-Way Traffic Flow	1 Way	1 Way	2 Way	1 Way/2 Way	1 Way/2 Way	1 Way/2 Way	1 Way
49								
50	**Site Comparative Ranking for Satisfying the Parking Demand of the Downtown Core Parking**							
51	Site Ranking (1 = Best & 7 = Worst)	3	3	7	5	5	5	5
52	**Comments**							
53	**Conceptual Comparative Construction Cost**							
54	**Parking Ramp Construction Cost**							
55	Base Parking Ramp Unit Cost ($/SF)[2]	85.00	85.00	52.50	52.50	52.50	52.50	52.50
56	Premium for Vertical Development ($/SF)			2.75			2.75	2.75
57	Base Parking Ramp Cost	$2,082,500	$4,165,000	$9,922,900	$8,736,000	$8,935,500	$10,917,400	$10,447,775
58	Street Level Commercial Shell Cost at $80/SF	$0	$0	$0	$384,000	$0	$0	$0
59	Below Grade Premium			26.30	26.30	26.30	26.30	26.30
60	Footprint Area for Below Grade			31,200	43,500	34,800	51,900	48,700
61	Below Grade Cost Premium	$0	$0	$820,560	$1,144,050	$915,240	$1,364,970	$1,280,810
62	Storm Water Management System Allowance ($250k/acre)	$0	$0	$305,000	$257,500	$257,500	$425,000	$425,000
63	Façade Area (SF)			34,100	21,300	24,900	17,500	17,300
64	Façade Premium Cost at $30/SF	$0	$0	$1,023,000	$639,000	$747,000	$525,000	$519,000
65	**Site Work Construction Cost**							
66	Demolition of Parking Lot at $250/space	$0	$0	$43,000	$36,250	$36,250	$62,000	$62,000
67	Demolition of Existing Building(s)							
68	**Total Parking Ramp Construction Cost =**	**$2,082,500**	**$4,165,000**	**$12,114,460**	**$11,196,800**	**$10,891,490**	**$13,294,370**	**$12,734,585**
69	Total Parking Ramp Cost per SF =	$85.00	$85.00	$67.45	$65.40	$63.99	$67.28	$67.34
70	Cost Per Ramp Parking Space (Including Commercial) =	$26,361	$26,871	$21,907	$22,712	$21,610	$21,237	$22,263
71	Cost Per Net Parking Space (Including Commercial) =	$29,331	$28,333	$31,796	$32,175	$30,338	$35,170	$39,304
72	Preliminary Soft Costs (@ 15%)= [1]	$312,400	$624,800	$1,817,200	$1,679,500	$1,633,700	$1,994,200	$1,910,200
	Owners Construction Phase Contingency (@ 3%) =	$62,500	$125,000	$363,400	$335,900	$326,700	$398,800	$382,000
73	Conceptual Design Cost Contingency (@ 10%) =	$208,300	$416,500	$1,211,400	$1,119,700	$1,089,100	$1,329,400	$1,273,500
74	**Total Project Cost =**	**$2,665,700**	**$5,331,300**	**$15,506,460**	**$14,331,900**	**$13,940,990**	**$17,016,770**	**$16,300,285**

Notes:

1. Excludes land acquisition and City of Fargo administration, legal, and financing costs.

2. Assumes March 2016 start of construction.



LEVEL 1 PLAN

1" = 60'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 5	100	---	100
LEVEL 4	118	---	118
LEVEL 3	114	4	118
LEVEL 2	114	4	118
LEVEL 1	54	2	56
LEVEL B1	94	4	98
GARAGE TOTAL	594	14	608
EXISTING LOT TOTAL	93	---	93
NET GAIN FOR SITE	501	14	515

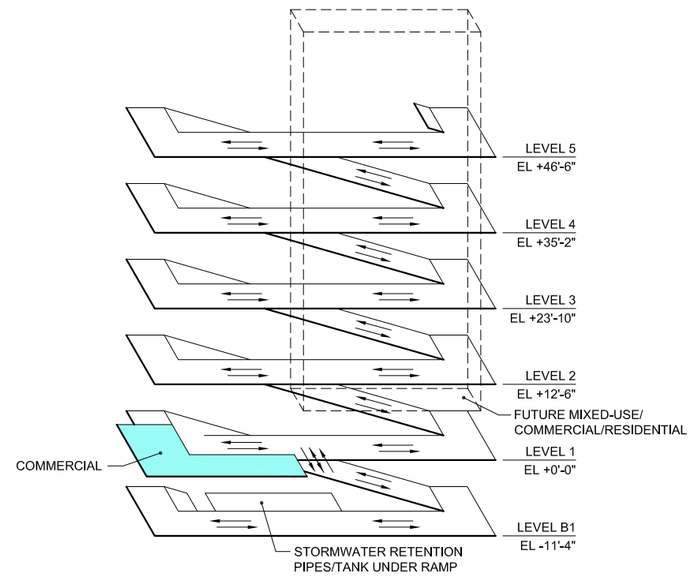
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 372 SPACES (NET GAIN = 279)
BASEMENT + 4 LEVELS = 490 SPACES (NET GAIN = 397)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 1-A

Sheet 1
March 2, 2015

Carl Walker Parking
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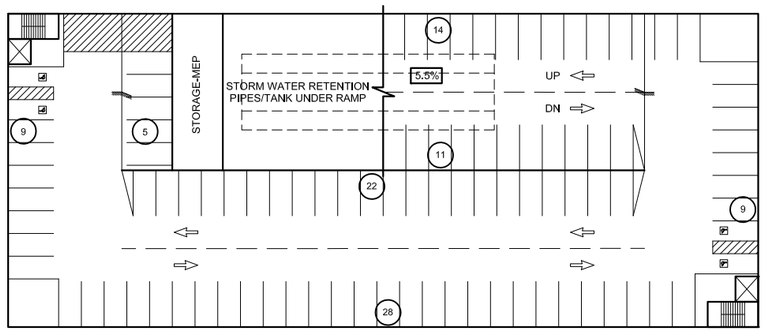
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

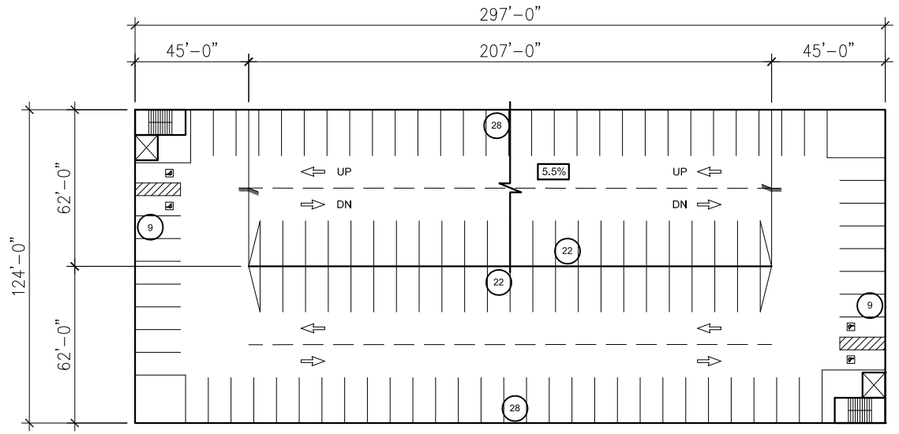
City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



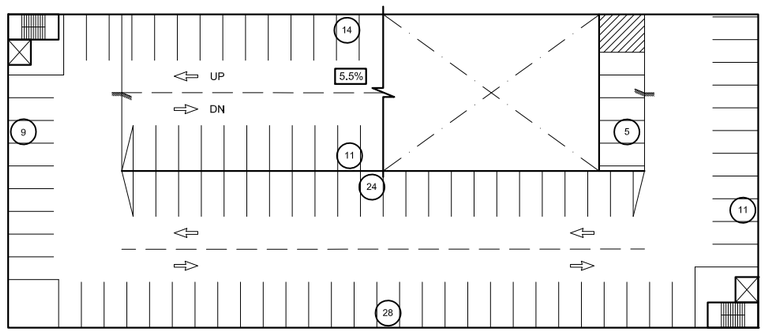
LEVEL B1 PLAN

1" = 60'–0"



LEVEL 2, 3 & 4 PLAN

1" = 60'–0"



LEVEL 5 PLAN

1" = 60'–0"

Concept 1-A

Sheet 2
March 2, 2015

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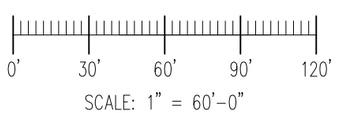
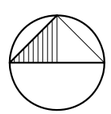


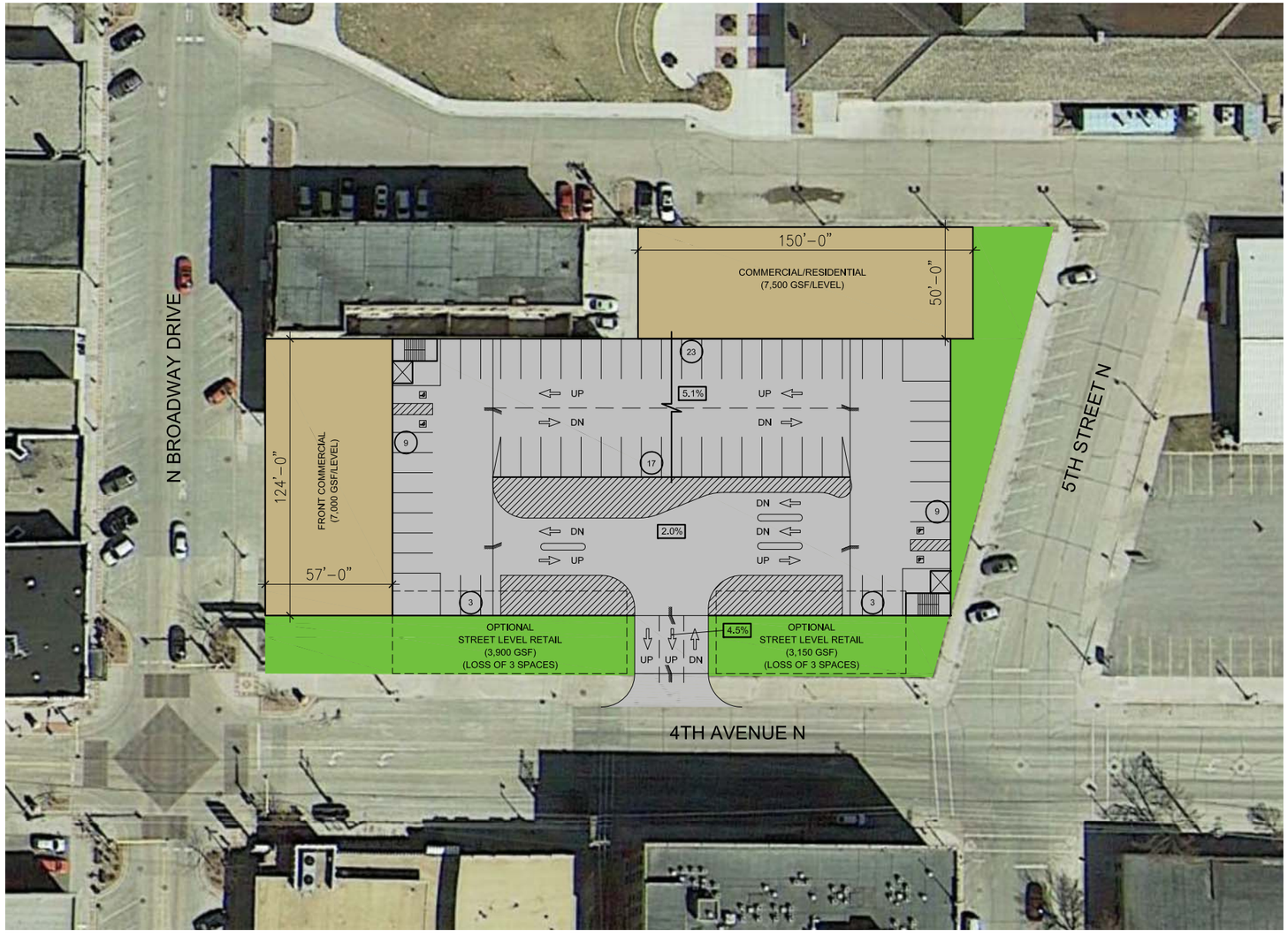
SCALE: 1" = 60'–0"



N O R T H

City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 6	84	---	84
LEVEL 5	98	---	98
LEVEL 4	98	---	98
LEVEL 3	94	4	98
LEVEL 2	94	4	98
LEVEL 1	60	4	64
LEVEL B1	31	2	33
GARAGE TOTAL	559	14	573
EXISTING LOT TOTAL	93	---	93
NET GAIN FOR SITE	466	14	480

SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 279 SPACES (NET GAIN = 186)
BASEMENT + 4 LEVELS = 377 SPACES (NET GAIN = 284)
BASEMENT + 5 LEVELS = 475 SPACES (NET GAIN = 382)

ISOMETRIC VIEW

SINGLE THREADED HELIX

Concept 1-B

Sheet 3
February 23, 2015

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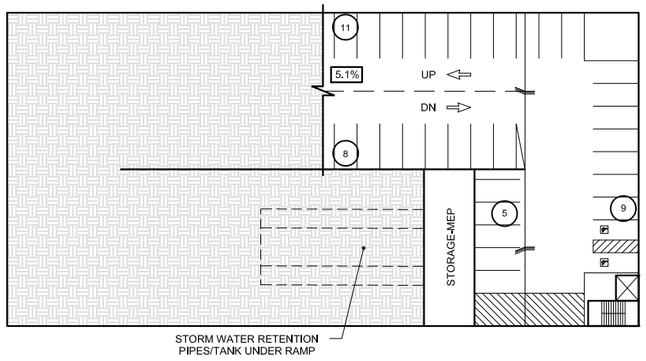
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

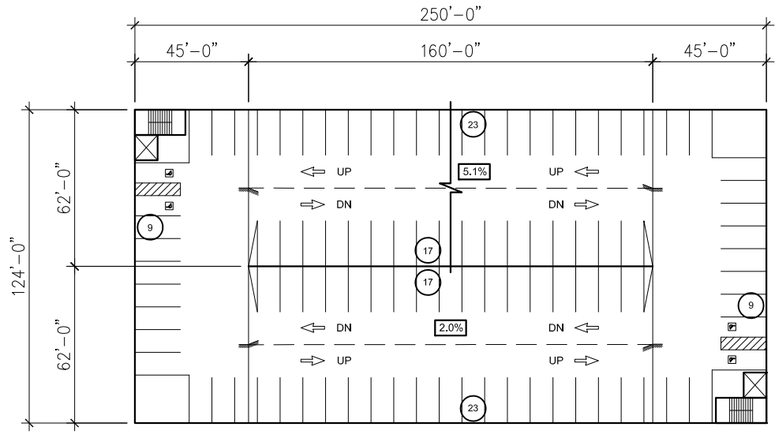
City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



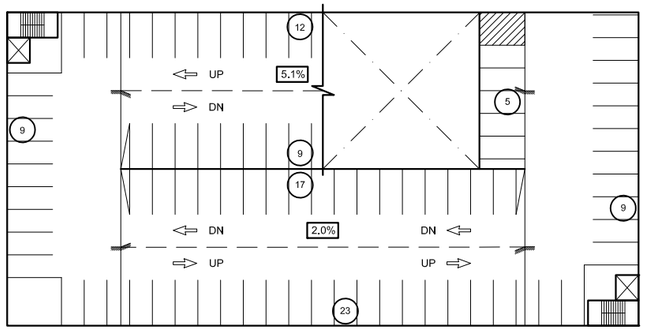
LEVEL B1 PLAN

1" = 60'–0"



LEVEL 2, 3, 4 & 5 PLAN

1" = 60'–0"



LEVEL 6 PLAN

1" = 60'–0"

Concept 1-B

Sheet 4
February 23, 2015

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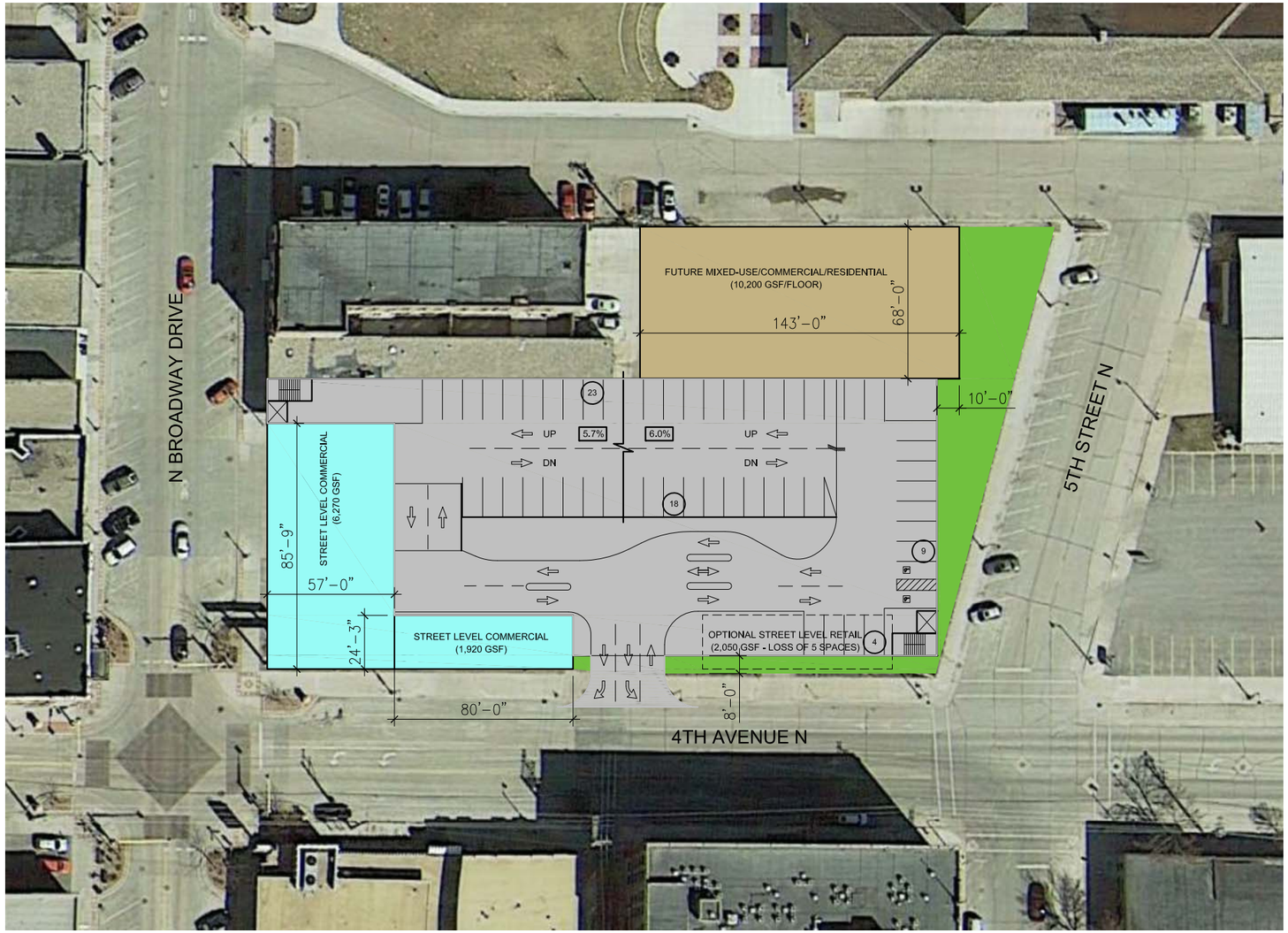
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 5	98	---	98
LEVEL 4	114	---	114
LEVEL 3	110	4	114
LEVEL 2	110	4	114
LEVEL 1	52	2	54
LEVEL B1	90	4	94
GARAGE TOTAL	570	14	584
EXISTING LOT TOTAL	93	---	93
NET GAIN FOR SITE	477	14	491

SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 376 SPACES (NET GAIN = 283)
BASEMENT + 4 LEVELS = 490 SPACES (NET GAIN = 377)

ISOMETRIC VIEW

SINGLE THREADED HELIX

Sheet 5
March 2, 2015

Concept 1-C

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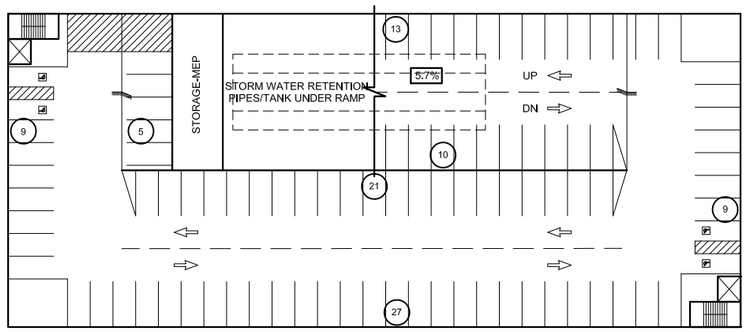
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

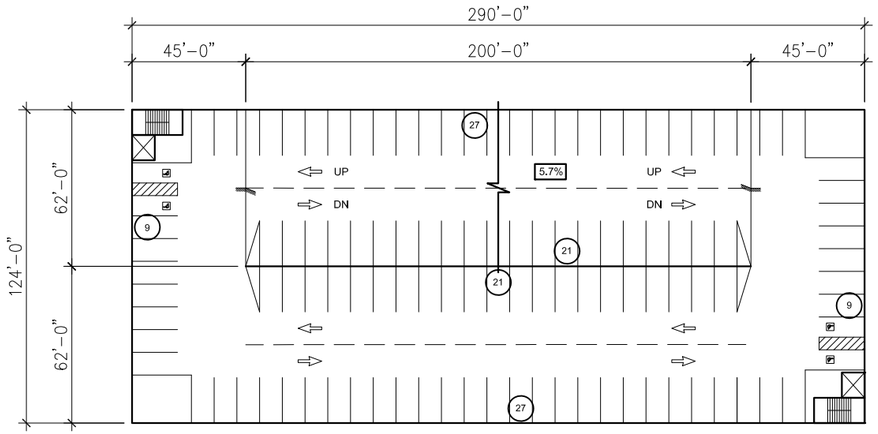
City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



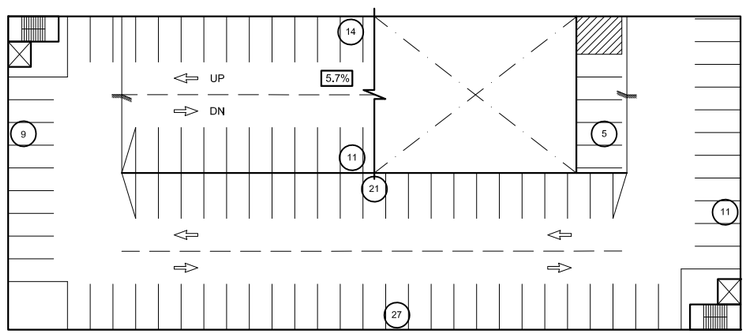
LEVEL B1 PLAN

1" = 60'–0"



LEVEL 2, 3 & 4 PLAN

1" = 60'–0"



LEVEL 5 PLAN

1" = 60'–0"

