



**CITY OF MARQUETTE
PLANNING AND ZONING
300 W. BARAGA AVENUE
MARQUETTE, MI 49855
(906) 225-0425
www.mqtcty.org**

MEMORANDUM

TO: Planning Commission
FROM: Andrea Landers, Planning/Zoning Official
DATE: August 12, 2015
SUBJECT: 01-PUD-08-15 – Request for PUD Criteria Qualification for Duke LifePoint – 850 W. Baraga Ave. (PIN: 0130100, 0240013, 0514071, and 0514072)

.....

Attached is a request from Duke LifePoint to establish criteria that would allow for a Planned Unit Development (PUD) at 850 W. Baraga Avenue.

Please see the attached STAFF FILE REVIEW/ANALYSIS for a complete review of the proposal.

All notices have been sent in accordance with the Zoning Ordinance and State Law. No correspondence has been received.

Recommended Action:

In accordance with the Zoning Ordinance, the Planning Commission should hold a public hearing, review the proposed PUD application materials, and make a determination regarding the proposal's qualification for the PUD option.

It is also highly recommended that any motion regarding the PUD request include:

After review of the concept PUD site plan dated 07-20-15 and received 7-21-15, and the STAFF FILE REVIEW/ANALYSIS for 01-PUD-08-15, the Planning Commission finds that the request meets the following criteria (1, 2, 3, ... 10) of 80.30.3(a) of the Marquette City Zoning Ordinance therefore the proposal is eligible for a PUD.

or,

After review of the concept PUD site plan dated 07-20-15 and received 7-21-15, and the STAFF FILE REVIEW/ANALYSIS for 01-PUD-08-15, the Planning Commission does not find that the request meets three or more of the 10 criteria of 80.30.3(a) of the Marquette City Zoning Ordinance therefore the proposal is not eligible for a PUD.



STAFF FILE REVIEW/ANALYSIS

Completed by Andrea M. Landers – Planning/Zoning Official

Reviewed by David Stensaas – City Planner and Zoning Administrator

File Number: 01-PUD-08-15

Date: August 11, 2015

Project/Application: Applicant is seeking PUD qualification for their proposed development consisting of a hospital and associated uses on the site.

Location: 850 W. Baraga Avenue

Parcel ID: 0130100, 0240013, 0514071, 0514072

Available Utilities: Natural Gas, Electricity, City Water, City Sewer, and Garbage Collection.

Current Zoning: I – Industrial

Surrounding Zoning: North: BG – General Business
PUD- Planned Unit Development
South: RS- Single Family Residential
RM- Multiple Family Residential
East: I – Industrial, RM- Multiple Family Residential, and
RG – General Residential
West: I – Industrial

Zoning District and Standards:

Current Zoning – Industrial

Intent and Uses Allowed:

80.27 I - Industrial District.

1. **Intent.** *It is the intent of this district to regulate the establishment of industrial uses in the city in such a way as to prevent the deterioration of the environment to protect the desired qualities of adjoining districts and to exert a minimum nuisance on adjacent uses within this district.*
2. **Principal Uses** (See Sec. 80.40.2).
 - A. *All principal uses permitted in the BG zoning district, with the exception of residential and day care uses.*
 - B. *Wholesaling operations.*
 - C. *Warehousing, and distributive operations.*
 - D. *Light Manufacturing.*

3. **Requirements for Principal Uses.**

- A. Open storage of any equipment, vehicles and all materials, including wastes, shall be screened from public streets, and from adjoining properties by an enclosure consisting of a wall or an obscuring fence of a height of not less than six (6) feet to obscure such stored materials (See also Sec. 80.43.3).
- B. Open storage shall not be in excess of twenty (20) feet in height.

4. **Conditional Uses (See Sec. 80.65).**

- A. Heavy manufacturing.
- B. Major repair and maintenance operations.
- C. Bulk storage.

Schedule of General Regulations:

Zoning District	Minimum Lot Size	Minimum Lot Width	Minimum Front Yard	Minimum Side Yard	Minimum Rear yard	Maximum Height
I	None	None	25	10	10	80 (f)

(f) In no case shall the height of any structure in the industrial district exceed the horizontal distance from the structure to the property line; where the property abuts a right-of-way, up to 1/2 width of said right-of-way may be used in calculation the required yard; in no instance may the yard be less than the minimum specified in Section 80.40.2.

District Boundary Regulations:

DISTRICT IN WHICH TRANSITIONAL YARD IS REQUIRED	ABUTTING DISTRICT									
	RS	RG	RM	OS	BC	CBD	BG	I	C R	DD
I	40	40	40	25	25	25	25	NA	0	0

This boundary (for placement of structures) is established in order to reduce the impact and potential for conflicts between incompatible land uses abutting district boundaries.

Proposed Zoning – PUD

Intent and Uses Allowed (staff comments, where applicable, are indicated in bold text):

80.30 PUD - PLANNED UNIT DEVELOPMENT

1. *Purpose*

- a. *The Planned Unit Development (PUD) option is intended to encourage, with City approval, private or public development which is substantially in accord with the goals and objectives of the Community Master Plan.*

- b. *Development permitted under this Section shall be considered as an optional means of development only upon terms agreeable to the City.*
 - c. *Use of the PUD option will permit flexibility in the regulation of land development and benefit the City by:*
 - (1) *Encouraging innovation through an overall development plan to provide variety in design and layout.*
 - (2) *Achieving economy and efficiency in the use of land, natural resources, energy, and in the provision of public services and utilities.*
 - (3) *Encouraging the creation of useful open spaces particularly suited to the needs of the parcel in question.*
 - (4) *Providing appropriate housing, employment, service, and shopping opportunities suited to the needs of residents of Marquette.*
 - d. *The PUD may be used to:*
 - (1) *Permit nonresidential uses of residentially zoned areas.*
 - (2) *Permit residential uses of non-residentially zoned areas.*
 - (3) *Permit densities or lot sizes which are different from the applicable district and to permit the mixing of land uses that would otherwise not be permitted; provided that other objectives are met and the resulting development would promote the public health, safety, and welfare.*
 - e. *Further, it is intended that the PUD shall be laid out so various land uses and building bulk relate to each other and to adjoining existing and planned uses with no material adverse impact of one use on another.*
2. *Definitions*
- a. *A PUD is a zoning district which shall apply to a specific parcel of land or several contiguous parcels of land, for which a comprehensive physical plan has been recommended by the Planning Commission, approved by the City Commission, and documented in a contract between the City and site owner/developer. Such plan and contracted development will establish functional use areas and density patterns; will provide a fixed system of streets, public utilities, drainage, and other essential services; and account for similar factors necessary for and incidental to the intended land uses. The Planning Commission may, but is not required to, consider parcels separated by a public street as eligible for inclusion in a PUD.*
 - b. *A Pattern Book is a document prepared by the applicant's design firm which contains specific information on the site master plan, and architectural designs for planned buildings. Information should include specifications on building materials, size, and dimensions, building elevations, and site design elements such as pedestrian walkways, lighting, landscaping, and signage.*
3. *Criteria for Qualification*
- The PUD option may be permitted anywhere in the City except in the CR Zone. To be considered for the PUD option, it must be demonstrated that all of the following criteria are met:*
- a. *Use of this option shall not be for the purpose of avoiding applicable zoning requirements. Any permission given for any activity or building or use not normally permitted shall result in an improvement to the public health, safety and welfare in the area affected.*

The Zoning Ordinance does not provide other options to accommodate the density and character of development that the applicant is attempting to achieve in a single zoning district and in one process. The proposed development will likely result in a general improvement to the public health, safety, and welfare for the community.

- b. The PUD shall not be utilized in situations where the same land use objectives can be accomplished by application of conventional zoning provisions or standards. Problems or constraints presented by applicable zoning provisions shall be identified in the PUD application.*

The land use objectives of this development would not be able to be achieved by utilizing the current zoning district, regardless of the provisions and standards.

- c. The PUD option may be effectuated only when proposed land use will not materially add service and facility loads beyond those contemplated in the Comprehensive Plan unless the proponent can demonstrate to the sole satisfaction of the City that such added loads will be accommodated or mitigated by the proponent as part of the PUD.*

The proposal is in accordance with civic land uses recommended for this property in the Community Master Plan (2015). City staff including Engineering, Fire, Police, Public Works, Planning, and the Board of Light and Power have all reviewed the proposal. Please see the attached analysis from the various municipal departments.

- d. The PUD shall not be allowed solely as a means of increasing density or as a substitute for a variance request; such objectives should be pursued through the normal zoning process by requesting a zoning change or variance.*

The normal zoning process and available zoning districts do not provide for the unique character of this proposed development. Variances for unique land uses are not an option, as the City is not permitted to review use variances (per statute), for principal or conditional uses. Variances for the use of structures that are not permitted by the zoning district standards, such as accessory structures in commercial zoning districts, are also not an option.

- e. The Planned Unit Development must substantially meet, as a minimum, three or more of the following objectives. The benefits given to the developer through the flexibility of the PUD must be balanced with the benefits to the City:*

(1) To permanently preserve open space or natural features because of their exceptional characteristics or because they can provide a permanent transition or buffer between land uses.

According to the applicant, “open space is being permanently preserved in the area along Whetstone Brook and will serve as a buffer to the residential areas located to the southeast of the medical campus”.

(2) To permanently establish land use patterns which are compatible or which will protect existing or planned uses.

N.A.

(3) To accept dedication or set aside open space areas in perpetuity.

N.A.

(4) To provide alternative uses for parcels which can provide transition buffers to residential areas.

N.A.

(5) To guarantee provision of a public improvement which could not otherwise be required that would further the public health, safety, or welfare; protect existing or future uses from the impact of a proposed use; or alleviate an existing or potential problem relating to public facilities.

According to the applicant, “The Hospital is not an allowable use within the base zoning districts available within the City. Therefore, a PUD is being proposed to provide the community with improved healthcare through the construction of a new medical campus”. Hospitals are a conditional use in the RM Zoning District, but they would not be allowed to be higher than 120 feet. This proposal includes a building of 124’-8” in height. Accessory uses would also not be allowed.

The current MGH Hospital overlay zone does allow for certain accessory uses, but to create a similar overlay district for the current zoning of the subject property would require a complex process that would likely result in something very similar to what the PUD option allows for with an already established, simple process.

In the current hospital location, homes were being bought and demolished in order to allow for the expansion of the hospital. This proposal would require hospital campus expansions to remain on the site, according to the site plans submitted, therefore the existing homes near the proposed hospital would not be impacted by campus expansions.

(6) *To promote the goals and objectives of the Community Master Plan.*

According to the applicant, “The Creation of a medical center campus is envisioned by the community’s long-range plan”. The Community Master Plan (2015) includes discussion of this site as the location identified by the applicant and the City of Marquette for the development of a hospital campus that would replace the current hospital in the city (p.7-10).

(7) *To foster the aesthetic appearance of the City through quality building design and site development; the provision of trees and landscaping beyond minimum requirements; the preservation of unique and/or historic sites or structures; and the provision of open space or other desirable features of a site beyond minimum requirements.*

N.A.

(8) *To bring about redevelopment of sites where an orderly change of use or requirements is determined to be desirable.*

According to the applicant, “The proposed PUD allows for the re-development of a site that currently contains the City’s Municipal Services Center. The site has also been approved as a brownfield site by the State of Michigan due to several environmental components”.

(9) *To bring about redevelopment of sites which have been identified as environmentally distressed or Brownfields.*

The Marquette Brownfield Redevelopment Authority and City Commission have approved a Brownfield Redevelopment Plan and Act 381 Work Plan for this project.

(10) *To facilitate appropriate development of environmentally sensitive areas.*

According to the applicant, “The PUD will control the development surrounding Whetstone Brook which is an environmentally sensitive feature”.

4. *Submittal of Concept and Request for Consideration of Project Qualifications*
 - a. *Any person owning or controlling land in the City may make application for consideration of a PUD. Such application shall be made by submitting a request for a preliminary determination as to whether or not a parcel qualifies for the PUD option.*
 - b. *A written and graphic request shall be submitted to the Marquette City Planning Commission through the Community Development Department. The submission shall include information required by subparagraph c. below.*

- c. *Based on the documentation submitted, and following a public hearing the Planning Commission shall make a preliminary determination as to whether or not a parcel qualifies for the PUD option under the provisions of Criteria for Qualifications (80.30 #3.) The submittal must include the following:*

- (1) *Substantiation that the criteria set forth in Criteria for Qualifications (80.30 #3.) are or will be met.*

TBD by the Planning Commission. Please see the applicant’s response to the Planning/Zoning Comments under General Comments #6.

- (2) *A schematic land use plan containing enough detail to explain the function of open space; the location of land use areas, streets providing access to the site, pedestrian and vehicular circulation within the site; dwelling unit density and types; and buildings or floor areas contemplated, as applicable.*

Provided.

- (3) *A plan for the protection of natural, cultural and historic features and preservation of open space, green space, or public access, as applicable.*

Provided.

- (4) *The proposed phasing of the project.*

Provided.

- d. *The Planning Commission shall review the applicant’s request.*
- e. *To expedite minor PUD projects, of one acre or less, the Planning Commission, at its discretion, may waive submittal information required in Section 5.*

This project is more than one acre so this does not apply.

Schedule of General Regulations:

Zoning District	Minimum Lot Size	Minimum Lot Width	Minimum Front Yard	Minimum Side Yard	Minimum Rear yard	Maximum Height
PUD	Per approval	Per approval	Per approval	Per approval	Per approval	Per approval

District Boundary Regulations:

No transitional yard is required.

Additional Comments:

The off-site improvements will be provided by the City in accordance with a negotiated development agreement as part of the Brownfield/Act 381 plans.

Attachments:

- PUD Application with letter dated July 21, 2015
- Applicant's response to Pre-application meeting staff comments
- Staff comments for official submittal
- Applicant's response to staff comments
- Area Map
- Zoning Map
- Photos of Site
- Site Plan
- Applicant's presentation

**CITY OF MARQUETTE
PLANNED UNIT DEVELOPMENT APPLICATION**



0240013 0130100 6514072		CITY STAFF USE	
Parcel ID#:	<u>0514071</u>	File #:	<u>01-PUO-08-15</u>
Receipt #:	<u>INV</u>	Check #:	<u>051473</u>
Concept Plans (12 copies) Submitted:	<input checked="" type="checkbox"/>	Hearing Date:	<u>8-18-15</u>
Preliminary Plan & Pattern Book (12) Submitted:	<input checked="" type="checkbox"/>	Notice Date:	<u>7-31-15</u>
Final Site Plan(12) Submitted:	Y/N	Contract signed:	Y/N
Amendment Plan (12) Submitted:	Y/N	Meeting Date:	_____

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED, THE PLANNED UNIT DEVELOPMENT REQUEST WILL NOT BE SCHEDULED FOR A HEARING UNTIL IT HAS BEEN VERIFIED THAT ALL OF THE INFORMATION REQUIRED IS PRESENT AT THE TIME OF THE APPLICATION - NO EXCEPTIONS!

FEE SCHEDULE	
<input type="checkbox"/> PUD Criteria Qualification	\$524
<input checked="" type="checkbox"/> PUD Review <i>(includes Site plan Review)</i>	\$1,836
<input type="checkbox"/> PUD Revision - Minor	\$136
<input type="checkbox"/> PUD Revision - Major	\$1,735

If you have any questions please call 228-0425 or e-mail alanders@mqctcy.org. Please refer to www.mqctcy.org to find the Planning Commission page for filing deadline and meeting schedule.

Please review the attached:

- PUD Timeline
- PUD Checklist
- Excerpts from the City Zoning Ordinance
 - Section 80.30 Planned Unit Development
 - Section 80.62 Site Plans

APPLICANT CONTACT INFORMATION

PROPERTY OWNER
Name: <u>City of Marquette</u> <i>(Under Mott w/ Duke, Lippitt)</i>
Address: <u>300 W. Baraga Ave</u>
City, State, Zip: <u>Marquette, MI 49855</u>
Phone #: <u>906.228.8377</u>
Fax #: _____
Email: <u>Dstachewicz@mqctcy.org</u>

APPLICANT/OWNERS REPRESENTATIVE
Name: <u>Mr. Jeffrey Heinze</u>
Address: <u>1935 21st Ave So.</u>
City, State, Zip: <u>Nashville, TN 37212</u>
Phone #: <u>615.385.4444</u>
Fax #: _____
Email: <u>jheinze@leaving.com</u>

PRE-APPLICATION CONFERENCE

It is strongly encouraged that all applicants and their representatives meet with City of Marquette staff prior to submitting an application for a Planned Unit Development. A pre-application meeting with staff allows for a preliminary review of the application procedures, project timelines, compliance with the City Master Plan, and other project criteria, and prevents most situations that usually results in a project being postponed.

PROPERTY INFORMATION

Location (Street Address): 850 W. Baraga Ave. Property Identification Number: _____

Size of property (frontage / depth / sq. ft. or acres): 39.95 Acres / 1,880 L.F. frontage on Baraga Ave.

Current Zoning District: I
 Surrounding Zoning Districts:
 North BG
 East RG
 South RS & RM
 West I & RG

Current Land Use: Municipal Service Ctr.
 Surrounding Land Uses: Gen.
 North Commercial/Business (BG)
 East General Resid. (RG)
 South Single Fam. Resid. (RS) & Multifamily (RM)
 West Commercial (BG) & Industrial (I)

PLANNED UNIT DEVELOPMENT INFORMATION

Percentage of Land Use by Type

	Residential	Commercial	Industrial	Open Space	Institutional	Other	Total
# of Acres	0	0	0	6.9	33.05		39.95
% of Total				17%	83%		100

Residential Density

Type of Unit	Number of Units	Net Acres	Net Density
Single Family Home			
Town Home			
Apartments			
Other			
Total			

Net Acres - Land development for land use type not including right-of-way
 Net Density - Number of Units/Net Acres

VARIANCES FROM ORDINANCE(S)

THIS IS A REQUIRED SECTION. FAILURE TO FILL OUT MAY INDICATE THAT THE PROPERTY CAN BE DEVELOPED UNDER CURRENT ZONING DISTRICT STANDARDS.

Please list and justify the request variance(s) from the Zoning or Subdivision Ordinances (attach additional pages if necessary):

The requested Planned Unit Development is being proposed to allow for a Hospital use on the site. Site development under the PUD is proposed to be in compliance with the plans and campus development standards established by this submittal.

SIGNATURE

I hereby certify the following:

1. I am the legal owner of the property for which this application is being submitted.
2. I desire to apply for the Planned Unit Development Permit indicated in this application with the attachments and the information contained herein is true and accurate to the best of my knowledge.
3. The requested Planned Unit Development would not violate any deed restrictions attached the property involved in the request.
4. I have read the attached Planned Unit Development section of the Zoning Ordinance and understand the necessary requirements that must be completed.
5. I understand that the payment of the application fee is nonrefundable and is to cover the costs associated with processing this application, and that it does not assure approval of the plan.
6. I acknowledge that this application is not considered filed and complete until all of the required information has been submitted and all required fees have been paid in full. Once my application is deemed complete, I will be assigned a date for a public hearing before the Planning Commission that may not necessarily be the next scheduled meeting due to notification requirements and Planning Commission Bylaws.
7. I acknowledge that this form is not in itself a Planned Unit Development but only an application for a Planned Unit Development and is valid only with procurement of applicable approvals.
8. I authorize City Staff and the Planning Commission members to inspect the site.

Property Owner Signature: _____

Date: _____



July 21, 2015

Ms. Andrea Landers
City of Marquette
Department of Planning and Zoning
300 West Baraga Ave.
Marquette, MI 49855

**RE: Preliminary PUD Plan Submittal
UP Health – Marquette Replacement Hospital**

Dear Ms. Landers,

Enclosed are 12 sets of the Preliminary PUD Plan submittal documents, revised in accordance with the comments received from the Planning Department staff. The proposed PUD rezoning of the 39.11 acre combined parcel includes a new Hospital facility, Clinical Services Building (CSB), retaining the existing Cold Storage Bldg. on the property for re-purposing, and other healthcare support functions. This submittal is in keeping with our discussions at the preliminary review meeting held on July 10th, 2015.

We offer the following clarifications (in the attached memorandum) regarding comments raised by various City departments during our preliminary review session and the PUD criteria specifically being met with this application. Additionally, we are requesting 3 variances from the City's ordinances pertaining to the PUD application. These variances include: 1) a variance from the City's signage ordinance to allow for the implementation of the signage standards identified in the Pattern Book document; 2) a variance to allow for plantings to be utilized in lieu of a 6' height stockade fence where the PUD abuts residentially zoned property (along the southeast corner of the site); and 3) a variance to allow for the use of 30' height light standards within the parking areas and as accent lighting on the building. We have submitted a photometric analysis indicating that through the use of shielding and placement of fixtures the light distribution at the property boundary shall be 0 fc.

We request to be placed on the August 18th agenda of the City of Marquette Planning Commission for the Preliminary PUD Plan review. Please advise us of any questions or concerns that may arise as a part of the review process.

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Thank you again for the Planning Department's continued assistance with this important project for the Marquette community.

Sincerely,

LITTLEJOHN ENGINEERING ASSOCIATES

A handwritten signature in black ink, appearing to read "Jeffrey D. Heinze". The signature is fluid and cursive, with the first name being the most prominent.

Jeffrey D. Heinze
Discipline Manager, Principal Landscape Architect



MEMORANDUM

TO: City of Marquette Planning and Zoning Department
Attn. Andrea Landers, Planning/Zoning Official

RE: Response Letter to Prelim. City Comments, Site Plan Submittal
City File No. 01-PUD-08-15

DATE: 7/21/2015

We are submitting this memorandum offering the following explanations for questions and plan comments noted by the departmental staff reviewers:

Submittal Documents:

Plan: Marquette Replacement Hospital
Architectural & Engineering Company: Littlejohn, Inc.
Approving Architect/Engineer: None
Plans Dated: Received July 1, 2015

City of Marquette Engineering standards are to be followed and are available online at: www.mqtcty.org/Departments/Engineering/Standards/Design-and-Construction-Standards-2015.pdf

The following are plan review comments from the Engineering Department for the documents identified above:

General:

1. Per City Code 80.62(5)(A)(1)(e) "Appropriate measures shall be taken to ensure that removal of surface waters will not adversely affect neighboring properties".
 - a. Please provide a stormwater sheet with delineated watersheds and flow arrows showing direction of run-off from entire site, including runoff from rooftops, parking lots, and vegetated areas.

LEA Response: Stormwater sheets showing delineated watersheds have been included within the drainage report.
 - b. Please ensure and demonstrate with calculations that there is no increase in run-off from the site to neighboring properties.

LEA Response: Calculations have been included within the drainage report that demonstrate there is no increase in run-off to the neighboring properties.

2. Please include a construction note stating if soil erosion control permits are or are not required.

LEA Response: Soil erosion control permits are required for this site. The permits will be obtained prior to construction.

Cover Sheet:

1. Please have plans stamped by an Architect or Engineer licensed in the State of Michigan.

LEA Response: Both Engineer and Landscape Architect stamps have been added to the plans.

2. Please remove "Final" from "Preliminary & Final PUD Submittal".

LEA Response: The title has been revised.

3. Please remove or reduce the font size of the bearings and distances.

LEA Response: The bearings and distances have been removed.

4. Please label what areas inside the bold dashed lines represent north of the City multi-use path.

LEA Response: The parcels along Washington St. have been screened back and the proposed boundary of the PUD has been specifically noted. These parcels are included in the Site Plan, but not the PUD.

5. Please label the areas of West Spring Street, West Baraga Avenue, and the proposed roundabout that are inside the bold dashed lines as "Work Done by City of Marquette".

LEA Response: The scope of work within the dashed lines has been specifically noted on sheets C5.0, C6.0 and C7.0.

6. Please remove or reduce the font size of the bearings and distances.

LEA Response: The bearings and distances have been removed.

7. Please identify the scale of the drawing in inches:feet.

LEA Response: We have a Graphic Scale included on all plan sheets. We prefer not to specifically denote the scale due to the contractor utilizing half-size prints for construction. If this is a mandated requirement, then we will add when comments are addressed at resubmittal.

8. Please label Morgan Street.

LEA Response: Morgan Street has been labeled.

9. Please provide a legend.

LEA Response: Legends are evident on each of the specific E&S Plan, Layout, Grading and Utility Plan sheets. If a legend is still mandated for the cover sheet, then requested legend will be added prior to the Final Site Plan submittal.

C1.0:

1. Please delineate and label the City multi-use path.

LEA Response: The Heritage Trail has been labeled.

2. Please identify the scale of the drawing in inches:feet.

LEA Response: We have a Graphic Scale included on all plan sheets. We prefer not to specifically denote the scale due to the contractor utilizing half-size prints for construction. If this is a mandated requirement, then we will add when comments are addressed at resubmittal.

3. Please remove or reduce the font size of the bearings and distances.

LEA Response: The font size of the bearings and distances has been reduced.

4. Please represent gas, storm, and sanitary sewer utilities in a heavier lineweight.

LEA Response: The lineweight of the gas, storm, and sanitary utilities has been increased.

5. Please identify material and diameter of all utilities.

LEA Response: The material of the storm system has been indicated by the surveyor based upon visual verification. The material and diameter for sanitary and water will be added to all of the utilities prior to re-submittal of the plans. We will need to take this information from City records since visual field verification is not possible.

6. Please label contours in 5 foot intervals.

LEA Response: Contours have been labeled on the Site Grading Plan, sheet C6.0. Contour labels on this particular sheet will be added when comments are addressed at resubmittal.

7. Please revise that portion of the existing 8" water main shown as 12".

LEA Response: We aren't certain wherein the water line sizes appear incorrect based upon our prior discussions?

C4.0:

1. Please remove or reduce the font size of the bearings and distances.

LEA Response: The font size of the bearings and distances has been reduced.

2. Please identify the scale of the drawing in inches:feet.

LEA Response: We have a Graphic Scale included on all plan sheets. We prefer not to specifically denote the scale due to the contractor utilizing half-size prints for construction. If this is a mandated requirement, then we will add when comments are addressed at resubmittal.

3. Please include a note that no tree removal is to occur on City property adjacent to multi-use path.

LEA Response: Tree removal on the Heritage Trail property will be necessitated in order to achieve the proposed grading elevations and to install the grade separated driveway entrance to Washington St.. New trees will be planted to replace removed trees as shown on sheet LI.0. The intent is to create a solid view screen with new landscaping along the northern boundary of the hospital campus in order to screen views to service areas of the facility.

4. Please include a note indicating abandonment of 2" water service currently used to flood ice rink.

LEA Response: The 2" water service will be noted to be removed when comments are addressed at resubmittal.

5. Please increase size of font of notes north of multi-use path so that notes are legible.

LEA Response: The font size of the bearings and distances has been increased. The font size of the remaining notes will be increased when comments are addressed at resubmittal.

6. Please label dashed lines that represent the proposed roundabout as "Work to be done by City of Marquette".

LEA Response: The scope of work has been noted on sheets that pertain to the new improvements (i.e. Site Layout Plan, sht. C5.0). However, we will add requested labels on this specific sheet when comments are addressed at resubmittal.

C5.0:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: The scale has been revised.

2. Please show and label the stormwater basin proposed east of the helipad.

LEA Response: The stormwater basin east of the helipad has been labeled.

3. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path

at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: A bridge has been added over the Heritage Trail similar to the Seventh Street crossing and noted as Grade Separated Heritage Trail Crossing.

4. Please increase size of font of notes north of multi-use path so that notes are legible.

LEA Response: The font size of the bearings and distances has been increased. The font size of the remaining notes will be increased when comments are addressed at resubmittal.