Concept 1-C

Sheet 6
March 2, 2015

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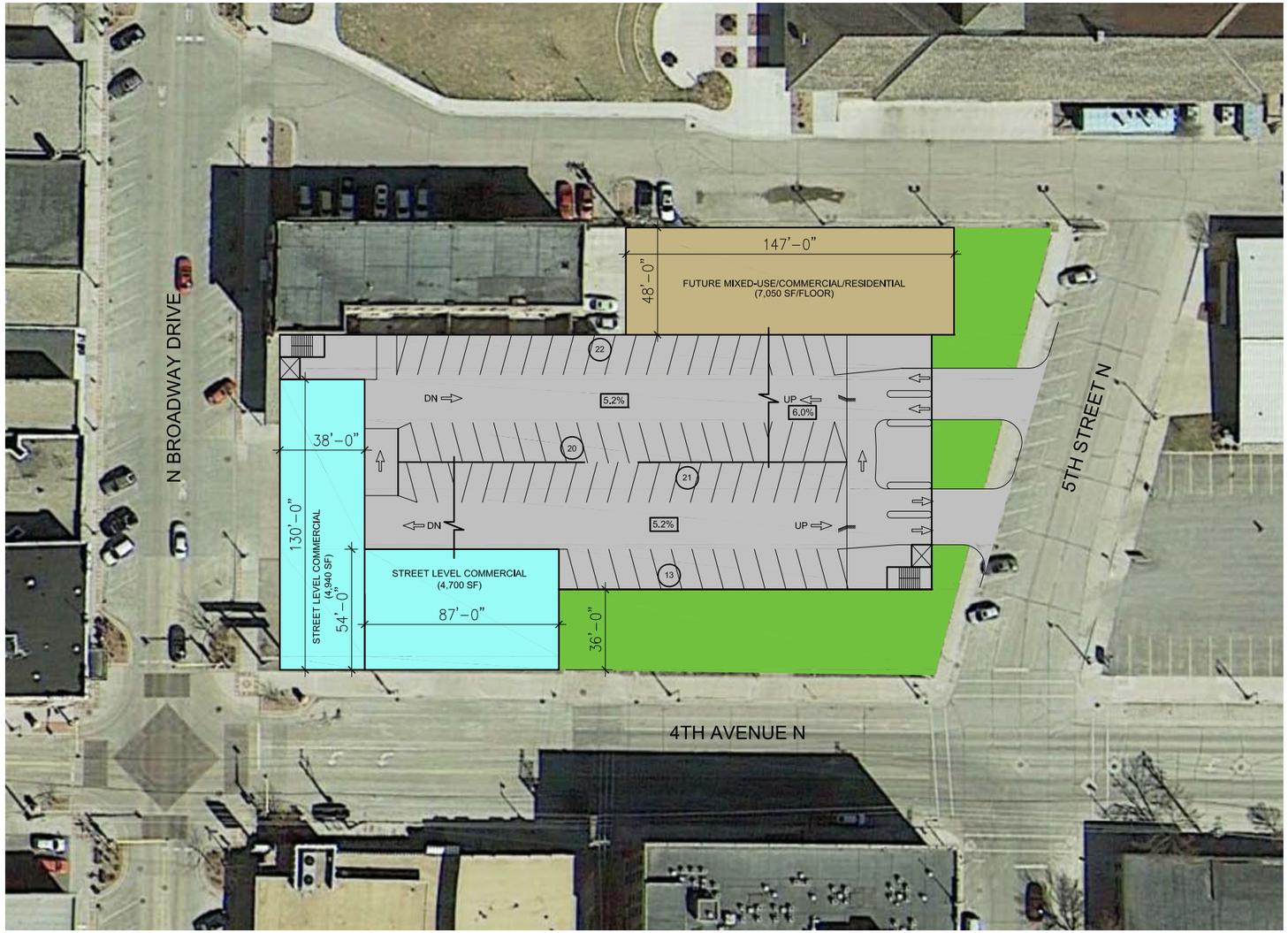
0' 30' 60' 90' 120'

SCALE: 1" = 60'–0"

N O R T H

City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
CROSSOVER	37	---	37
LEVEL 5	111	---	111
LEVEL 4	101	4	105
LEVEL 3	107	4	111
LEVEL 2	101	4	105
LEVEL 1	76	---	76
LEVEL B1	74	4	78
GARAGE TOTAL	607	16	623
EXISTING LOT TOTAL	93	---	93
NET GAIN FOR SITE	514	16	530

SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 407 SPACES (NET GAIN = 314)
BASEMENT + 4 LEVELS = 512 SPACES (NET GAIN = 419)

ISOMETRIC VIEW

DOUBLE THREADED HELIX

Sheet 7
March 2, 2015

Concept 1-D

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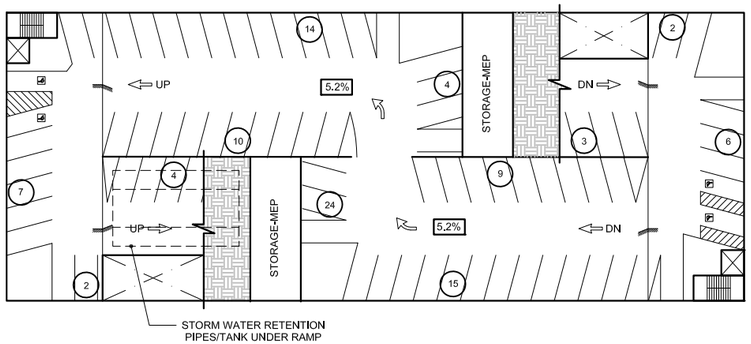
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

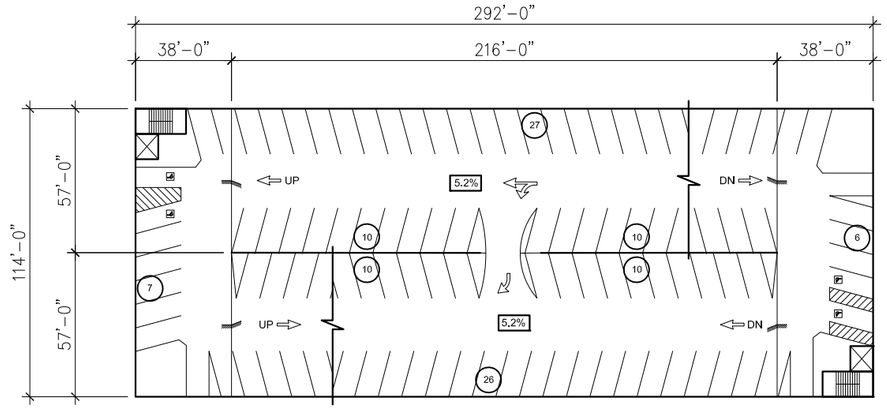
City of Fargo

Site 1 - Warner
Fargo, North Dakota



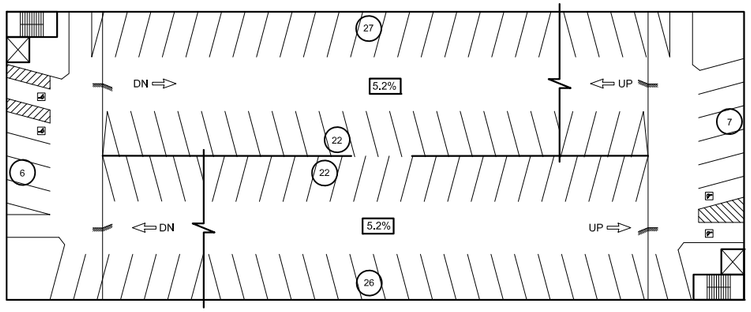
LEVEL B1 PLAN

1" = 60'–0"



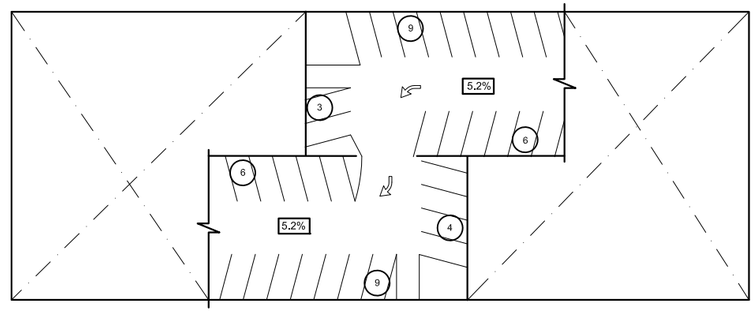
LEVEL 2 & 4 PLAN

1" = 60'–0"



LEVEL 3 & 5 PLAN

1" = 60'–0"



CROSSOVER PLAN

1" = 60'–0"

Concept 1-D

Sheet 8
March 2, 2015

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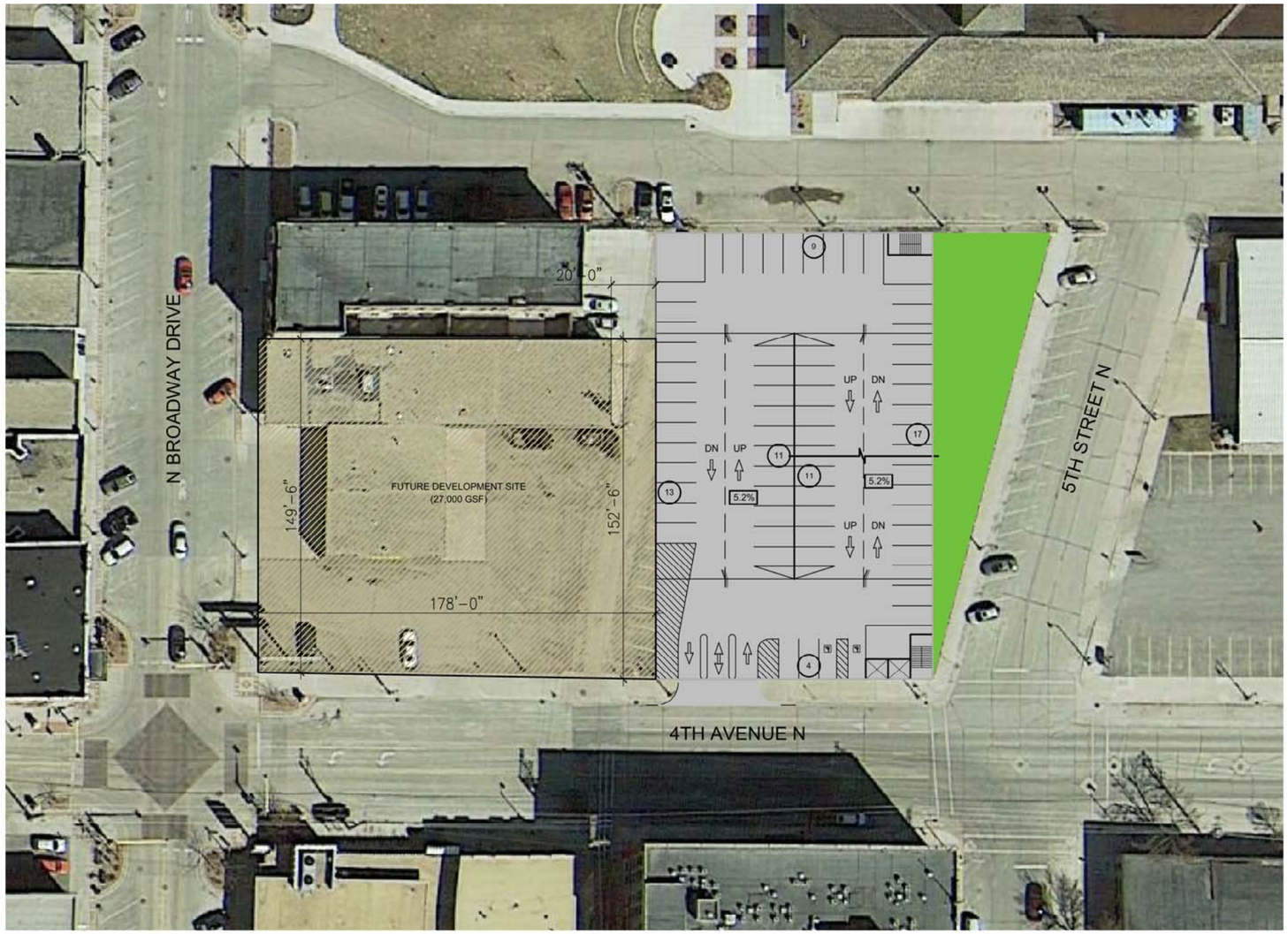
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

N O R T H

City of Fargo

Site 1 - Warner
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 7	64	2	66
LEVEL 6	72	2	74
LEVEL 5	72	2	74
LEVEL 4	72	2	74
LEVEL 3	72	2	74
LEVEL 2	72	2	74
LEVEL 1	63	2	65
LEVEL B1	62	2	64
GARAGE TOTAL	547	18	565
EXISTING LOT TOTAL	93	---	93
NET GAIN FOR SITE	454	18	472

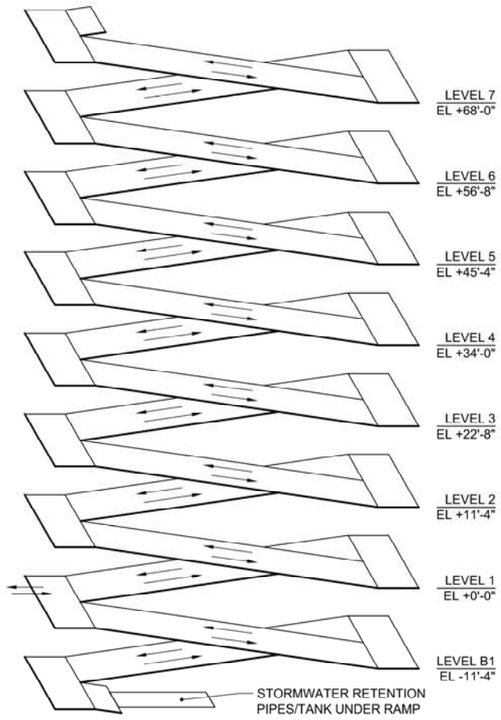
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 236 SPACES (NET GAIN = 176)
BASEMENT + 4 LEVELS = 310 SPACES (NET GAIN = 250)
BASEMENT + 5 LEVELS = 386 SPACES (NET GAIN = 324)
BASEMENT + 6 LEVELS = 458 SPACES (NET GAIN = 398)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 1-E

Sheet 9
March 2, 2015

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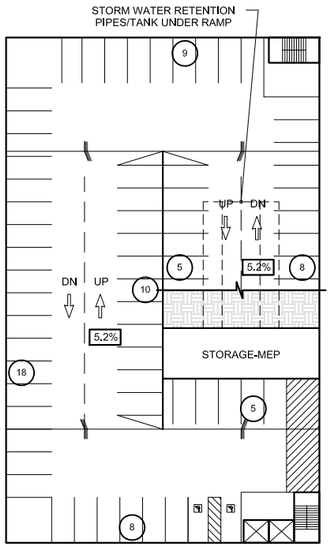
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

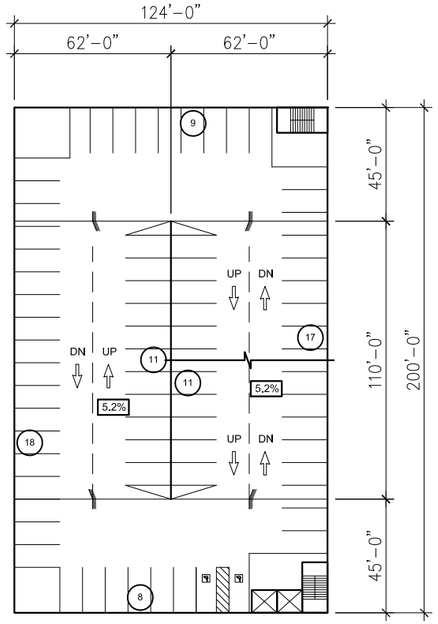
City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



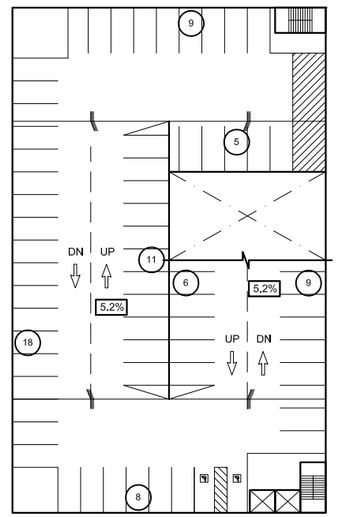
LEVEL B1 PLAN

1" = 60'–0"



LEVEL 2, 3, 4, 5 & 6 PLAN

1" = 60'–0"



LEVEL 7 PLAN

1" = 60'–0"

Concept 1-E

Sheet 10
March 2, 2015

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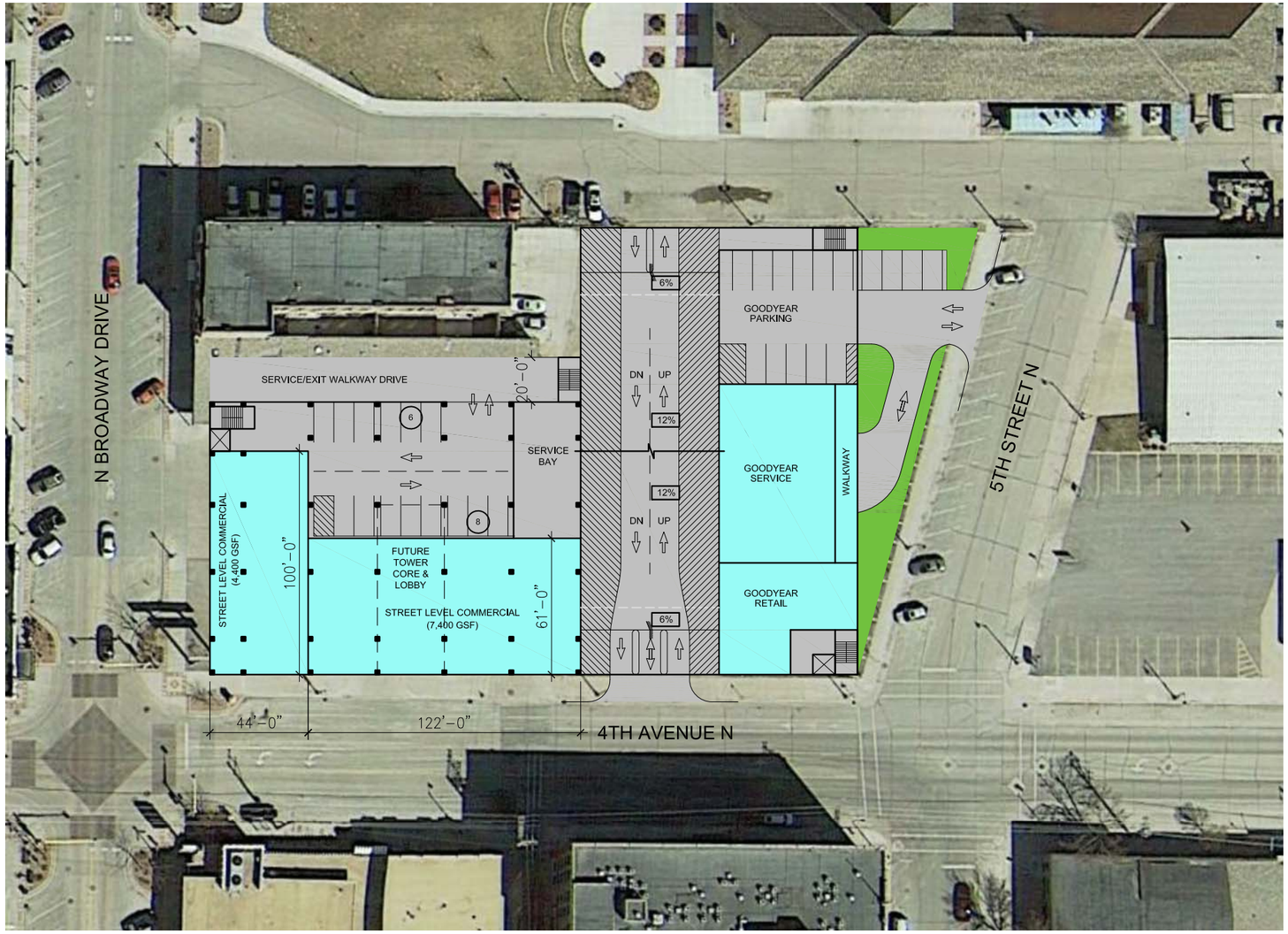
0' 30' 60' 90' 120'

SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 5	125	---	125
LEVEL 4	126	4	130
LEVEL 3	126	4	130
LEVEL 2	116	4	120
LEVEL 1	14	---	14
LEVEL B1	106	4	110
GARAGE TOTAL	613	16	629
EXISTING LOT TOTAL	93	---	93
NET GAIN FOR SITE	520	16	536

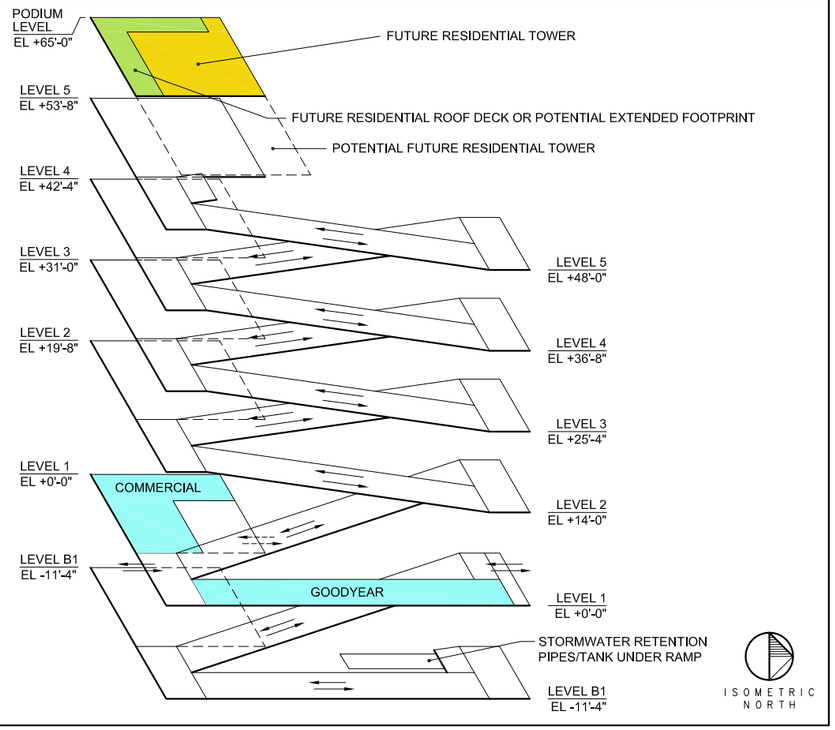
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 369 SPACES (NET GAIN = 276)
BASEMENT + 4 LEVELS = 499 SPACES (NET GAIN = 406)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 1-F

Sheet 11
March 2, 2015

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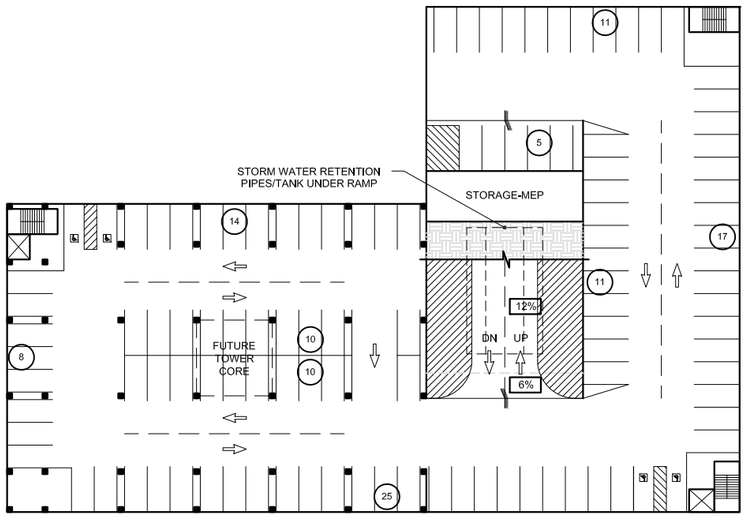
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

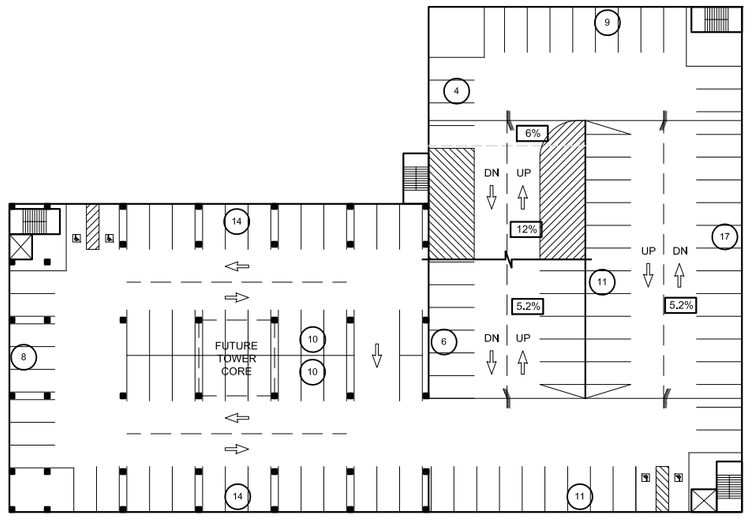
City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



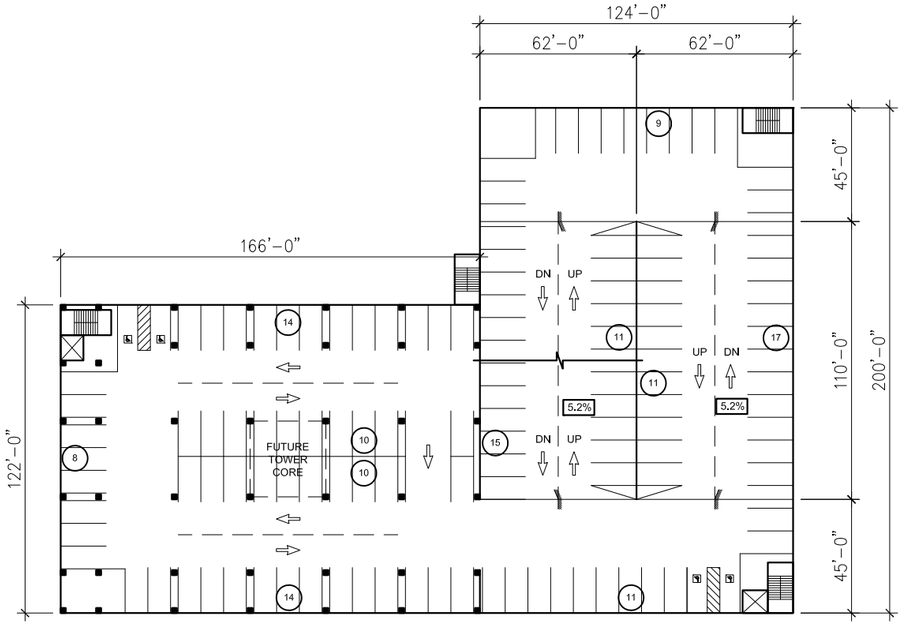
LEVEL B1 PLAN

1" = 60'–0"



LEVEL 2 PLAN

1" = 60'–0"



LEVEL 3 & 4 PLAN

1" = 60'–0"

Concept 1-F

Sheet 12
March 2, 2015

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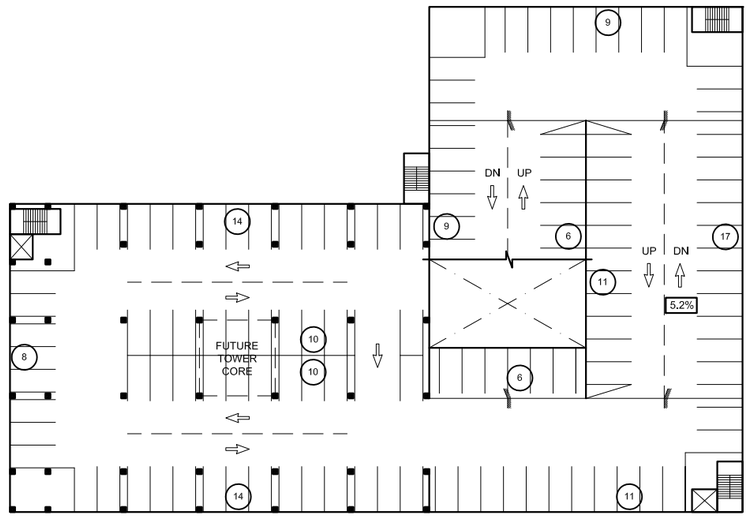
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

N O R T H

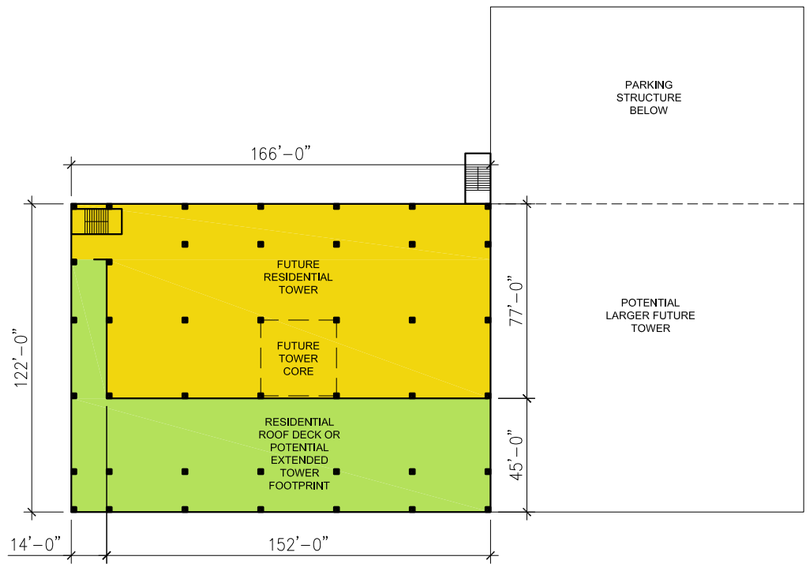
City of Fargo

Site 1 - Warner Site
Fargo, North Dakota



LEVEL 5 PLAN

1" = 60'–0"



PODIUM LEVEL PLAN

1" = 60'–0"

Concept 1-F

Sheet 13
March 2, 2015

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0' 30' 60' 90' 120'

SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 1 - Warner Site
Fargo, North Dakota

LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 7	70	2	72
LEVEL 6	80	2	82
LEVEL 5	80	2	82
LEVEL 4	80	2	82
LEVEL 3	80	2	82
LEVEL 2	80	2	82
LEVEL 1	62	2	64
LEVEL B1	68	2	70
GARAGE TOTAL	600	16	616
EXISTING LOT TOTAL	106	---	106
NET GAIN FOR SITE	494	16	510

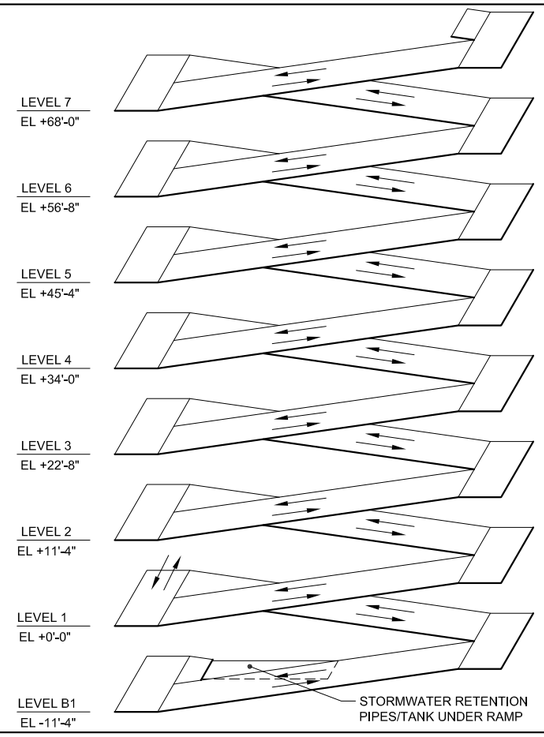
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 289 SPACES (NET GAIN = 182)
BASEMENT + 4 LEVELS = 371 SPACES (NET GAIN = 264)
BASEMENT + 5 LEVELS = 452 SPACES (NET GAIN = 346)
BASEMENT + 6 LEVELS = 534 SPACES (NET GAIN = 428)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 2-A

Sheet 14
March 2, 2015

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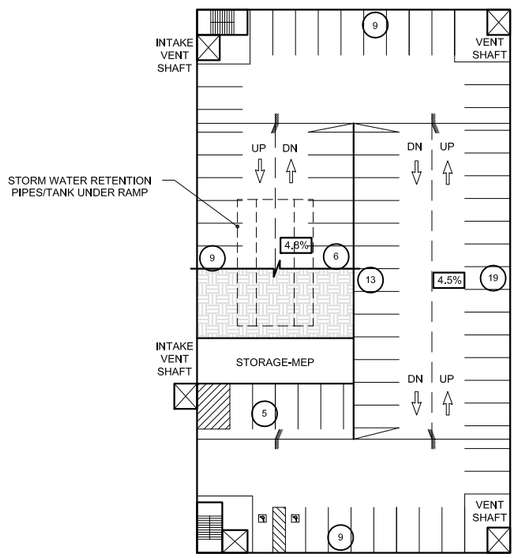
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

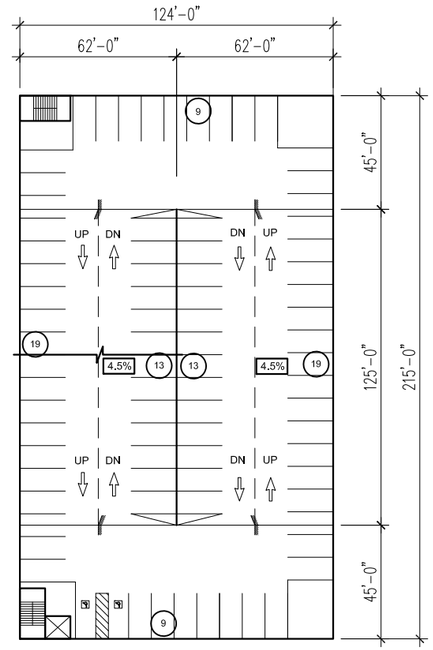
City of Fargo

Site 2 - St Mark's
Fargo, North Dakota



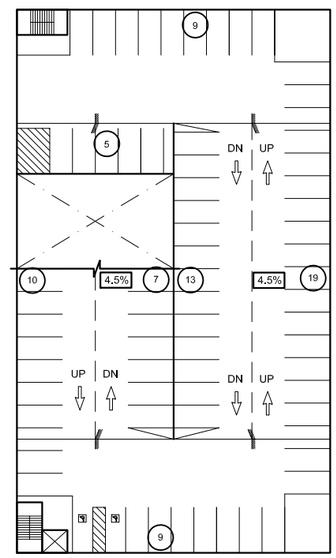
LEVEL B1 PLAN

1" = 60'-0"



LEVEL 2, 3, 4, 5 & 6 PLAN

1" = 60'-0"



LEVEL 7 PLAN

1" = 60'-0"

Concept 2-A

Sheet 15
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0' 30' 60' 90' 120'

SCALE: 1" = 60'-0"

N O R T H

City of Fargo

Site 2 - St Mark's
Fargo, North Dakota

LEVEL 1 PLAN

1" = 60'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
CROSSOVER	22	---	22
LEVEL 5	95	---	95
LEVEL 4	90	---	90
LEVEL 3	91	4	95
LEVEL 2	86	4	90
LEVEL 1	78	2	80
LEVEL B1	77	4	81
GARAGE TOTAL	539	14	553
EXISTING LOT TOTAL	104	---	104
NET GAIN FOR SITE	435	14	449

SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 368 SPACES (NET GAIN = 264)
BASEMENT + 4 LEVELS = 458 SPACES (NET GAIN = 354)

ISOMETRIC VIEW

DOUBLE THREADED HELIX

Concept 2-B

Sheet 16
March 2, 2015

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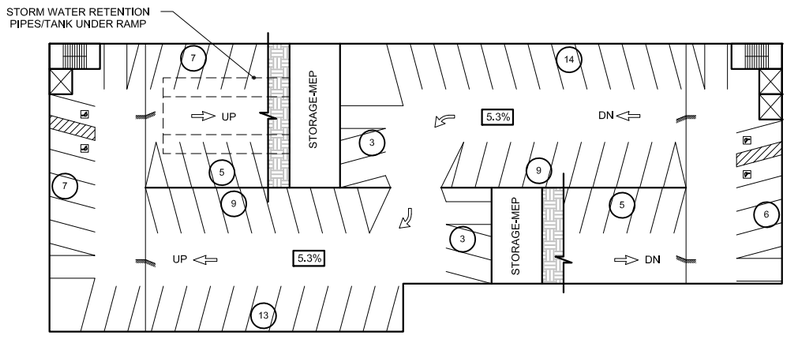
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

N O R T H

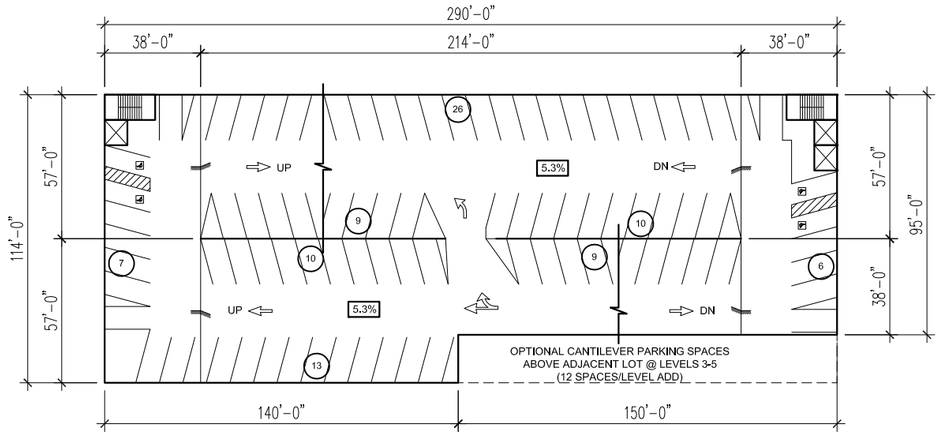
City of Fargo

Site 2 - St Mark's
Fargo, North Dakota



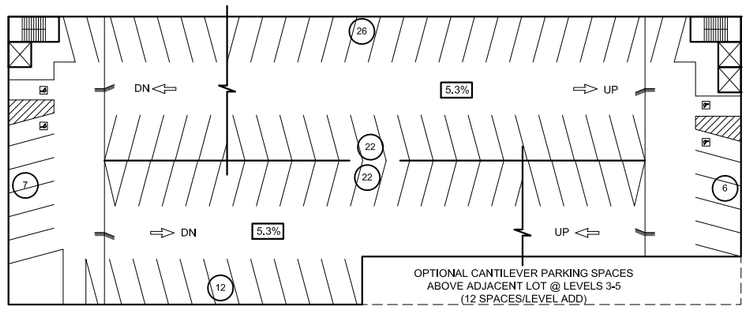
LEVEL B1 PLAN

1" = 60'–0"



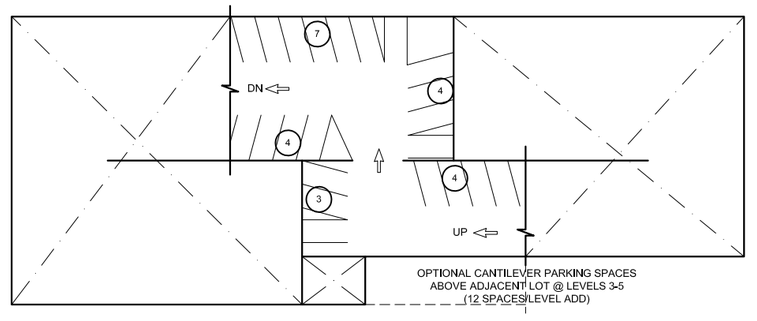
LEVEL 2 & 4 PLAN

1" = 60'–0"



LEVEL 3 & 5 PLAN

1" = 60'–0"



CROSSOVER

1" = 60'–0"

Concept 2-B

Sheet 17
March 2, 2015

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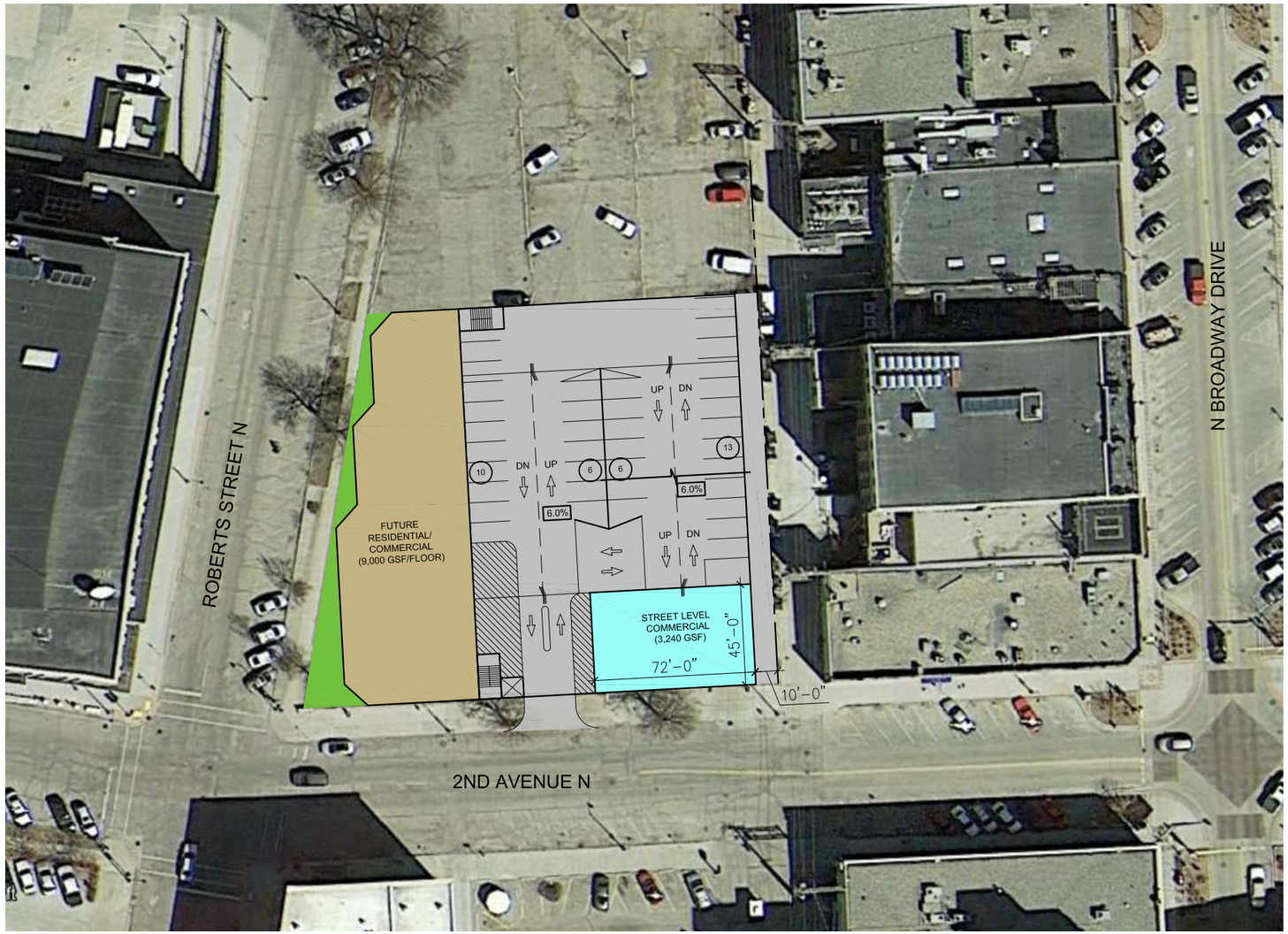
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 2 - St Mark's
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 7	51	2	53
LEVEL 6	60	2	62
LEVEL 5	60	2	62
LEVEL 4	60	2	62
LEVEL 3	60	2	62
LEVEL 2	60	2	62
LEVEL 1	35	---	35
LEVEL B1	52	2	54
GARAGE TOTAL	438	14	452
EXISTING LOT TOTAL	100	---	100
NET GAIN FOR SITE	338	14	352

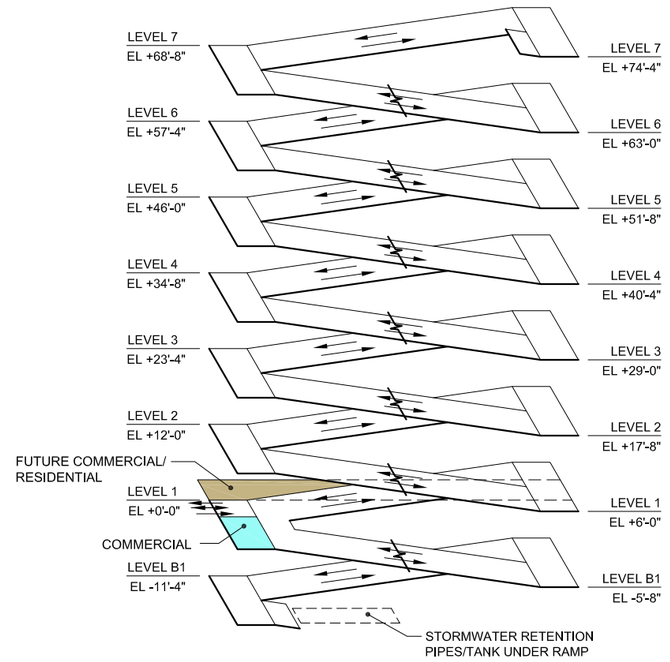
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 204 SPACES (NET GAIN = 104)
BASEMENT + 4 LEVELS = 266 SPACES (NET GAIN = 166)
BASEMENT + 5 LEVELS = 328 SPACES (NET GAIN = 228)
BASEMENT + 6 LEVELS = 390 SPACES (NET GAIN = 290)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 3-A

Sheet 18
March 2, 2015

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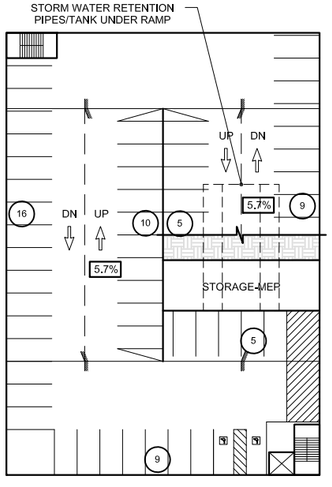
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

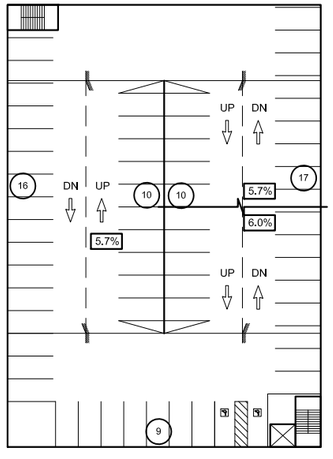
City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



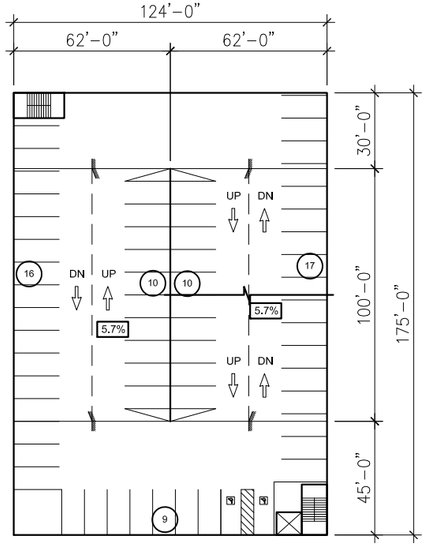
LEVEL B1 PLAN

1" = 60'–0"