5. Consider a stormwater basin immediately north of Baraga Avenue and west of main Baraga Avenue entrance from roundabout.

LEA Response: There is not enough room at this location for a detention basin, but we have a small water quality basin and snow storage area located here. The basin is labeled on the Grading Plans as a Bio Filtration Area.

6. Please indicate if there will be a connection to the Staybridge Hotel at the Liberty Way site.

LEA Response: The pattern book illustrates the intent to match the pedestrian access location being constructed by the Veridea developer. We have met with them and understand that their specific connection point is still potentially moving. DLP will construct a pedestrian sidewalk connection to the Heritage Trail at the location where Veridea connects with their walkway path to create a new pedestrian node on the Heritage Trail.

7. Volume of existing stormwater basin south of Baraga Avenue is recognized by official FEMA floodplain maps. Please consult with FEMA before modifying the stormwater basin.

LEA Response: LEA will coordinate the pipe and headwall installation with FEMA. There will not be any modification made to the storage volume of the basin as part of the DLP campus improvements. However, the City's improvements to Baraga Ave. and the Round-about would impact this area.

C5.1:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: The scale has been revised.

2. Please label the multi-use trail.

LEA Response: The multi-use trail has been labeled.

3. Please eliminate redundant overlapping labels.

LEA Response: Redundant and overlapping labels have been corrected.

4. Please delete crosshair symbols shown south of multi-use trail.

LEA Response: Crosshair symbols have been deleted.

5. Please indicate sheet number of sheet adjacent to matchline in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

6. Please label future parking.

LEA Response: Future parking has been labeled.

C5.2:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: The scale has been revised.

2. Please label the multi-use trail.

LEA Response: The multi-use trail has been labeled.

3. Please eliminate redundant overlapping labels.

LEA Response: Redundant and overlapping labels have been corrected.

4. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

5. Please revise that portion of the existing 8" watermain shown as 12".

LEA Response: The existing 8" watermain will be shown correctly once the exact location is clarified.

6. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: A bridge has been added over the Heritage Trail similar to the Seventh Street crossing and noted as Grade Separated Heritage Trail Crossing.

7. Please dimension parking stalls.

LEA Response: Parking stall dimensions have been added.

C5.3:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: The scale has been revised.

2. Please eliminate redundant overlapping labels.

LEA Response: Redundant and overlapping labels have been corrected.

3. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

4. Please revise that portion of the existing 8" watermain shown as 12".

LEA Response: The existing 8" watermain will be shown correctly once the exact location is clarified.

5. Please indicate if site distance requirements are met at entrance at Baraga Avenue.

LEA Response: Specific sight distance information will be added when comments are addressed at resubmittal. However, there is not any issue perceived with any of the proposed entrances.

6. Please label Baraga Avenue.

LEA Response: Baraga Avenue has been labeled.

7. Please label portion of Baraga Avenue that is to be constructed by City of Marquette.

LEA Response: Requested labels will be added when comments are addressed at resubmittal.

8. Please show stormwater basin proposed east of helipad.

LEA Response: The stormwater basin east of the helipad has been labeled.

C5.4:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

2. Please label all proposed stormwater basins.

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

3. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

4. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

5. Consider a right turn only out of Washington Street exit.

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

6. Please label City multi-use path.

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

7. Please delete crosshair symbol shown south of multi-use trail.

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

8. Please label roundabout to be built by City of Marquette.

LEA Response: Sheet 5.4 has been removed. See sheet C5.3.

C6.0:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please label all proposed stormwater basins.

LEA Response: All stormwater basins and Bio-Filtration Areas are identified.

3. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: A bridge has been added over the Heritage Trail similar to the path at Seventh Street.

4. Please label the existing stormwater basin located north of the multi-use path and west of the proposed Washington St entrance.

LEA Response: The existing low collection area will remain in this location. The stormwater basin will be labeled when comments are addressed at resubmittal.

5. Please delineate and label the City multi-use path.

LEA Response: The Heritage Trail has been labeled.

6. Please delineate and label Whetstone Brook.

LEA Response: Whetstone Brook has been labeled.

7. Please delineate and label the existing Baraga Avenue culvert for Whetstone Brook.

LEA Response: The existing Baraga Avenue culvert has been labeled.

8. Please delete contours indicating fill at inlet to Whetstone Brook culver under Baraga Avenue.

LEA Response: The fill grading at Whetstone Brook has been removed. We are utilizing the existing culvert termination as the limit of improvements for the new driveway.

9. Please delineate and label Baraga Avenue.

LEA Response: Baraga Avenue has been labeled.

C6.1:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

3. Please delineate and label the City multi-use path.

LEA Response: The Heritage Trail has been labeled.

4. Please delineate and label Whetstone Brook.

LEA Response: Whetstone Brook has been labeled.

5. Please delineate and label the existing Baraga Avenue culvert for Whetstone Brook.

LEA Response: The existing Baraga Avenue culvert has been labeled.

6. Please delete contours indicating fill at inlet to Whetstone Brook culver under Baraga Avenue.

LEA Response: The fill grading at Whetstone Brook has been removed.

7. Please delineate and label Baraga Avenue.

LEA Response: Baraga Avenue has been labeled.

8. Please call out stormwater manhole and catch basin designations to match profile.

LEA Response: Stormwater manhole and catch basin labels have been added.

C6.2:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

3. Please delineate and label the City multi-use path.

LEA Response: Heritage Trail will be labeled when comments are addressed at resubmittal.

4. Please call out stormwater manhole and catch basin designations to match profile.

LEA Response: Stormwater manhole and catch basin labels have been added.

5. 12" watermain is proposed on the east edge of property where stormwater basin is proposed. Watermain is to have 6.5' of cover. Cover over watermain will likely require revisions to stormwater basin configuration.

LEA Response: The watermain layout has been revised. The watermain now runs beneath the roadway instead of beneath the stormwater basin.

6. Please label Spring Street.

LEA Response: Spring Street has been labeled.

7. Please label dashed areas around Spring Street and Baraga Avenue as "Work to be performed by City of Marquette".

LEA Response: The label has been added.

C6.3:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

3. Please delineate and label the City multi-use path.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal. The grade separated trail crossing is called out within the detailed view.

4. Please call out stormwater manhole and catch basin designations to match profile.

LEA Response: Stormwater manhole and catch basin labels have been added.

5. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: A bridge has been added over the Heritage Trail similar to the crossing at Seventh Street.

C6.4:

1. Profiles are difficult/impossible to read and contain multiple question marks instead of stationing.

LEA Response: Storm tables have been added instead of profiles for clarification.

C7.0:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please label all pipes as existing or proposed stormwater, sanitary, and watermain.

LEA Response: The line weight of the proposed improvements is heavy and the existing conditions are screened back for reference. However, we will also note the utilities as existing or proposed when comments are addressed at resubmittal.

3. Please identify all pipe materials and diameters.

LEA Response: The material and diameter will be added to all of the utilities when comments are addressed at resubmittal.

4. Please show the existing storm sewer located on the west side of the property. This storm sewer serves the Liberty Way property and will need to be accommodated.

LEA Response: The existing storm sewer will be re-routed to by-pass off-site storm flow. The re-routed pipe is not yet shown on the plans, but will be added at the time of plans re-submittal.

5. Proposed 12" watermain on east side is shown on private property. Please relocate to hospital property and show watermain centered on 20' wide utility easement.

LEA Response: The waterline location has been revised and a utility easement added.

6. Proposed 8" watermain on east side is shown under detention basin. Please relocate to under detention basin berm.

LEA Response: The watermain layout has been revised. The watermain now runs beneath the roadway instead of beneath the stormwater basin.

7. Please increase size of font of notes north of multi-use path so that notes are legible.

LEA Response: The font size of the bearings and distances has been increased. The font size of the remaining notes will be increased when comments are addressed at resubmittal.

8. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path

- at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.
- LEA Response: A bridge has been added over the Heritage Trail similar to the crossing at Seventh Street.**
9. Please label the City multi-use path.
LEA Response: The Heritage Trail has been labeled.
10. Please remove or reduce the font size of the bearings and distances.
LEA Response: The font size of the bearings and distances has been reduced.
11. Proposed 8" watermain on west side is shown under detention basin. Please relocate to outside the detention basin.
LEA Response: The watermain layout has been revised. The watermain now runs beneath the roadway instead of beneath the stormwater basin.
12. Please revise that portion of the existing 8" watermain shown as 12".
LEA Response: The existing 8" watermain will be shown correctly once the exact location is clarified.
13. Please specify if the existing sanitary sewer on the west side is to be abandoned.
LEA Response: The limits of sanitary sewer removal will be clarified when comments are addressed at resubmittal.
14. 8" watermain proposed on west side is in conflict with existing culvert for Whetstone Brook. An 8" watermain exists immediately east of the proposed 8" watermain as shown on the plans and can be used as the connection point for the proposed 8" watermain.
LEA Response: The existing 8" water tap will be utilized to avoid the conflict with the culvert.
15. Please label portion of Baraga Avenue and roundabout that is to be constructed by City of Marquette as "Work to be done by City of Marquette".
LEA Response: The label has been added.
16. Please show existing storm sewers under Baraga Avenue.
LEA Response: Existing storm sewer under Baraga Avenue is shown.
17. Please relocate the sanitary manhole to outside the stormwater detention basin by the proposed Washington Street entrance.
LEA Response: This manhole will be relocated when comments are addressed at resubmittal.

C7.1:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please show existing contour lines in a light lineweight and proposed contour lines in a heavy lineweight.

LEA Response: Contour lineweights are all screened back on the Utility Plans since the intent of these sheets is to address utility improvements in a heavier line weight. We will correct the graphics further when comments are addressed at resubmittal.

3. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

4. Please label all pipes as existing or proposed stormwater, sanitary, and watermain.

LEA Response: The utilities will be noted as existing or proposed when comments are addressed at resubmittal.

5. Please identify all pipe materials and diameters.

LEA Response: The material and diameter will be added to all of the utilities when comments are addressed at resubmittal.

6. Please show the existing storm sewer located on the west side of the property. This storm sewer serves the Liberty Way property and will need to be accommodated.

LEA Response: The existing storm sewer will be re-routed to by-pass off-site storm flow. The re-routed pipe is not yet shown on the plans, but will be added at the time of plans re-submittal.

7. Proposed 8" watermain on is shown under detention basin. Please relocate to outside the detention basin.

LEA Response: The watermain layout has been revised. The watermain now runs beneath the roadway instead of beneath the stormwater basin.

8. Please revise that portion of the existing 8" watermain shown as 12".

LEA Response: The existing 8" watermain will be shown correctly once the exact location is clarified.

9. Please call out stormwater manhole and catch basin designations to match profile.

LEA Response: Stormwater manhole and catch basin labels will be added when comments are addressed at resubmittal.

Proposed 8" watermain is in conflict with existing culvert for Whetstone Brook. An 8" watermain exists immediately east of the proposed 8" watermain as shown on the plans and can be used as the connection point for the proposed 8" watermain.

LEA Response: The existing 8" water tap will be utilized to avoid the conflict with the culvert.

10. Please label proposed future parking.

LEA Response: Future parking has been labeled.

11. Please show existing storm sewers under Baraga Avenue.

LEA Response: Existing storm sewer under Baraga Avenue is shown.

12. Please delineate and label the City multi-use path.

LEA Response: Heritage Trail has been labeled.

13. Please relocate the sanitary manhole to outside the stormwater detention basin by the proposed Washington Street entrance.

LEA Response: This manhole will be relocated when comments are addressed at resubmittal.

C7.2:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

3. Please provide rim and invert elevations of all proposed culverts and manholes discharging to culverts.

LEA Response: Rim and invert elevations are shown on the storm chart on sheet C6.4.

4. Please label all pipes as existing or proposed stormwater, sanitary, and watermain.

LEA Response: The utilities will be noted as existing or proposed when comments are addressed at resubmittal.

5. Please identify all pipe materials and diameters.

LEA Response: The material and diameter will be added to all of the utilities when comments are addressed at resubmittal.

6. Proposed 12" watermain on east side is shown on private property. Please relocate to hospital property and show watermain centered on 20' wide utility easement.

LEA Response: The waterline location has been revised and utility easements have been added.

6. Proposed 8" watermain on east side is shown under detention basin. Please relocate to under detention basin berm.

LEA Response: The watermain layout has been revised. The watermain now runs beneath the roadway instead of beneath the stormwater basin.

7. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: A bridge has been added over the Heritage Trail similar to the crossing at Seventh Street.

8. Please label portion of Baraga Avenue that is to be constructed by City of Marquette as "Work to be done by City of Marquette".

LEA Response: The scope of work is noted on Sht. C7.0, but we will also add a supplemental note to this sheet when comments are addressed at resubmittal.

9. Please revise that portion of the existing 8" watermain shown as 12".

LEA Response: The existing 8" watermain will be shown correctly once the exact location is clarified.

10. Please call out stormwater manhole and catch basin designations to match profile.

LEA Response: Stormwater manhole and catch basin labels will be added when comments are addressed at resubmittal.

11. Please relocate the sanitary manhole to outside the stormwater detention basin by the proposed Washington Street entrance.

LEA Response: This manhole will be relocated when comments are addressed at resubmittal.

C7.3:

1. Please identify the scale of the drawing in inches:feet.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

2. Please indicate sheet numbers of sheets adjacent to matchlines in the format "See Sheet ___ of ___".

LEA Response: Relevant sheet numbers have been added to the matchlines.

3. Please provide rim and invert elevations of all proposed culverts and manholes discharging to culverts.

LEA Response: Rim and invert elevations are shown on the storm chart on sheet C6.4.

4. Please label all pipes as existing or proposed stormwater, sanitary, and watermain.

LEA Response: The utilities will be noted as existing or proposed when comments are addressed at resubmittal.

5. Please identify all pipe materials and diameters.

LEA Response: The material and diameter will be added to all of the utilities when comments are addressed at resubmittal.

6. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: A bridge has been added over the Heritage Trail similar to the crossing at Seventh Street.

7. Proposed 12" watermain on east side is shown on private property. Please relocate to hospital property and show watermain centered on 20' wide utility easement.

LEA Response: The waterline location has been revised and a utility easement added.

8. Proposed 8" watermain on east side is shown under detention basin. Please relocate to under detention basin berm.

LEA Response: The watermain layout has been revised. The watermain now runs beneath the roadway instead of beneath the stormwater basin.

9. Please call out stormwater manhole and catch basin designations to match profile.

LEA Response: Stormwater manhole and catch basin labels will be added when comments are addressed at resubmittal.

10. Please relocate the sanitary manhole to outside the stormwater detention basin by the proposed Washington Street entrance.

LEA Response: This manhole will be relocated when comments are addressed at resubmittal.

C7.4:

1. Profiles are difficult to read and contain question marks instead of stationing.

LEA Response: Profiles will be adjusted for clarification when comments are addressed at resubmittal.

C8.0:

1. Please indicate which pavement cross sections apply to pavement in City right-of-way.

LEA Response: The heavy duty pavement section would apply to the areas within City right-of-way.

- a. Pavement cross sections occurring in right-of-way to include pavement material and thickness.

LEA Response: Pavement materials and thicknesses are shown on detail I of sheet C8.0.

C8.1:

1. Please indicate if details are current.

LEA Response: The details are current per the standard drawings on the City of Marquette website.

C8.2:

1. Please indicate if details are current.

LEA Response: The details are current per the standard drawings on the City of Marquette website.

C8.3:

1. Please indicate if details are current.

LEA Response: The details are current per the standard drawings on the City of Marquette website.

L1.0:

1. Trees are planned over the existing watermain.

LEA Response: All proposed tree plantings will be located a minimum of 10' clear of any existing or proposed water mains.

2. Please increase size of font of notes north of multi-use path so that notes are legible.

LEA Response: The font size of the bearings and distances has been increased. The font size of the remaining notes is 0.8 tenths of an inch – which is our stnd. sizing. If requested, then we will enlarge further when comments are addressed at resubmittal.

3. Please delineate and label the City multi-use path.

LEA Response: Requested revision will be completed when comments are addressed at resubmittal.

4. Pattern book states there will be a bridge over the City multi-use path. So as not to introduce pedestrian-vehicle conflict points, please show bridge over multi-use path at the Washington Street similar to the bridge used for the multi-use path at Seventh Street.

LEA Response: A bridge has been added over the Heritage Trail similar to the crossing at Seventh Street.

5. There is nothing to screen the multi-use path from the parking lot proposed west of the proposed Washington Street entrance.

LEA Response: A heavy mix of evergreen and accent deciduous plantings is proposed along the medical campus interface with the Heritage Trail. It is the design intent to create a visual buffer screening along the trail of any proposed parking areas and service area functions. Additionally, plantings are proposed along the edges of the parking areas as shown on the detailed landscape plans.

L1.1:

1. Plans labeled "Detailed Landscape" have no detailed landscaping.

LEA Response: Plans have been updated.

2. Please delete the black shading on Baraga Avenue.

LEA Response: The black shading has been removed.

L1.2:

1. Plans labeled "Detailed Landscape" have no detailed landscaping.

LEA Response: Plans have been updated.

L1.3:

1. Plans labeled "Detailed Landscape" have no detailed landscaping.

LEA Response: Plans have been updated.

2. Please delete the black shading on Baraga Avenue and Spring Street.

LEA Response: The black shading has been removed.

Pattern Book

Page I:

1. Please show stormwater detention pond proposed east of helipad.

LEA Response: These specific items have been noted on the stormwater and grading plans. The goal of the Pattern Book is to address architectural, signage and

campus amenity level stnds. that will be applied throughout the entirety of the campus.

2. Please show Whetstone Brook.

LEA Response: The location of Whetstone Brook is visible in the aerial images where the current tree cover will be preserved. We will add a label denoting the waterway when comments are addressed at resubmittal.

3. Volume of existing stormwater basin south of Baraga Avenue is recognized by official FEMA floodplain maps. Please consult with FEMA before modifying the stormwater basin.

LEA Response; There will not be any modification made to the storage volume of the basin as part of the DLP campus improvements. However, the City's improvements to Baraga Ave. and the Round-about would impact this area.

Page 6:

1. Please replace the note "Heritage Trail Crossing" with the same note from page 1; "Iron Ore Heritage Trail to be Lowered with Driveway Bridge Crossing".

LEA Response: This clarification note will need to be added when comments are addressed at resubmittal.



MEMORANDUM

TO: City of Marquette Planning and Zoning Department
Attn. Andrea Landers, Planning/Zoning Official

RE: Response Letter to Prelim. City Comments, PUD Plan Submittal
City File No. 01-PUD-08-15

DATE: 7/21/2015

We are submitting this memorandum offering the following explanations for questions and plan comments noted by the departmental staff reviewers:

Submittal Documents:

- Plan Title: Preliminary & Final PUD Submittal, Marquette Replacement Hospital
Plans Dated: July 1, 2015
Plans Received: July 1, 2015
- Pattern Book

The Planning/Zoning Staff's review of the preliminary meeting plans and supplementary documentation has generated the following comments/questions:

General Comments/Questions

1. Missing Site Plan review application for the preliminary site plan review.
LEA Response: Both a PUD and Site Plan Application form have been completed and submitted with the package.
2. If you are only applying for the parcels mentioned in the site data to be included in this PUD request, then please remove the Washington street parcels. If you wish to keep them on the site plan then please provide a note that they are not included in the PUD request.
LEA Response: The parcels along Washington St. have been screened back and the proposed boundary of the PUD has been specifically noted.
3. Missing fencing for the helipad.
LEA Response: The Helipad fencing has been shown. This will involve a 3' height fence in keeping with the FAA published guidelines for the design of helipads.
4. Missing the flight path for the helicopters.
LEA Response: The helicopter flight path has been shown on the Overall Site Layout Plan, sht. C5.0.

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5. Missing the preparer's name and professional seal.
LEA Response: Littlejohn has been identified as the preparer of the plans on the drawings.

6. For the concept review missing the following:
 - a. Substantiation in writing that the criteria set forth in Section 80.30.3 are or will be met.
LEA Response: The proposed PUD submittal meets the following of the criteria identified by the City zoning ordinance (Section 80.30):
 - 1) Open space is being permanently preserved in the area along Whetstone Brook and will serve as a buffer to the residential areas located to the southeast of the medical campus;
 - 5) The Hospital is not an allowable use within the base zoning districts available within the City. Therefore, a PUD is being proposed to provide the community with improved healthcare through the construction of a new medical campus.
 - 6) The creation of a medical center campus is envisioned by the community's long-range plan.
 - 8) The proposed PUD allows for the re-development of a site that currently contains the City's Municipal Services Center. The site has also been approved as a brownfield site by the State of Michigan due to several environmental components.
 - 9) The site has been classified as a Brownfield site, as stated above;
 - 10) The PUD will control the development surrounding Whetstone Brook which is an environmentally sensitive feature.

 - b. A schematic land use plan containing:
 - i. The function of open space.
 - ii. The proposed phasing of the project.**LEA Response:** The Architectural Standards Book has identified a program of uses for the Open Space and the pedestrian connectivity throughout the site.

7. For the preliminary site plan review missing the following:
 - a. Complete and current legal description. Make sure your legal only contains parcels 0240013, 0514071, 0514072, and 0130100.
LEA Response: The applicable parcels for the PUD have been coordinated and match the MOU between DLP and the City of Marquette.

- b. All structures and lot lines within 100 feet of the site's property lines.
LEA Response: Structure locations have been shown accordingly.
- c. On the elevations missing height measurement from the grade.
LEA Response: Heights have been included on the architectural elevations sheets.
- d. Setbacks from the buildings to the lot lines.
LEA Response: Setbacks to the existing and proposed buildings have been shown on the layout plans.
- e. The location and screening for the dumpster.
LEA Response: The Landscape Plans have introduced screen plantings along the Heritage Trail frontage to mitigate views to the service area.
- f. The size of installation for the proposed plants/trees. Berms, retaining walls or fences shall be shown with elevations from the surrounding average grade.
LEA Response: The Landscape Plans denote the type and size of all plant materials.
- g. The method of shielding for the proposed lights.
LEA Response: The Site Lighting Plan denotes the type of fixtures and shielding provided. A photometric plan is included for review.
- h. The location of all permanent or temporary signs, existing or proposed, including their area, size, height, illumination, and the type of construction.
LEA Response: The Architectural Standards Booklet defines the location and types of signs being proposed for the campus. A variance is being requested to allow for the site specific sign standards.
- i. A complete boundary survey, completed by a licensed surveyor, of the PUD boundaries being requested.
LEA Response: A boundary survey prepared by TriMedia is included in the PUD plans.
- j. Indication of transition treatment including minimum building setbacks to land adjoining the PUD.
LEA Response: Minimum building setbacks are identified on the Overall Site Layout Plan (C5.0).
- k. Garage floor area.
LEA Response: The floor area for the garage has been included in the site calculations, as well as the campus build-out summary within the Arch. Stnds. Booklet..

l. The boundaries of the open space that are to be preserved or reserved.

LEA Response: The area being designated as preserved Open Space containing 4.7 acres is shown on the Landscape Plan and in the Stnds. Booklet.

m. The landscape plan is incomplete.

LEA Response: The Landscape Plans have been updated.

n. A written statement explaining in detail the full intent of the applicant, indicating the type of dwelling units or uses contemplated and resultant population, floor area, parking, and supporting documentation.

LEA Response: The intended uses within the campus are for a Hospital facility and associated medical support functions such as medical office, diagnostic functions, and accessory uses. The Arch. Stnds. Booklet outlines the intent of the development and the allowable build-out for the campus in accordance with the specified architectural standards.

o. The proposed phasing of the project with tentative timetables.

LEA Response: The intent is to begin construction in the Spring of 2016 and complete the initial phase of construction by Spring 2018. Subsequent phases of campus additions, etc. are not known at this time, but are accommodated within the proposed allowances for future increases in building area per the summary in the Arch. Stnds. Booklet..

p. A minimum of two site sections showing major building relationships and building site features.

LEA Response: Site Sections are included within the submittal (Sht. A4.0).

Cover Sheet

1. Please update the Plan Title to state "Concept & Preliminary PUD submittal" and remove "Preliminary & Final PUD Submittal".

LEA Response: The title has been revised.

2. The City File number would be 01-PUD-08-15.

LEA Response: The City's file number is indicated on the plans.

3. The parcel information is incorrect please remove 0240010 and replace with 0240013 and ~~024001~~20514072.

LEA Response: The parcel numbers have been modified.

4. Please remove all of the extra parcels that are not included in the purchase agreement. i.e. only show parcels 0240013, 0514071, 0514072, and 0130100.

LEA Response: The PUD boundary has been delineated on the Site Layout Plan. The Washington St. parcels are screened back, but remain on the plans to illustrate driveway connectivity to Washington St.

5. Missing acreage of open space.

LEA Response: The acreage of the Open Space has been delineated..

6. Why does the plan state 0 ft minimum required setback lines?

LEA Response: The proposed setbacks have been identified on the Site Layout Plans.

7. Missing Garage S.F.

LEA Response: The square footage of the Garage is included on the cover sheet and the layout plans..

8. Missing building height.

LEA Response: The building height is noted on the architectural elevations, as well as the site data contained on the cover and Site Layout Plan.

9. Missing required parking spaces.

LEA Response: A calculation for required parking has been included.

10. Please remove floor area ratio labels info if you are not going to use it.

LEA Response: FAR reference has been removed.

11. The zoning is incorrect on the west side (it is Industrial) and the southeast side missing label for RM – Multiple Family.

LEA Response: The adjacent zoning has been revised on the plans.

12. The parcels off of Washington Street are shown; please provide a note that they are not included in this PUD request or remove from the site plan.

LEA Response: The limits of the PUD are shown on the Cover Sht. And the Site Layout Plan.

Sheet C5.0

1. The parcel information is incorrect please remove 0240010 and replace with 0240013 and ~~024001~~20514072.

LEA Response: Included.

2. Missing acreage of open space.

LEA Response: : Included.

3. Why does the plan state 0 ft minimum required setback lines?

LEA Response: The proposed setbacks have been identified on the Site Layout Plans.

4. Missing Garage S.F.

LEA Response: Included.

5. Missing building height.

LEA Response: Included.

6. Missing required parking spaces.

LEA Response: Included.

7. Please remove floor area ratio labels info if you are not going to use it.

LEA Response: FAR reference has been removed.

8. There is a label stating "Hospital connection to Heritage Trail" and I believe the arrow is not in the right location.

LEA Response: The note reference has been revised.

9. The zoning is incorrect on the west side (it is Industrial) and the southeast side missing label for RM – Multiple Family.

LEA Response: Revised.

10. Missing snow storage labels and calculations.

LEA Response: Snow storage calculations and storage areas have been added to the Site Layout Plan..

11. Please provide on the plan the required screening of the parking lot from the residential zoning on the east side. Per the Section 80.42.2.C of the Zoning Ordinance, "(12)An off-street parking lot abutting a residential district shall be provided with a continuous six foot (6') solid or stockade style screening fence. This screening fence shall be provided on all sides where the abutting zoning district is designated as a residential district."

LEA Response: The Landscape Plans have been updated to illustrate the desired screening for the parking areas.

Sheets C5.1 –C5.3

1. Overlapping labels, please fix.

2. On Sheet C5.2 one of the measurements for the loading dock area is overlapped from text, please move the measurement text to be legible.

LEA Response: The plans have been revised accordingly.

Sheet E1.1

1. The light poles are more than 20 feet high, which is the maximum for the Zoning Ordinance.

LEA Response: We are requesting a variance to allow for 30' height light fixtures.

2. Missing helipad lights. There are notes stating the helipad lights are not shown on plan but they are required.

LEA Response: Helipad lights have been indicated.

Sheet L1.0

1. Missing size at installation.

LEA Response: The plant material sizes have been clarified..

Sheets L1.1-L1.3

1. Missing labels on the plan from the keynote legend.

LEA Response: Plans have been updated..

Sheets A1- A3

1. Missing height measurement from the grade.
2. The sheets call out vertical expansion, please state what phase this is proposed to be.

LEA Response: Plans have been updated.

Pattern Book

1. On Page 8, it states that "any parking lot adjoining a street shall be screened to a height of three feet by walls, berms, landscaping, or a combination of these." Please state how you are meeting your requirement adjacent to Baraga Ave.

LEA Response: The Landscape Plans have been updated to reflect the intended screening.

2. On Page 9, it states the "parking lot light standards not to exceed twenty-two feet in height." The ordinance allows for a maximum of 20 feet and Sheet E1.1 of the site plan states the light poles are 24 to 34 feet of height from the grade.

LEA Response: We are requesting a variance to allow for 30' height light fixtures..

3. On Page 9, it states lighting used solely for the pedestrian not to exceed 16 feet in height, would the building lighting mounted at 24 feet be considered this?

LEA Response: Accent lighting on the building is proposed to exceed the 16' height limitation to pedestrian area lighting..

4. On Page 11, there are Sign standards, these standards are not from our ordinance. Are these your own proposed standards?

LEA Response: We are requesting a variance to allow for the use of the proposed Signage standards..

SITE PLAN REVIEW COMMITTEE
Site Plan Review**CITY OF MARQUETTE**
300 W. Baraga
Marquette, MI 49855**File:** 01-PUD-08-15
Date: July 31, 2015**Applicant:** Littlejohn, Inc.
Location: 850 W. Baraga Avenue**Submittal Documents:**

Plan: Marquette Replacement Hospital
Architectural & Engineering Company: Littlejohn, Inc.
Approving Architect/Engineer: Architect – Jeffrey Heinze, Engineer – James Littlejohn
Plans Dated: Stamped “Received July 21, 2015”

*City of Marquette Engineering standards are to be followed and are available online at:
www.mqtcty.org/Departments/Engineering/Standards/Design-and-Construction-Standards-2015.pdf*

The following are plan review comments from the Engineering Department for the documents identified above.

General Comments for All Applicable Sheets:

1. Please label the areas of West Spring Street, West Baraga Avenue, and the proposed roundabout that are inside the bold dashed lines as “Work Done by City of Marquette”.
2. Please label contours at 5 foot intervals.
3. Please label all street names.
4. Please delineate and label the City multi-use path.
5. Please identify the scale of the drawing in inches:feet. If necessary, provide two scales and designate scale for half size and full size sheets.
6. Please remove or reduce the font size of the bearings and distances where oversized.
7. Please label all property line bearings and distances.
8. Please revise that portion of the existing 8” watermain that is shown as 12”. Watermain information is provided on Figure 1 provided at the end of this review and shows where the 8” watermain transitions to the 12” watermain.
9. Please show all the sanitary sewers on the west side of the property as shown on Figure 2 provided at the end of this review. Please include the sanitary sewer from the City storage building that is to remain and the three sanitary laterals discharging to manhole 2012.
10. Please show the existing storm sewers as shown on Figure 2 provided at the end of this review, including
 - a. The storm sewer located on the west side of the property. This storm sewer serves the Liberty Way property and will need to be accommodated.
 - b. The storm sewers under Baraga Avenue.

11. Please identify material and diameter of all existing utilities. Utility material and diameter information is provided on Figure 2 provided at the end of this review.
12. Please show and label the existing check valve vault on the east side of the property and west of 620 Baraga Avenue. This check valve is shown on Figure 3 provided at the end of this review.

C1.1: Boundary Survey

1. Please correct overlapping text.
2. Please have preparing surveyor sign and stamp the sheet.

C2.0: General Notes:

1. Please include a construction note stating “All utility construction work to be accepted by the City of Marquette into their utility system and all work done in public rights of way or easements must be done in accordance with Michigan Department of Transportation and City of Marquette standards and specifications”.

C3.0: Erosion Control

1. Please include a construction note stating that soil erosion control permits are required.

C4.0: Demolition

1. Please include a note that a grading easement is required for any work on City property adjacent to multi-use path.
2. Please include a note indicating abandonment of:
 - a. The 6” watermain and fire hydrant located east of existing east entrance.
 - b. The 10” water service to the Service Center
3. Please include the following notes:
 - a. A permit is required for the abandonment of the 2” water service.
 - b. A permit is required for the abandonment of the 10” water service.
4. Please provide a note indicating that the three sewer laterals discharging to manhole 2012 will be abandoned.
 - a. Please include a note that a permit will be required for abandoning the three sanitary sewer laterals discharging to manhole 2012.
5. Please include a note if the sanitary lateral is to be abandoned from the City storage building that is to remain.
 - a. If yes, please include a note that a permit will be required to abandon the sanitary sewer lateral.

C5.0: Overall Layout Plan

1. Please label the bio filtration area immediately north of Baraga Avenue and west of main Baraga Avenue entrance from roundabout.

C5.3: Detailed Layout Plan

1. Please provide the calculations and results indicating if site distance requirements are met at entrance at Baraga Avenue.
2. Please add a note referencing the location of the detail sheet number(s) for the grade separated driveway crossing (i.e. “multi-use path tunnel”) to Washington Street:

3. Consider a dedicated left turn only lane and dedicated right turn only lane at the driveway exiting to Washington Street.
 - a. Please provide a traffic study for Washington Street and the Washington Street driveway including traffic volumes, stacking, gaps, etc.

C6.3: Detailed Grading Plan

1. Please identify the following at the grade separated driveway crossing (i.e. “tunnel”) to Washington Street:
 - a. Elevation of the multi-use path at the east and west end of the tunnel.
 - b. Elevation of the road at the east and west end of the tunnel.
 - c. Invert elevation of the deck of the tunnel (i.e. ceiling elevation) at the east and west end of the tunnel.
 - d. The height clearance of the tunnel
 - i. Please provide a minimum tunnel height clearance of 9 feet and
 - e. The width of the tunnel.
 - i. Please provide a minimum clearance width of 14 feet.
2. Please include a detail sheet for the box culvert tunnel, deck, railings, wingwalls, façade treatment of wingwalls, inside lighting, etc.
 - a. Please provide painted cobblestone façade wingwall treatments similar to the façade on the Seventh Street tunnel.
 - b. Please provide inside lighting similar to the Seventh Street tunnel.
 - c. Additional information on the above details is available from the Upper Peninsula Concrete Pipe Company of Escanaba at 906-786-0934.
3. Please add a note referencing the location of the box culvert detail sheet number(s).

C6.4: Storm Sewer Profile

1. Consider providing a storm sewer profile.

C7.0: Overall Utility Plan

1. Please show and label all the proposed storm sewers.
2. Please center the proposed 12” watermain on east side on the 20’ wide utility easement.
3. Please identify and label the location of the water meter to the hospital.
4. Please provide a 10 foot separation between the 8” watermain and 8” sewer line where they are proposed to be in parallel on the east and north sides of the hospital.
5. Please provide a 20 foot easement centered around each fire hydrant and fire hydrant service line.
6. An easement is not required for the proposed sanitary sewer that will serve the hospital. Please remove easement lines where provided solely for the hospital sanitary sewer.
7. Please prepare, record, and show a 20 foot easement centered on the existing 15” RCP sanitary sewer that runs through the west end of property.
8. Please include the following notes:
 - a. Two permits are required for tapping the two proposed 8” watermains to the existing watermain on Baraga Avenue
 - b. A permit is required for tapping the proposed 8” sanitary sewer line to the City sanitary sewer on Spring Street.

C7.1 – C7.3: Detailed Utility Plans

1. Please provide a gate valve on each side of each tee to each proposed fire hydrant.
2. Please provide a gate valve at the property line at each connection of the proposed 8” watermain loop to the watermain under Baraga Avenue.

C7.5: Watermain Profile

2. Please provide a watermain profile showing proposed surface and 6.5’ of burial.
3. Please show and label all utility crossings (storm sewer, sanitary sewer, etc.) and label each pipe (type, existing/proposed, diameter, material).

Note:

The applicant will be required to complete the permit application for the proposed 8” watermain for the Michigan Department of Environmental Quality (MDEQ), including plans, profiles, standards, and specifications. The permit will then be submitted by the City of Marquette to the MDEQ.

- a. Please submit the permit application to the City upon approval of plans.

L1.0:

1. Plans show trees within 10’ of proposed watermain. Please revise and include note that no trees are to be planted within 10’ of watermain.

Additional review comments are likely upon resubmittal of revised plans.

Please reply to these comments point by point. A digital copy is available upon request.

Respectfully Submitted,
Engineering Department

J:\Site Plan Review Files\2015\01-PUD-08-15 Hospital\07-31-15.doc



Figure 1: Location of Transition from 8" to 12" Watermain

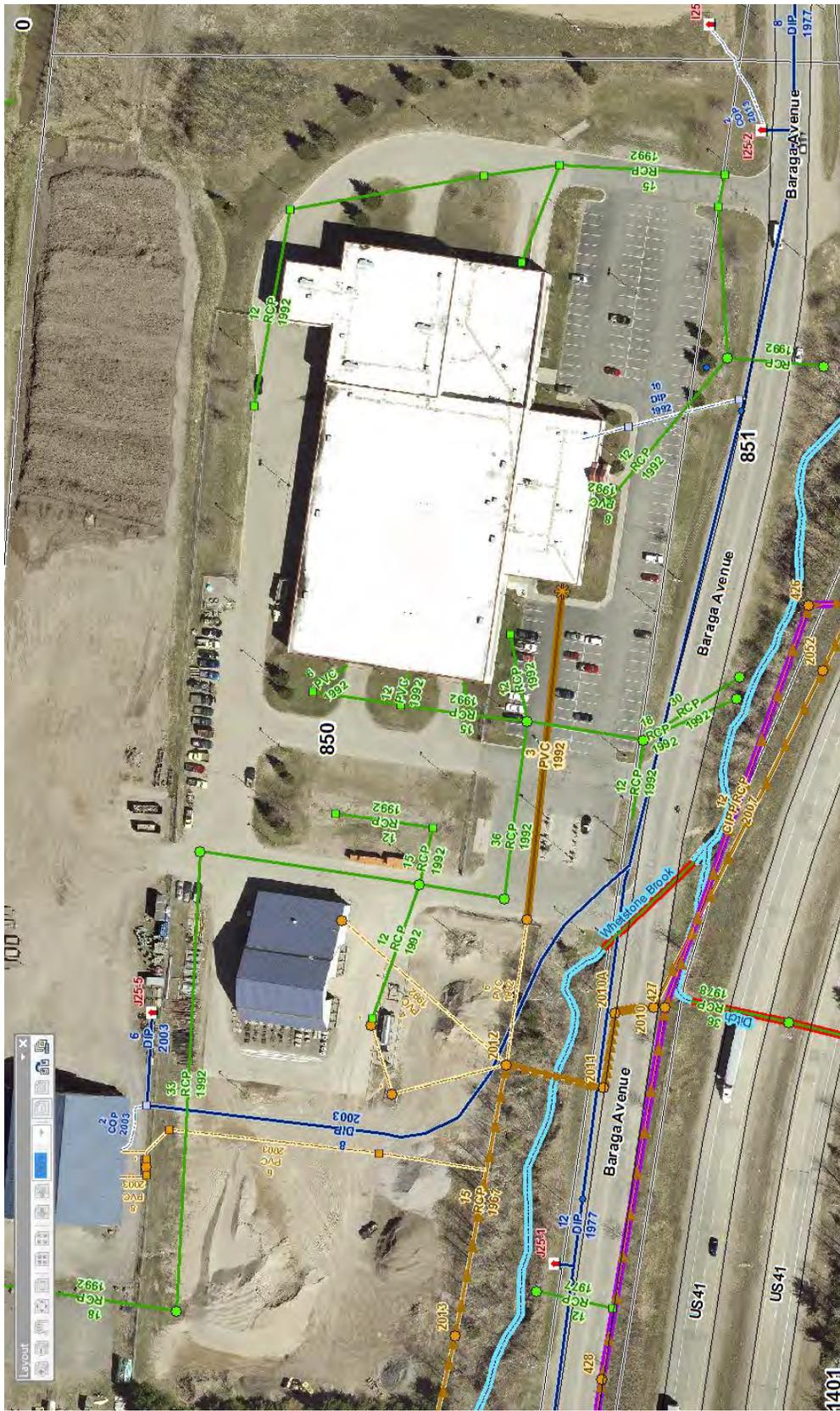


Figure 2: Existing Utilities



Figure 3: Location of Existing Check Valve Vault



**CITY OF MARQUETTE
 PLANNING AND ZONING
 300 W. BARAGA AVENUE
 MARQUETTE, MI 49855
 (906) 228-0425
 www.mqtcty.org**

MEMORANDUM

TO: Jeffrey Heinze, Littlejohn; Greg Zarnick, LifePoint Health
FROM: Andrea Landers, Planning/Zoning Official
DATE: August 4, 2015
SUBJECT: **01-PUD-08-15 (also 17-SPR-08-15) – Concept and Preliminary PUD review for Hospital replacement located at for 850 W. Baraga Ave (PIN: 0240013, 0514071, 0514072, and 0130100)**

Submittal Documents:

- Plan Title: Concept & Preliminary PUD Submittal, Marquette Replacement Hospital
 Plans Dated: July 20, 2015
 Plans Received: July 21, 2015
- Pattern Book

The Planning/Zoning Staff's review of the site plan and supplementary documentation has generated the following comments/questions:

General Comments/Questions

1. **Still missing the residential structures and lot lines within 100 feet of the site's property lines, please provide this.**
2. The general location of the signs are shown in the pattern book, but please provide the exact location on the site plan indicating setbacks to the nearest lot line as we have to verify they meet the Sign Ordinance in regard to location.
3. Do you plan to have any accommodations for transit stops (bus pick-ups and drop offs)?

Cover Sheet

1. The parcel information is still incorrect please remove 0240012.
2. Please remove floor area ratio of site, as you are not using it.

Sheet C1.1

1. Text is overlapping, please fix.
2. Please have the surveyor sign and seal this sheet.

Sheet C5.0

1. The parcel information is still incorrect please remove 0240012.
2. Please remove floor area ratio of site, as you are not using it.

Sheet E1.1

1. There are notes still stating the helipad lights are not shown on plan but they are required. Please show all of the lights.

Pattern Book

1. Please remove parcel 0240012 as that is not part of the purchase agreement and will remain with the City. This will affect your Zone 2, future medical office building and the B4 sign. Please update the B4 sign location so it is on your property, if you wish to be on the City property then you will need to apply for a license.

2. B5 is an off premise sign, did you get permission from the property owner for it?
3. The site plan indicates a tunnel for the heritage trail connection and the pattern book discusses it to be at grade, please update the pattern book to reflect the site plan.
4. Page 6 indicates pedestrian circulation along W. Baraga, but the site plan does not indicate the addition of a sidewalk. Please explain.
5. As Washington Street redevelops in this area, this route has the potential to carry large amounts of bicycle and pedestrian traffic. This drive should also have a "stop" or "yield" sign where it intersects the perimeter road. Please consider adding a sidewalk.
6. Along W. Baraga Ave if this will be used as pedestrian circulation then the plan should include properly marked crosswalks in the two hospital drives to be crossed. It should also include the extension of barrier curb from the west end of the existing curb near the property east boundary to the curb radius on the east side of the main entrance drive, along with appropriate drainage collection provisions.

Note: I will provide you with a digital file of this memo so that you may respond to my comments on this sheet and I will include your comments in the STAFF FILE REVIEW/ANALYSIS to the Planning Commission.

In order to do so, I must receive your comments no later than August 10, 2015.

New sets of plans or plan sheets will NOT be accepted per the City of Marquette Zoning Ordinance.



Andrea Landers <alanders@mqctcy.org>

(no subject)

Ian Davis <idavis@mqctcy.org>
To: Andrea Landers <alanders@mqctcy.org>

Wed, Aug 5, 2015 at 8:50 AM

Andrea,

Comments on the DLP site plan are as follows;

Sheet C5.0 - The helicopter glide path crosses the city parcel located on the NW corner of Spring st. and 7th st. This is the potential location of a future fire station. As such, there may be a communications and/or hose tower placed on this parcel. The helicopter glide path will have to be moved farther north so as not to cross this parcel.

Thank you,

[Quoted text hidden]

—

Ian Davis
Marquette City Fire Inspector
418 S. Third St.
Marquette, MI 49855
Office: 906-225-8941
Fax: 906-228-0413
Email: idavis@mqctcy.org

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Andrea Landers <alanders@mqcty.org>

01-PUD-08-15 site plan

Blake Rieboldt <brieboldt@mqcty.org>
To: Andrea Landers <alanders@mqcty.org>

Tue, Aug 4, 2015 at 9:34 AM

Nope. The bike path crossing was my only concern, but that seemed to be addressed.

On Tue, Aug 4, 2015 at 8:38 AM, Andrea Landers <alanders@mqcty.org> wrote:

Hi Blake,

Did you have any comments for the Hospital replacement PUD plans?

Thanks,
Andrea

--

Andrea Landers
Planning/Zoning Official
Community Development Department
City of Marquette
alanders@mqcty.org
(906)225-8383

--

R. Blake Rieboldt
Patrol Captain
Marquette City Police Department
300 W. Baraga Ave.
Marquette, Michigan 49855
(906)228-0400
brieboldt@mqcty.org



MEMORANDUM

TO: City of Marquette Planning and Zoning Department
Attn. Andrea Landers, Planning/Zoning Official

RE: Response Letter to Prelim. City Engineering Comments, Site Plan Submittal
City File No. 01-PUD-08-15

DATE: 8/10/2015

We are submitting this memorandum offering the following explanations for questions and plan comments noted by the departmental staff reviewers:

Submittal Documents:

Plan: Marquette Replacement Hospital
Architectural & Engineering Company: Littlejohn, Inc.
Approving Architect/Engineer: Architect – Jeffrey Heinze, Engineer – James Littlejohn
Plans Dated: Stamped “Received July 21, 2015”

City of Marquette Engineering standards are to be followed and are available online at: www.mqtcty.org/Departments/Engineering/Standards/Design-and-Construction-Standards-2015.pdf

The following are plan review comments from the Engineering Department for the documents identified above.

General:

1. Please label the areas of West Spring Street, West Baraga Avenue, and the proposed roundabout that are inside the bold dashed lines as “Work Done by City of Marquette”.
LEA Response: The scope of work has been noted on sheets that pertain to the new improvements (i.e. Site Layout Plan, sht. C5.0). However, we will add requested labels on this specific sheet when comments are addressed at resubmittal.
2. Please label contours at 5 foot intervals.
LEA Response: Five foot contours have been labeled on the Site Detailed Grading Plans, sheets C6.1, C6.2 and C6.3. Per the conference call with the City staff, Sheet C6.0 shall be allowed to continue to reflect 10’ intervals as being labeled since only two-foot contours are reflected at this plan scale.

3. Please label all street names.
LEA Response: All streets have been labeled. Additional labels will be added prior to resubmittal if necessary for clarification.
4. Please delineate and label the City multi-use path.
LEA Response: The Heritage Trail has been labeled. Additional labels will be added prior to resubmittal if necessary for clarification.
5. Please identify the scale of the drawing in inches:feet. If necessary, provide two scales and designate scale for half size and full size sheets.
LEA Response: The graphic scales will be updated as requested prior to resubmittal.
6. Please remove or reduce the font size of the bearings and distances where oversized.
LEA Response: The font size of the bearings and distances has been reduced where oversized.
7. Please label all property line bearings and distances.
LEA Response: All property line bearings and distances will be added prior to resubmittal.
8. Please revise that portion of the existing 8" watermain that is shown as 12". Watermain information is provided on Figure 1 provided at the end of this review and shows where the 8" watermain transitions to the 12" watermain.
LEA Response: The existing watermain sizes have been corrected per the provided Figure 1.
9. Please show all the sanitary sewers on the west side of the property as shown on Figure 2 provided at the end of this review. Please include the sanitary sewer from the City storage building that is to remain and the three sanitary laterals discharging to manhole 2012.
LEA Response: The sanitary sewers shown in Figure 2 have been added to the plans. The three laterals currently discharging into manhole 2012 will be removed.
10. Please show the existing storm sewers as shown on Figure 2 provided at the end of this review, including
 - a. The storm sewer located on the west side of the property. This storm sewer serves the Liberty Way property and will need to be accommodated.
LEA Response: The existing storm sewer has been added to the plans. The portions that will be removed have been noted on the Demolition Plan, sheet C4.0. The new storm line added to accommodate the off-site drainage is shown on the Site Grading Plan, sheet C6.0.

- b. The storm sewers under Baraga Avenue.

LEA Response: The existing storm sewers under Baraga Avenue have been added to the plans.

11. Please identify material and diameter of all existing utilities. Utility material and diameter information is provided on Figure 2 provided at the end of this review.
LEA Response: Material and diameter of all existing utilities will be added to the plans per Figure 2 prior to resubmittal.

12. Please show and label the existing check valve vault on the east side of the property and west of 620 Baraga Avenue. This check valve is shown on Figure 3 provided at the end of this review.

LEA Response: The existing check valve shown on Figure 3 will be labeled prior to resubmittal.

C1.1: Boundary Survey

1. Please correct overlapping text.

LEA Response: The overlapping text has been corrected.

2. Please have preparing surveyor sign and stamp the sheet.

LEA Response: The Boundary Survey will be stamped and signed by the preparing surveyor prior to resubmittal.

C2.0: General Notes:

1. Please include a construction note stating “All utility construction work to be accepted by the City of Marquette into their utility system and all work done in public rights of way or easements must be done in accordance with Michigan Department of Transportation and City of Marquette standards and specifications”.

LEA Response: The requested note has been added to the General Notes section of the General Notes, sheet C2.0.

C3.0: Erosion Control

1. Please include a construction note stating that soil erosion control permits are required.

LEA Response: The requested note will be added to the Erosion Control Notes section of the General Notes, sheet C2.0, prior to resubmittal.

C4.0: Demolition

1. Please include a note that a grading easement is required for any work on City property adjacent to multi-use path.

LEA Response: The requested note will be added to the Demolition Notes section of the General Notes, sheet C2.0, prior to resubmittal.

2. Please include a note indicating abandonment of:
 - a. The 6” watermain and fire hydrant located east of existing east entrance.
LEA Response: The 6” watermain and fire hydrant east of the existing entrance have been noted to be removed on the Demolition Plan, sheet C4.0.
 - b. The 10” water service to the Service Center
LEA Response: The 10” water service to the Service Center has been noted to be removed on the Demolition Plan, sheet C4.0.
3. Please include the following notes:
 - a. A permit is required for the abandonment of the 2” water service.
LEA Response: The requested note has been added to the Demolition Notes section of the General Notes, sheet C2.0.
 - b. A permit is required for the abandonment of the 10” water service.
LEA Response: The requested note has been added to the Demolition Notes section of the General Notes, sheet C2.0.
4. Please provide a note indicating that the three sewer laterals discharging to manhole 2012 will be abandoned.
 - a. Please include a note that a permit will be required for abandoning the three sanitary sewer laterals discharging to manhole 2012.
LEA Response: The requested note has been added to the Demolition Notes section of the General Notes, sheet C2.0.
5. Please include a note if the sanitary lateral is to be abandoned from the City storage building that is to remain.
 - a. If yes, please include a note that a permit will be required to abandon the sanitary sewer lateral.
LEA Response: The sanitary sewer lateral to the existing City storage building will remain in place.

C5.0: Overall Layout Plan

1. Please label the bio filtration area immediately north of Baraga Avenue and west of main Baraga Avenue entrance from roundabout.
LEA Response: The bio filtration area has been labeled.

C5.3: Detailed Layout Plan

1. Please provide the calculations and results indicating if site distance requirements are met at entrance at Baraga Avenue.
LEA Response: Specific sight distance information will be added when comments are addressed at Final PUD submittal. However, there is not any site distance issue perceived with any of the proposed entrances.

2. Please add a note referencing the location of the detail sheet number(s) for the grade separated driveway crossing (i.e. “multi-use path tunnel”) to Washington Street:
LEA Response: Notes have been added referencing the separated driveway crossing detail shown on sheet C8.7.

3. Consider a dedicated left turn only lane and dedicated right turn only lane at the driveway exiting to Washington Street.
 - a. Please provide a traffic study for Washington Street and the Washington Street driveway including traffic volumes, stacking, gaps, etc.
LEA Response: A trip generation traffic analysis will be provided for the Washington Street entrance with the Final PUD submittal. We will consider the left turn and right turn only lanes based upon the trip generation findings. We will continue to coordinate with City staff during the final design phase.

C6.3: Detailed Grading Plan

1. Please identify the following at the grade separated driveway crossing (i.e. “tunnel”) to Washington Street:
 - a. Elevation of the multi-use path at the east and west end of the tunnel.
LEA Response: The multi-use path is nearly flat beneath the roadway crossing. The path elevation on both the east and west ends of the tunnel are 702.85.
 - b. Elevation of the road at the east and west end of the tunnel.
LEA Response: The road elevation at the multi-use path is 712.7.
 - c. Invert elevation of the deck of the tunnel (i.e. ceiling elevation) at the east and west end of the tunnel.
LEA Response: The invert of the tunnel deck is 711.9.
 - d. The height clearance of the tunnel
 - i. Please provide a minimum tunnel height clearance of 9 feet and
LEA Response: The tunnel clearance is 9.0 feet with the aforementioned grade adjustments.
 - e. The width of the tunnel.
 - i. Please provide a minimum clearance width of 14 feet.
LEA Response: The inside tunnel width is 14 feet.
2. Please include a detail sheet for the box culvert tunnel, deck, railings, wingwalls, façade treatment of wingwalls, inside lighting, etc.
 - a. Please provide painted cobblestone façade wingwall treatments similar to the façade on the Seventh Street tunnel.
LEA Response: Wall treatments will be provided similar to the Seventh Street tunnel, as requested

b. Please provide inside lighting similar to the Seventh Street tunnel.

LEA Response: Lighting will be provided similar to the Seventh Street tunnel.

c. Additional information on the above details is available from the Upper Peninsula Concrete Pipe Company of Escanaba at 906-786-0934.

LEA Response: Additional information will be obtained from the Peninsula Concrete Pipe Company of Escanaba prior to finalizing the tunnel design.

3. Please add a note referencing the location of the box culvert detail sheet number(s).

LEA Response: Notes have been added referencing the separated driveway crossing detail shown on sheet C8.7.

C6.4: Storm Sewer Profile

1. Consider providing a storm sewer profile.

LEA Response: Storm sewer profiles will be provided prior to resubmittal.

C7.0: Overall Utility Plan

1. Please show and label all the proposed storm sewers.

LEA Response: Storm sewer have been shown and labeled.

2. Please center the proposed 12" watermain on east side on the 20' wide utility easement.

LEA Response: A 20 foot wide utility easement has been added around all watermains.

3. Please identify and label the location of the water meter to the hospital.

LEA Response: The water meter locations are shown on the Detailed Utility Plan sheet C7.2.

4. Please provide a 10 foot separation between the 8" watermain and 8" sewer line where they are proposed to be in parallel on the east and north sides of the hospital.

LEA Response: The water main has been adjusted to provide the required 10 foot horizontal separation.

5. Please provide a 20 foot easement centered around each fire hydrant and fire hydrant service line.

LEA Response: A 20 foot wide utility easement will be added around all fire hydrants and service lines prior to Final PUD submittal.

6. An easement is not required for the proposed sanitary sewer that will serve the hospital. Please remove easement lines where provided solely for the hospital sanitary sewer.