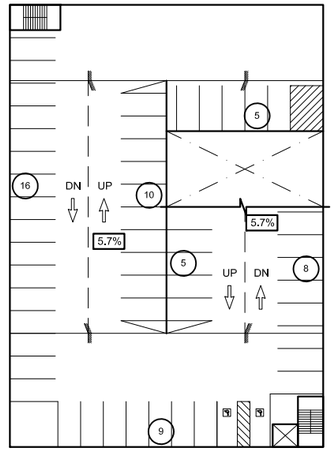
LEVEL 2 PLAN

1" = 60'–0"



LEVEL 3, 4, 5 & 6 PLAN

1" = 60'–0"



LEVEL 7 PLAN

1" = 60'–0"

Concept 3-A

Sheet 19
March 2, 2015

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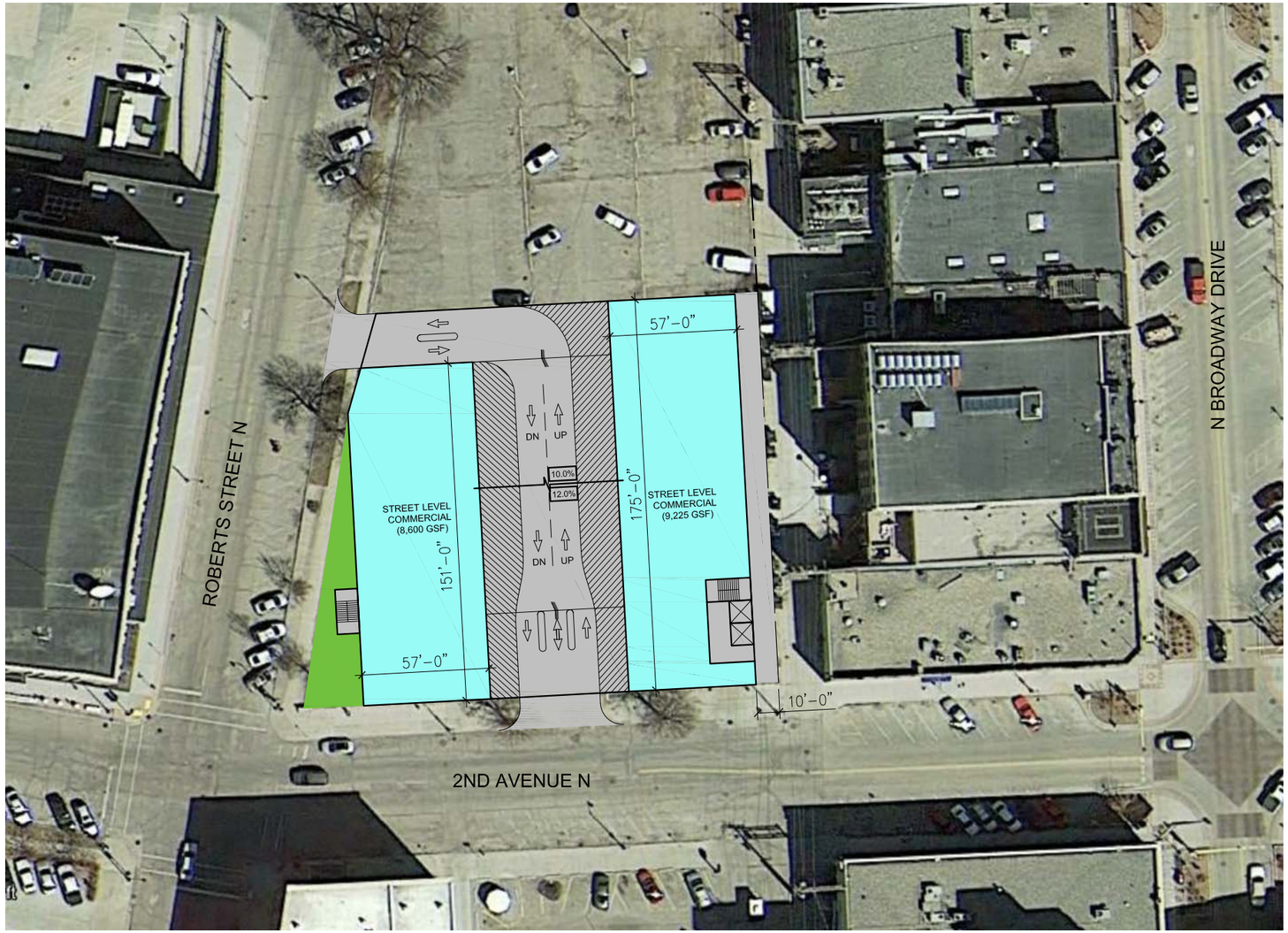
0' 30' 60' 90' 120'

SCALE: 1" = 60'–0"

N O R T H

City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 6	77	2	79
LEVEL 5	83	2	85
LEVEL 4	83	2	85
LEVEL 3	83	2	85
LEVEL 2	71	2	73
LEVEL 1	---	---	---
LEVEL B1	65	2	67
GARAGE TOTAL	462	12	474
EXISTING LOT TOTAL	100	---	100
NET GAIN FOR SITE	362	12	374

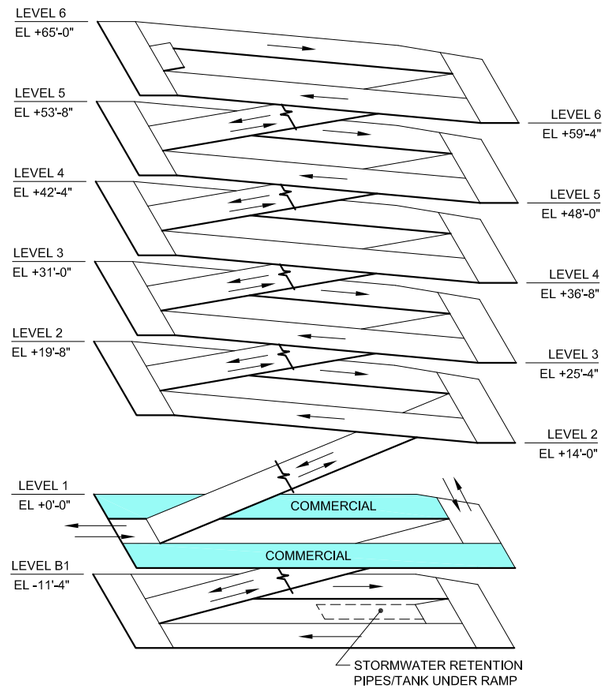
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 219 SPACES (NET GAIN = 119)
BASEMENT + 4 LEVELS = 304 SPACES (NET GAIN = 204)
BASEMENT + 5 LEVELS = 389 SPACES (NET GAIN = 289)

ISOMETRIC VIEW

SIDE BY SIDE SINGLE THREADED HELIX



Concept 3-B

Sheet 20
March 2, 2015

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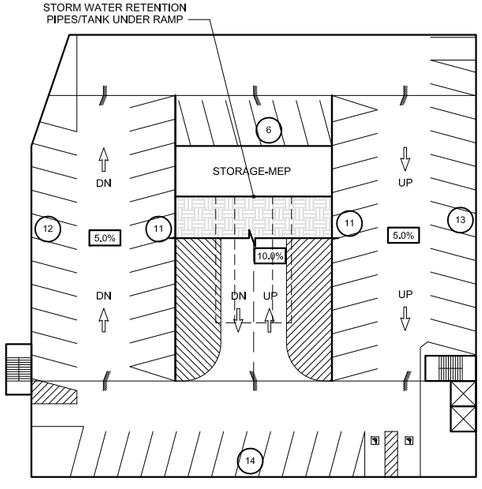
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

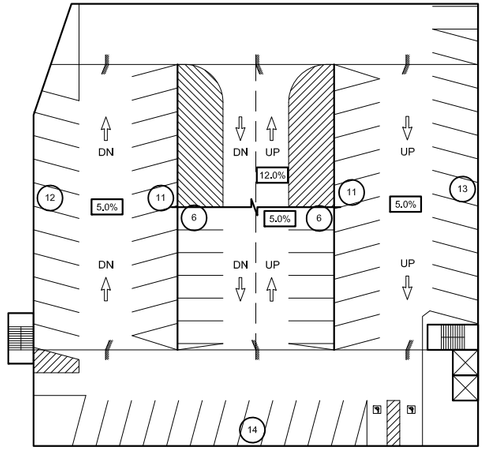
City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



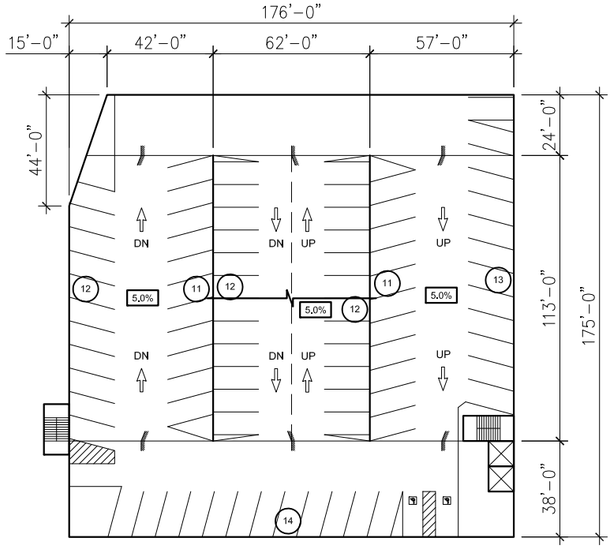
LEVEL B1 PLAN

1" = 60'–0"



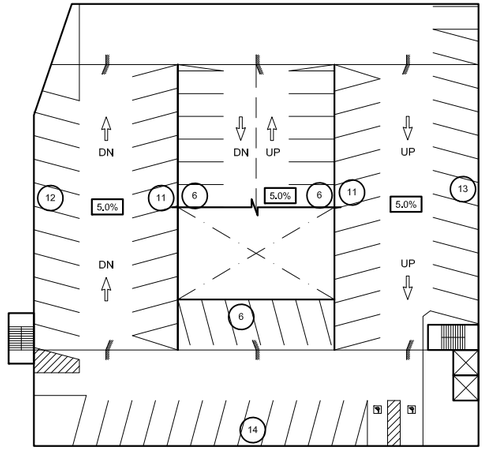
LEVEL 2 PLAN

1" = 60'–0"



LEVEL 3, 4, & 5 PLAN

1" = 60'–0"



LEVEL 6 PLAN

1" = 60'–0"

Concept 3-B

Sheet 21
March 2, 2015

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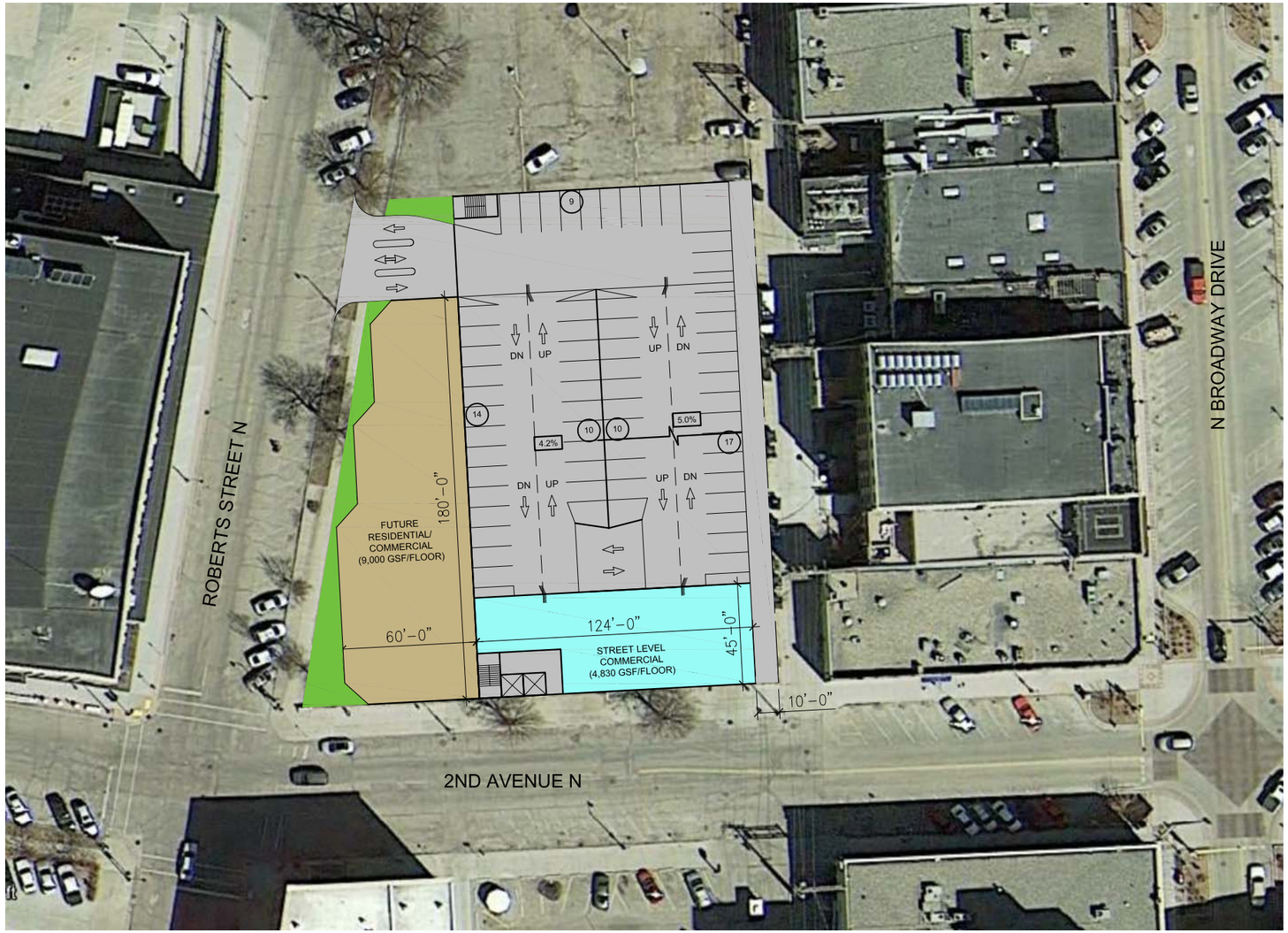
0' 30' 60' 90' 120'

SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 6	73	2	75
LEVEL 5	83	2	85
LEVEL 4	83	2	85
LEVEL 3	83	2	85
LEVEL 2	63	---	63
LEVEL 1	60	---	60
LEVEL B1	73	2	75
GARAGE TOTAL	518	10	528
EXISTING LOT TOTAL	132	---	132
NET GAIN FOR SITE	386	10	396

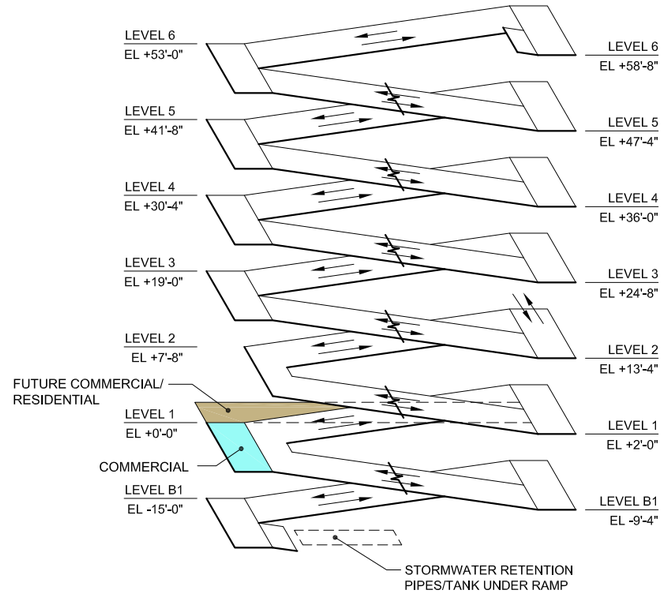
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 273 SPACES (NET GAIN = 141)
BASEMENT + 4 LEVELS = 358 SPACES (NET GAIN = 226)
BASEMENT + 5 LEVELS = 443 SPACES (NET GAIN = 311)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 3-C

Sheet 22
March 2, 2015

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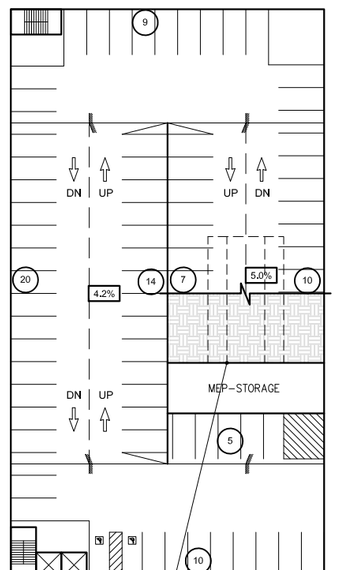
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota

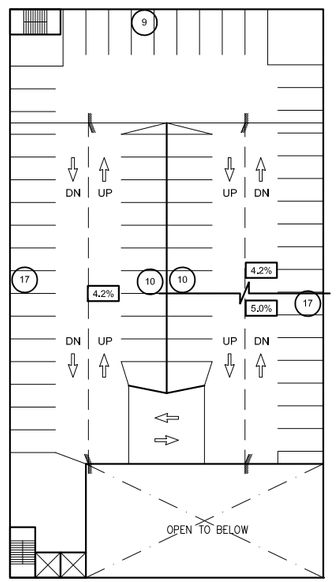


STORM WATER RETENTION

PIPES/TANK UNDER RAMP

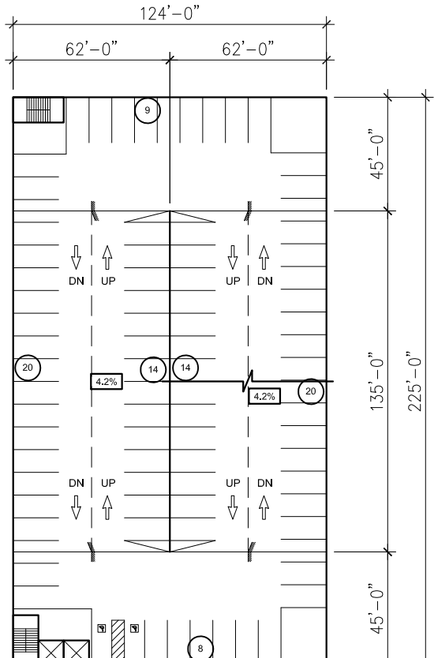
LEVEL B1 PLAN

1" = 60'-0"



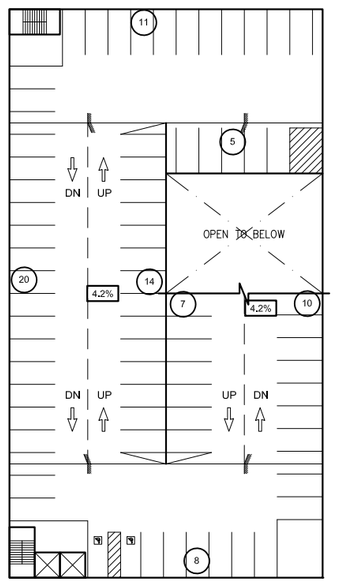
LEVEL 2 PLAN

1" = 60'-0"



LEVEL 3, 4, & 5 PLAN

1" = 60'-0"



LEVEL 6 PLAN

1" = 60'-0"

Concept 3-C

Sheet 23
March 2, 2015

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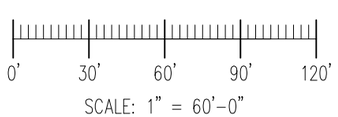
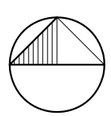
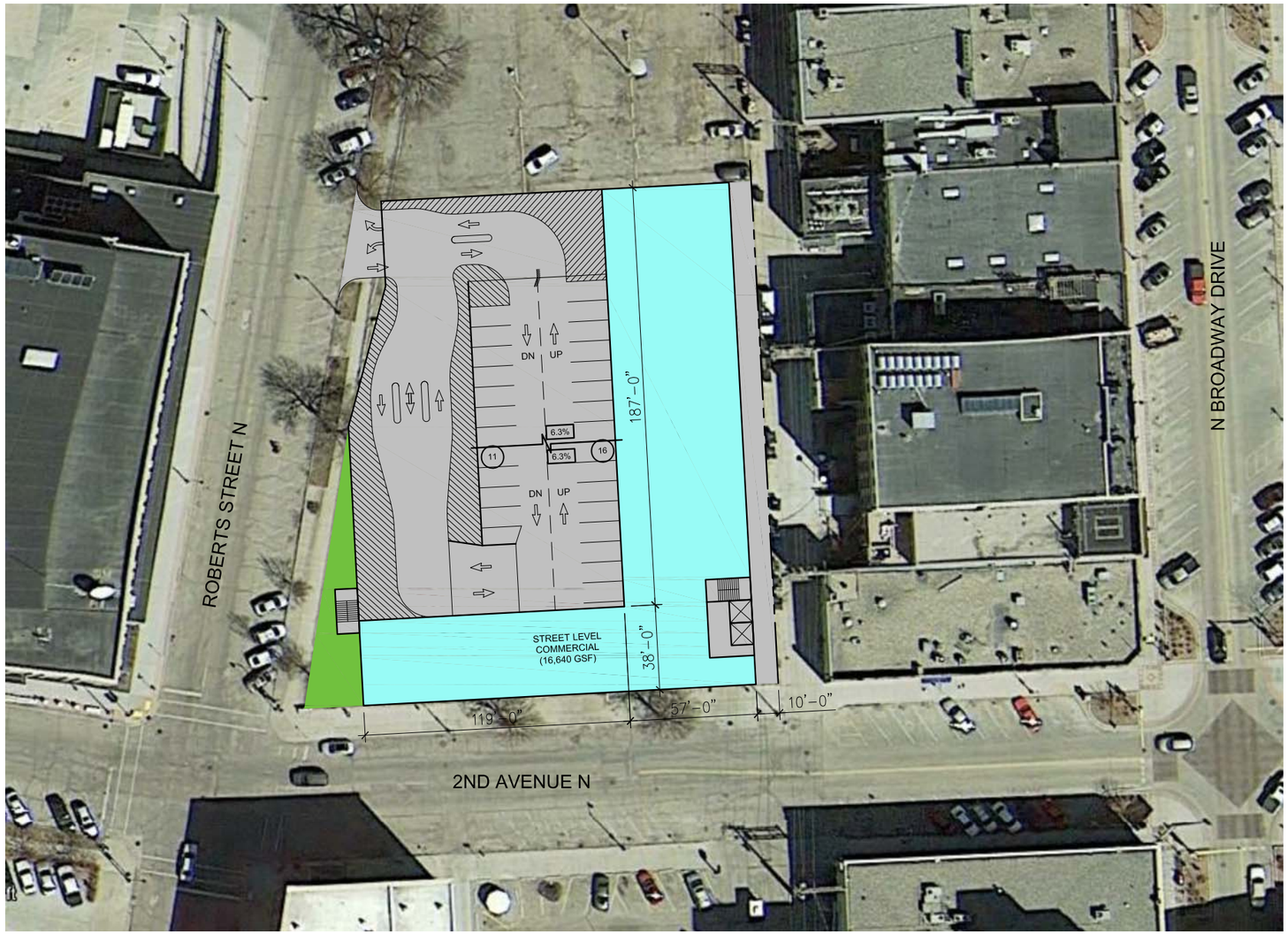


SCALE: 1" = 60'-0"



City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 5	104	2	106
LEVEL 4	114	2	116
LEVEL 3	114	2	116
LEVEL 2	114	2	116
LEVEL 1	27	---	27
LEVEL B1	104	2	106
GARAGE TOTAL	577	10	587
EXISTING LOT TOTAL	132	---	132
NET GAIN FOR SITE	445	10	455

SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 355 SPACES (NET GAIN = 223)
BASEMENT + 4 LEVELS = 471 SPACES (NET GAIN = 339)

ISOMETRIC VIEW

SIDE BY SIDE SINGLE THREADED HELIX

Concept 3-D

Sheet 24
March 2, 2015

Carl Walker Parking
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Fargo, ND 58102
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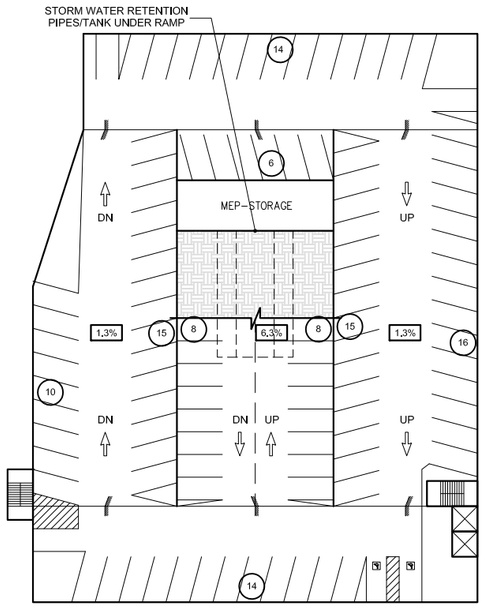
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

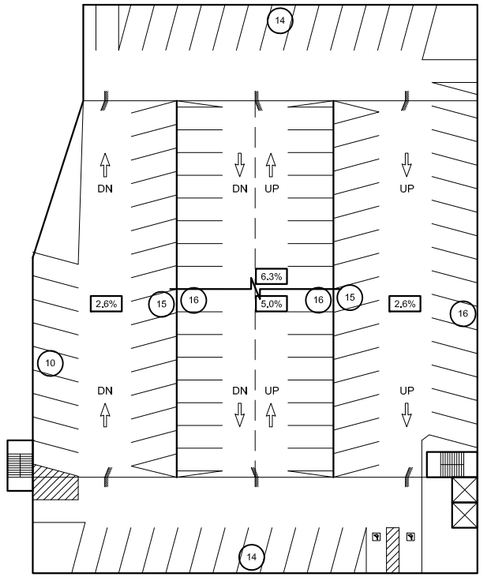
City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



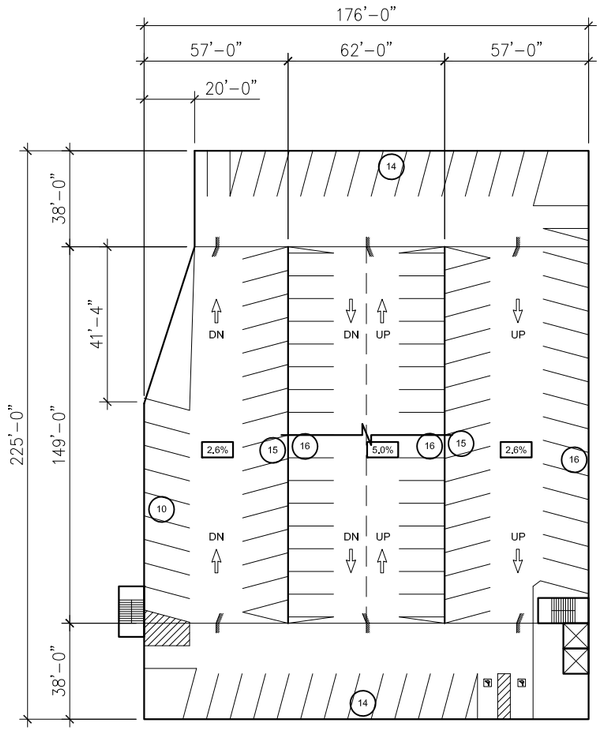
LEVEL B1 PLAN

1" = 60'–0"



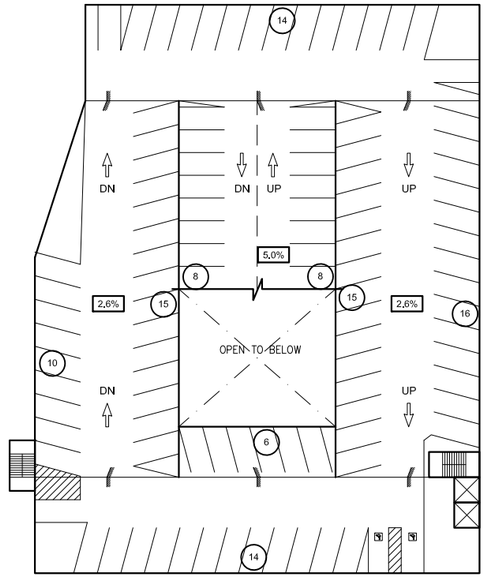
LEVEL 2 PLAN

1" = 60'–0"



LEVEL 3 & 4 PLAN

1" = 60'–0"



LEVEL 5 PLAN

1" = 60'–0"

Concept 3-D

Sheet 25
March 2, 2015

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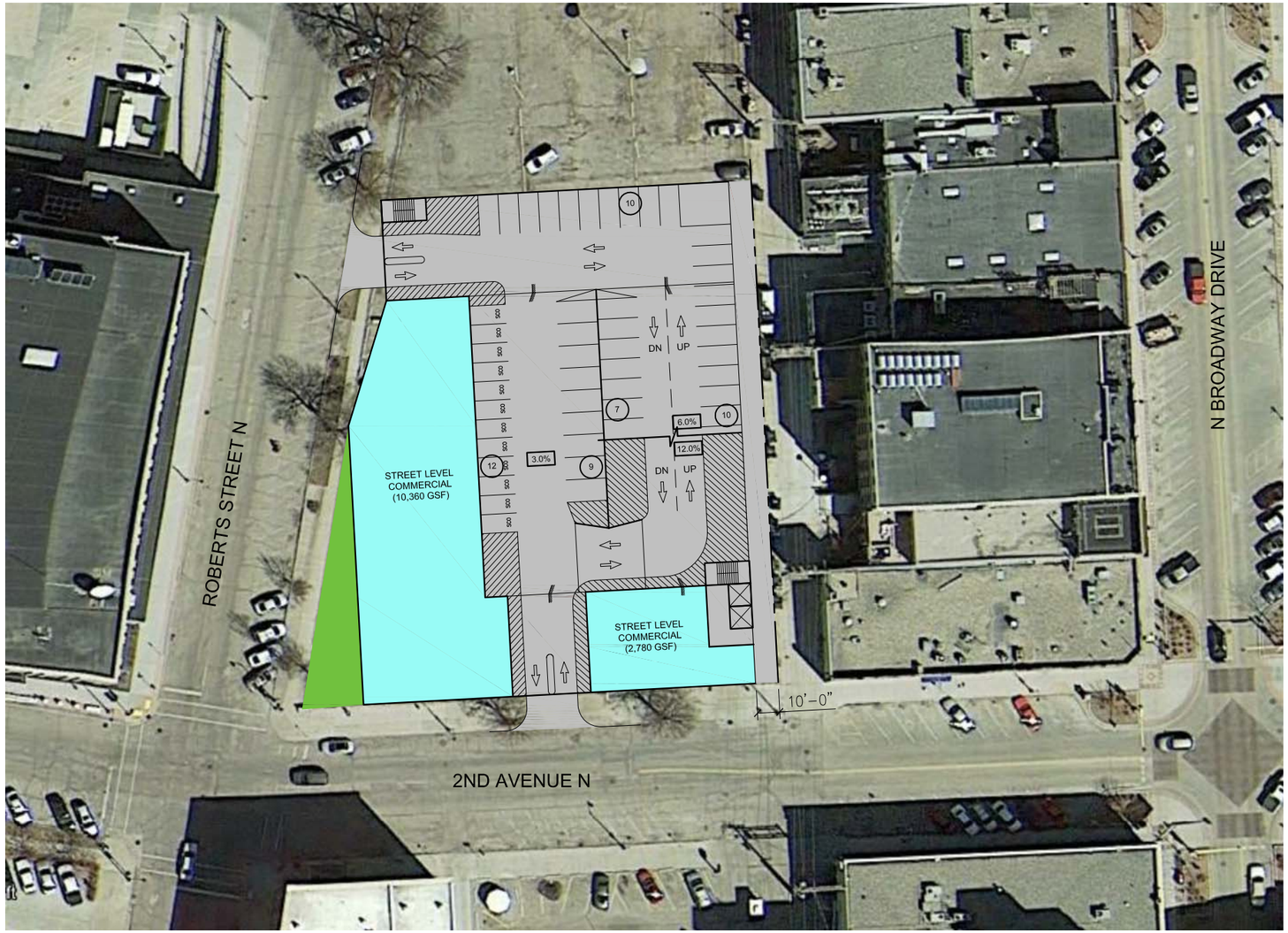
0' 30' 60' 90' 120'

SCALE: 1" = 60'–0"

N O R T H

City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 5	101	2	103
LEVEL 4	110	2	112
LEVEL 3	110	2	112
LEVEL 2	96	2	98
LEVEL 1	48	---	48
LEVEL B1	100	2	102
GARAGE TOTAL	565	10	575
EXISTING LOT TOTAL	132	---	132
NET GAIN FOR SITE	433	10	443

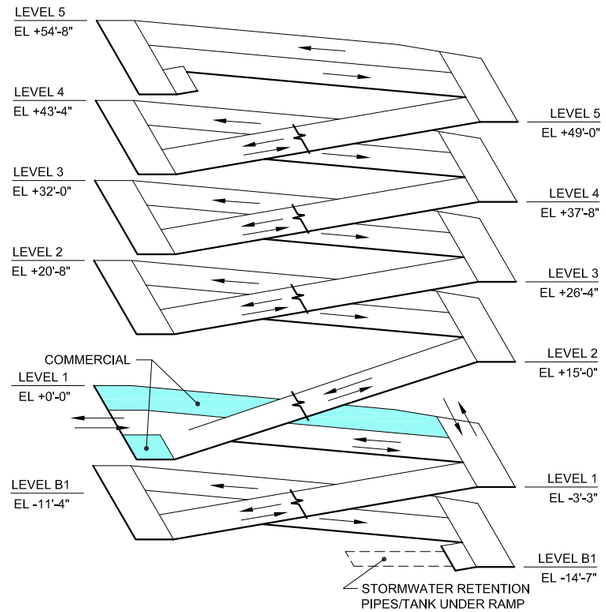
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
SCO (SMALL CAR ONLY) SPACES @ LEVEL 1 = 8'-6" WIDE X 16'-0" @ 90° PARKING ANGLE (12 TOTAL)
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 351 SPACES (NET GAIN = 219)
BASEMENT + 4 LEVELS = 463 SPACES (NET GAIN = 331)

ISOMETRIC VIEW

SIDE BY SIDE SINGLE THREADED HELIX



Concept 3-E

Sheet 26
March 2, 2015

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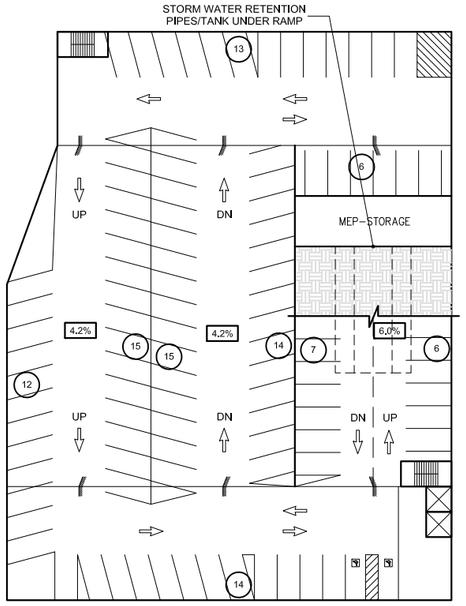
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

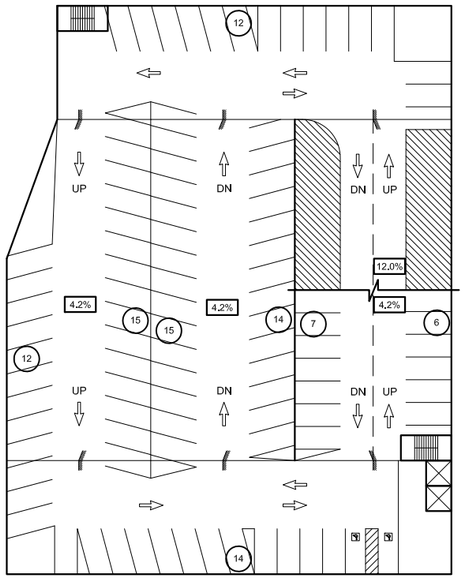
City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota



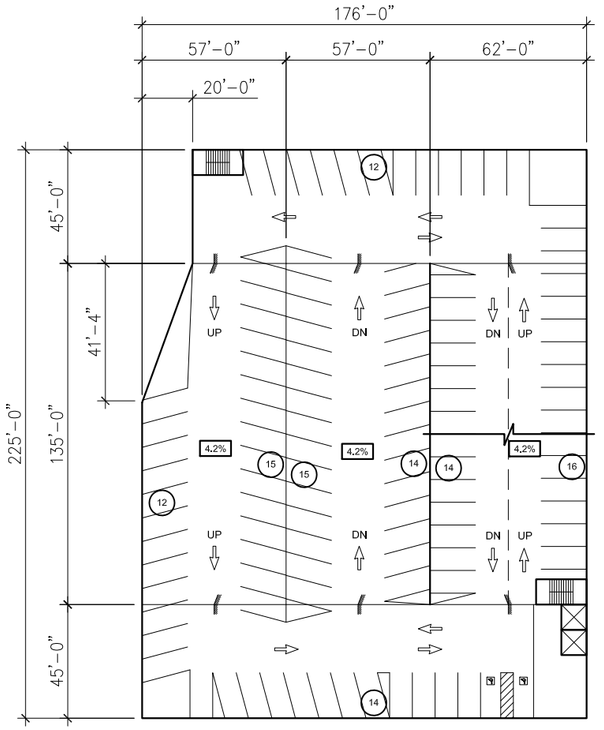
LEVEL B1 PLAN

1" = 60'-0"



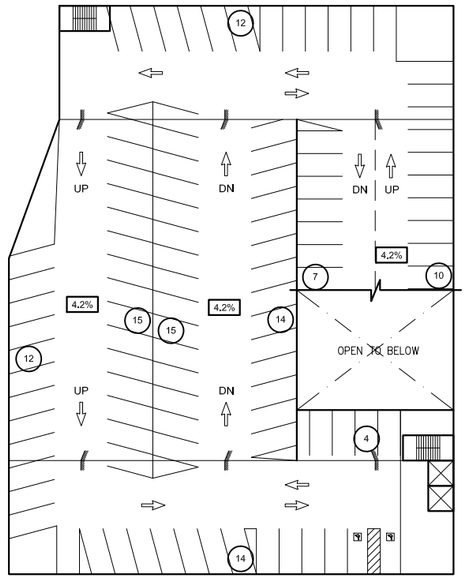
LEVEL 2 PLAN

1" = 60'-0"



LEVEL 3 & 4 PLAN

1" = 60'-0"



LEVEL 5 PLAN

1" = 60'-0"

Concept 3-E

Sheet 27
March 2, 2015

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0' 30' 60' 90' 120'

SCALE: 1" = 60'-0"

NORTH

City of Fargo

Site 3 - 2nd Ave North
Fargo, North Dakota

LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 8	9	2	11
LEVEL 7	40	2	42
LEVEL 6	40	2	42
LEVEL 5	40	2	42
LEVEL 4	40	2	42
LEVEL 3	40	2	42
LEVEL 2	42	---	42
LEVEL 1	25	---	25
GARAGE TOTAL	276	12	288
EXISTING LOT TOTAL	65	---	65
NET GAIN FOR SITE	211	12	223

SHEET NOTES:

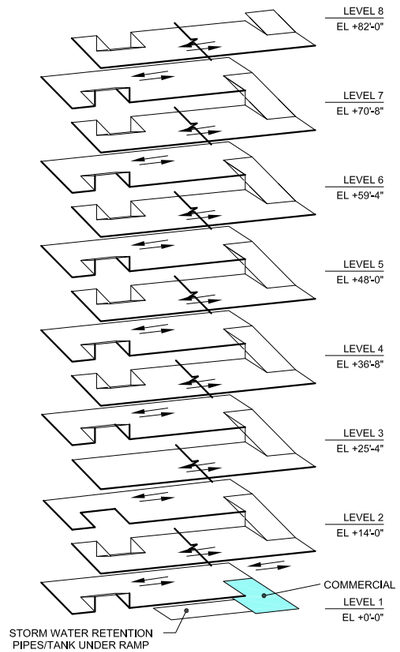
STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
4 LEVELS = 120 SPACES (NET GAIN = 55)
5 LEVELS = 162 SPACES (NET GAIN = 97)
6 LEVELS = 204 SPACES (NET GAIN = 139)
7 LEVELS = 246 SPACES (NET GAIN = 181)

NO BASEMENT INCLUDED IN THIS CONCEPT

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 4-A

Sheet 28
March 2, 2015

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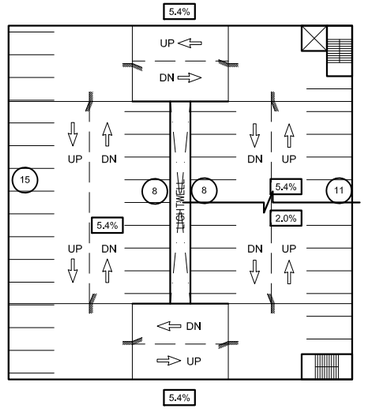
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

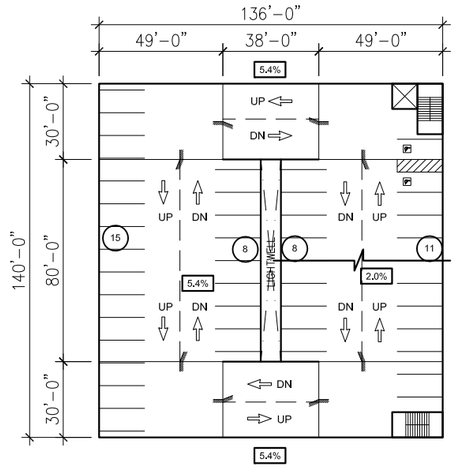
City of Fargo

Site 4 - 2nd Ave South
Fargo, North Dakota



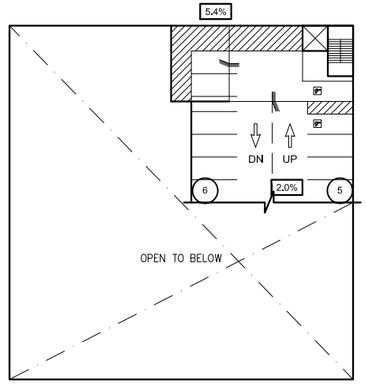
LEVEL 2 PLAN

1" = 60'–0"



LEVEL 3, 4, 5, 6 & 7 PLAN

1" = 60'–0"



LEVEL 8 PLAN

1" = 60'–0"

Concept 4-A

Sheet 29
March 2, 2015

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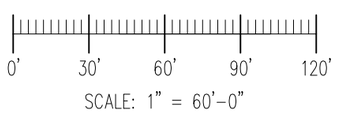
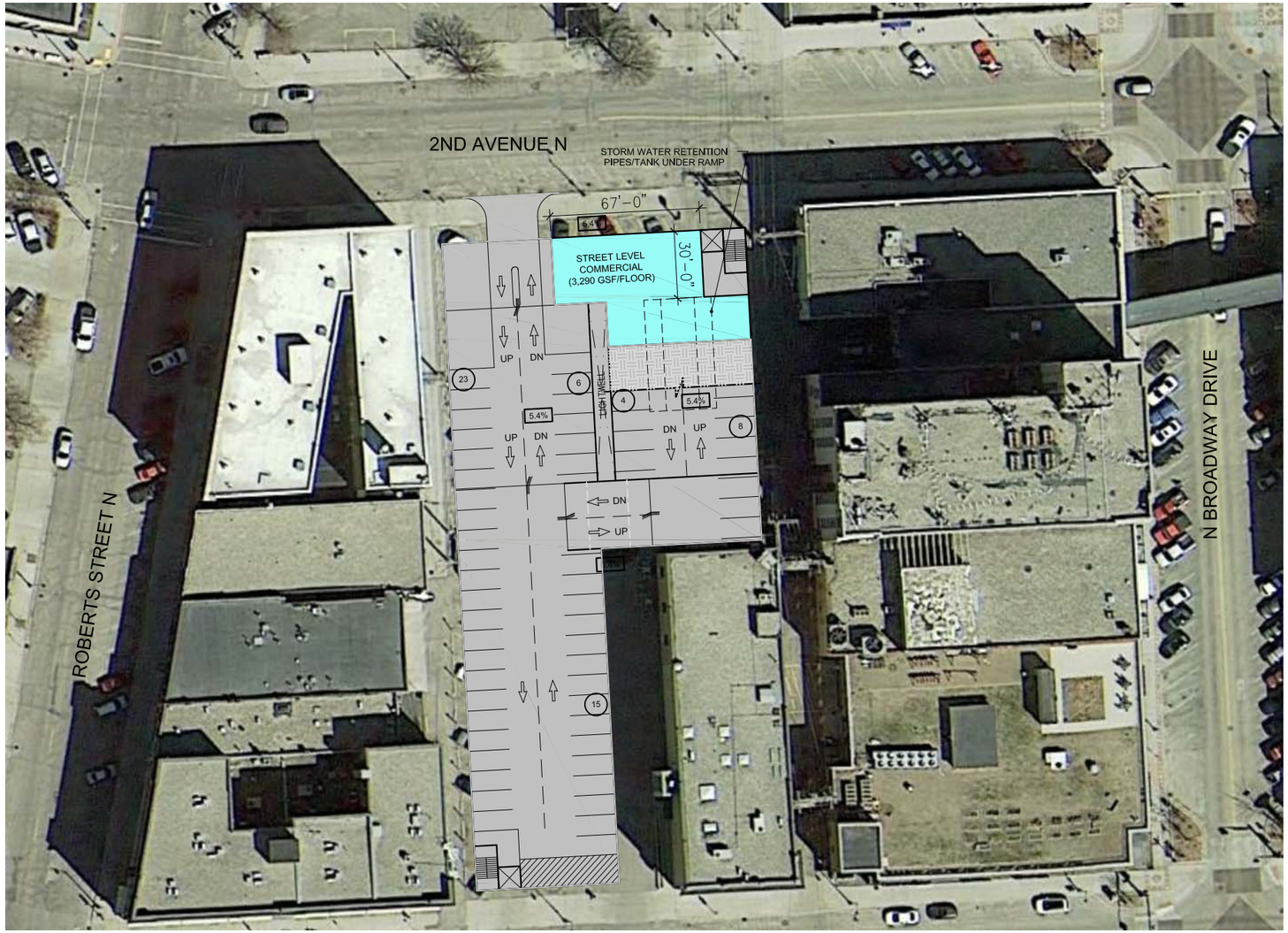


City of Fargo

Site 4 - 2nd Ave South
Fargo, North Dakota



LEVEL 1 PLAN

1" = 60'-0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 8	9	2	11
LEVEL 7	70	2	72
LEVEL 6	70	2	72
LEVEL 5	70	2	72
LEVEL 4	70	2	72
LEVEL 3	70	2	72
LEVEL 2	73	---	73
LEVEL 1	56	---	56
GARAGE TOTAL	478	12	490
EXISTING LOT TOTAL	107	---	107
NET GAIN FOR SITE	371	12	383

SHEET NOTES:

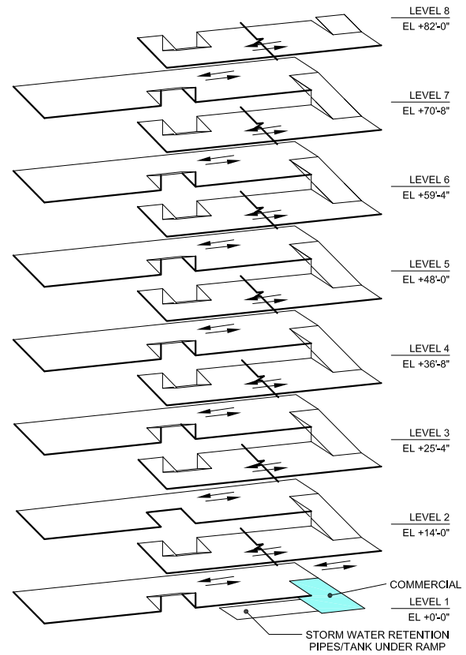
STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
4 LEVELS = 202 SPACES (NET GAIN = 95)
5 LEVELS = 274 SPACES (NET GAIN = 167)
6 LEVELS = 346 SPACES (NET GAIN = 239)
7 LEVELS = 418 SPACES (NET GAIN = 311)

NO BASEMENT INCLUDED IN THIS CONCEPT

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 4-B

Sheet 30
March 2, 2015

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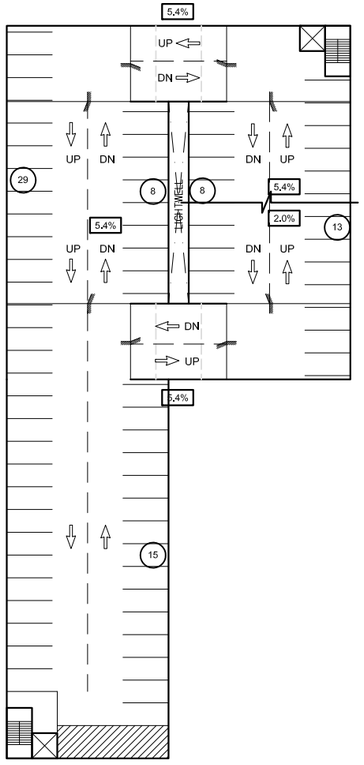
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

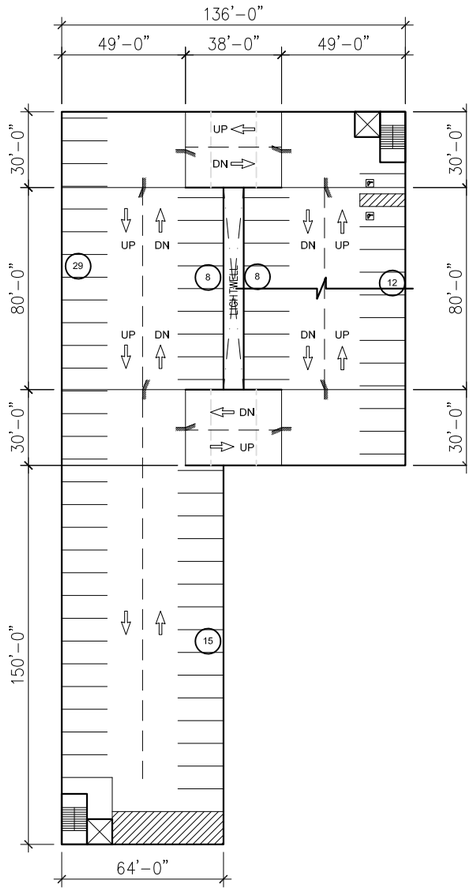
City of Fargo

Site 4 - 2nd Ave South
Fargo, North Dakota



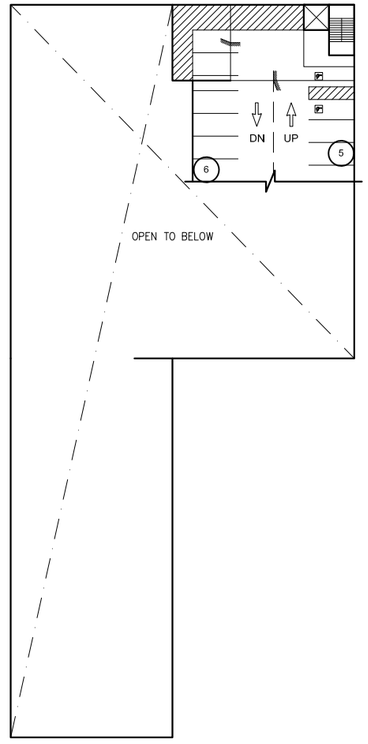
LEVEL 2 PLAN

1" = 60'–0"



LEVEL 3, 4, 5, & 6 PLAN

1" = 60'–0"



LEVEL 7 PLAN

1" = 60'–0"

Concept 4-B

Sheet 31
March 2, 2015

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0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 4 - 2nd Ave South
Fargo, North Dakota

LEVEL 1 PLAN

1" = 60'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 6	61	2	63
LEVEL 5	70	2	72
LEVEL 4	70	2	72
LEVEL 3	70	2	72
LEVEL 2	70	2	72
LEVEL 1	62	2	64
LEVEL B1	61	2	63
GARAGE TOTAL	464	14	478
EXISTING LOT TOTAL	107	---	107
NET GAIN FOR SITE	357	14	371

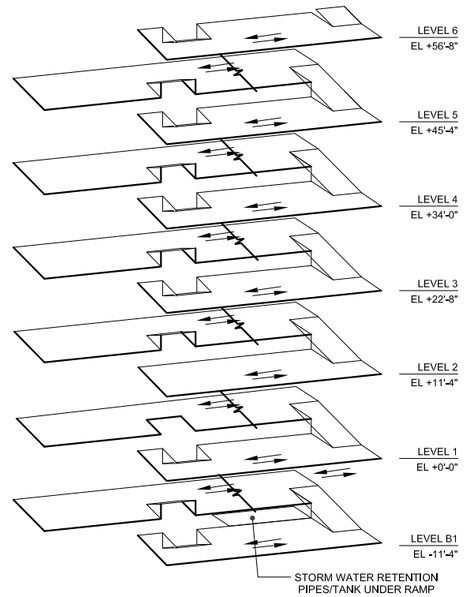
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 262 SPACES (NET GAIN = 155)
BASEMENT + 4 LEVELS = 334 SPACES (NET GAIN = 227)
BASEMENT + 5 LEVELS = 406 SPACES (NET GAIN = 299)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 4-C

Sheet 32
March 2, 2015

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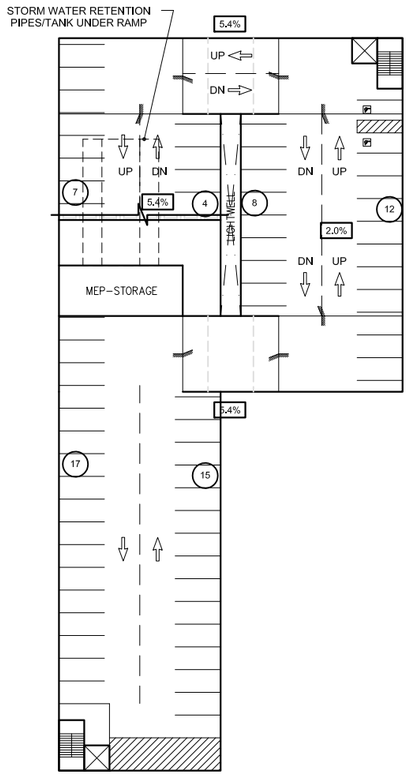
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

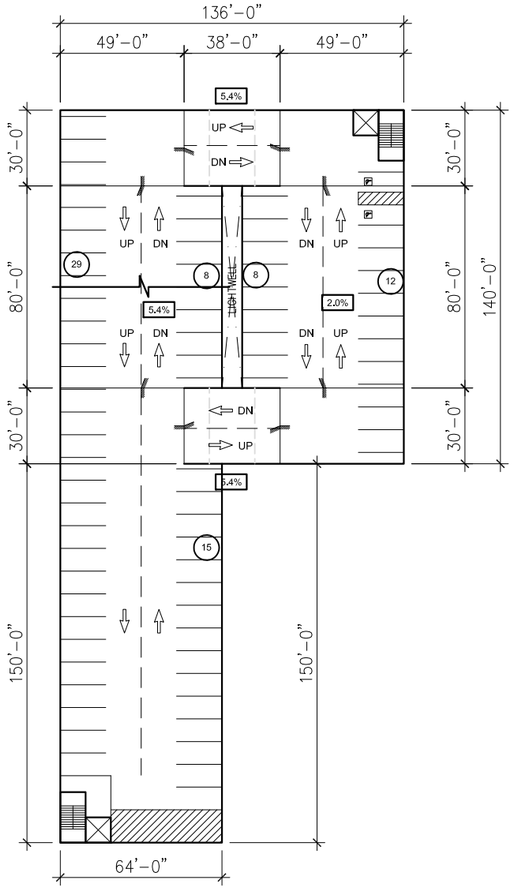
City of Fargo

Site 4 - 2nd Ave South
Fargo, North Dakota



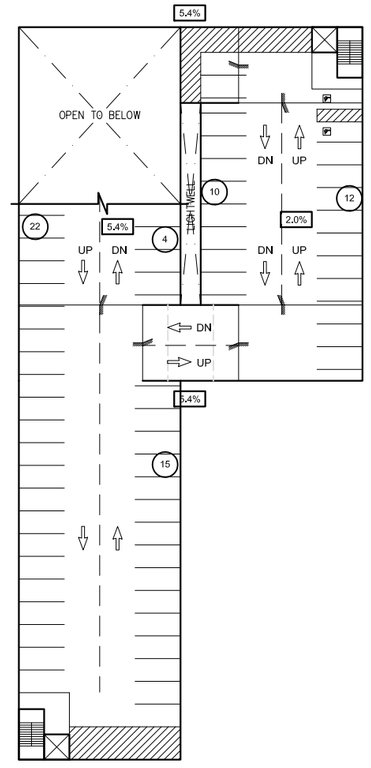
LEVEL B1 PLAN

1" = 60'-0"



LEVEL 3 & 4 PLAN

1" = 60'-0"



LEVEL 5 PLAN

1" = 60'-0"

Concept 4-C

Sheet 33
March 2, 2015

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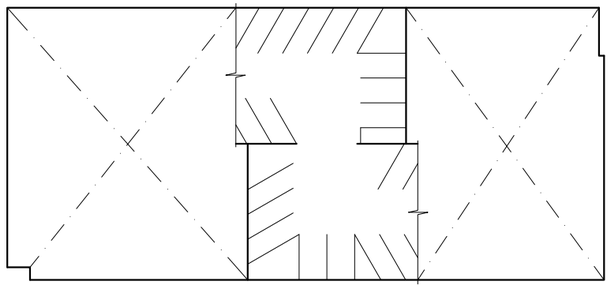
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

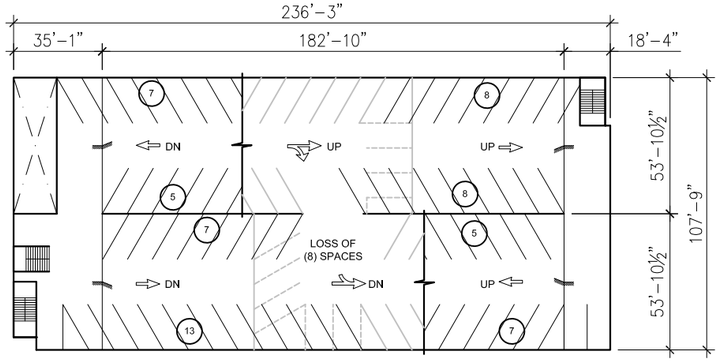
City of Fargo

Site 4 - 2nd Ave South
Fargo, North Dakota



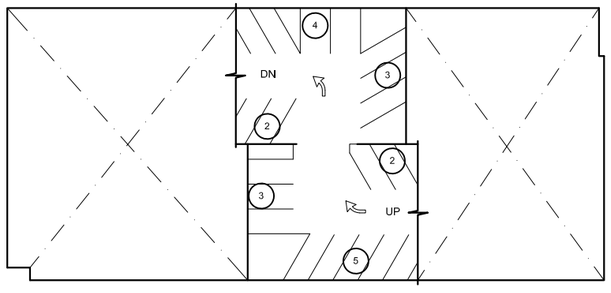
EXISTING LEVEL 5 PLAN

1" = 60'–0"



EXPANDED LEVEL 5 PLAN

1" = 60'–0"



NEW LEVEL 6 PLAN

1" = 60'–0"

SPACE TABULATION

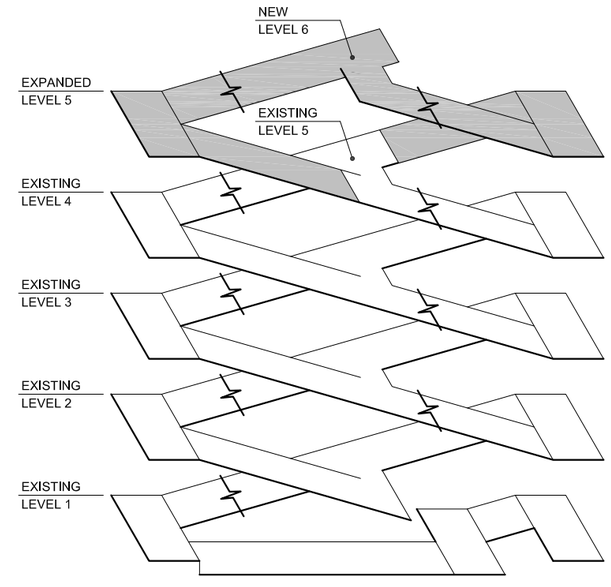
DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 6	19	---	19
LEVEL 5	60	---	60
EXPANSION TOTAL	79	---	79
EXISTING TOTAL	238	---	238
SPACES LOST	8	---	8
NEW RAMP TOTAL	309	---	309
NET GAIN FOR SITE	71	---	71

SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 60° PARKING ANGLE

ISOMETRIC VIEW

DOUBLE THREADED HELIX



Concept 5-A

Sheet 34
January 29, 2015

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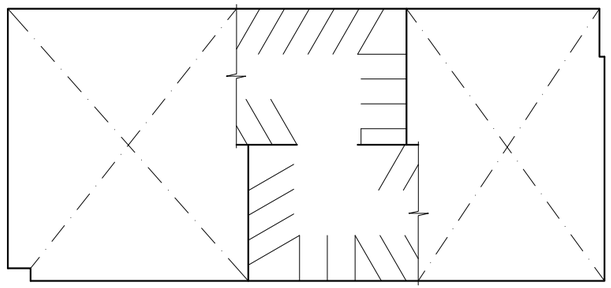
0' 30' 60' 90' 120'

SCALE: 1" = 60'–0"

N O R T H

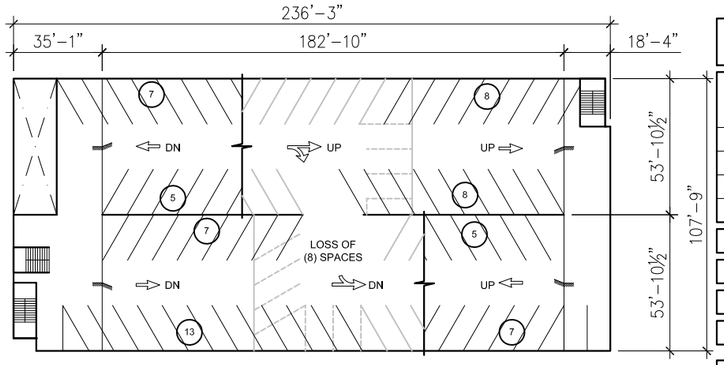
City of Fargo

Site 5 - Civic Center Ramp Expansion
Fargo, North Dakota



EXISTING LEVEL 5 PLAN

1" = 60'–0"



EXPANDED LEVEL 5 PLAN

1" = 60'–0"

SPACE TABULATION

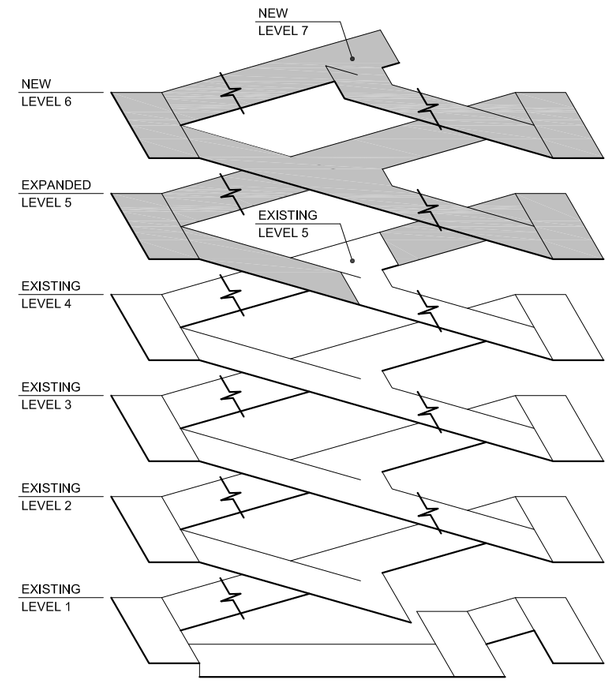
DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 7	19	---	19
LEVEL 6	76	---	76
LEVEL 5	60	---	60
EXPANSION TOTAL	155	---	155
EXISTING TOTAL	238	---	238
SPACES LOST	8	---	8
NEW RAMP TOTAL	385	---	385
NET GAIN FOR SITE	147	---	147

SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 60° PARKING ANGLE

ISOMETRIC VIEW

DOUBLE THREADED HELIX



NEW LEVEL 6 PLAN

1" = 60'–0"

NEW LEVEL 7 PLAN

1" = 60'–0"

Concept 5-B

Sheet 35
January 29, 2015

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Helenske Design Group
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Fargo, ND 58102
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0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

N O R T H

City of Fargo

Site 5 - Civic Center Ramp Expansion
Fargo, North Dakota

LEVEL 1 PLAN

1" = 80'–0"

SPACE TABULATION

DESCRIPTION	STANDARD SPACES	ADA ♿	TOTALS
LEVEL 6	35	---	35
LEVEL 5	99	---	99
LEVEL 4	97	2	99
LEVEL 3	97	2	99
LEVEL 2	97	2	99
LEVEL 1	84	4	88
LEVEL B1	32	2	34
GARAGE TOTAL	541	12	553
EXISTING LOT TOTAL	172	---	172
NET GAIN FOR SITE	369	12	381

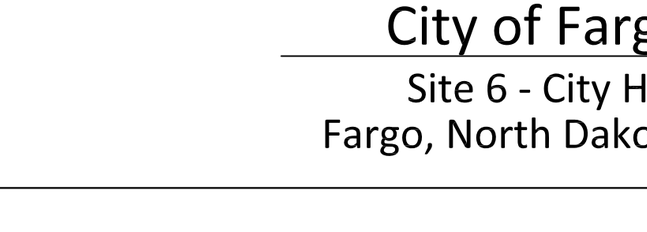
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES @ 90° PARKING ANGLE

LEVEL SUMMARY (SPACE TABULATION):
BASEMENT + 3 LEVELS = 356 SPACES (NET GAIN = 184)
BASEMENT + 4 LEVELS = 455 SPACES (NET GAIN = 283)

ISOMETRIC VIEW

SINGLE THREADED HELIX



Concept 6-A

Sheet 36
March 2, 2015

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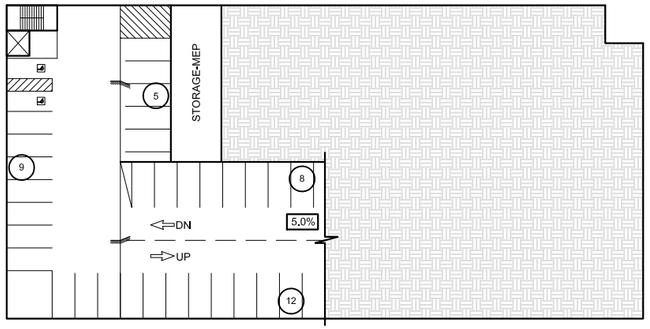
0' 40' 80' 120' 160'
SCALE: 1" = 80'–0"

NORTH

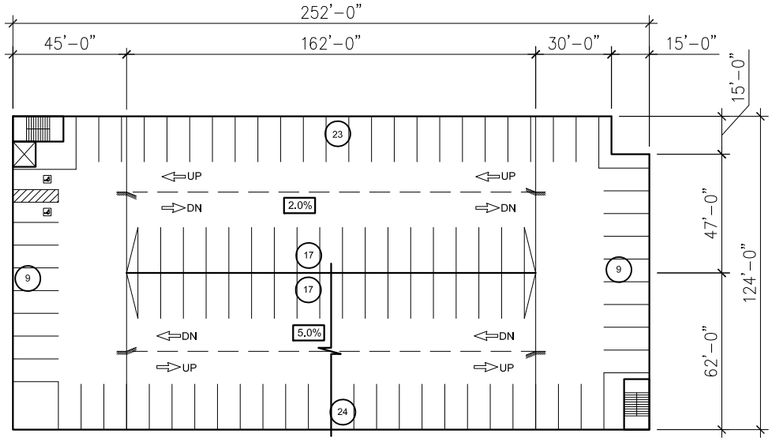
City of Fargo

Site 6 - City Hall
Fargo, North Dakota



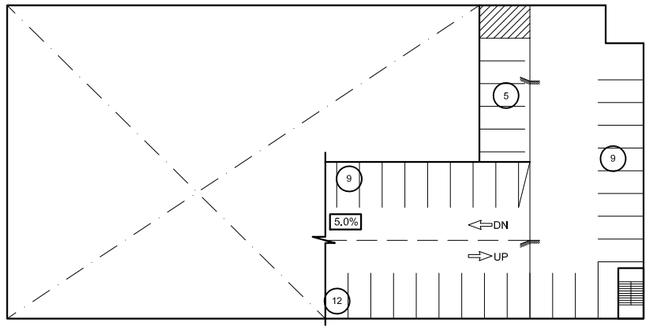
LEVEL B1 PLAN

1" = 60'–0"



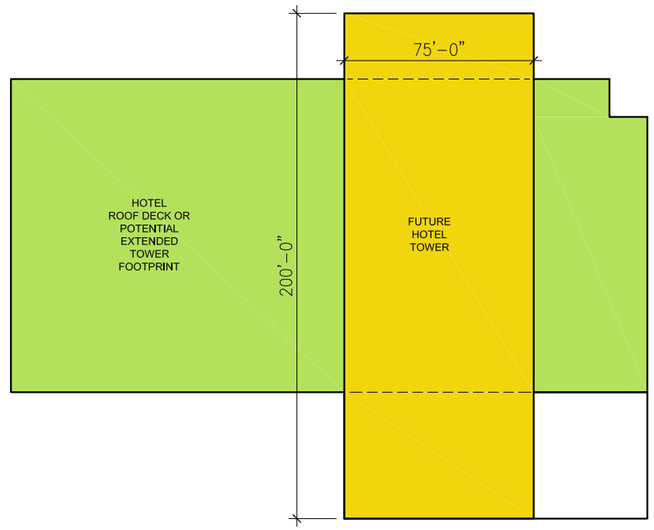
LEVEL 2, 3, 4 & 5 PLAN

1" = 60'–0"



LEVEL 6 PLAN

1" = 60'–0"



PODIUM LEVEL PLAN

1" = 60'–0"