LEA Response: Easements have been removed from the hospital service lines, but will be retained on the sanitary sewer mains throughout the campus in order to allow these improvements to qualify for Brownfield activities.

7. Please prepare, record, and show a 20 foot easement centered on the existing 15” RCP sanitary sewer that runs through the west end of property.

LEA Response: A 20 foot easement will be provided along the existing 15” RCP sanitary sewer prior to resubmittal.

8. Please include the following notes:

- a. Two permits are required for tapping the two proposed 8” watermains to the existing watermain on Baraga Avenue

LEA Response: The requested note has been added to the Site Utility Notes section of the General Notes, sheet C2.0.

- b. A permit is required for tapping the proposed 8” sanitary sewer line to the City sanitary sewer on Spring Street.

LEA Response: The requested note has been added to the Site Utility Notes section of the General Notes, sheet C2.0.

C7.1 – C7.3: Detailed Utility Plans

1. Please provide a gate valve on each side of each tee to each proposed fire hydrant.

LEA Response: Gate valves will be added to each side of proposed hydrants prior to resubmittal.

2. Please provide a gate valve at the property line at each connection of the proposed 8” watermain loop to the watermain under Baraga Avenue.

LEA Response: Gate valves will be as requested prior to resubmittal.

C7.5: Watermain Profile

1. Please provide a watermain profile showing proposed surface and 6.5’ of burial.

LEA Response: A watermain profile will be added prior to resubmittal.

2. Please show and label all utility crossings (storm sewer, sanitary sewer, etc.) and label each pipe (type, existing/proposed, diameter, material).

LEA Response: All crossings will be labeled on the water main profile prior to resubmittal.

Note:

The applicant will be required to complete the permit application for the proposed 8” watermain for the Michigan Department of Environmental Quality (MDEQ), including

plans, profiles, standards, and specifications. The permit will then be submitted by the City of Marquette to the MDEQ.

- a. Please submit the permit application to the City upon approval of plans.

LEA Response: The permit application will be submitted to the City upon approval of plans.

L1.0:

1. Plans show trees within 10' of proposed watermain. Please revise and include note that no trees are to be planted within 10' of watermain.

LEA Response: All trees will be planted outside of the easement limits of the public utilities.

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MEMORANDUM

TO: City of Marquette Planning and Zoning Department
Attn. Andrea Landers, Planning/Zoning Official

RE: Response Letter to Prelim. City Comments, PUD Plan Submittal
City File No. 01-PUD-08-15, (also 17-SPR-08-15) – Concept and Preliminary PUD review
for Hospital replacement located at for 850 W. Baraga Ave (PIN: 0240013, 0514071,
0514072, and 0130100)

DATE: 8/10/2015

We are submitting this memorandum offering the following explanations for questions and plan comments noted by the departmental staff reviewers:

Submittal Documents:

- Plan Title: Concept & Preliminary PUD Submittal, Marquette Replacement Hospital
Plans Dated: July 20, 2015
Plans Received: July 21, 2015
- Pattern Book

The Planning/Zoning Staff's review of the preliminary meeting plans and supplementary documentation has generated the following comments/questions:

General Comments/Questions

1. Still missing the residential structures and lot lines within 100 feet of the site's property lines, please provide this.
LEA Response: We will add these structures to the plans at the time of Final PUD submittal.
2. The general location of the signs are shown in the pattern book, but please provide the exact location on the site plan indicating setbacks to the nearest lot line as we have to verify they meet the Sign Ordinance in regard to location.
LEA Response: We will add a Site Signage Plan to the document set providing setback dimensions from the public right-of-way to proposed signs. The sight distance triangles will be analyzed to avoid conflicts.
3. The approach flight path for the helipad is shown passing over the property that the City plans to build a fire station, and it will have some sort of tower structure, either for hose, training, or communications antennae. It is likely that this would pose a hazard to helicopters approaching the landing site from that direction. Also related to the helipad, this area has significant prevailing west winds. While the helipad appears in an open area during the initial development, buildout plans show it located between future expansions of the

hospital itself, future medical office II, and a City fire station. Will approaching in a stiff wind and then dropping into a sheltered area or area with eddied wind patterns as it drops beneath the roof line of the buildings pose any issues for maintaining control of the aircraft. During the winter, these prevailing west winds can be expected to sweep snow from high roofs and deposit it in very deep drifts on the leeward lower roof levels. This should be considered not only in the design for snow loads but also in the placement of vents, chimneys, and other roof-top features. The Service Center required extra winter roof maintenance and some after-the-fact modifications to deal with this issue that had a greater effect than was considered in the original design.

LEA Response: The Helipad location will be shifted slightly to the north to remove the approach flight pattern from crossing over the City owned parcel. With regard to wind patterns, etc., the Helipad location will be vetted with the flight crew to obtain their input and approval. The desired location for the approach is landing into the prevailing wind direction; however, the detailed specifics of the approach will be further refined. We will continue to coordinate the final location for the Helipad with City staff.

4. What accommodations are provided for transit stops (bus pick-ups and drop offs)?

LEA Response: The Hospital will work with the County Transit provider and the City to develop a plan for the expanded bus circuit to accommodate drop-off and pick-up capability at the Hospital campus.

Cover Sheet

1. The parcel information is still incorrect please remove 0240012.

LEA Response: It is agreed that this parcel reference is not included within the PUD. The parcel number reference will be removed from the Final PUD submittal documents.

2. Please remove floor area ratio of site, as you are not using it.

LEA Response: The reference to FAR (Floor Area Ratio) will be removed from the Final PUD submittal documents.

Sheet CI.1

1. Text is overlapping, please fix.

LEA Response: The text conflict will be corrected at the time of Final PUD submittal.

2. Please have the surveyor sign and seal this sheet.

LEA Response: A signed and sealed site boundary survey will be included in the Final PUD submittal documents.

Sheet C5.0

1. The parcel information is still incorrect please remove 0240012.

LEA Response: It is agreed that this parcel reference is not included within the PUD. The parcel number reference will be removed from the Final PUD submittal documents.

2. Please remove floor area ratio of site, as you are not using it.

LEA Response: The reference to FAR (Floor Area Ratio) will be removed from the Final PUD submittal documents.

Sheet E1.1

1. There are notes still stating the helipad lights are not shown on plan but they are required. Please show all of the lights.

LEA Response: The required Helipad lighting will be shown on the Final PUD submittal documents. These lights are ground-mounted and define the landing surface for the helicopter pilots. The lights will not impact light spillage from the site.

Pattern Book

1. Please remove parcel 0240012 as that is not part of the purchase agreement and will remain with the City. This will affect your Zone 2, future medical office building and the B4 sign. Please update the B4 sign location so it is on your property, if you wish to be on the City property then you will need to apply for a license.

LEA Response: The Pattern Book will be adjusted to remove the City's parcel of land from the booklet graphics. The delineation of the Zone 2 building area and B4 signage location will be adjusted accordingly.

2. B5 is an off premise sign, did you get permission from the property owner for it?
LEA Response: The B5 sign location will be re-located onto the hospital owned land parcels.

3. The site plan indicates a tunnel for the heritage trail connection and the pattern book discusses it to be at grade, please update the pattern book to reflect the site plan.
LEA Response: The Pattern Book text will be adjusted at the time of Final PUD Plans submittal to reflect a grade-separated drive crossing at the Heritage Trail.

4. Page 6 indicates pedestrian circulation along W. Baraga Avenue and the drive from Washington Street, but the site plan does not indicate the addition of a sidewalk. Please explain.

LEA Response: Per the conference call with the City staff on 8/4/2015, it was agreed that the City of Marquette will be providing a sidewalk along the reconstructed section of Baraga Ave. which will, in turn, connect to the walks being proposed on the medical campus.

Regarding pedestrian access from Washington St. to the medical campus, it was agreed that a pedestrian sidewalk will be added along the side of the access drive to the medical campus to provide better pedestrian access. The walk will be shown on the Final PUD Plans.

5. As Washington Street redevelops in this area, this route has the potential to carry large amounts of bicycle and pedestrian traffic. This drive should also have a "stop" or "yield" sign

where it intersects the perimeter road.

LEA Response: It is the intent to have a 3-way stop condition where the drive from Washington St. intersects the perimeter hospital drive. Stop signs will be provided on the Final PUD Plans at the 3 legs of the intersection.

6. Along W. Baraga Ave if this will be used as pedestrian circulation then the plan should include properly marked crosswalks in the two hospital drives to be crossed. It should also include the extension of barrier curb from the west end of the existing curb near the property east boundary to the curb radius on the east side of the main entrance drive, along with appropriate drainage collection provisions.

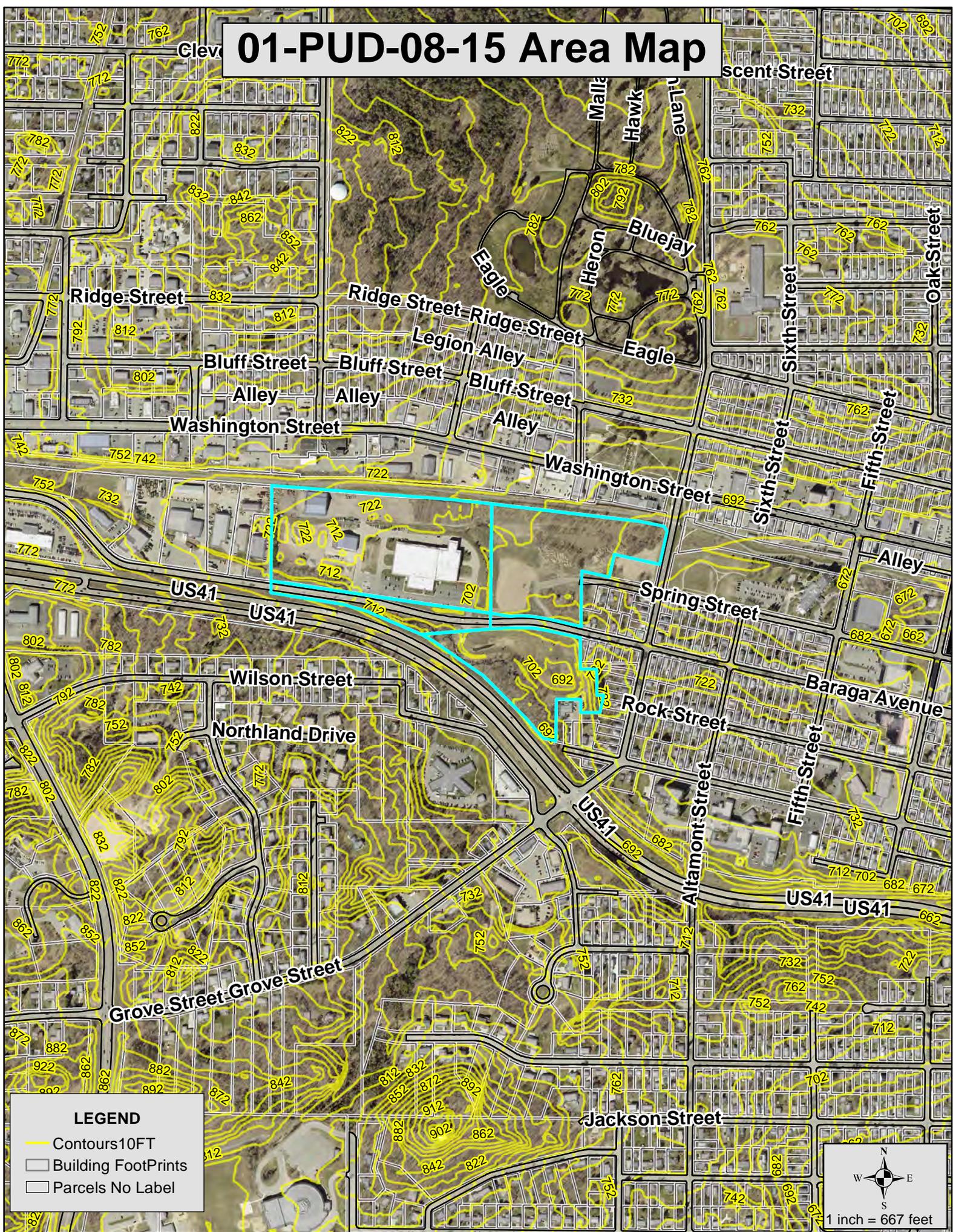
LEA Response: It was agreed on the previously referenced conference call that the City's plans for the re-construction of Baraga Ave. will indicate the referenced cross-walk and curb improvements. The Hospital plans will provide stop bars striped at each entry drive behind the point where the pedestrian crosswalks will be installed.

Fire Department Comments/Questions:

7. Sheet C5.0-The helicopter glide path crosses the City parcel located on the NW corner of Spring St. and 7th St. This is the potential location of a future fire station. As such, there may be a communications and/or hose tower placed on this parcel. The helicopter glide path will have to be moved farther north so as not to cross this parcel.

LEA Response: The glide path for the helicopter will be modified slightly so as not to cross over the City's parcel at the corner of Spring St. and 7th Ave.

01-PUD-08-15 Area Map

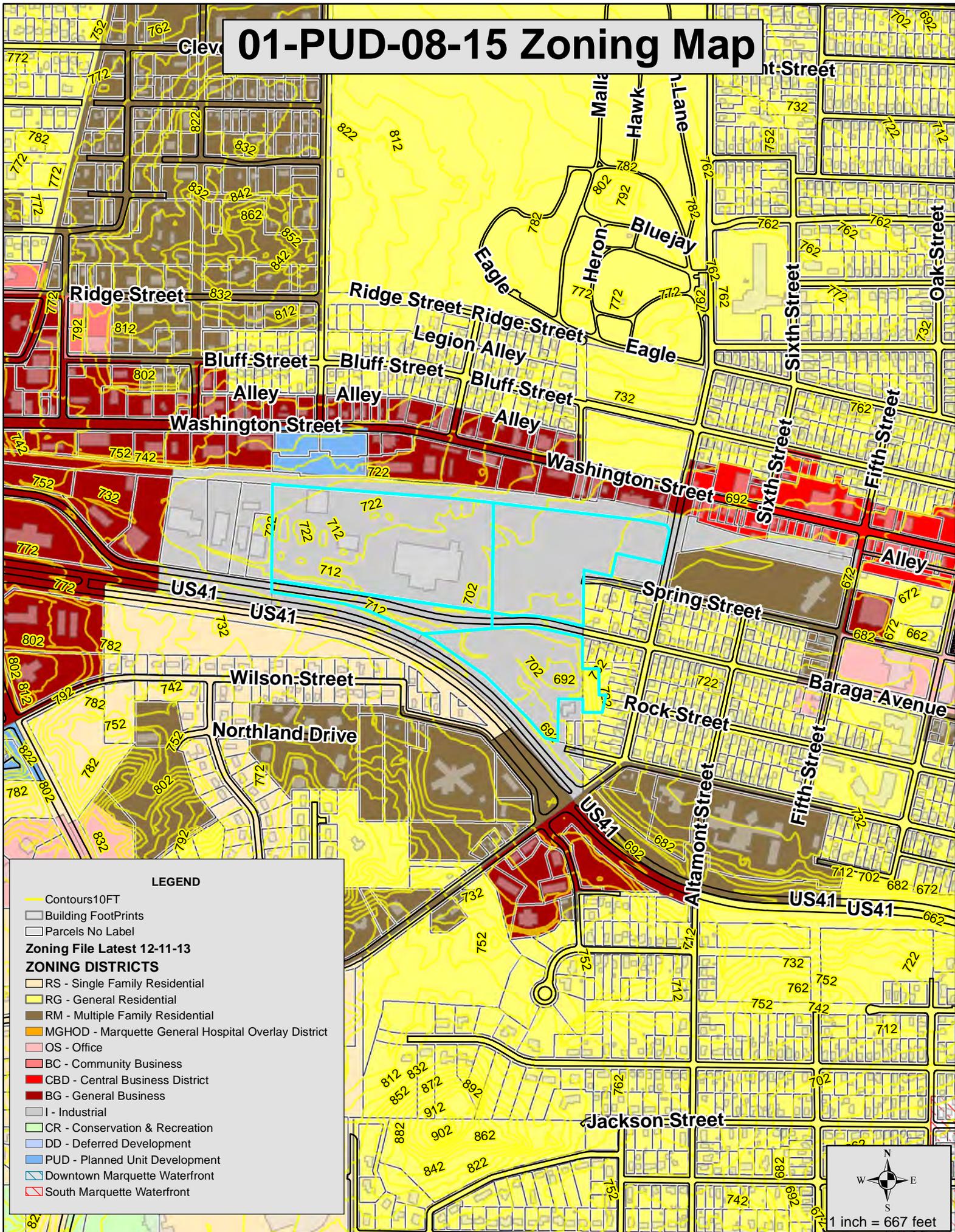


LEGEND

- Contours 10FT
- Building FootPrints
- Parcels No Label

A north arrow pointing upwards, with 'N' at the top, 'S' at the bottom, 'E' to the right, and 'W' to the left. Below the arrow is a scale bar labeled '1 inch = 667 feet'.

01-PUD-08-15 Zoning Map



LEGEND

- Contours 10FT
- Building FootPrints
- Parcels No Label
- Zoning File Latest 12-11-13**
- ZONING DISTRICTS**
- RS - Single Family Residential
- RG - General Residential
- RM - Multiple Family Residential
- MGHOD - Marquette General Hospital Overlay District
- OS - Office
- BC - Community Business
- CBD - Central Business District
- BG - General Business
- I - Industrial
- CR - Conservation & Recreation
- DD - Deferred Development
- PUD - Planned Unit Development
- Downtown Marquette Waterfront
- South Marquette Waterfront



View looking east along Baraga Avenue, from the western end of future hospital property. This view includes the entire Baraga Ave. frontage of future hospital PUD site.



Municipal "salt barn" and fuel depot, to the west of the Municipal Service Center on Baraga Ave. The salt barn will be kept on site indefinitely as part of the site plan for the proposed hospital PUD.



Municipal Service Center, just west of the salt barn and fuel depot.



View looking east along Baraga Ave. frontage just east of the Municipal Service Center.



View looking west along Baraga Ave. frontage just west of the Spring Street extension.



View across center of property from near Baraga Street, looking E-NE towards the Spring St. extension, Seventh St., and the Ramada Inn on the 500 block of W. Washington Street.



View across the east side of the property from near Baraga Street, looking E-NE. The Spring St. extension is in foreground.



View to the south-southeast from the center-north side of property. The Baraga Ave. corridor and the Spring St. extension are visible.



View looking east from center of property, approximately in the location of the former railyard roundhouse.



View to the west across property from Seventh St. bridge over the multi-use path that borders the property on the north.



Panoramic view looking east (at left) to west (at right) across the north boundary of municipal property that is to be sold to Duke Lifepoint for the new U.P. Health Systems – Marquette hospital.



CONCEPT & PRELIMINARY PUD SUBMITTAL

MARQUETTE REPLACEMENT HOSPITAL

850 West Baraga Avenue
Marquette, Marquette County, Michigan

City File No.: 01-PUD-08-15
July 20, 2015

SITE DATA:
EXISTING MAP AND PARCEL: MARQUETTE COUNTY TAX MAP PARCELS 0240012, 0240013, 0514071, 0130100, 0514072
SITE ADDRESS: 850 WEST BARAGA AVENUE
CITY: MARQUETTE
COUNTY: MARQUETTE
STATE: MICHIGAN

PROPERTY USE: HOSPITAL
PROPOSED ZONING: I-INDUSTRIAL
PROPOSED USE: HOSPITAL
ACREAGE OF SITE: 39.11 ACRES
SQUARE FOOTAGE OF SITE: 1,703,886 S.F.

MINIMUM REQUIRED SETBACK LINES:
FRONT YARD: 20'
SIDE YARD: 100'
REAR YARD: 40'

EXISTING BUILDING SQ. FT.: 0'

PROPOSED BUILDING SQ. FT.:
HOSPITAL: 535,000 S.F.
CLINICAL SERVICES BUILDING: 93,000 S.F.
GARAGE: 180,000 S.F.
TOTAL BUILDING S.F.: 808,000 S.F.

FUTURE BUILDING FOOTAGE ALLOWANCE: 515,000 S.F.

ALLOW. MAX. BUILDING HEIGHT: 118 FT (8 STORIES)
HOSPITAL: 6 STORIES

MEDICAL OFFICE TOTAL ALLOWABLE CAMPUS BUILDOUT: 1,323,000 SF
PROPOSED BUILDING HEIGHT: 8 STORIES
HEIGHT TO STAIR OVERBURN: 125'
MAX. FLOOR AREA RATIO ALLOWED: 0.76
FLOOR AREA RATIO OF SITE: 7'
IMPERVIOUS SURFACE AREA ALLOWED: NA
IMPERVIOUS SURFACE AREA PROVIDED: NA

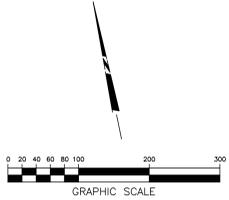
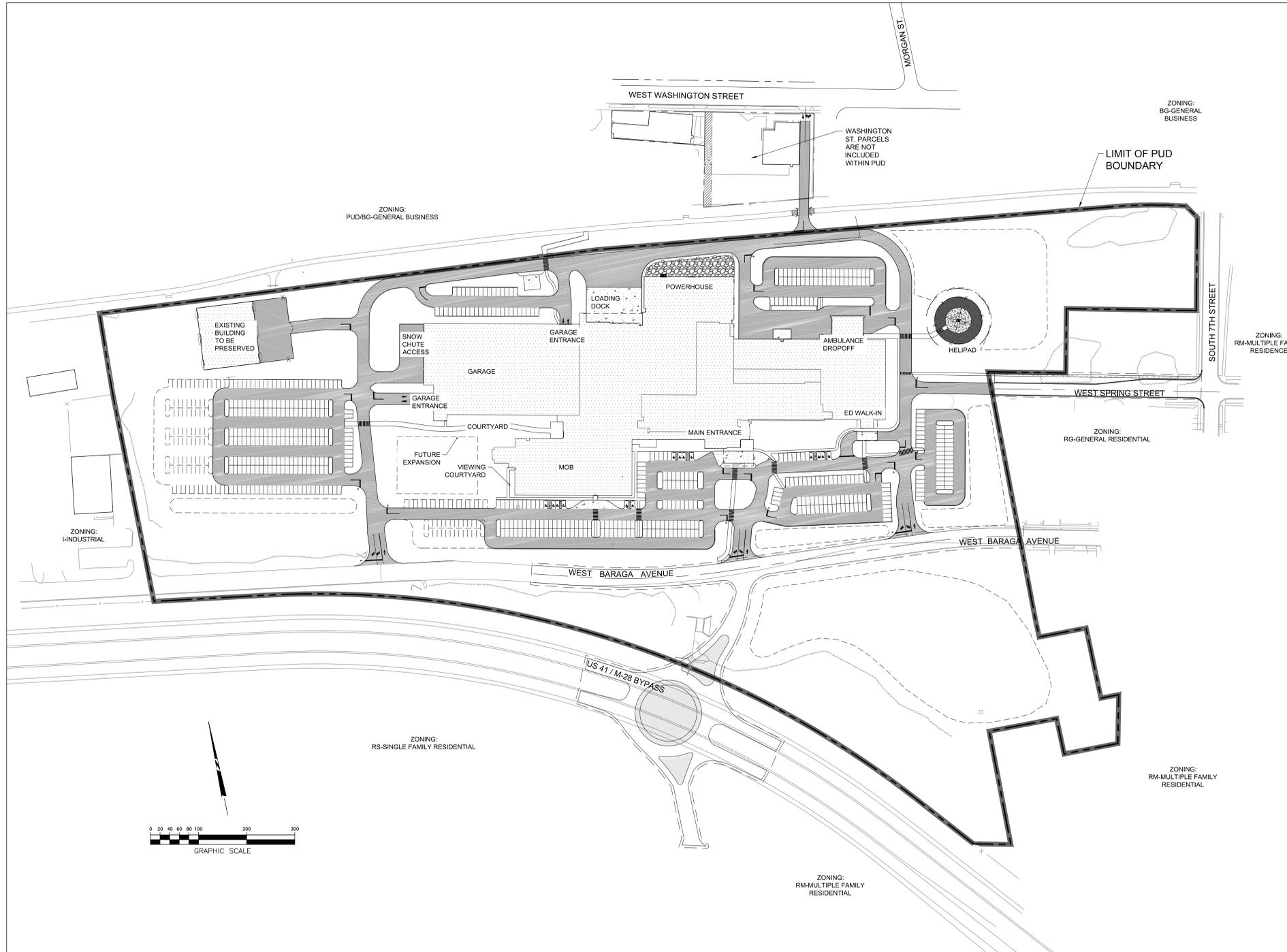
REQUIRED PARKING:
PARKING REQUIRED: (HOSPITAL) 265 BEDS 2 SPACES / BED = 530 SPACES
(MEDICAL OFFICE - 93,000 SF) 6 SPACES / DOCTOR - 1 DOCTOR / 1500 SF = 372 SPACES
TOTAL REQUIRED = 902 SPACES

PROPOSED PARKING: 1,000 SPACES (14 ACCESSIBLE SURFACE)

OWNER/DEVELOPER: DUKE LIFEPOINT HEALTHCARE
330 SEVEN SPRINGS WAY
BRENTWOOD, TN 37027
615.920.7678

ACREAGE OF OPEN SPACE: 4.7 ACRES

APPLICANT/PREPARER: LITTLEJOHN
1935 21st AVENUE SOUTH
NASHVILLE, TN 37212
615.385.4144
MR. GREGORY D. HEINZE
gheinze@leoinc.com



INDEX OF SHEETS

SHT. NO.	SHEET TITLE
C00	COVER SHEET
C10	EXISTING CONDITIONS
C11	BOUNDARY SURVEY
C20	GENERAL NOTES
C40	DEMOLITION
C50	OVERALL LAYOUT PLAN
C51	DETAILED LAYOUT PLAN
C52	DETAILED LAYOUT PLAN
C53	DETAILED LAYOUT PLAN
C54	DETAILED LAYOUT PLAN
C60	OVERALL GRADING PLAN
C61	DETAILED GRADING PLAN
C62	DETAILED GRADING PLAN
C63	DETAILED GRADING PLAN
C64	STORM SEWER PROFILES
C70	OVERALL UTILITY PLAN
C71	DETAILED UTILITY PLAN
C72	DETAILED UTILITY PLAN
C73	DETAILED UTILITY PLAN
C74	SANITARY SEWER PROFILE
C80	DETAILS
C81	DETAILS
C82	DETAILS
C83	DETAILS
L10	OVERALL SITE LANDSCAPE
L11	DETAILED LANDSCAPE
L12	DETAILED LANDSCAPE
L13	DETAILED LANDSCAPE
L20	LANDSCAPE DETAILS
E11	SITE LIGHTING PLAN
A10	ARCHITECTURAL ELEVATION (SOUTH)
A20	ARCHITECTURAL ELEVATION (NORTH)
A30	ARCHITECTURAL ELEVATION (EAST, WEST)
A40	SITE SECTIONS

SPECIFIC VARIANCES BEING REQUESTED

- VARIANCE TO THE SIGNAGE ORDINANCE TO ALLOW FOR THE SPECIFIC SIGNAGE GUIDELINES PROPOSED HEREIN.
- VARIANCE TO THE REQUIREMENT FOR A 6' HT. STOCKADE FENCE ABUTTING A RESIDENTIAL ZONING DISTRICT.
- VARIANCE TO ALLOW FOR 30' MAX. HEIGHT LIGHT FIXTURES WITHIN THE PARKING AREAS.