Concept 6-A

Sheet 37
March 2, 2015

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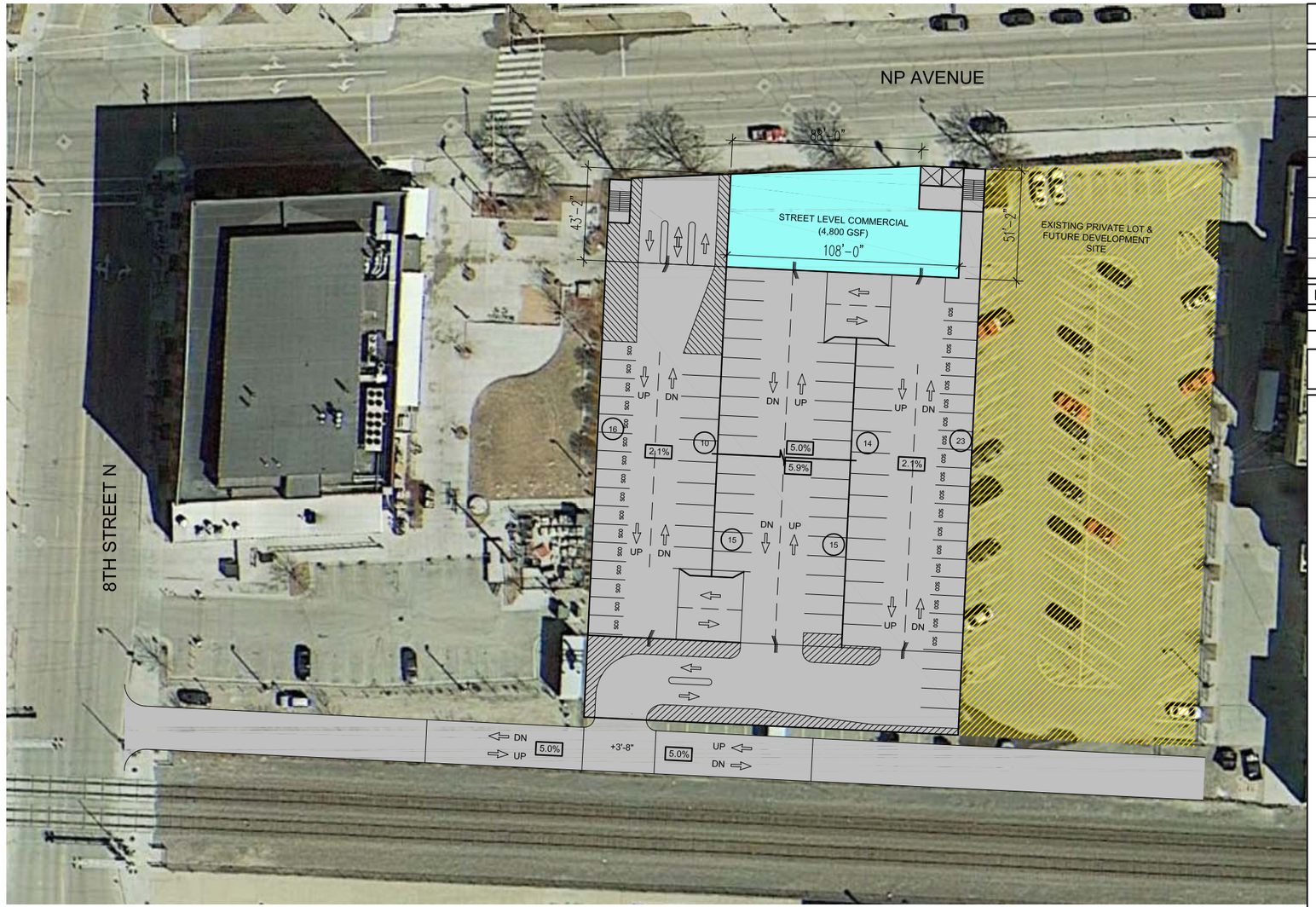
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

NORTH

City of Fargo

Site 6 - City Hall
Fargo, North Dakota



SPACE TABULATION

DESCRIPTION	STANDARD -SCO SPACES	ADA ♿	TOTALS
LEVEL 3	131	---	131
LEVEL 2	136	6	142
LEVEL 1	93	---	93
LEVEL B1	121	6	127
GARAGE TOTAL	481	12	493
EXISTING LOT TOTAL	145	---	145
NET GAIN FOR SITE	336	12	348

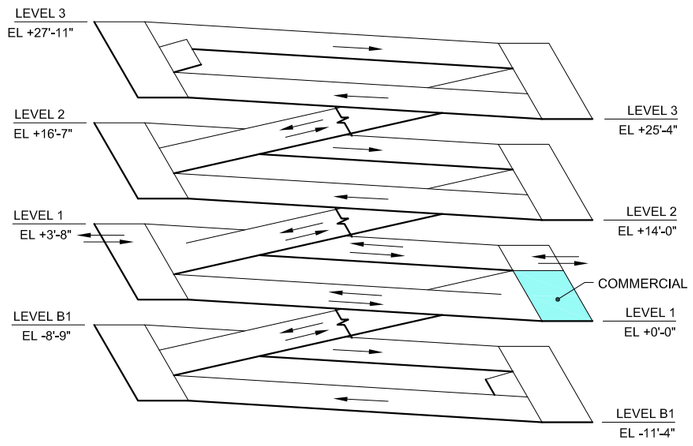
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 70° & 90° PARKING ANGLE
SCO SPACE = 8'-6" X 16'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES

LEVEL SUMMARY (SPACE TABULATION):
?

ISOMETRIC VIEW

SIDE BY SIDE SINGLE THREADED HELIX



LEVEL 1 PLAN

1" = 60'-0"

Concept 7-A

Sheet 38
March 2, 2015

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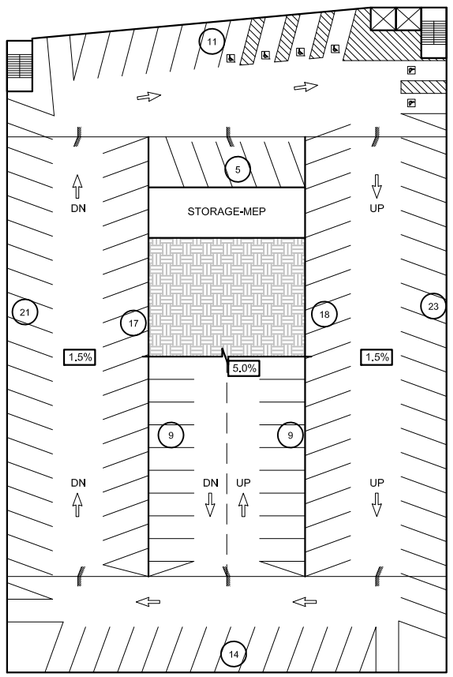
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

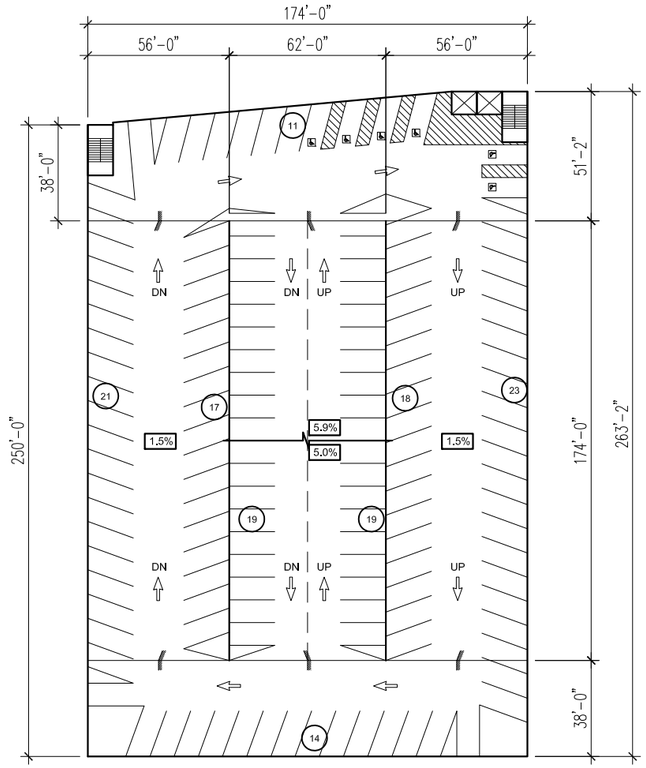
City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



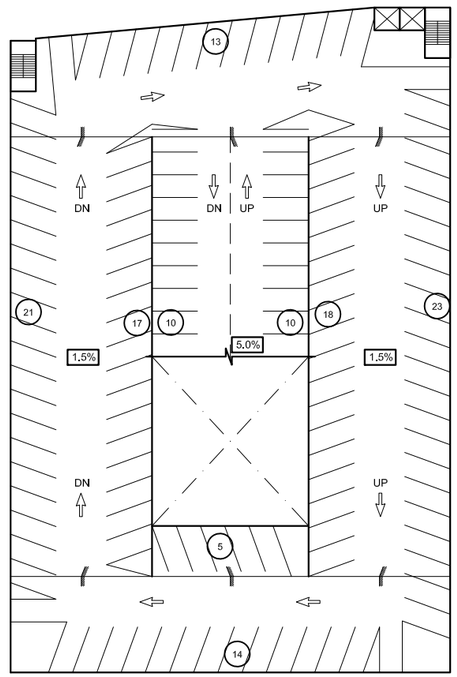
LEVEL B1 PLAN

1" = 60'-0"



LEVEL 2 PLAN

1" = 60'-0"



LEVEL 3 PLAN

1" = 60'-0"

Concept 7-A

Sheet 39
March 2, 2015

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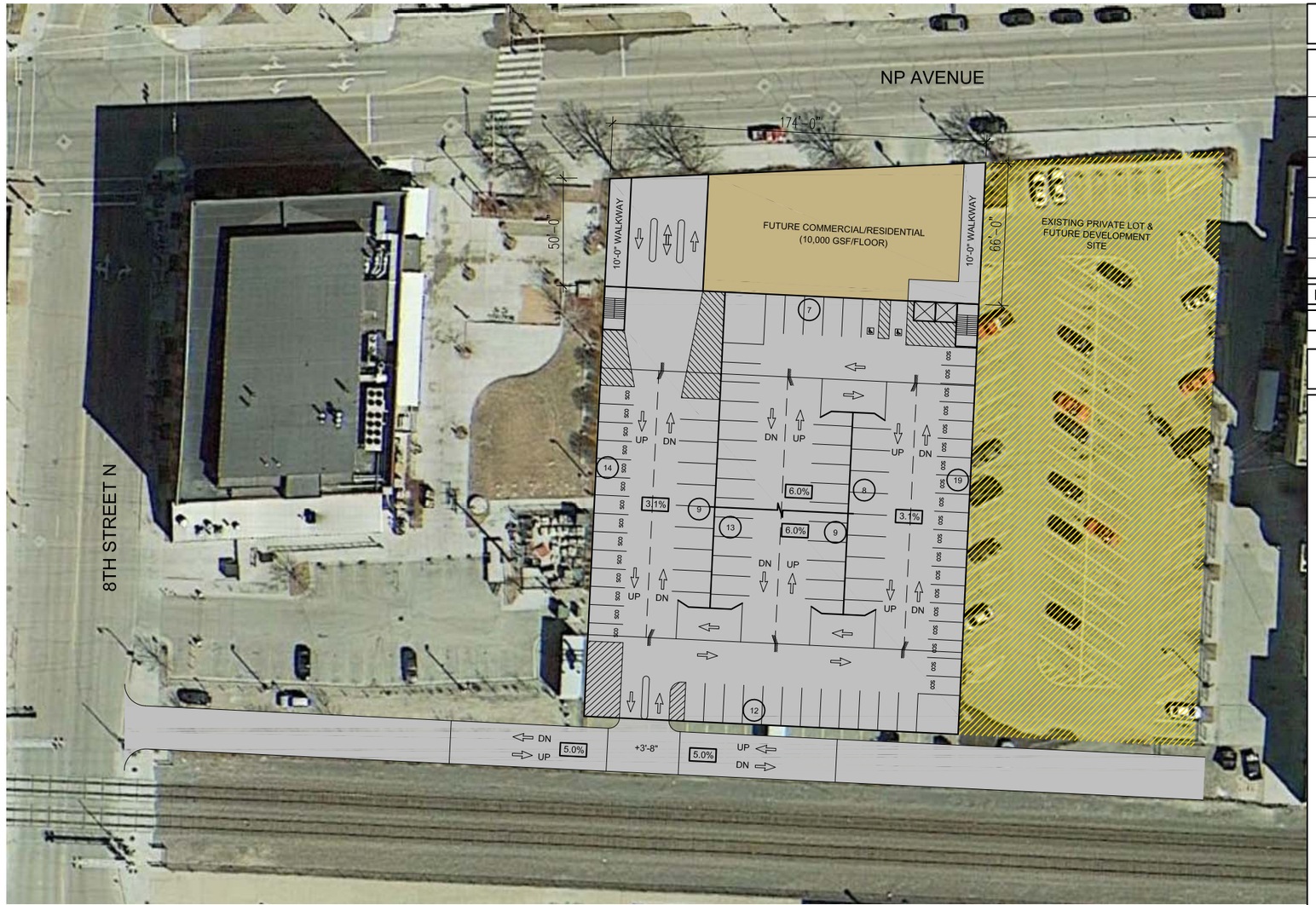
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



SPACE TABULATION

DESCRIPTION	STANDARD -SCO SPACES	ADA ♿	TOTALS
LEVEL 4	101	---	101
LEVEL 3	103	4	107
LEVEL 2	103	4	107
LEVEL 1	89	2	91
LEVEL B1	94	4	98
GARAGE TOTAL	490	14	504
EXISTING LOT TOTAL	145	---	145
NET GAIN FOR SITE	345	14	359

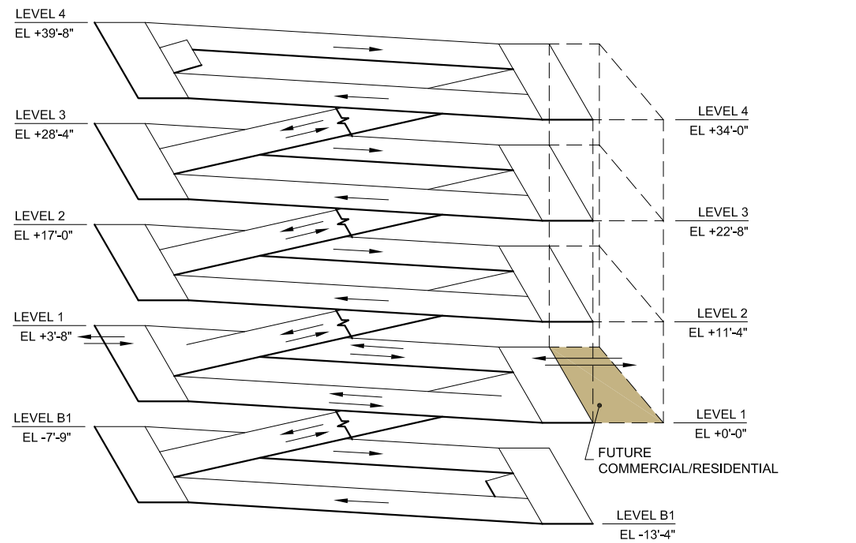
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 70° & 90° PARKING ANGLE
SCO SPACE = 8'-6" X 16'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES

LEVEL SUMMARY (SPACE TABULATION):
?

ISOMETRIC VIEW

SIDE BY SIDE SINGLE THREADED HELIX



LEVEL 1 PLAN

1" = 60'-0"

Concept 7-B

Sheet 40
March 2, 2015

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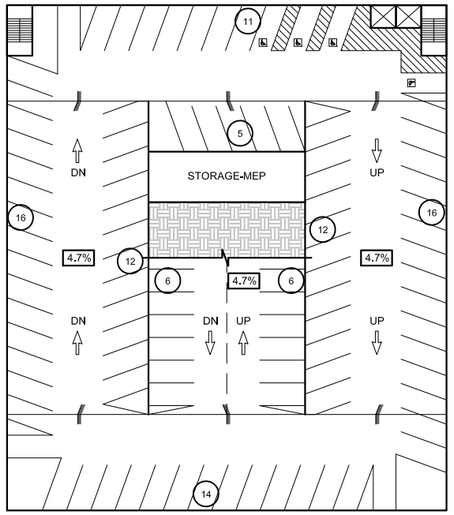
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

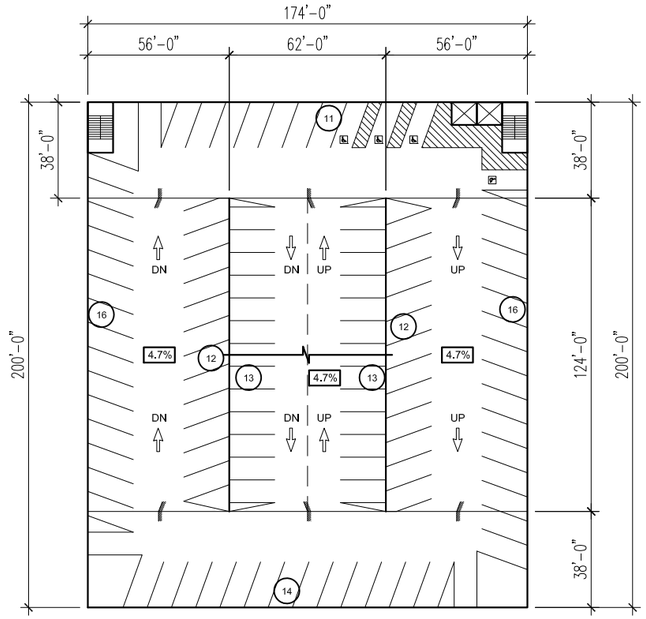
City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



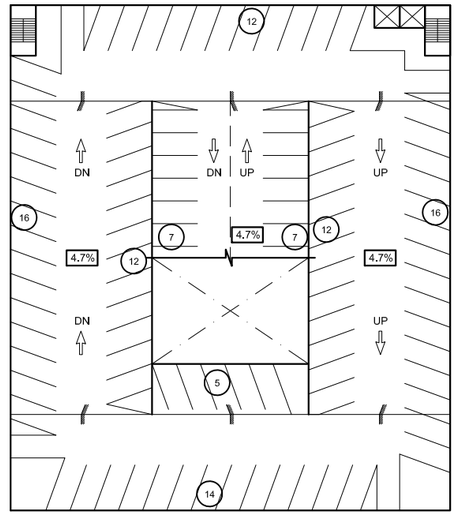
LEVEL B1 PLAN

1" = 60'–0"



LEVEL 2 & 3 PLAN

1" = 60'–0"



LEVEL 4 PLAN

1" = 60'–0"

Concept 7-B

Sheet 41
March 2, 2015

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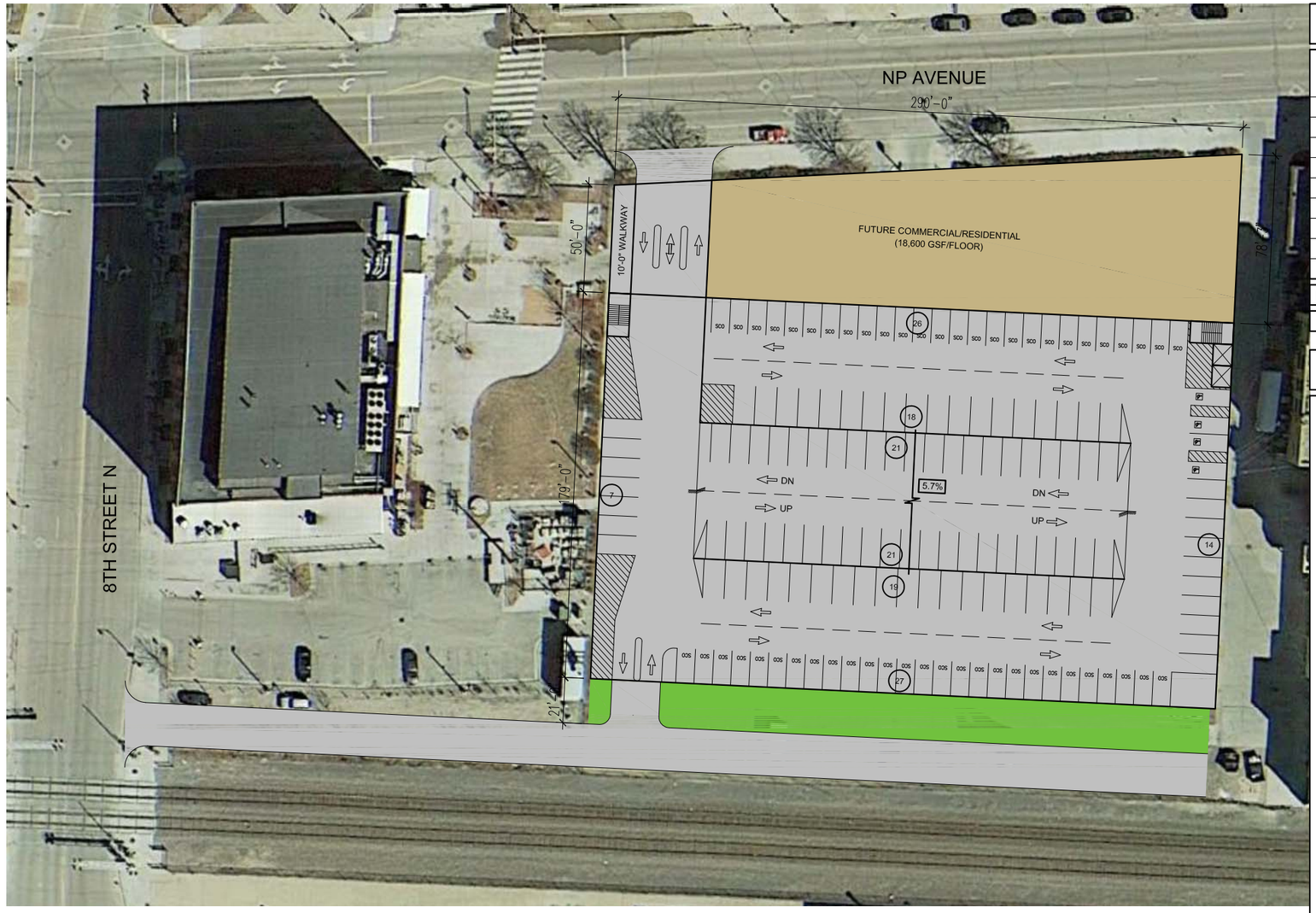
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

N O R T H

City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



SPACE TABULATION

DESCRIPTION	STANDARD -SCO SPACES	ADA ♿	TOTALS
LEVEL 3	154	---	154
LEVEL 2	165	4	169
LEVEL 1	149	4	153
LEVEL B1	146	4	146
GARAGE TOTAL	614	12	626
EXISTING LOT TOTAL	248	---	248
NET GAIN FOR SITE	366	12	378

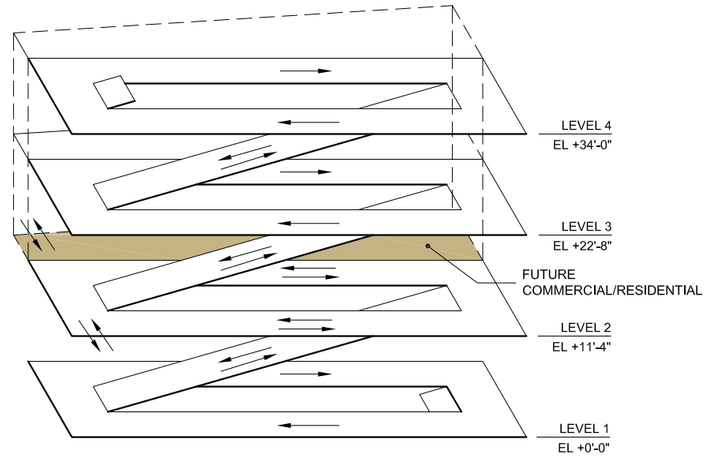
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 75° & 90° PARKING ANGLE
SCO SPACE = 8'-6" X 16'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES

LEVEL SUMMARY (SPACE TABULATION):
?