ARCHITECT:
GRESHAM, SMITH AND PARTNERS
1400 NASHVILLE CITY CENTER, 511 UNION STREET
NASHVILLE, TN 37219
615.770.8214

PREPARED FOR:
DUKE LIFEPOINT HEALTHCARE
330 SEVEN SPRINGS WAY
BRENTWOOD, TN 37027
615.920.7678

PREPARED BY:
CIVIL ENGINEER/LANDSCAPE ARCHITECTURE:

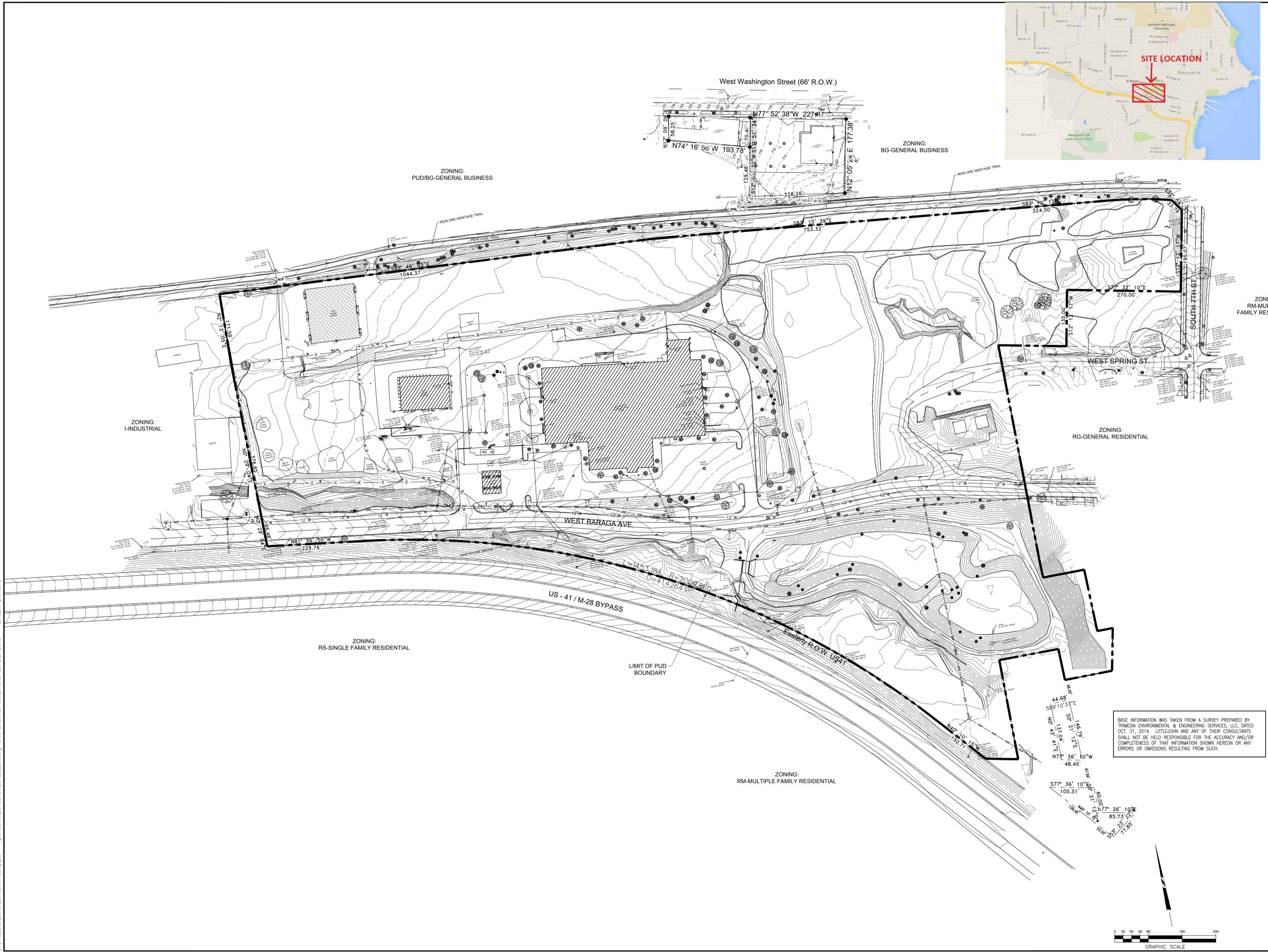
Littlejohn

1935 21st Avenue South, NASHVILLE, TENNESSEE 37212
615.385.4144
Orlando | Phoenix | Tampa Bay | Tri-Cities

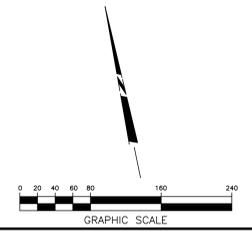


C0.0

G:\Projects\2013\20130197\dwg\DO - April 2015\20130197_C1_0_EXI.dwg - C1.0 EXISTING CONDITIONS Jul 20, 2015 - 12:13pm pavliams



BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY TRIMEDIA ENVIRONMENTAL & ENGINEERING SERVICES, LLC, DATED OCT. 31, 2014. LITTLEJOHN AND ANY OF THEIR CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.



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 Nashville | Chattanooga | Decatur | Huntsville | Knoxville
 Orlando | Phoenix | Tampa Bay | The Cities

**MARQUETTE REPLACEMENT
 HOSPITAL**

DUKE LIFEPPOINT HEALTHCARE
 330 SEVEN SPRINGS WAY
 BRENTWOOD, TN 37027
 615-920-7678

DATE	REVISIONS
07/20/2015	20130197

C1.0
 EXISTING
 CONDITIONS

EROSION CONTROL NOTES:

- 1. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATION BEGINS AND MUST BE CONSTRUCTED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
2. THE FOLLOWING RECORDS SHALL BE MAINTAINED ON OR NEAR SITE: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; THE DATES WHEN STABILIZATION MEASURES ARE INITIATED; INSPECTION RECORDS AND RAINFALL RECORDS.
3. THE CONTRACTOR SHALL MAINTAIN A RAIN GAUGE AND DAILY RAINFALL RECORDS AT THE SITE OR USE A REFERENCE SITE FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION.
4. PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 10 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
5. CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED AREAS.
6. SEDIMENT SHOULD BE REMOVED FROM SEDIMENT TRAPS, SILT FENCES, SEDIMENTATION PONDS AND OTHER SEDIMENT CONTROLS AS NECESSARY AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50% OR AS DIRECTED BY OWNERS REPRESENTATIVE.
7. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.

DEMOLITION NOTES

- 1. ALL MATERIALS BEING REMOVED AND NOT RELOCATED UNDER THE NEW CONSTRUCTION, INCLUDING TREES AND SHRUBS, SIGNS, UTILITY STRUCTURES, ETC., SHALL BE FIRST OFFERED TO THE OWNER'S REPRESENTATIVE AND IF NOT ACCEPTED SHALL THEN BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL CHARTED AND UNCHARTED UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
3. THE CONTRACTOR SHALL VERIFY THE LIMITS OF DEMOLITION WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.
4. IN AREAS WHERE EXISTING PAVEMENT, WALKS, OR CURBS ARE TO BE REMOVED, SAW CUT TO PROVIDE A CLEAN EDGE. COORDINATE EXTENT OF PAVEMENT DEMOLITION WITH THE LIMIT OF NEW IMPROVEMENTS ON THE SITE LAYOUT PLAN & UTILITY INSTALLATION.
5. CONTRACTOR SHALL COORDINATE PHASING OF THE DEMOLITION WITH THE OWNER'S REPRESENTATIVE AND LOCAL GOVERNING AGENCY PRIOR TO BEGINNING WORK. DISRUPTION OF EXISTING UTILITY SERVICES AND TRAFFIC PATTERNS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE AND INITIATED ONLY AFTER APPROVAL BY THE LOCAL GOVERNING AGENCY AND THE UTILITY COMPANIES.
6. CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE SUITABLY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL USE WATER SPRINKLING AND OTHER SUITABLE METHODS AS NECESSARY TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION WORK.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL NECESSARY TO ACCOMPLISH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
9. THE CONTRACTOR SHALL PRESERVE AND PROTECT SURVEY CONTROL POINTS AND SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY DISTURBED CONTROL POINTS.
10. EXISTING LIGHT STANDARDS BEING REMOVED SHALL BE FIRST OFFERED TO THE OWNER PRIOR TO DISPOSING OF THEM. COORDINATE LIGHTING DEMOLITION AND LAYOUT WITH THE ELECTRICAL DRAWINGS.
11. RELOCATION OF EXISTING PLANT MATERIALS SHALL BE COORDINATED WITH THE OWNER AND RELOCATED TO A DESIGNATED AREA ON SITE.
12. EXISTING TREES TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION. IN ACCORDANCE WITH THE TREE PRESERVATION NOTES AND DETAIL ON THE LANDSCAPE PLAN.
13. NO UTILITY OR STORM SEWER LINES SHALL BE DEMOLISHED UNTIL THE NEW LINES HAVE BEEN INSTALLED AND ARE PLACED INTO OPERATION.
14. THE CONTRACTOR SHALL INCORPORATE INTO HIS WORK ANY ISOLATION VALVES OR TEMPORARY PLUGS REQUIRED TO CONSTRUCT NEW UTILITY LINES AND DEMOLISH EXISTING UTILITY LINES.
15. SELECTIVE CLEARING CONSISTING OF REMOVAL OF VINES, SAPLINGS UNDER 1" DIAMETER AND UNDERBRUSH SHALL BE PERFORMED IN TREE PRESERVATION AREAS INTERNAL TO THE PROJECT AND NOTED ON PLANS.
16. WHERE WATER LINE AND SEWER LINE ABANDONMENT IS PLANNED, THE CONTRACTOR MAY ABANDON WATER LINES AND SEWER LINES IN PLACE WHERE THEY OCCUR AT LEAST 24" (TO TOP OF PIPE) BELOW FINAL SUBGRADE ELEVATIONS AND OUTSIDE THE BUILDING FOOT PRINT. ALL UTILITY LINES BEING ABANDONED IN PLACE SHALL HAVE ALL ENDS PERMANENTLY CLOSED USING A CONCRETE PLUG.
17. EXISTING IRRIGATION LINES LIE WITHIN THE AREA AFFECTED BY THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL REWORK THE EXISTING IRRIGATION SYSTEMS IN ACCORDANCE WITH DIRECTIVES NOTED ON THE LANDSCAPE PLAN. SERVICE SHALL BE MAINTAINED DURING CONSTRUCTION TO THE LANDSCAPED AREAS CURRENTLY IRRIGATED.

GENERAL NOTES

- 1. THE PROJECT SITE IS SHOWN ON MARQUETTE COUNTY TAX MAP AS PARCELS 0240010, 0514071, 0130100.
2. BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY TRIMEDIA ENVIRONMENTAL AND ENGINEERING SERVICES, LLC, DATED NOV. 11, 2014. LITTLEJOHN ENGINEERING ASSOCIATES AND ANY OF THEIR CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.
3. THE SITE LAYOUT IS BASED ON REFERENCE POINTS AS NOTED.
4. THE CONTRACTOR SHALL CHECK ALL EXISTING CONDITIONS, (i.e. INVERTS, UTILITY ROUTINES, UTILITY CROSSINGS, AND DIMENSIONS) IN THE FIELD PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE ENGINEER.
5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL CALL NATIONAL ONE CALL (811) 72 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION.
6. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND RECEIVE APPROVAL WHERE NECESSARY BEFORE CONSTRUCTION.
7. EXISTING PAVEMENT OF PUBLIC ROADWAYS SHALL BE PATCHED IN ACCORDANCE WITH LOCAL AGENCY STANDARDS WHEREVER UTILITY INSTALLATION REQUIRES REMOVAL OF THE EXISTING PAVEMENT. COORDINATE PAVEMENT TRENCHING LOCATIONS WITH SITE CIVIL, PLUMBING AND ELECTRICAL PLANS.
8. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. SLIGHT FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY.
9. DIMENSIONS ARE TO FACE OF CURB AND/OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
10. CONCRETE FOR CURBS AND SIDEWALKS SHALL BE 3500 PSI CONCRETE.
11. ANY WORK UNACCEPTABLE TO THE OWNER'S REPRESENTATIVE OR TO THE LOCAL GOVERNING AUTHORITY SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
12. ACCESSIBLE RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1:12. GRADES WITHIN ACCESSIBLE SPACES SHALL BE MAXIMUM 2% IN ALL DIRECTIONS.
13. THE PROPOSED BUILDING SHALL BE LAID OUT UTILIZING THE EXISTING STRUCTURE AS A CONTROL POINT AND THE ARCHITECTURAL DRAWINGS. DIMENSIONS SHOWN TO THE PROPOSED BUILDING ARE CALCULATED TO THE FACE OF EXTERIOR WALL. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
14. CURBS SHALL BE PARALLEL TO THE CENTERLINE OF DRIVES. THE CURB SHALL BE PLACED ONLY AFTER HAVING ALL BREAK POINTS (PC & PT OF CURVES) LOCATED AT THE FACE OF CURB OR AT A CONSISTENT OFFSET BY A REGISTERED LAND SURVEYOR.
15. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE MANUAL OF ACCIDENT PREVENTION AND CONSTRUCTION ISSUED BY AGC OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS OF CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.
16. THE CONTRACTOR SHALL PAVE IN THE DIRECTION OF TRAFFIC.
17. THE CONTRACTOR SHALL COLD PLANE IN THE DIRECTION OF TRAFFIC.
18. THE CONTRACTOR WILL BE REQUIRED TO ADJUST GRADES OF INTERSECTING STREETS, ALLEYS, PUBLIC ENTRANCES AND PRIVATE DRIVES AS DIRECTED BY THE ENGINEER.
19. ALL ROADWAY AND SIDEWALK CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF MARQUETTE.
20. ALL CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO CITY OF MARQUETTE AND STATE DOT REGULATIONS AND SPECIFICATIONS.

SITE GRADING & EROSION CONTROL NOTES

- 1. THE DISTURBED AREA FOR THIS PROJECT IS APPROXIMATELY ____ ACRES.
2. THE SUBJECT PROPERTY DOES LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO COMMUNITY PANEL NO. 260716 0025 B OF THE F.E.M.A. FLOOD INSURANCE RATE MAPS FOR MARQUETTE COUNTY, MICHIGAN WITH AN EFFECTIVE DATE OF 2 DEC. 1994.
3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED, UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
6. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
7. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF THE STORM DRAIN CONNECTIONS AT THE BUILDING WITH THE PLUMBING PLANS.
8. THE CONTRACTOR SHALL CHECK ALL EXISTING GRADES AND DIMENSIONS IN THE FIELD PRIOR TO BEGINNING WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
9. THE CONTRACTOR SHALL ADJUST THE CASTINGS OF ALL NEW AND EXISTING STRUCTURES TO MATCH PROPOSED FINISH GRADES.
10. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE MANUAL OF ACCIDENT PREVENTION AND CONSTRUCTION ISSUED BY AGC OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS OF CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.
11. PROPOSED CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF AN ENGINEERED GRADING DESIGN AND REFLECT A PROPOSED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THE INTENT OR ANY PROBLEM WITH THE CONTINUITY OF GRADES, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY.
12. ALL CUT AND FILL SLOPES SHALL BE 3 HORIZONTAL TO 1 VERTICAL OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS.
13. ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO THE TOP OF SUBGRADE WITH CRUSHED STONE.
14. MINIMUM GRADE ON ASPHALT OR CONCRETE PAVING SHALL BE 1.0%. THE MAXIMUM GRADES WITHIN ACCESSIBLE SPACES SHALL BE 2% IN ANY DIRECTION.
15. CONTRACTOR SHALL CONFORM TO ALL APPLICABLE CODES AND OBTAIN APPROVAL AS NECESSARY BEFORE BEGINNING CONSTRUCTION.
16. ALL EARTHWORK, INCLUDING THE EXCAVATED SUBGRADE AND EACH LAYER OF FILL, SHALL BE MONITORED AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER, OR HIS REPRESENTATIVE.
17. IF ANY SPRINGS OR UNDERGROUND STREAMS ARE EXPOSED DURING CONSTRUCTION PERMANENT FRENCH DRAINS MAY BE REQUIRED. THE DRAINS SHALL BE SPECIFIED AND LOCATED DURING CONSTRUCTION AS REQUIRED BY THE CONDITIONS WHICH ARE ENCOUNTERED, AND SHALL BE APPROVED BY THE ENGINEER.
18. THIS GRADING & DRAINAGE PLAN IS NOT A DETERMINATION OR GUARANTEE OF THE SUITABILITY OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED. A GEOTECHNICAL SOILS REPORT HAS BEEN PREPARED AND IS AVAILABLE FROM THE OWNER. DETERMINATION OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
19. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO COMPACT FILL SUFFICIENTLY AROUND AND OVER ALL PIPES, STRUCTURES, VALVE STEMS, ETC., INSIDE THE PROPOSED PAVED AREAS TO AVOID SETTLEMENT. ANY SETTLEMENT DURING THE WARRANTY PERIOD SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
20. IN NO CASE SHALL SLOPE, HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CFR PART 1926) SHALL BE FOLLOWED.
21. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
22. STRIP TOPSOIL FROM ALL CUT AND FILL AREAS AND STOCKPILE UPON COMPLETION OF GENERAL GRADING OVER ALL DISTURBED AREAS, TO A MINIMUM DEPTH OF 6". CONTRACTOR SHALL SUPPLY ADDITIONAL TOP SOIL IF INSUFFICIENT QUANTITIES EXIST ON SITE.
23. TOP OF GRATE ELEVATIONS AND LOCATION OF COORDINATES FOR DRAINAGE STRUCTURES SHALL BE AS SHOWN ON THE DETAIL, UNLESS NOTED OTHERWISE. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADES.
24. ALL DRAINAGE CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL GOVERNING AGENCY.
25. POSITIVE DRAINAGE SHALL BE ESTABLISHED AS THE FIRST ORDER OF WORK AND SHALL BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION. SOIL SOFTENED BY PERCHED WATER IN FOUNDATION AND PAVEMENT AREAS MUST BE UNDERCUT AND REPLACED WITH SUITABLE FILL MATERIALS APPROVED BY THE GEOTECHNICAL ENGINEER. GROUNDWATER INFILTRATION INTO EXCAVATIONS SHOULD BE EXPECTED, AND THE WATER SHALL BE REMOVED USING GRAVITY DRAINAGE OR PUMPING.
26. REINFORCED CONCRETE STORM DRAINAGE PIPE SHALL BE CLASS III, WALL "8".
27. FILL SLOPES 3:1 AND GREATER SHALL BE PLACED AND COMPACTED 5' BEYOND PROPOSED LIMITS AND THEN EXCAVATED BACK TO THE PROPOSED LOCATION.
28. THE CONTRACTOR SHALL PROVIDE AN ASBLUIT SURVEY STAMPED BY A LICENSED SURVEYOR IN THE SAME STATE OF THE PROJECT OF ALL PUBLIC STORM SYSTEMS AND ONSITE DETENTION PONDS AND WATER QUALITY MEASURES VERIFYING COMPLIANCE WITH DESIGN DOCUMENTS.
29. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS PRIOR TO INSTALLATION OF THE WATER QUALITY DEVICE.
30. ALL FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THIS MATERIAL SHALL BE PLACED IN LIFTS DIRECTED BY THE GEOTECHNICAL ENGINEER AND COMPACTED AS SPECIFIED BY THE GEOTECHNICAL ENGINEER (TO 98% MODIFIED PROCTOR).
31. THE LOCATION OF ALL DIVERSION SWALES AND DITCHES SHALL BE FIELD ADJUSTED TO AVOID TREES AS POSSIBLE. THE CONTRACTOR SHALL WALK THE ALIGNMENT OF THESE SWALES AND DITCHES IN THE FIELD TO VERIFY AVOIDANCE OF TREES.
32. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES IS TO BE PLACED AT A SITE APPROVED BY THE ENGINEER. IT SHALL BE TREATED IN A MANNER SO THAT THE AREA AROUND THE DISPOSAL SITE WILL NOT BE CONTAMINATED OR DAMAGED BY THE SEDIMENT IN THE RUN-OFF. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR EARTHWORK. THE CONTRACTOR SHALL OBTAIN THE DISPOSAL SITE AS PART OF THIS WORK.
33. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS.
34. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
35. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO WASTE EXCESS EARTH MATERIAL OFF SITE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL FIRST OFFER THE EXCESS MATERIAL TO THE OWNER. IF NOT ACCEPTED BY THE OWNER, THE CONTRACTOR SHALL DISPOSE OF EARTH MATERIAL OFF SITE. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT SUITABLE MATERIAL (AT NO ADDITIONAL COST TO THE OWNER) FOR EARTHWORK OPERATIONS IF SUFFICIENT AMOUNTS OF EARTH MATERIAL ARE NOT AVAILABLE ON SITE.
36. SEGMENTAL WALLS SHALL BE PROVIDED BY THE CONTRACTOR AS A DESIGN BUILD. WALL DESIGN PLANS STAMPED BY A REGISTER ENGINEER IN THE STATE OF THE PROJECT SHALL BE SUBMITTED TO THE ENGINEER AS A SHOP DRAWING. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY ADDITIONAL GEOTECHNICAL INFORMATION NECESSARY TO PROPERLY DESIGN THE WALL.

SITE UTILITY NOTES

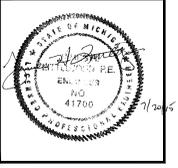
- 1. THE PROJECT SITE IS SHOWN ON MARQUETTE COUNTY TAX MAP AS PARCELS 0240010, 0514071, 0130100.
2. THE SANITARY SEWER SHALL BE OF THE MATERIAL INDICATED ON THE PLAN. POLYVINYLCHLORIDE (PVC) SHALL BE (SDR35). DUCTILE IRON PIPE (D.I.P.) SHALL BE CLASS 52.
3. ALL WATER LINES, SEWER LINES, AND APPURTENANCES SHALL BE OF MATERIALS AND CONSTRUCTION THAT CONFORM TO THE LOCAL AGENCY STANDARDS AND SPECIFICATIONS.
4. PROVIDE A MINIMUM 72" OF COVER OVER ALL WATER LINES.
5. THE CONTRACTOR SHALL MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES. WHERE THESE CRITERIA CANNOT BE MET, THE CONTRACTOR SHALL MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER AND SEWER LINES.
6. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF EXISTING MANHOLES OR SANITARY SEWER LINES AT THE POINT OF CONNECTION PRIOR TO THE COMMENCEMENT OF ORDERING OF MATERIALS, CONSTRUCTION OR REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES DO NOT CONFLICT WITH SANITARY SEWERS, SANITARY SEWER SERVICES, STORM SEWERS, OR ANY OTHER UTILITY OR STRUCTURE, EXISTING OR PROPOSED.
8. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
9. BEFORE CONNECTIONS ARE MADE INTO EXISTING UTILITIES, THE NEW LINES ARE TO BE FLUSHED AND TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE LOCAL WATER AND SEWER DEPARTMENT SPECIFICATIONS.
10. ALL TRENCHES CUT IN EXISTING ROADS OR DRIVES SHALL UTILIZE A CLEAN SAW CUT AND SHALL BE BACKFILL (100%) TO FINAL SUBGRADE WITH #57 STONE. REPAIR ROADS PER LOCAL AGENCY REQUIREMENTS.
11. REPAIR ALL DAMAGE TO EXISTING FEATURES (i.e. DRIVES, ROADS, YARDS, LANDSCAPING, ETC...) TO PRE-CONSTRUCTION CONDITION.
12. THE CONTRACTOR SHALL PROVIDE ALL HORIZONTAL AND VERTICAL BENDS TO ATTAIN THE ALIGNMENT INDICATED ON THE PLANS. PROVIDE VERTICAL BENDS WHERE NECESSARY TO ALLOW WATER LINES TO PASS UNDER OR OVER OTHER UTILITY LINES. (ALL BENDS AND BRACES NEEDED MAY NOT BE ACTUALLY SHOWN). PROVIDE BRACING AND/OR ROODING AT ALL BENDS AND TEES AS REQUIRED BY WATER DEPARTMENT.
13. REDUCED PRESSURE BACKFLOW PREVENTER (RPBP) OR DUAL CHECK WILL BE REQUIRED ON ALL TESTS AND FILL LINES (JUMPER) NEEDED FOR WATER MAIN CONSTRUCTION AND MUST BE APPROVED BY THE WATER DEPARTMENT.
14. COORDINATE THE EXACT LOCATION OF ALL UTILITIES ENTERING THE BUILDING WITH THE PLUMBING PLANS.
15. WATER METERS SHALL BE AT LEAST 22" BUT NO MORE THAN 26" FROM TOP OF METER TO PROPOSED FINISHED GRADE.
16. THE CONTRACTOR SHALL VERIFY REQUIRED PIPE LENGTHS. EXISTING PIPE MATERIAL AND SIZES AS SHOWN ON PLANS.
17. REPAIR EXISTING PAVEMENT, CURBS, WALKS, LANDSCAPING, ETC. THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES TO A LIKE NEW CONDITION AT NO ADDITIONAL COST TO THE OWNER.
18. THE PROPOSED GAS LINE CONSTRUCTION AND INSTALLATION SHALL BE COORDINATED WITH THE LOCAL GAS COMPANY BY THE CONTRACTOR.
19. THE PROPOSED ELECTRIC LINE CONSTRUCTION AND INSTALLATION SHALL BE COORDINATED WITH THE LOCAL ELECTRIC COMPANY BY THE CONTRACTOR.
20. THE PROPOSED TELEPHONE LINE CONSTRUCTION AND INSTALLATION SHALL BE COORDINATED WITH THE LOCAL TELEPHONE COMPANY BY THE CONTRACTOR.
21. WHERE DRAINAGE OR UTILITY LINES OCCUR IN PROPOSED FILL AREAS, THE FILL MATERIAL IS TO BE PLACED AND COMPACTED TO (95%) OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 1557 PRIOR TO INSTALLATION OF DRAINAGE OR UTILITY LINES. FILL IS TO BE INSPECTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER TESTING FIRM EMPLOYED BY THE OWNER. RESULTS OF THE TEST SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE. CONTRACTOR TO PAY FOR ANY RETESTING.
22. THE CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE WATER LINES (HORIZONTALLY AND/OR VERTICALLY) TO ALLOW THE REQUIRED BRACING LOCATED IN FILL/CUT AREAS SHALL BE ADJUSTED TO ENSURE THAT THE TOP OF CASTING IS FLUSH WITH THE FINISHED GRADE.
23. EXISTING CASTINGS LOCATED IN FILL/CUT AREAS SHALL BE ADJUSTED TO ENSURE THAT THE TOP OF CASTING IS FLUSH WITH THE FINISHED GRADE.
24. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
25. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS.
26. ALL CONNECTIONS TO EXISTING MANHOLES SHALL BE BY THE CORING AND RESILIENT SEAL METHOD.
27. FIRE HYDRANT ASSEMBLIES INCLUDE THE APPROPRIATE SIZED TEE (WITH KICKER), 6" LINE TO HYDRANT, 6" GATE VALVE (WITH VALVE BOX), AND FIRE HYDRANT (WITH KICKER). HYDRANTS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS.
28. THE CONCRETE CAPS AND ENCASUREMENTS ON WATER AND SEWER LINES SHALL BE A MINIMUM OF 6" THICK. USE 3000 PSI CONCRETE.
29. ALL FIRE LINES SHALL BE INSTALLED BY A SPRINKLER CONTRACTOR LICENSED IN THE STATE OF THE PROJECT.

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Littlejohn
1935 1st Avenue South, NASHVILLE, TENNESSEE 37212
T. 615.385.4144 F. 615.385.4020 www.littlejohn.com
Nashville | Chattanooga | Decatur | Huntsville | Knoxville
Orlando | Phoenix | Tampa Bay | The Cities

MARQUETTE REPLACEMENT HOSPITAL

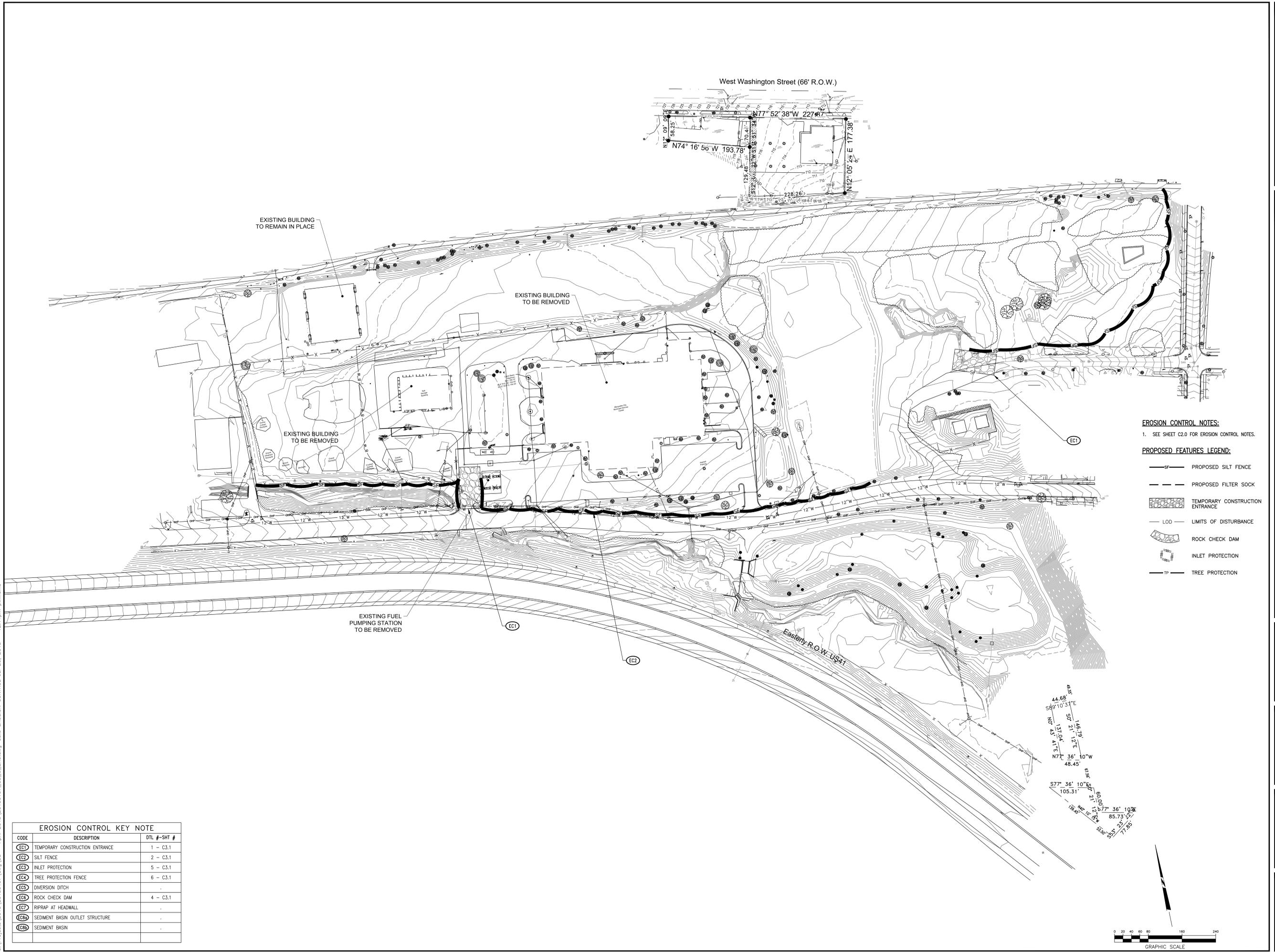
DUKE LIFEPPOINT HEALTHCARE
930 SEVEN SPRINGS WAY
BRENTWOOD, TN 37027
615-920-7678



DATE	REVISIONS
07/20/2015	20130197

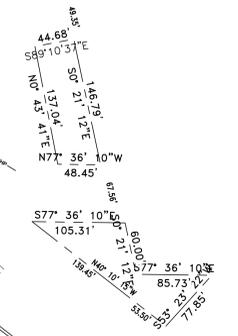
C2.0
GENERAL NOTES

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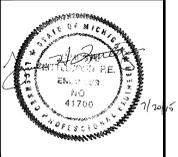
- EROSION CONTROL NOTES:**
 1. SEE SHEET C2.0 FOR EROSION CONTROL NOTES.
- PROPOSED FEATURES LEGEND:**
- PROPOSED SILT FENCE
 - PROPOSED FILTER SOCK
 - TEMPORARY CONSTRUCTION ENTRANCE
 - LOD - LIMITS OF DISTURBANCE
 - ROCK CHECK DAM
 - INLET PROTECTION
 - TP - TREE PROTECTION

EROSION CONTROL KEY NOTE		
CODE	DESCRIPTION	DTL # - SHT #
EC1	TEMPORARY CONSTRUCTION ENTRANCE	1 - C3.1
EC2	SILT FENCE	2 - C3.1
EC3	INLET PROTECTION	5 - C3.1
EC4	TREE PROTECTION FENCE	6 - C3.1
EC5	DIVERSION DITCH	.
EC6	ROCK CHECK DAM	4 - C3.1
EC7	RIPRAP AT HEADWALL	.
EC8a	SEDIMENT BASIN OUTLET STRUCTURE	.
EC8b	SEDIMENT BASIN	.



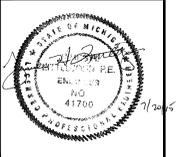
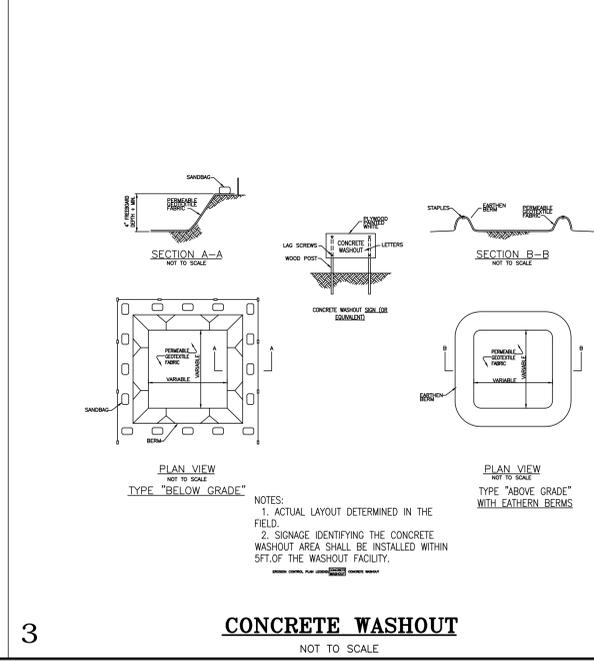
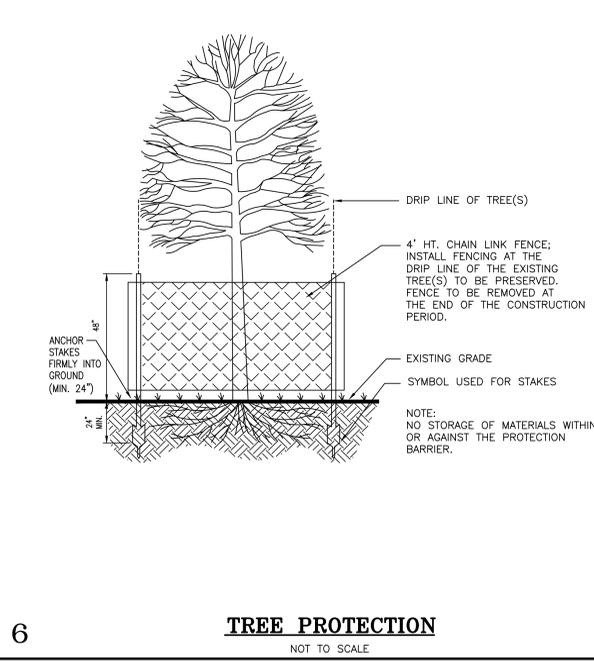
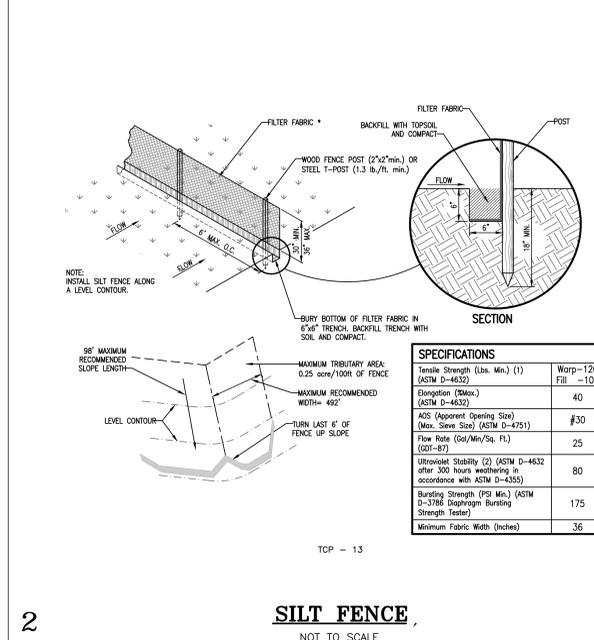
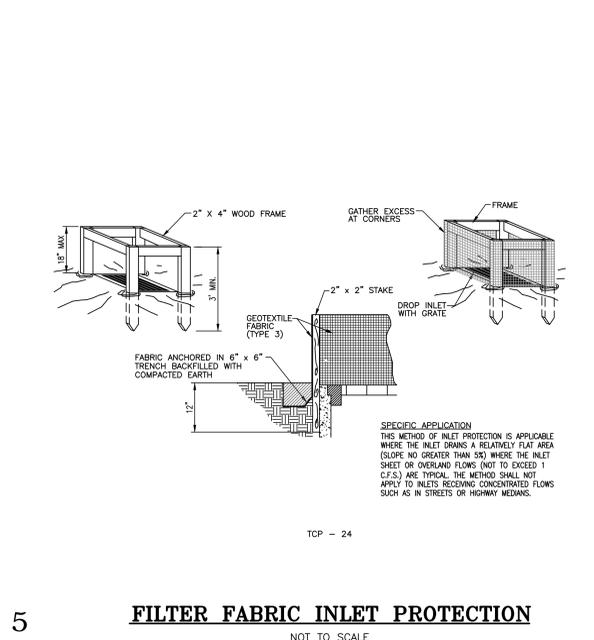
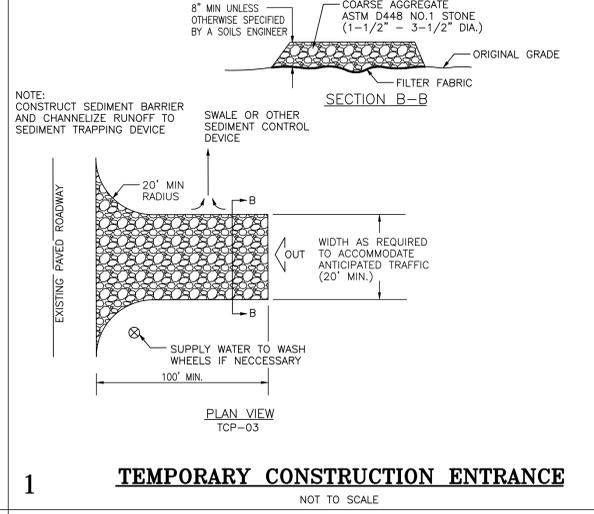
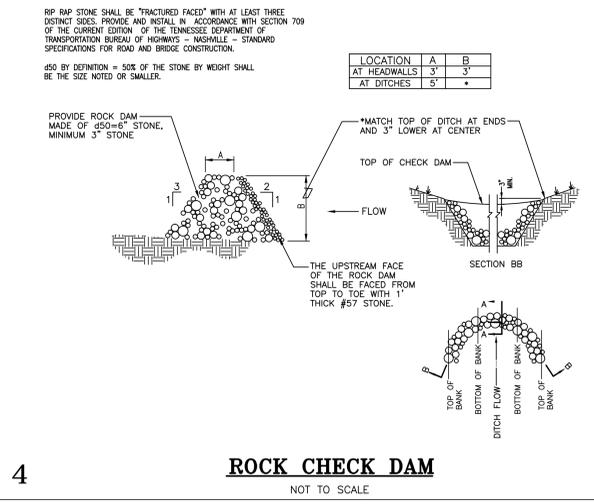
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DUKE LIFEPPOINT HEALTHCARE
 330 SEVEN SPRINGS WAY
 BRENTWOOD, TN 37027
 615-920-7678



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DATE	REVISIONS
07/20/2015	20130197

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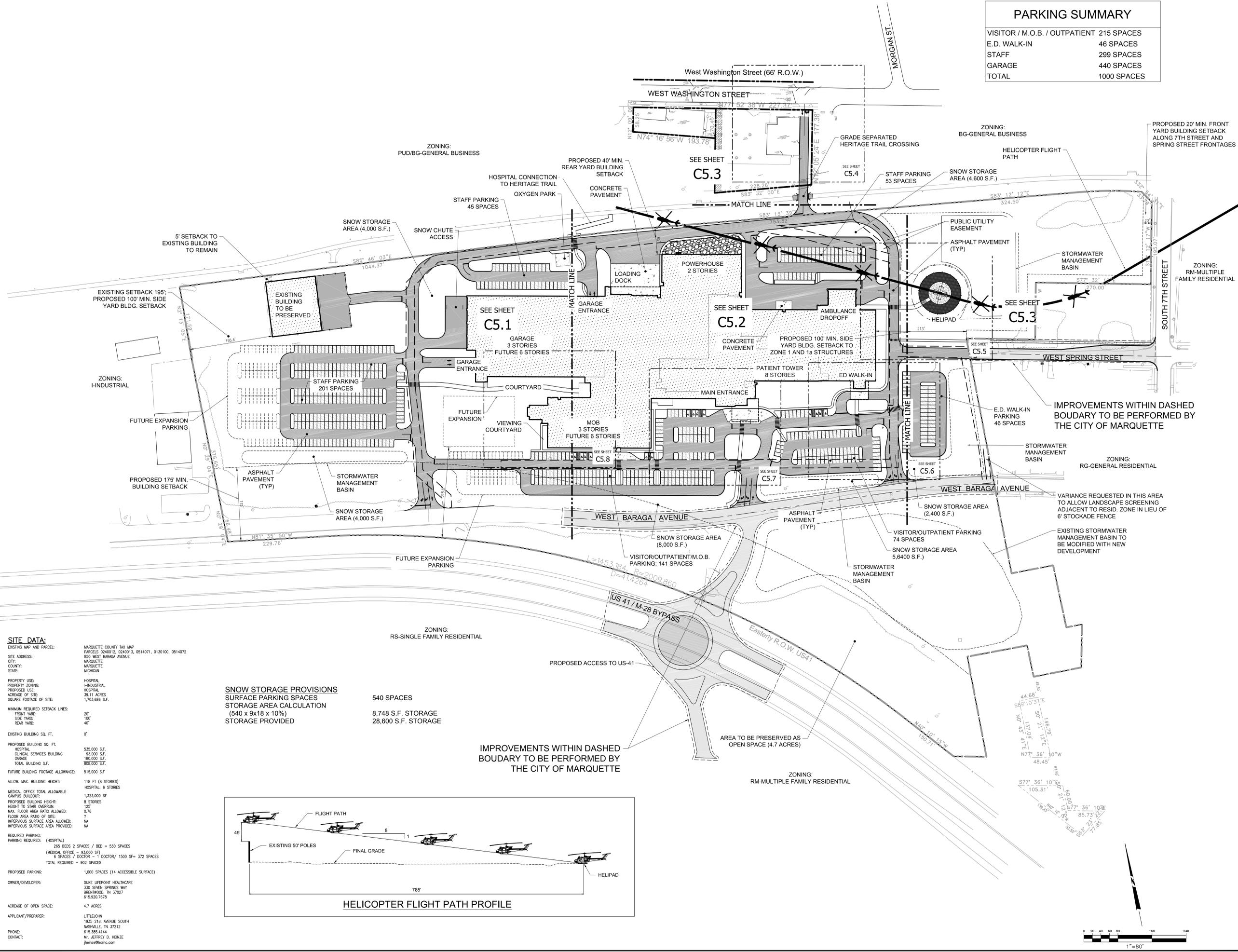
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 615.920.7678



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07/20/2015	20130197

C5.0
 OVERALL LAYOUT PLAN

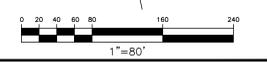
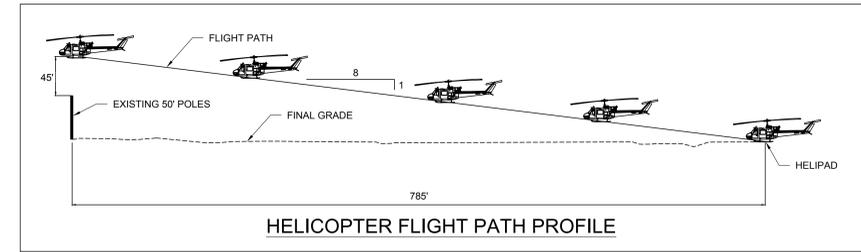
PARKING SUMMARY	
VISITOR / M.O.B. / OUTPATIENT	215 SPACES
E.D. WALK-IN	46 SPACES
STAFF	299 SPACES
GARAGE	440 SPACES
TOTAL	1000 SPACES



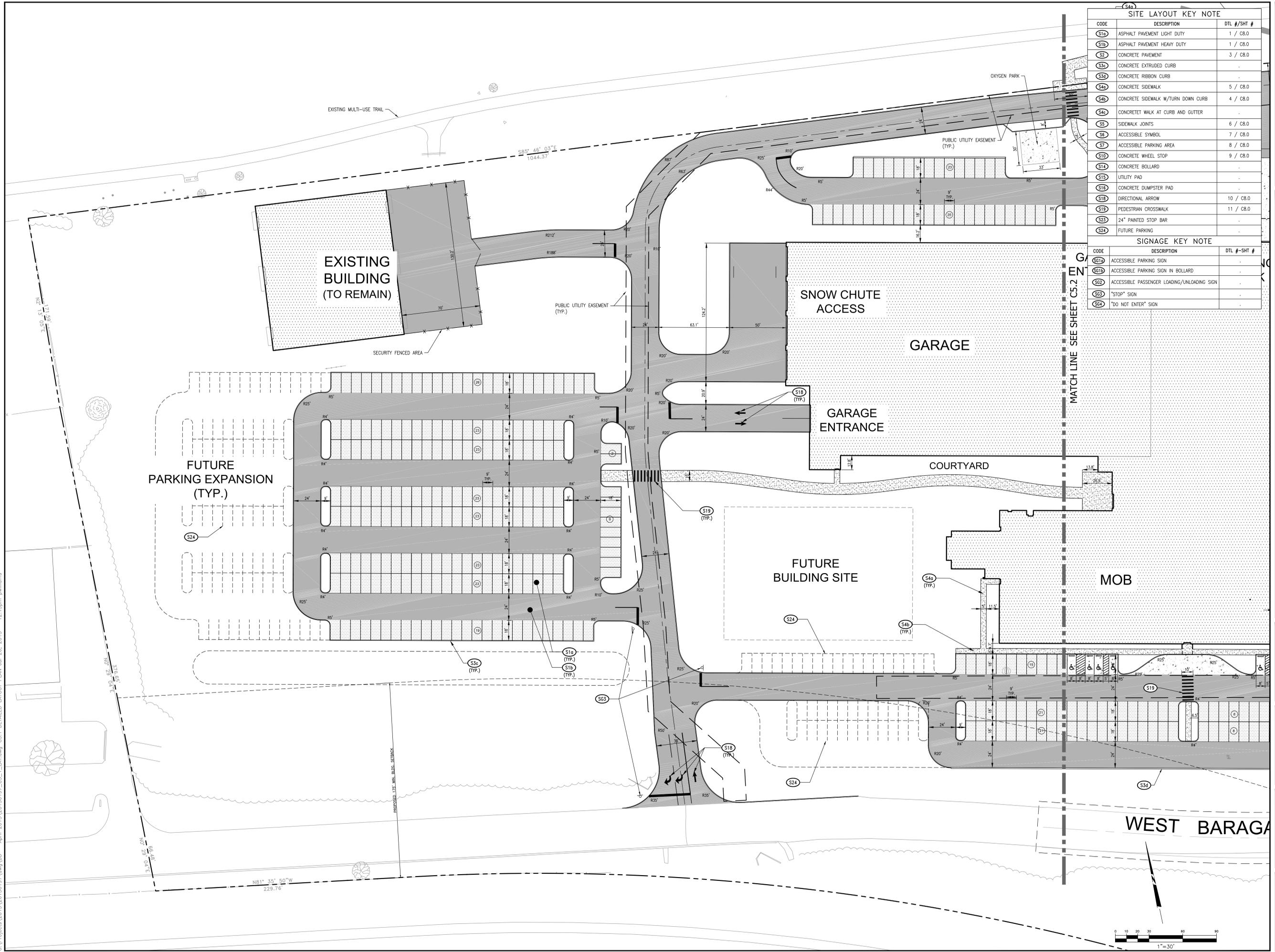
SITE DATA:
 EXISTING MAP AND PARCELS: MARQUETTE COUNTY TAX MAP PARCELS 0240012, 0240013, 0514071, 0130100, 0514072
 SITE ADDRESS: 850 WEST BARAGA AVENUE
 CITY: MARQUETTE
 COUNTY: MARQUETTE
 STATE: MICHIGAN
 PROPERTY USE: HOSPITAL
 PROPOSED ZONING: I-INDUSTRIAL
 PROPOSED USE: HOSPITAL
 ACREAGE OF SITE: 39.11 ACRES
 SQUARE FOOTAGE OF SITE: 1,703,086 S.F.
 MINIMUM REQUIRED SETBACK LINES:
 FRONT YARD: 20'
 SIDE YARD: 100'
 REAR YARD: 40'
 EXISTING BUILDING SQ. FT.: 0'
 PROPOSED BUILDING SQ. FT.:
 HOSPITAL: 535,000 S.F.
 CLINICAL SERVICES BUILDING: 93,000 S.F.
 GARAGE: 180,000 S.F.
 TOTAL BUILDING S.F.: 808,000 S.F.
 FUTURE BUILDING FOOTAGE ALLOWANCE: 515,000 S.F.
 ALLOW. MAX. BUILDING HEIGHT: 118 FT (8 STORIES)
 MEDICAL OFFICE TOTAL ALLOWABLE CAMPUS BUILDOUT: 1,323,000 SF
 PROPOSED BUILDING HEIGHT: 8 STORIES
 HEIGHT TO STAR OVERLAP: 125'
 MAX. FLOOR AREA RATIO ALLOWED: 0.75
 FLOOR AREA RATIO OF SITE: 7
 IMPERVIOUS SURFACE AREA ALLOWED: NA
 IMPERVIOUS SURFACE AREA PROVIDED: NA
 REQUIRED PARKING: (HOSPITAL)
 PARKING REQUIRED: 255 BEDS 2 SPACES / BED = 530 SPACES
 (MEDICAL OFFICE - 93,000 SF)
 6 SPACES / DOCTOR - 1 DOCTOR/ 1500 SF = 372 SPACES
 TOTAL REQUIRED = 902 SPACES
 PROPOSED PARKING: 1,000 SPACES (14 ACCESSIBLE SURFACE)
 OWNER/DEVELOPER: DUKE LIFEPPOINT HEALTHCARE
 330 SEVEN SPRINGS WAY
 BRENTWOOD, TN 37027
 615.920.7678
 ACREAGE OF OPEN SPACE: 4.7 ACRES
 APPLICANT/PREPARER: LITTLEJOHN
 1935 21st AVENUE SOUTH
 NASHVILLE, TN 37212
 615.385.4144
 M. JEFFREY D. HEINZE
 jheinze@littlejohn.com
 PHONE:
 CONTACT:

SNOW STORAGE PROVISIONS

SURFACE PARKING SPACES	540 SPACES
STORAGE AREA CALCULATION (540 x 9x18 x 10%)	8,748 S.F. STORAGE
STORAGE PROVIDED	28,600 S.F. STORAGE



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SITE LAYOUT KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
S10	ASPHALT PAVEMENT LIGHT DUTY	1 / C8.0
S16	ASPHALT PAVEMENT HEAVY DUTY	1 / C8.0
S2	CONCRETE PAVEMENT	3 / C8.0
S3c	CONCRETE EXTRUDED CURB	
S3d	CONCRETE RIBBON CURB	
S4c	CONCRETE SIDEWALK	5 / C8.0
S4b	CONCRETE SIDEWALK W/TURN DOWN CURB	4 / C8.0
S5	CONCRETE WALK AT CURB AND GUTTER	
S5c	SIDEWALK JOINTS	6 / C8.0
S6	ACCESSIBLE SYMBOL	7 / C8.0
S7	ACCESSIBLE PARKING AREA	8 / C8.0
S10	CONCRETE WHEEL STOP	9 / C8.0
S14	CONCRETE BOLLARD	
S15	UTILITY PAD	
S16	CONCRETE DUMPSTER PAD	
S18	DIRECTIONAL ARROW	10 / C8.0
S19	PEDESTRIAN CROSSWALK	11 / C8.0
S23	24" PAINTED STOP BAR	
S24	FUTURE PARKING	

SIGNAGE KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
SG10	ACCESSIBLE PARKING SIGN	
SG16	ACCESSIBLE PARKING SIGN IN BOLLARD	
SG2	ACCESSIBLE PASSENGER LOADING/UNLOADING SIGN	
SG3	"STOP" SIGN	
SG4	"DO NOT ENTER" SIGN	