ISOMETRIC VIEW

SIDE BY SIDE SINGLE THREADED HELIX



LEVEL 1 PLAN

1" = 60'-0"

Concept 7-C

Sheet 42
March 2, 2015

Carl Walker Parking
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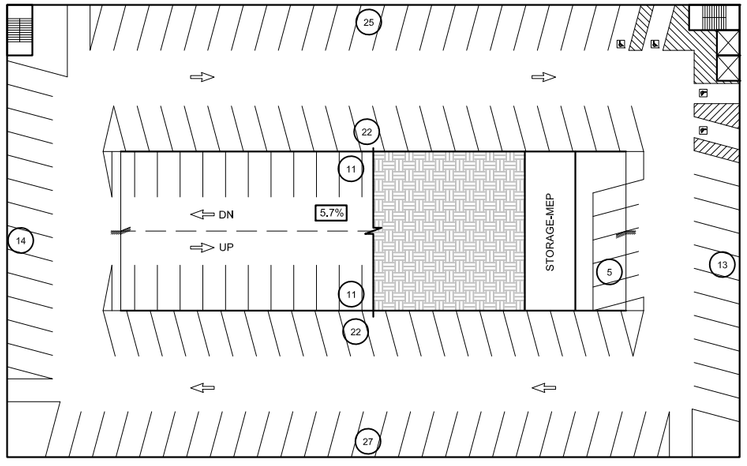
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

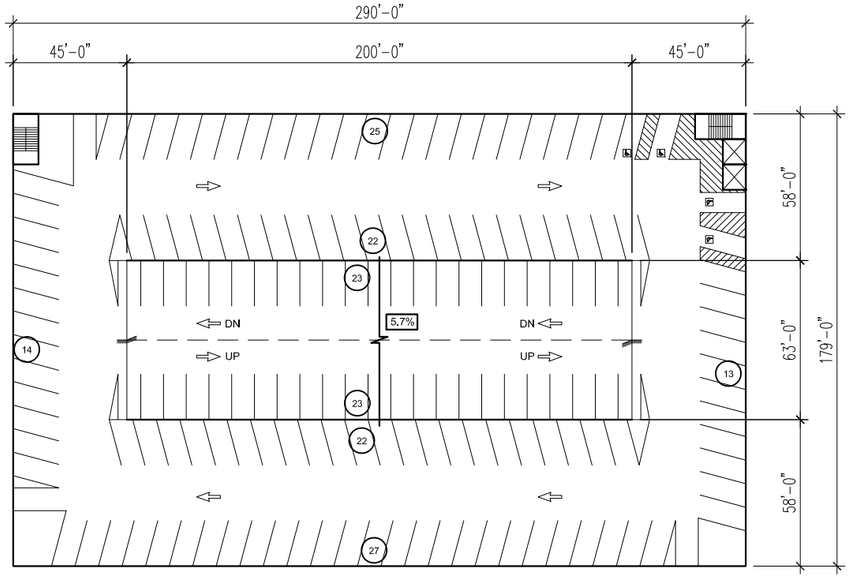
City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



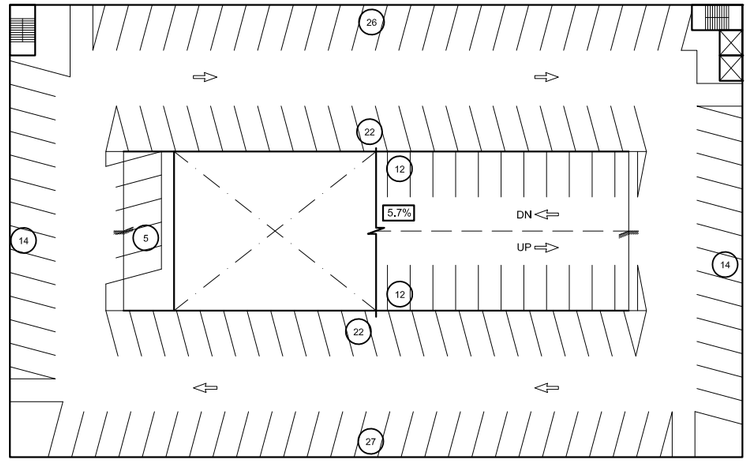
LEVEL B1 PLAN

1" = 60'–0"



LEVEL 2 PLAN

1" = 60'–0"



LEVEL 3 PLAN

1" = 60'–0"

Concept 7-C

Sheet 43
March 2, 2015

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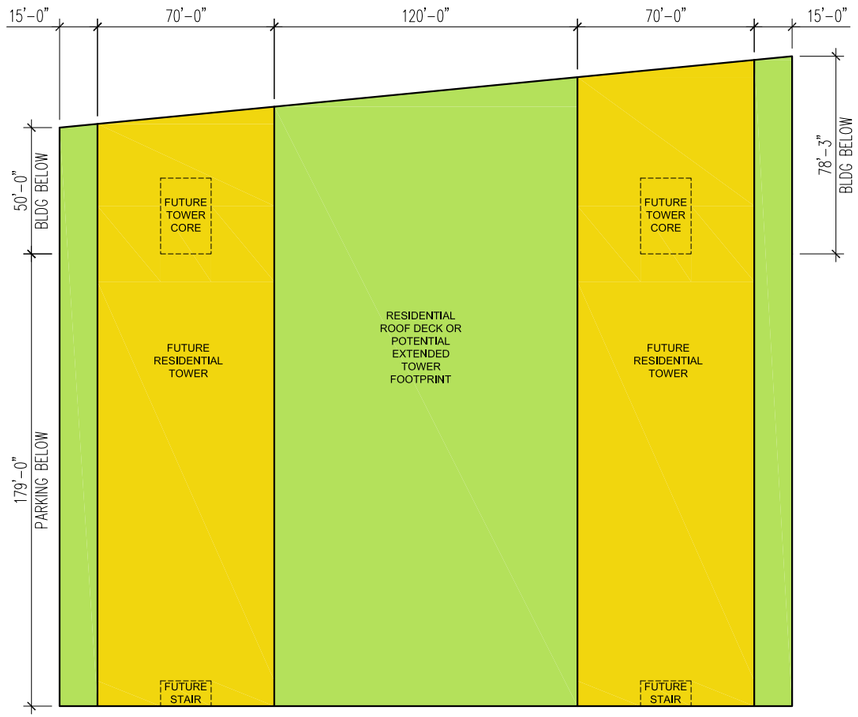
0' 30' 60' 90' 120'
SCALE: 1" = 60'–0"

N O R T H

City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



PODIUM LEVEL PLAN

1" = 60'-0"

Concept 7-C

Sheet 44
March 2, 2015

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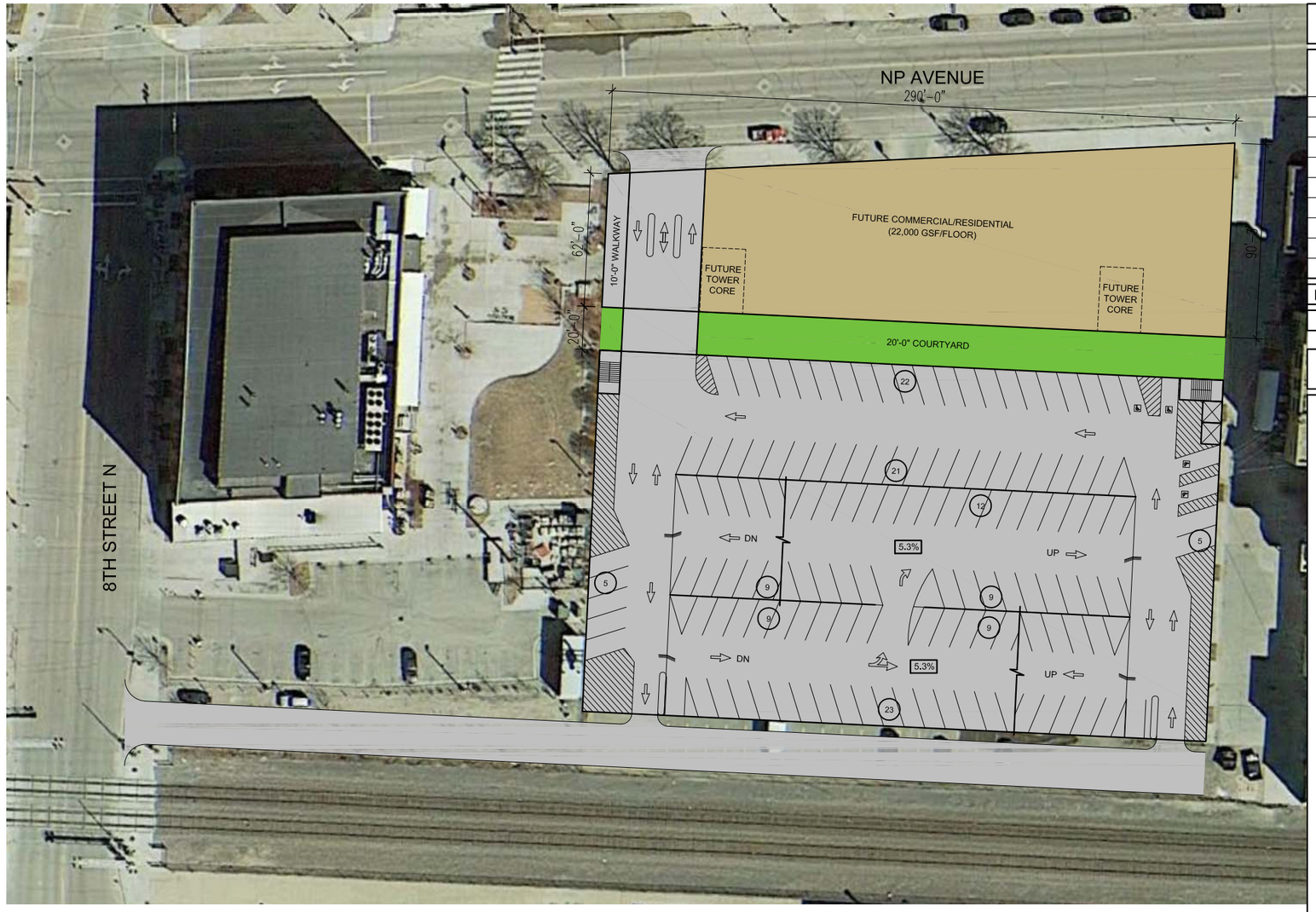
0' 30' 60' 90' 120'

SCALE: 1" = 60'-0"

NORTH

City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



SPACE TABULATION

DESCRIPTION	STANDARD -SCO SPACES	ADA ♿	TOTALS
LEVEL 3	140	---	140
LEVEL 2	154	4	158
LEVEL 1	129	4	133
LEVEL B1	137	4	141
GARAGE TOTAL	560	12	572
EXISTING LOT TOTAL	248	---	248
NET GAIN FOR SITE	312	12	324

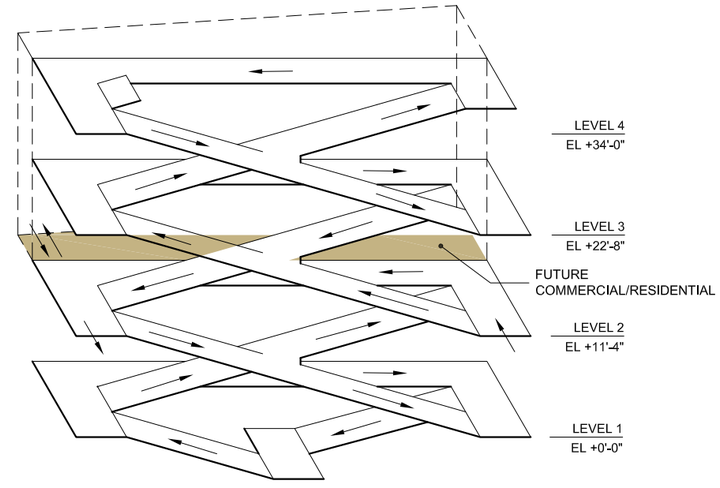
SHEET NOTES:

STANDARD SPACE = 9'-0" X 18'-0" @ 75° & 90° PARKING ANGLE
SCO SPACE = 8'-6" X 16'-0" @ 90° PARKING ANGLE
ADA SPACE = 8'-0" X 18'-0" W/ 8'-0" & 5'-0" WIDE AISLES

LEVEL SUMMARY (SPACE TABULATION):
?

ISOMETRIC VIEW

DOUBLE THREADED HELIX



LEVEL 1 PLAN

1" = 60'-0"

Concept 7-C

Sheet 45
March 2, 2015

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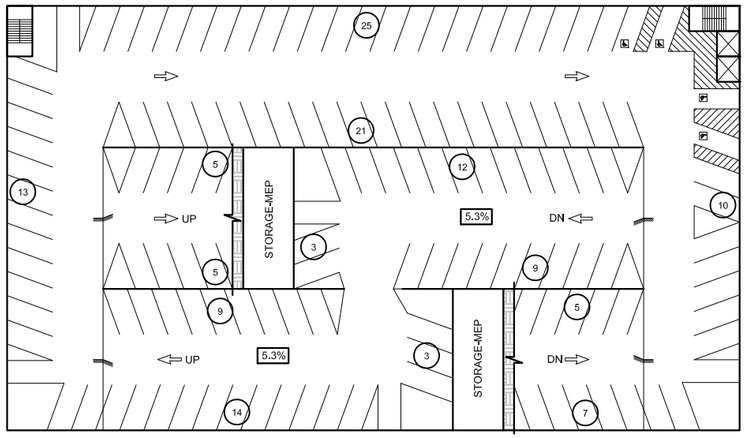
0' 30' 60' 90' 120'
SCALE: 1" = 60'-0"

NORTH

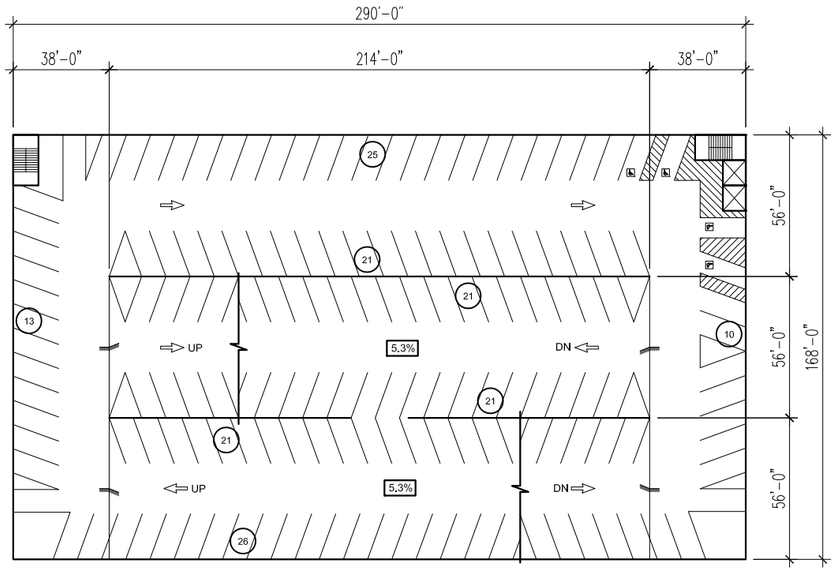
City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



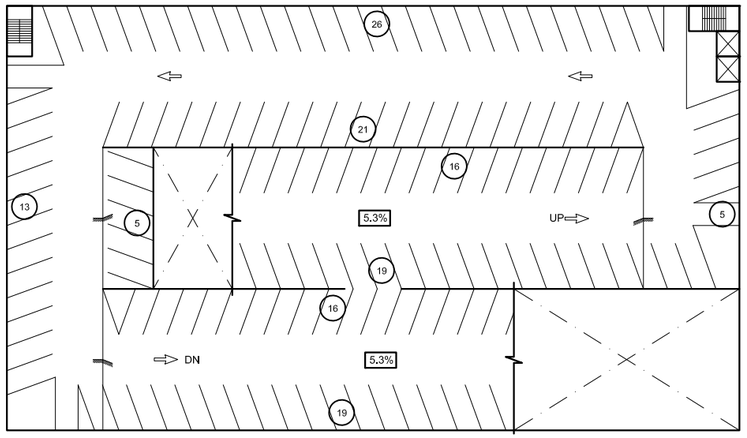
LEVEL B1 PLAN

1" = 60'-0"



LEVEL 2 PLAN

1" = 60'-0"



LEVEL 3 PLAN

1" = 60'-0"

Concept 7-D

Sheet 46
March 2, 2015

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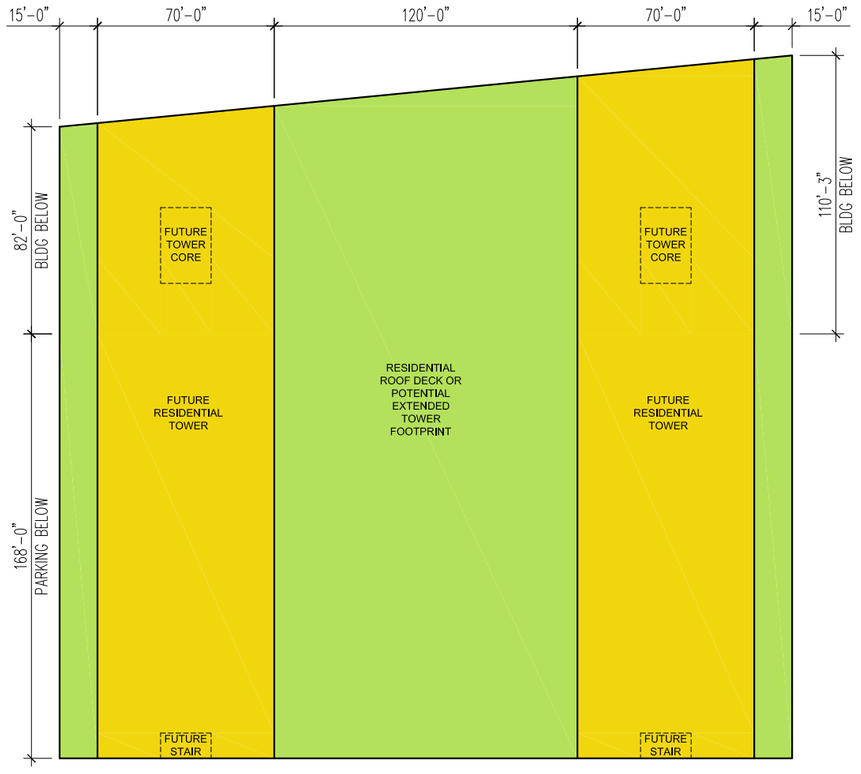
0' 30' 60' 90' 120'

SCALE: 1" = 60'-0"

NORTH

City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota



PODIUM LEVEL PLAN

1" = 60'-0"

Concept 7-D

Sheet 47
March 2, 2015

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0' 30' 60' 90' 120'

SCALE: 1" = 60'-0"

N O R T H

City of Fargo

Site 7 - NP Avenue
Fargo, North Dakota

Appendix C

Over the course of the preparation of the Downtown Fargo Site Feasibility Analysis, individual stakeholder representatives and the public were engaged through a series of meetings and public presentations. The goal was to seek input and comment on study findings, as well as perspective on parking needs and solutions. The following summarizes the input received:

1. **Stake Holders/DCP Comments**
    a. Peak demand periods are 10AM-Noon and evenings typically.
    b. Immediate adjacency to Broadway is important.
    c. Do not want another Island Park Ramp (only parking, without street level retail/mixed use)
    d. General concern for the site solutions that required 5 plus levels due to impact on adjoining buildings and sensitivity to the character of downtown's streetscapes.
    e. It appears that current parking demands from commercial and office users on the south end of Broadway, hasn't been considered, or isn't on the near term priority list.
    f. If US Bank Plaza is developed, will its parking demand take over any new ramp constructed nearby.
    g. NDSU's future footprint downtown will be a driver for significant new development, and resulting parking demand.
    h. Having city owned land available for development is key, majority of sites require acquisition of additional land. Looking long term, to acquire and hold property, will give the city more flexibility to respond to parking and catalyze mixed use development.
    i. Near-term development will be associated with the riverfront area and projects such as a convention center and performing arts venue.

2. **<u>Public Presentation Comments</u>:**
    a. **<u>Goodyear lot</u>**
        i. Impact on the Depot/Bike Shop. Building heights higher then adjoining buildings should be avoided and appropriate consideration should be given to transitions into adjacent buildings
        ii. Use of the Bike Shop land and the 5th Avenue alignment to the north of the Warner property for potential access is negotiable.

iii. Site layouts attempted to keep an open view of the Depot tower, however this was not felt to be a significant priority.

iv. Setting the priority of the importance of a larger commercial footprint on Broadway versus smaller integrated shops - will need to be evaluated.

v. Integrating the Goodyear Store/Service Center into the ramp similar to the existing Radisson Ramp and Firestone arrangement was not considered a priority.

b. **St. Mark's Church Site**

i. Opportunity for different land swap ideas to include the St. Mark's properties at 305, 315 and 321 7th St

ii. Adjoining property for Ivers Apartments, is likely not available in the near term as a potential site expansion to facilitate an east/west solution.

iii. An east/west ramp configuration was viewed positively whereas a north/south configuration was not as favorable. Pedestrian linkages to Roberts and Alley/Broadway were considered viable if an east/west site package could be assembled.

iv. The ability of this site to serve NDSU's growth was viewed very positively.

v. Some concern for the scale of a large ramp and the relationship to smaller scaled residential neighborhood to the west.

vi. The harsh streetscape of Roberts Street between 2nd avenue and 4th Avenue was viewed by some as a reason to not consider any development on Robert's.

b. **2nd Avenue Sites**

i. Mixed used options can be achieved on this site, but is it better to be held as a standalone development site.

ii. Most viewed the opportunity to enhance the alleyscape as part of the development of a ramp was very positive.

iii. Adjoining land to the north is critical to developing an efficient ramp design.

iv. This location would best meet the near-term needs of Broadway customer and shoppers.

v. Scale of a large ramp on this site was a concern to some.

vi. 2nd Avenue South site was not viewed as viable by anyone and did not generate discussion.

c. **Civic Ramp Expansion**

i. Stakeholders generally agreed that expanding the civic ramp would make sense, provided other new parking was in place to take care of lost inventory during the expansion process.

ii. Radisson Management was very concerned with the idea, due to impact on sunlight and view from guest rooms.

iii. Potential expansion beyond one level cannot be assured without detailed structural and material analysis, which is part of next phase of services.

d. **City Hall Site**

i. Consideration for impact to open plaza space in front of the new City Hall, must be weighed.

ii. Net area of buildable site is limited by infrastructure that must remain in place.

iii. Ability to joint venture with property owner on south side of 1st Avenue, will significantly expand development options.

e. **NP Avenue Site**

i. Mixed comments on the merit of the site for serving near term parking demand on Broadway. Majority felt it should be a standalone mixed use development.

ii. A few stakeholders thought that this site should be a higher priority based on existing traffic and travel patterns from Main Avenue.

iii. Railroad tracks would need to be considered with any mixed-use project at this location.

iv. Inventorying the site to be available for a large user.

v. Adjoining land owners (Old Broadway & NDSU) would be interested in a project at this location. .

4. Public Input Meeting Dates:

a. Three (3) information meetings were conducted as part of this initial site feasibility analysis phase, as follows:

i. Thursday April 16th (9-11 a.m.) – This presentation was specifically intended to share the initial analysis with elected and appointed officials; including the Fargo City Commission, Parking Commission, Renaissance Zone Authority and Planning Commission.

ii. Thursday April 16th (6-7:30 p.m., Elevate Conference Room) and Friday April 17th (8:30 -10 a.m., Fargo Theatre) – These two (2) presentations were intended to engage downtown stakeholders and interested community members on the ramp discussion and in general on

downtown parking. The meeting included downtown residents, business owners, property owners and various downtown stakeholders.