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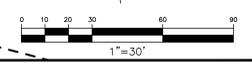
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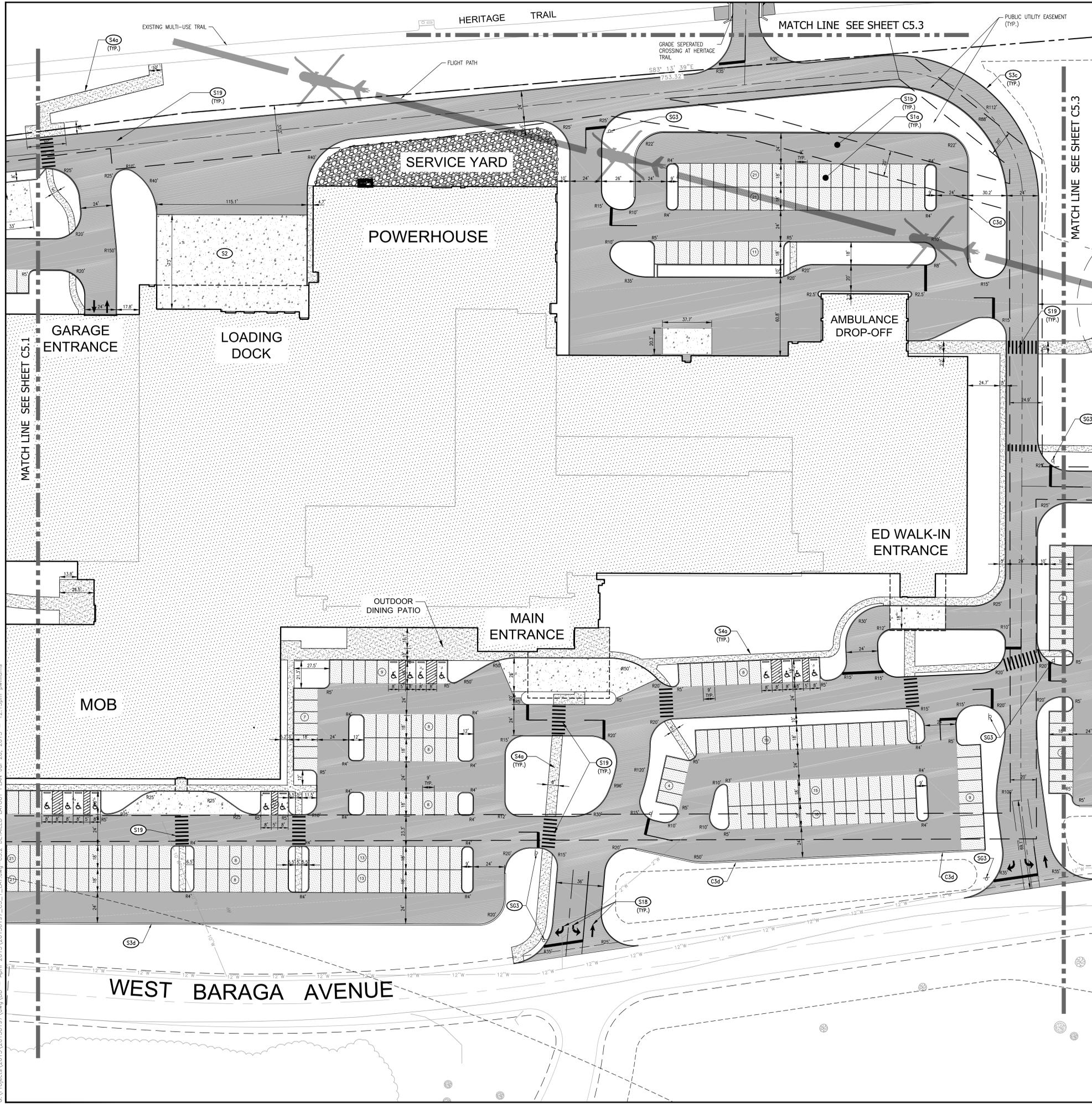
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C5.1
 DETAILED LAYOUT PLAN





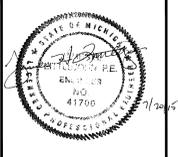
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CODE	DESCRIPTION	DTL #/SHT #
S10	ASPHALT PAVEMENT LIGHT DUTY	1 / C8.0
S11	ASPHALT PAVEMENT HEAVY DUTY	1 / C8.0
S2	CONCRETE PAVEMENT	3 / C8.0
S3C	CONCRETE EXTRUDED CURB	
S3D	CONCRETE RIBBON CURB	
S4C	CONCRETE SIDEWALK	5 / C8.0
S4D	CONCRETE SIDEWALK W/TURN DOWN CURB	4 / C8.0
S4E	CONCRETE WALK AT CURB AND GUTTER	
S5	SIDEWALK JOINTS	6 / C8.0
S6	ACCESSIBLE SYMBOL	7 / C8.0
S7	ACCESSIBLE PARKING AREA	8 / C8.0
S10	CONCRETE WHEEL STOP	9 / C8.0
S14	CONCRETE BOLLARD	
S15	UTILITY PAD	
S16	CONCRETE DUMPSTER PAD	
S18	DIRECTIONAL ARROW	10 / C8.0
S19	PEDESTRIAN CROSSWALK	11 / C8.0
S23	24" PAINTED STOP BAR	
S24	FUTURE PARKING	

SIGNAGE KEY NOTE		
CODE	DESCRIPTION	DTL #-SHT #
SG10	ACCESSIBLE PARKING SIGN	
SG19	ACCESSIBLE PARKING SIGN IN BOLLARD	
SG2	ACCESSIBLE PASSENGER LOADING/UNLOADING SIGN	
SG3	"STOP" SIGN	
SG4	"DO NOT ENTER" SIGN	

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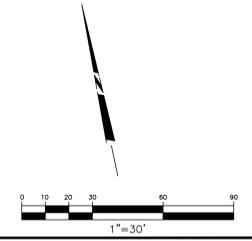
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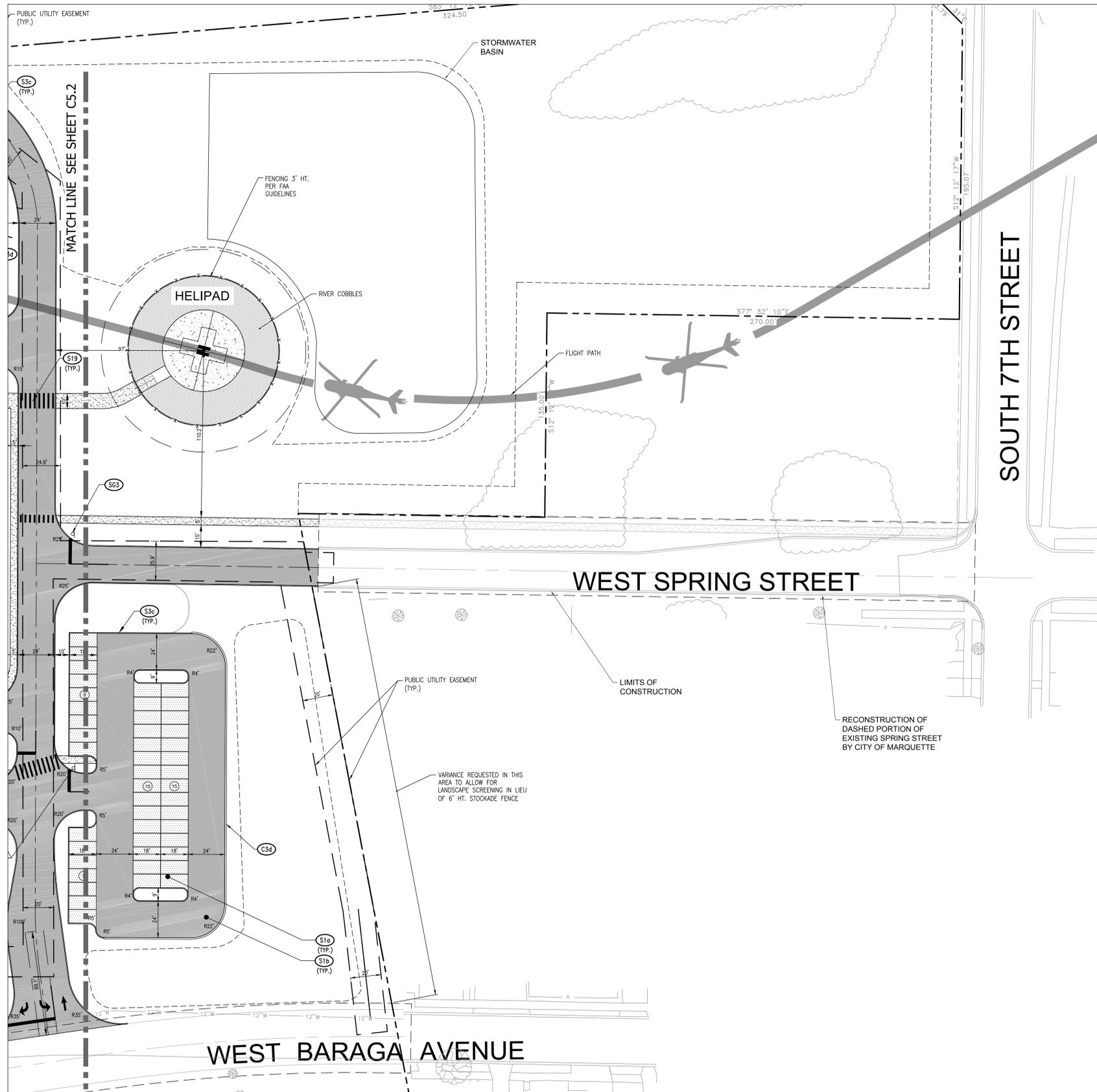
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C5.2
 DETAILED LAYOUT PLAN



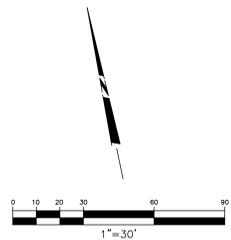
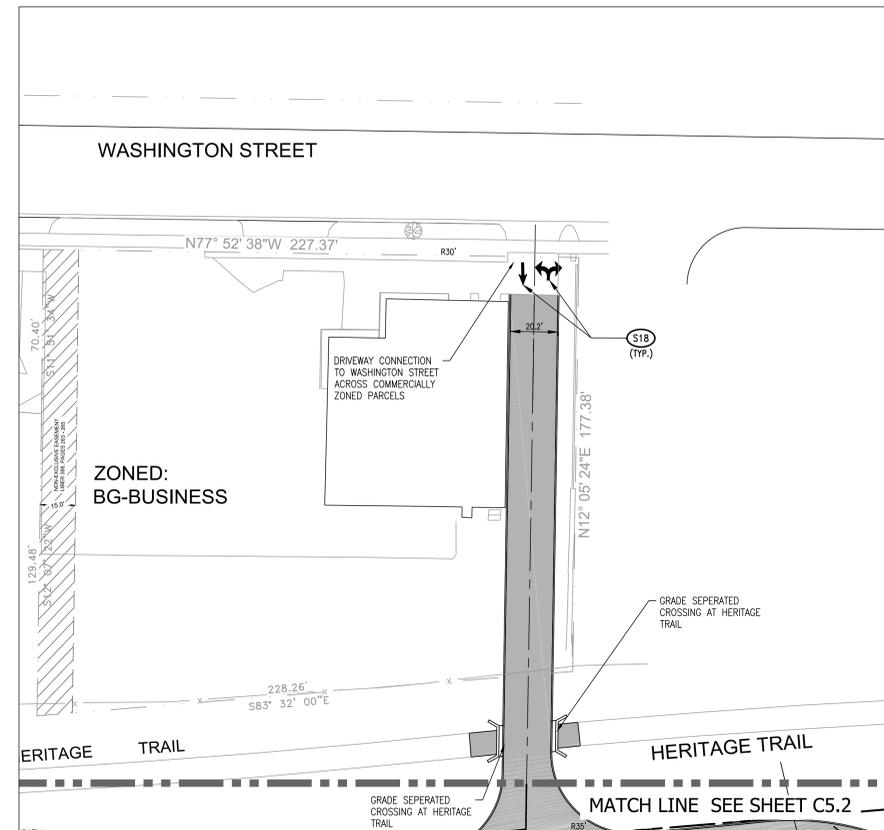
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SITE LAYOUT KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
S19	ASPHALT PAVEMENT LIGHT DUTY	1 / C8.0
S18	ASPHALT PAVEMENT HEAVY DUTY	1 / C8.0
S2	CONCRETE PAVEMENT	3 / C8.0
S36	CONCRETE EXTRUDED CURB	.
S34	CONCRETE RIBBON CURB	.
S46	CONCRETE SIDEWALK	5 / C8.0
S48	CONCRETE SIDEWALK W/TURN DOWN CURB	4 / C8.0
S46	CONCRETE WALK AT CURB AND CUTTER	.
S5	SIDEWALK JOINTS	6 / C8.0
S6	ACCESSIBLE SYMBOL	7 / C8.0
S7	ACCESSIBLE PARKING AREA	8 / C8.0
S10	CONCRETE WHEEL STOP	9 / C8.0
S14	CONCRETE BOLLARD	.
S15	UTILITY PAD	.
S16	CONCRETE DUMPSTER PAD	.
S18	DIRECTIONAL ARROW	10 / C8.0
S19	PEDESTRIAN CROSSWALK	11 / C8.0
S23	24" PAINTED STOP BAR	.
S24	FUTURE PARKING	.

SIGNAGE KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
S019	ACCESSIBLE PARKING SIGN	.
S018	ACCESSIBLE PARKING SIGN IN BOLLARD	.
S07	ACCESSIBLE PASSENGER LOADING/UNLOADING SIGN	.
S03	"STOP" SIGN	.
S04	"DO NOT ENTER" SIGN	.



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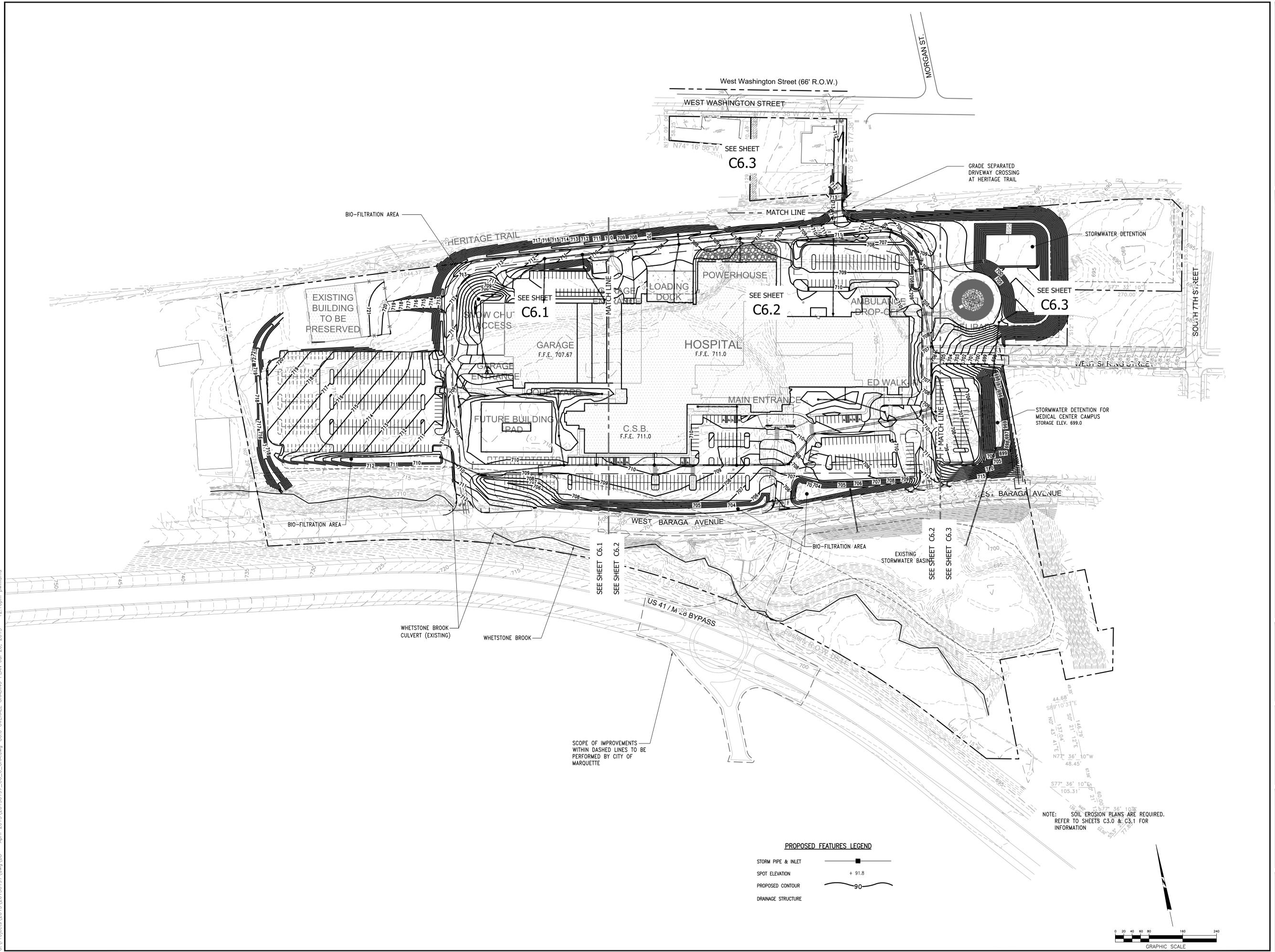
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C5.3
 DETAILED LAYOUT PLAN

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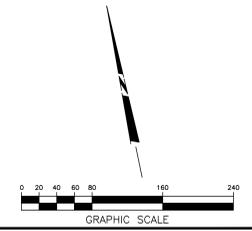


SCOPE OF IMPROVEMENTS WITHIN DASHED LINES TO BE PERFORMED BY CITY OF MARQUETTE

PROPOSED FEATURES LEGEND

- STORM PIPE & INLET
- SPOT ELEVATION
- PROPOSED CONTOUR
- DRAINAGE STRUCTURE

NOTE: SOIL EROSION PLANS ARE REQUIRED. REFER TO SHEETS C3.0 & C3.1 FOR INFORMATION



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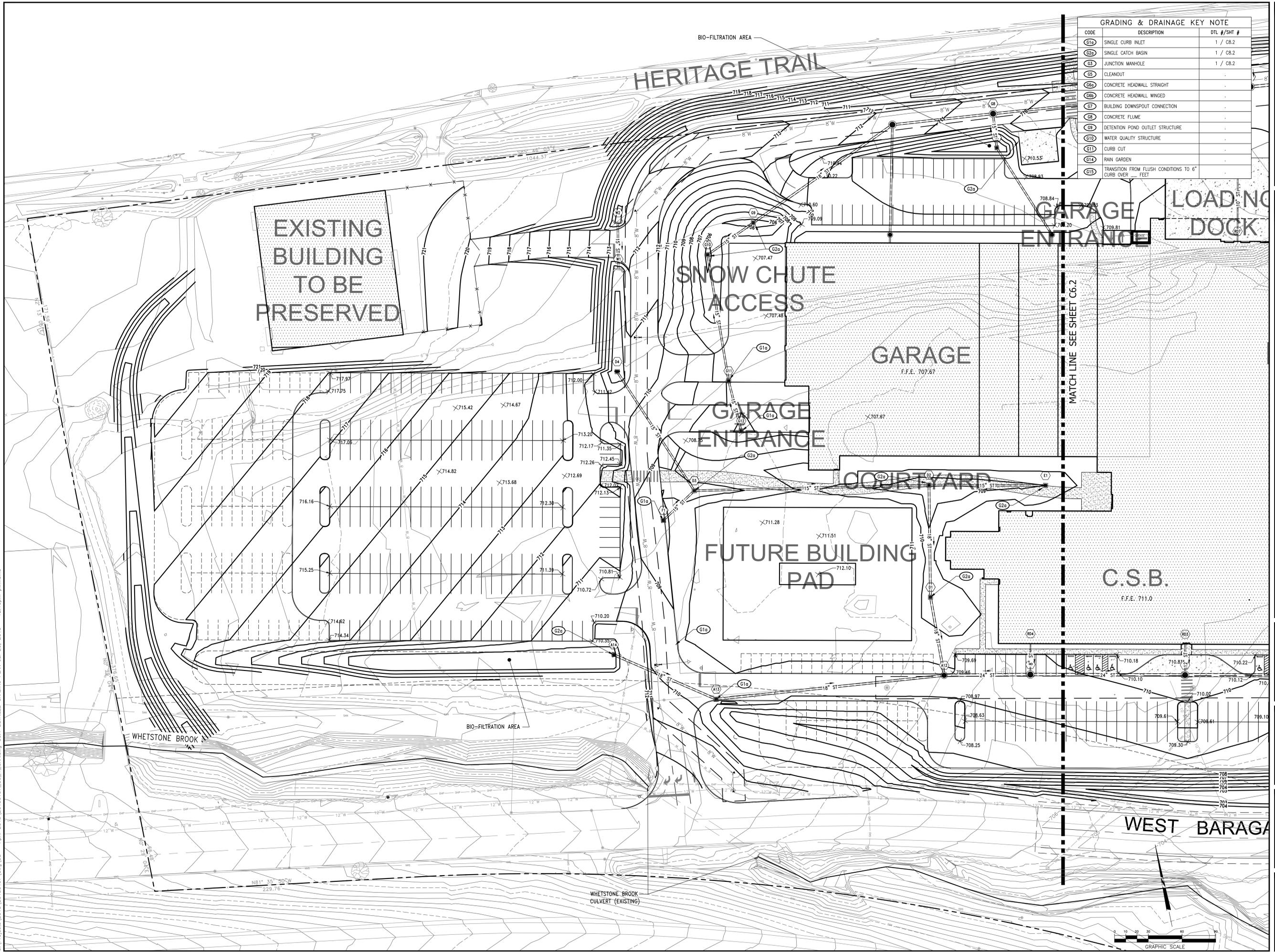
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C6.0
 OVERALL GRADING PLAN



GRADING & DRAINAGE KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
G10	SINGLE CURB INLET	1 / C8.2
G20	SINGLE CATCH BASIN	1 / C8.2
G3	JUNCTION MANHOLE	1 / C8.2
G5	CLEANOUT	
G6a	CONCRETE HEADWALL STRAIGHT	
G6b	CONCRETE HEADWALL WINGED	
G7	BUILDING DOWNSPOUT CONNECTION	
G8	CONCRETE FLUME	
G9	DEFLECTION POND OUTLET STRUCTURE	
G10	WATER QUALITY STRUCTURE	
G11	CURB CUT	
G14	RAIN GARDEN	
G15	TRANSITION FROM FLUSH CONDITIONS TO 6" CURB OVER FEET	

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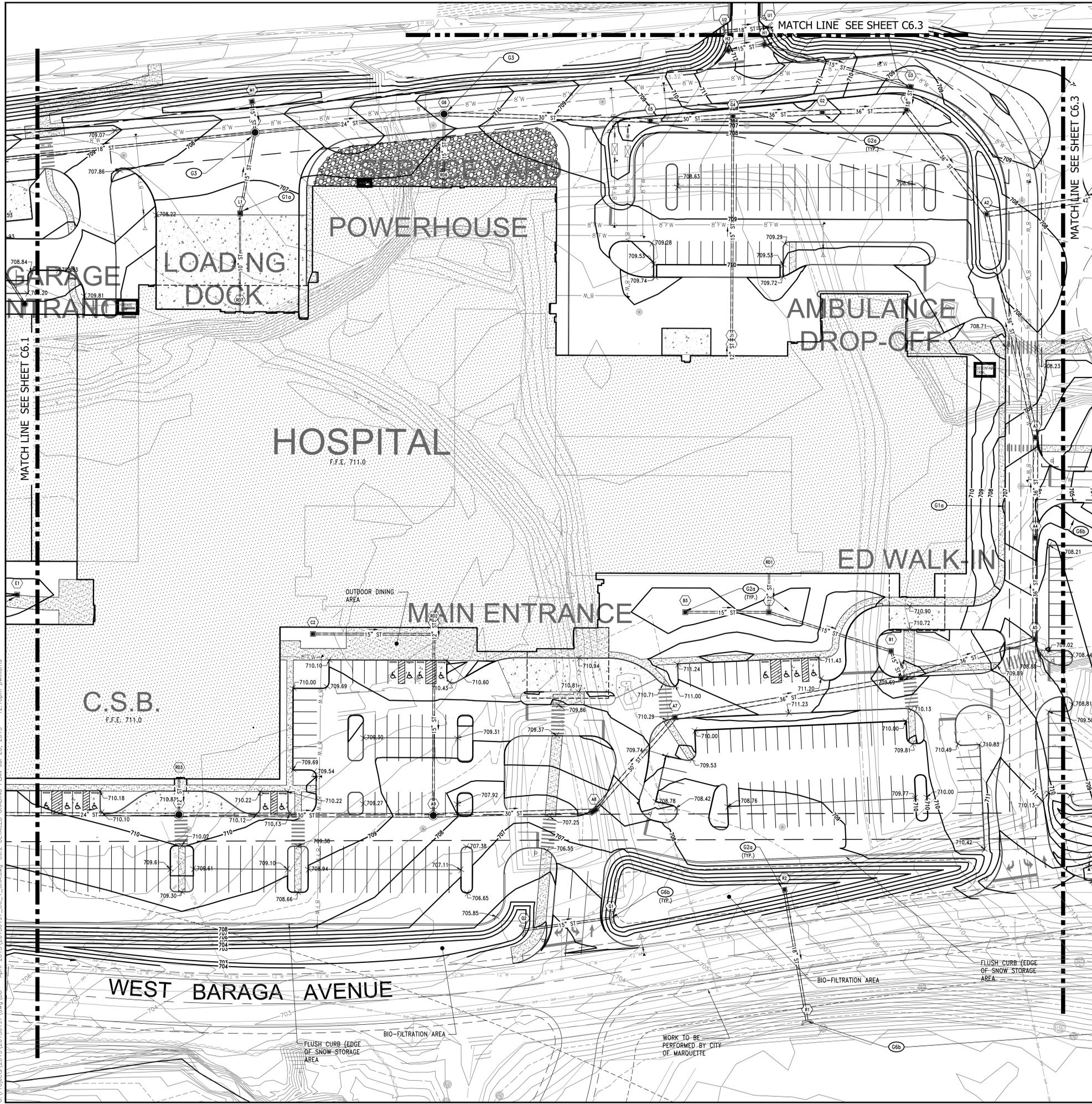
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C6.1
 DETAILED GRADING PLAN

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GRADING & DRAINAGE KEY NOTE

CODE	DESCRIPTION	DTL #/SHT #
G1a	SINGLE CURB INLET	1 / C6.2
G2a	SINGLE CATCH BASIN	1 / C6.2
G3	JUNCTION MANHOLE	1 / C6.2
G5	CLEANOUT	
G6a	CONCRETE HEADWALL STRAIGHT	
G6b	CONCRETE HEADWALL WINGED	
G7	BUILDING DOWNSPOUT CONNECTION	
G8	CONCRETE FLUME	
G9	DETENTION POND OUTLET STRUCTURE	
G10	WATER QUALITY STRUCTURE	
G11	CURB CUT	
G14	RAIN GARDEN	
G15	TRANSITION FROM FLUSH CONDITIONS TO 6" CURB OVER ___ FEET	

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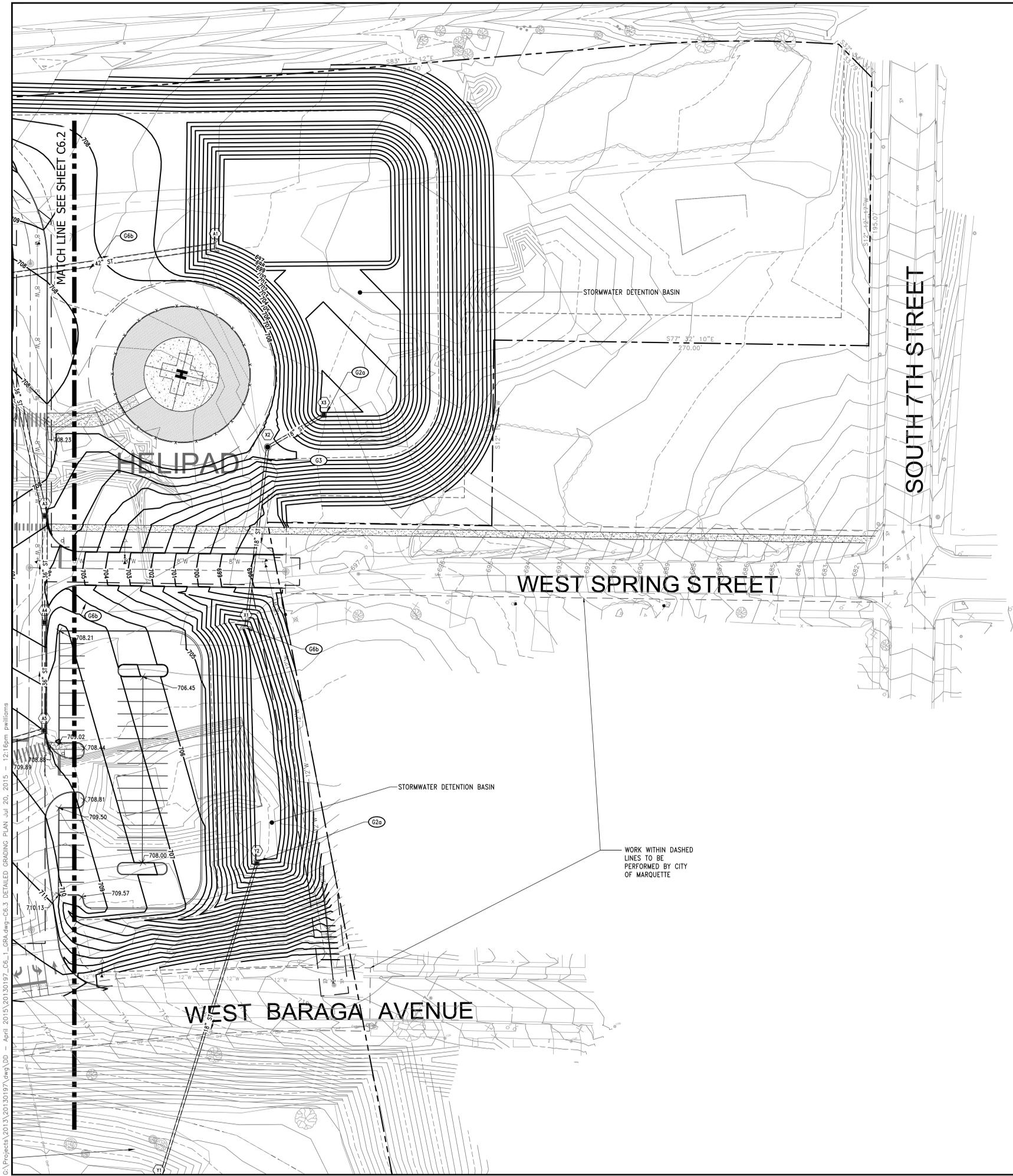
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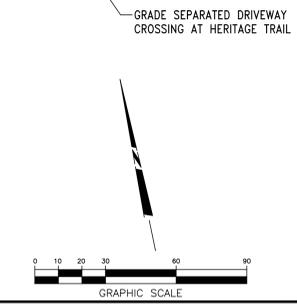
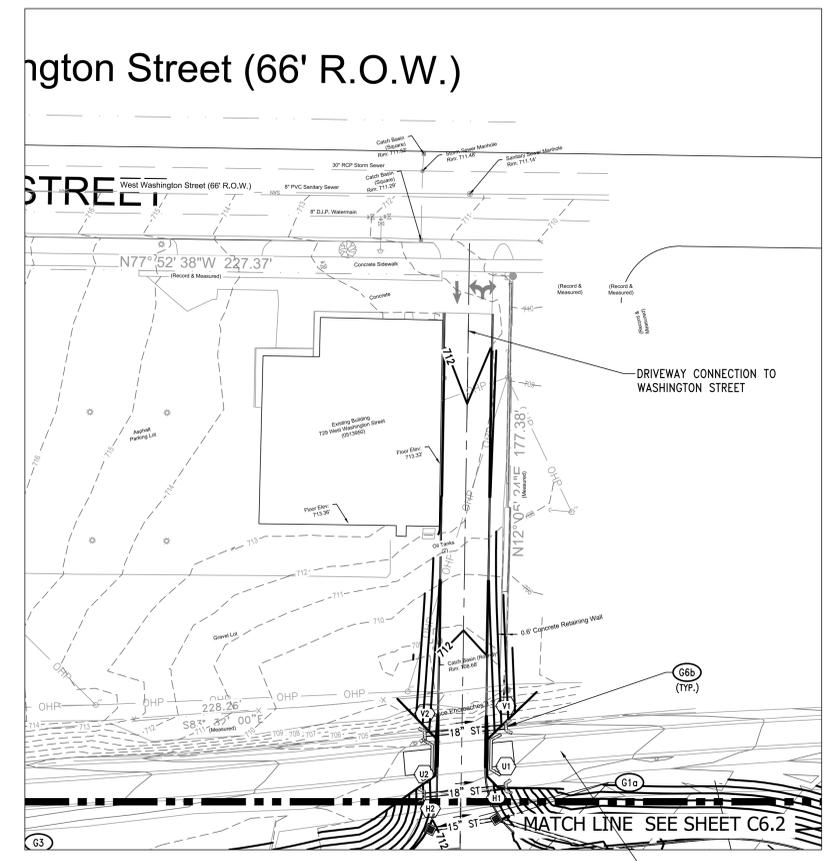
C6.2
 DETAILED GRADING
 PLAN

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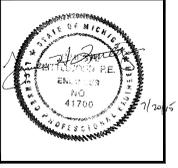
GRADING & DRAINAGE KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
G10	SINGLE CURB INLET	1 / C8.2
G20	SINGLE CATCH BASIN	1 / C8.2
G3	JUNCTION MANHOLE	1 / C8.2
G5	CLEANOUT	.
G66	CONCRETE HEADWALL STRAIGHT	.
G66	CONCRETE HEADWALL WINGED	.
G7	BUILDING DOWNSPOUT CONNECTION	.
G8	CONCRETE FLUME	.
G9	DETENTION POND OUTLET STRUCTURE	.
G10	WATER QUALITY STRUCTURE	.
G11	CURB CUT	.
G14	RAIN GARDEN	.
G15	TRANSITION FROM FLUSH CONDITIONS TO 6" CURB OVER ____ FEET	.

REFER TO SHEETS C8.0-C8.3 FOR SITE DETAILS



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STRUCTURE TABLE		
CODE	DESCRIPTION	TOP GRATE
A1	HEADWALL	700.94
A2	CATCH BASIN	706.05
A3	CURB INLET	707.24
A4	CURB INLET	706.39
A5	CURB INLET	708.99
A6	CURB INLET	709.61
A7	CURB INLET	710.57
A8	CURB INLET	707.77
A9	MANHOLE	708.38
A10	MANHOLE	710.49
A11	MANHOLE	709.76
A12	60" Concentric Manhole	709.38
A13	CURB INLET	709.29
A14	36" x 36" Pond Outlet	710.00
B1	CATCH BASIN	710.47
B2	CATCH BASIN	709.49
B3	CATCH BASIN	709.17
C1	MANHOLE	710.32
C2	CATCH BASIN	710.50
D1	CATCH BASIN	709.09
D2	CATCH BASIN	708.00
D3	CATCH BASIN	708.11
D4	CATCH BASIN	708.99
E1	36" Catch Basin	709.00
F1	CURB INLET	708.57

STRUCTURE TABLE		
CODE	DESCRIPTION	TOP GRATE
G1	CATCH BASIN	706.33
G2	CATCH BASIN	705.77
G3	CURB INLET	708.67
G4	CATCH BASIN	705.00
G5	CATCH BASIN	706.17
G6	MANHOLE	710.15
G7	MANHOLE	707.58
G8	MANHOLE	710.39
G9	36" Catch Basin	705.45
G10	CATCH BASIN	705.67
G11	CURB INLET	707.41
G12	CURB INLET	706.84
H1	CURB INLET	712.15
H2	CURB INLET	711.90
J1	MANHOLE	710.65
L1	CURB INLET	706.65
M1	CATCH BASIN	706.24
N1	36" x 36" Pond Outlet	706.50
O1	HEADWALL	703.94
O2	HEADWALL	704.69
R1	HEADWALL	696.21
R2	36" x 36" Pond Outlet	702.75
RD1	ROOF DRAIN	708.51
RD2	ROOF DRAIN	708.51
RD3	ROOF DRAIN	708.01

STRUCTURE TABLE		
CODE	DESCRIPTION	TOP GRATE
RD4	ROOF DRAIN	707.50
RD5	ROOF DRAIN	708.66
RD6	Null Structure	704.64
RD7	Null Structure	704.91
Structure - (85)	72" Concentric Manhole	711.59
Structure - (86)	Null Structure	704.22
Structure - (87)	Null Structure	707.25
Structure - (88)	48" Concentric Manhole	710.11
Structure - (89)	48" Concentric Manhole	710.13
U1	HEADWALL	702.71
U2	HEADWALL	703.90
V1	HEADWALL	703.40
V2	HEADWALL	704.23
W1	HEADWALL	712.06
W2	HEADWALL	712.69
X1	HEADWALL	695.93
X2	MANHOLE	707.35
X3	36" x 36" Pond Outlet	700.62
Y1	HEADWALL	694.49
Y2	36" x 36" Pond Outlet	697.68

PIPE TABLE							
FROM CODE	FROM INV.	TO CODE	TO INV.	GRADE %	SIZE INCHES	LENGTH L.F.	TYPE
A2	697.05	A1	696.56	0.30%	42"	162	RCP
A3	697.90	A2	697.55	0.20%	36"	177	RCP
A4	698.16	A3	698.00	0.20%	36"	78	RCP
A5	698.42	A4	698.26	0.20%	36"	79	RCP
A6	698.73	A5	698.52	0.20%	36"	107	RCP
A7	699.18	A6	698.83	0.20%	36"	176	RCP
A8	699.87	A7	699.68	0.20%	30"	95	RCP
A9	700.22	A8	699.97	0.20%	30"	123	RCP
A10	700.91	A9	700.32	0.30%	30"	195	RCP
A11	701.82	A10	701.41	0.30%	24"	138	RCP
A12	702.19	A11	701.92	0.35%	24"	77	RCP
A13	705.75	A12	702.69	1.50%	18"	204	RCP
A14	706.35	A13	705.85	0.50%	18"	100	RCP
B1	701.28	A6	700.48	3.50%	15"	23	RCP
B2	704.58	B1	701.38	3.25%	15"	98	RCP
B3	705.00	B2	704.68	0.50%	15"	64	RCP
C1	705.33	A9	701.47	2.75%	15"	140	RCP
C2	705.89	C1	705.43	0.50%	15"	93	RCP
D1	703.12	A12	702.69	0.60%	18"	71	RCP
D2	703.72	D1	703.22	0.50%	18"	101	RCP
D3	705.01	D2	703.97	0.50%	15"	209	RCP
D4	706.00	D3	705.11	0.70%	15"	127	RCP
E1	705.01	D2	703.97	1.00%	15"	104	RCP
F1	705.30	D3	705.11	0.50%	15"	38	RCP
G1	697.70	A2	697.55	0.15%	36"	102	RCP

PIPE TABLE							
FROM CODE	FROM INV.	TO CODE	TO INV.	GRADE %	SIZE INCHES	LENGTH L.F.	TYPE
G2	697.90	G1	697.80	0.15%	36"	65	RCP
G3	700.10	G1	699.20	5.00%	18"	18	RCP
G4	698.10	G2	698.00	0.15%	36"	69	RCP
G5	698.73	G4	698.60	0.20%	30"	63	RCP
G6	699.15	G5	698.83	0.20%	30"	158	RCP
G7	700.01	G6	699.65	0.25%	24"	146	RCP
G8	701.09	G7	700.51	0.25%	18"	230	RCP
G9	702.14	Structure - (85)	701.61	0.35%	18"	152	RCP
G10	702.64	G9	702.39	0.50%	15"	50	RCP
G11	703.60	G10	702.74	0.75%	15"	115	RCP
G12	703.93	G11	703.70	0.50%	15"	46	RCP
H1	706.16	G3	700.32	5.00%	15"	117	RCP
H2	707.68	H1	706.26	5.00%	15"	28	RCP
J1	707.00	G4	699.85	4.00%	15"	179	RCP
L1	702.03	G7	700.76	2.00%	15"	64	RCP
M1	701.60	G7	700.76	3.50%	15"	24	RCP
N1	701.96	G8	701.34	2.00%	15"	31	RCP
O2	702.75	O1	702.00	1.11%	15"	67	RCP
R2	697.10	R1	694.00	3.00%	18"	103	RCP
RD1	707.35	B2	704.93	8.10%	12"	30	HDPE
RD2	707.35	C1	705.68	31.73%	12"	5	HDPE
RD3	706.85	A10	702.41	16.05%	12"	28	HDPE
RD4	706.75	A11	703.15	13.00%	8"	28	HDPE
RD5	707.50	J1	707.25	3.67%	12"	7	HDPE
RD6	703.20	G6	700.40	5.00%	15"	56	HDPE

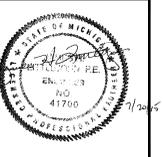
PIPE TABLE							
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Structure - (85)	701.51	G8	701.19	0.35%	18"	90	RCP
Structure - (86)	703.06	Structure - (89)	702.99	1.00%	12"	7	HDPE
Structure - (87)	706.09	Structure - (88)	706.00	1.15%	12"	8	HDPE
Structure - (88)	705.75	N1	702.06	4.00%	15"	92	RCP
Structure - (89)	702.75	Structure - (85)	701.76	1.00%	15"	99	RCP
U2	701.69	U1	700.50	3.40%	18"	35	RCP
V2	702.02	V1	701.19	2.40%	18"	35	RCP
W2	710.83	W1	710.21	1.50%	15"	42	HDPE
X2	695.70	X1	693.72	1.50%	18"	132	RCP
X3	696.50	X2	695.80	1.50%	18"	47	RCP
Y2	693.50	Y1	692.28	0.50%	18"	243	RCP

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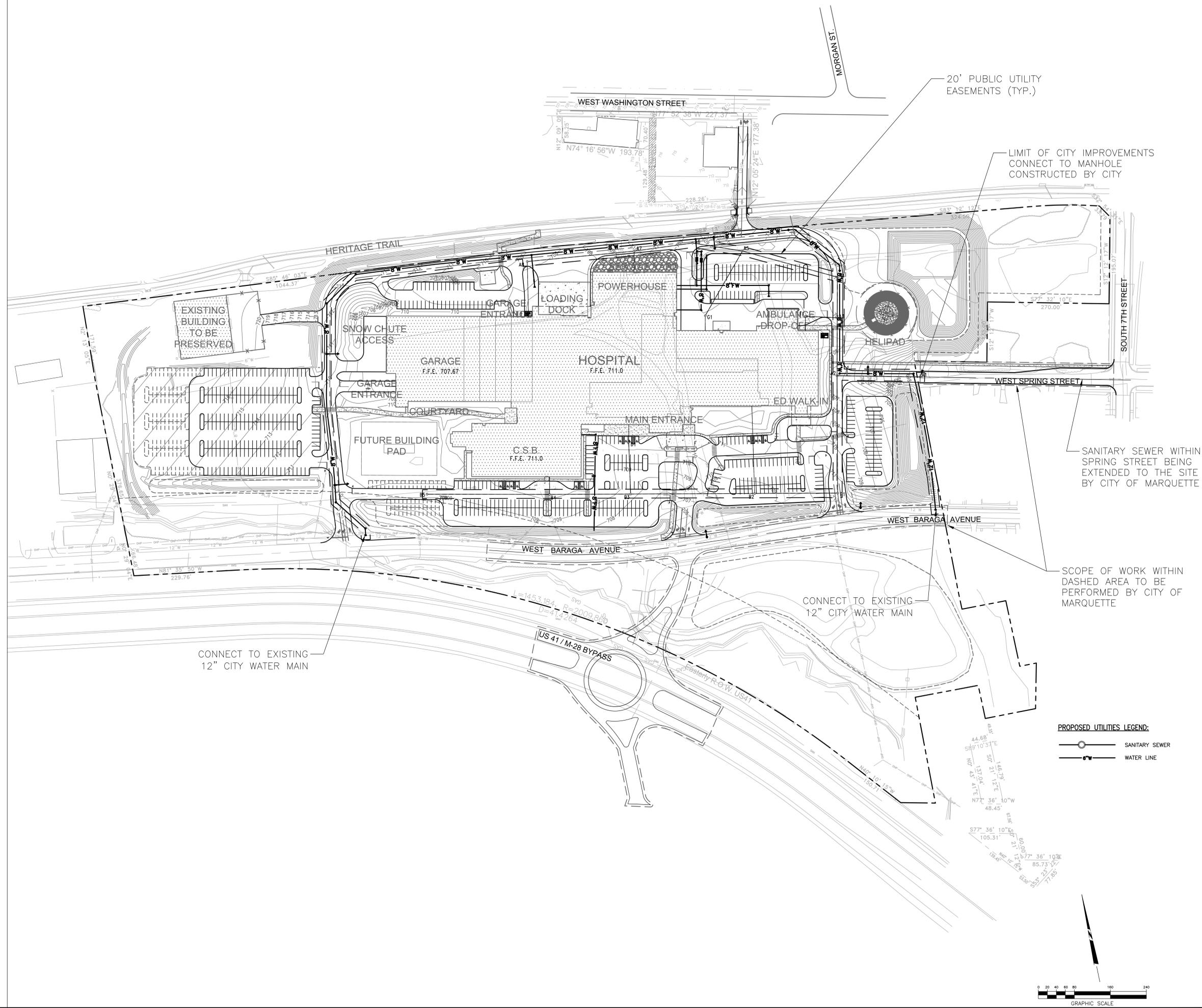
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C6.4

STORM SEWER TABLES



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20' PUBLIC UTILITY EASEMENT (TYP.)

HERITAGE TRAIL

EXISTING BUILDING TO BE PRESERVED

PROPOSED PUBLIC WATERMAIN

SNOW CHUTE ACCESS

GARAGE

F.F.E. 707.67

GARAGE ENTRANCE

COURTYARD

FUTURE BUILDING PAD

PROPOSED STORM SEWER

C.S.B.

F.F.E. 711.0

EXISTING SANITARY SEWER

EXISTING 8" WATERMAIN SERVING THE COLD STORAGE BUILDING

FIRE HYDRANT (TYP.)

PROPOSED SANITARY SEWER

EXISTING 12" WATERMAIN

CONNECT TO EXISTING 12" WATERMAIN WITH 8"x12" T.S.&V.

WEST BARAGA

SITE UTILITY KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
U1a	WATER LINE (8")	
U1b	WATER LINE (12")	
U2a	FIRE LINE (SPECIFY SIZE(S))	
U3a	IRRIGATION LINE (SPECIFY SIZE(S))	
U4a	WATER METER (SPECIFY SIZE(S))	
U5a	" REDUCED PRESSURE BACKFLOW PREVENTER	
U6a	" DOUBLE DETECTOR CHECK VALVE ASSEMBLY	
U7	WATER BLOCKING/KICKERS	1 / C8.3
U8	POST INDICATOR VALVE	
U9	FIRE DEPARTMENT CONNECTION	
U10	FIRE HYDRANT ASSEMBLY	1 / C8.3
U11a	WATER VALVE (SPECIFY SIZE(S))	1 / C8.3
U12a	TEE (SPECIFY SIZE(S))	1 / C8.3
U20a	SANITARY SEWER SERVICE (SPECIFY SIZE(S))	1 / C8.1
U21	SANITARY SEWER FORCE MAIN (SPECIFY SIZE(S))	
U22	SANITARY SEWER MANHOLE	1 / C8.1
U23	TACTILE WARNING SURFACE	
U24	GREASE INTERCEPTOR	
U30	GAS SERVICE	
U31	GAS METER	
U40	ELECTRIC TRANSFORMER	
U41	UNDERGROUND ELECTRIC LINE	
U42	OVERHEAD ELECTRIC LINE	
U43	UNDERGROUND COMMUNICATION LINE	
U44	OVERHEAD COMMUNICATION LINE	
U45	SITE LIGHTING	
U46	CONDUIT SLEEVES (SPECIFY NUMBER & SIZE)	

PROPOSED UTILITIES LEGEND:
○ SANITARY SEWER
— WATER LINE

GRAPHIC SCALE

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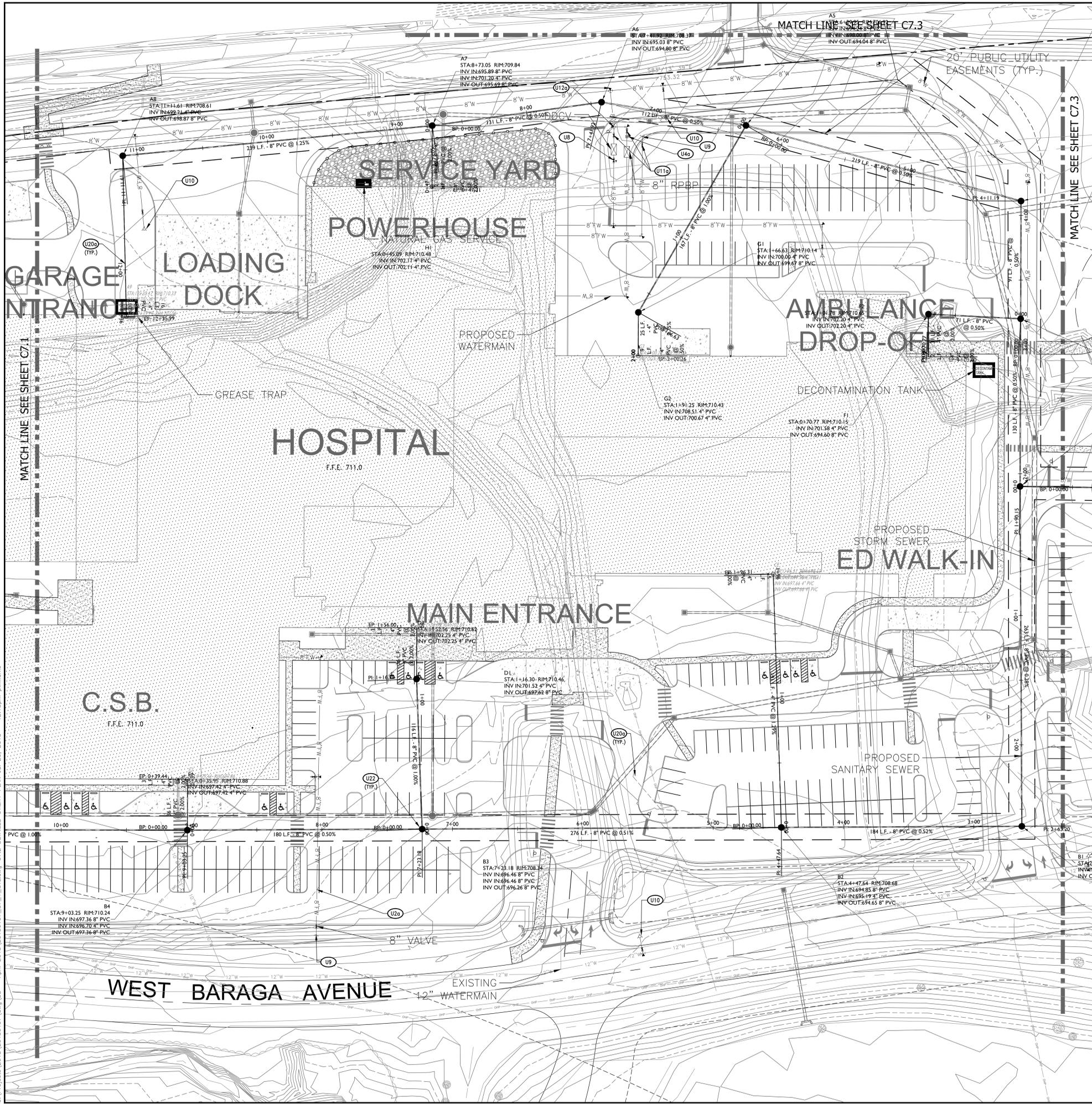
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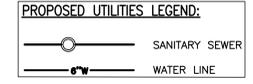


DATE	REVISIONS
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C7.1
DETAILED UTILITY PLAN



SITE UTILITY KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
U16	WATER LINE (8")	
U17	WATER LINE (12")	
U18	FIRE LINE (SPECIFY SIZE(S))	
U19	IRRIGATION LINE (SPECIFY SIZE(S))	
U20	WATER METER (SPECIFY SIZE(S))	
U21	REDUCED PRESSURE BACKFLOW PREVENTER	
U22	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	
U23	WATER BLOCKING/KICKERS	1 / C8.3
U24	POST INDICATOR VALVE	
U25	FIRE DEPARTMENT CONNECTION	
U26	FIRE HYDRANT ASSEMBLY	1 / C8.3
U27	WATER VALVE (SPECIFY SIZE(S))	1 / C8.3
U28	TEE (SPECIFY SIZE(S))	1 / C8.3
U29	SANITARY SEWER SERVICE (SPECIFY SIZE(S))	1 / C8.1
U30	SANITARY SEWER FORCE MAIN (SPECIFY SIZE(S))	
U31	SANITARY SEWER MANHOLE	1 / C8.1
U32	TACTILE WARNING SURFACE	
U33	GREASE INTERCEPTOR	
U34	GAS SERVICE	
U35	GAS METER	
U36	ELECTRIC TRANSFORMER	
U37	UNDERGROUND ELECTRIC LINE	
U38	OVERHEAD ELECTRIC LINE	
U39	UNDERGROUND COMMUNICATION LINE	
U40	OVERHEAD COMMUNICATION LINE	
U41	SITE LIGHTING	
U42	CONDUIT SLEEVES (SPECIFY NUMBER & SIZE)	



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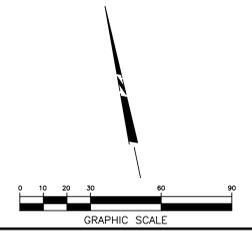
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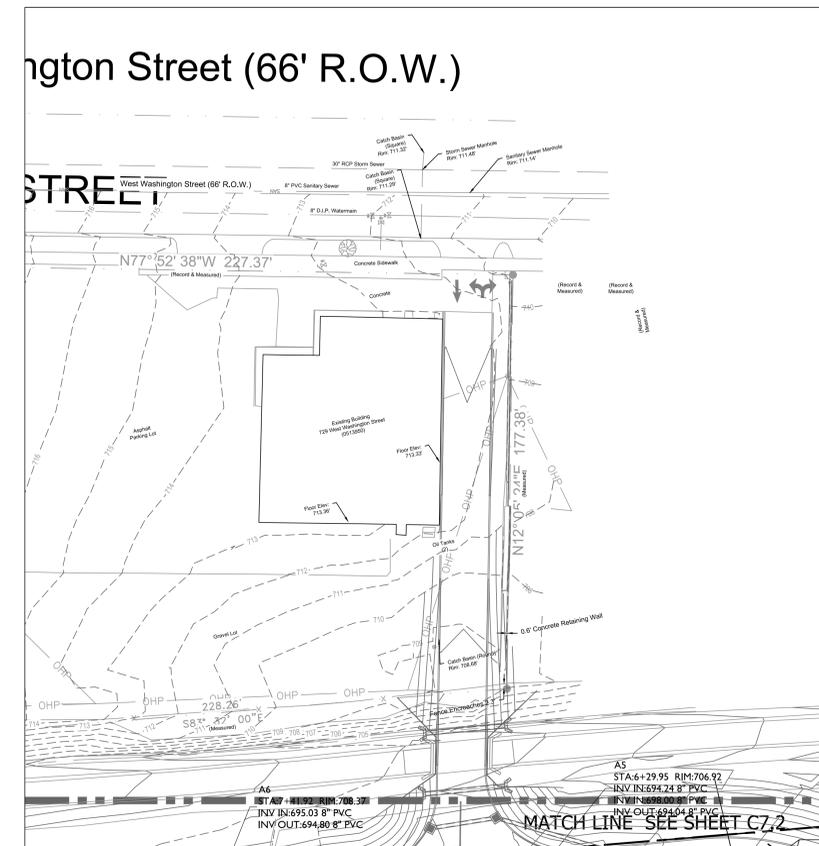
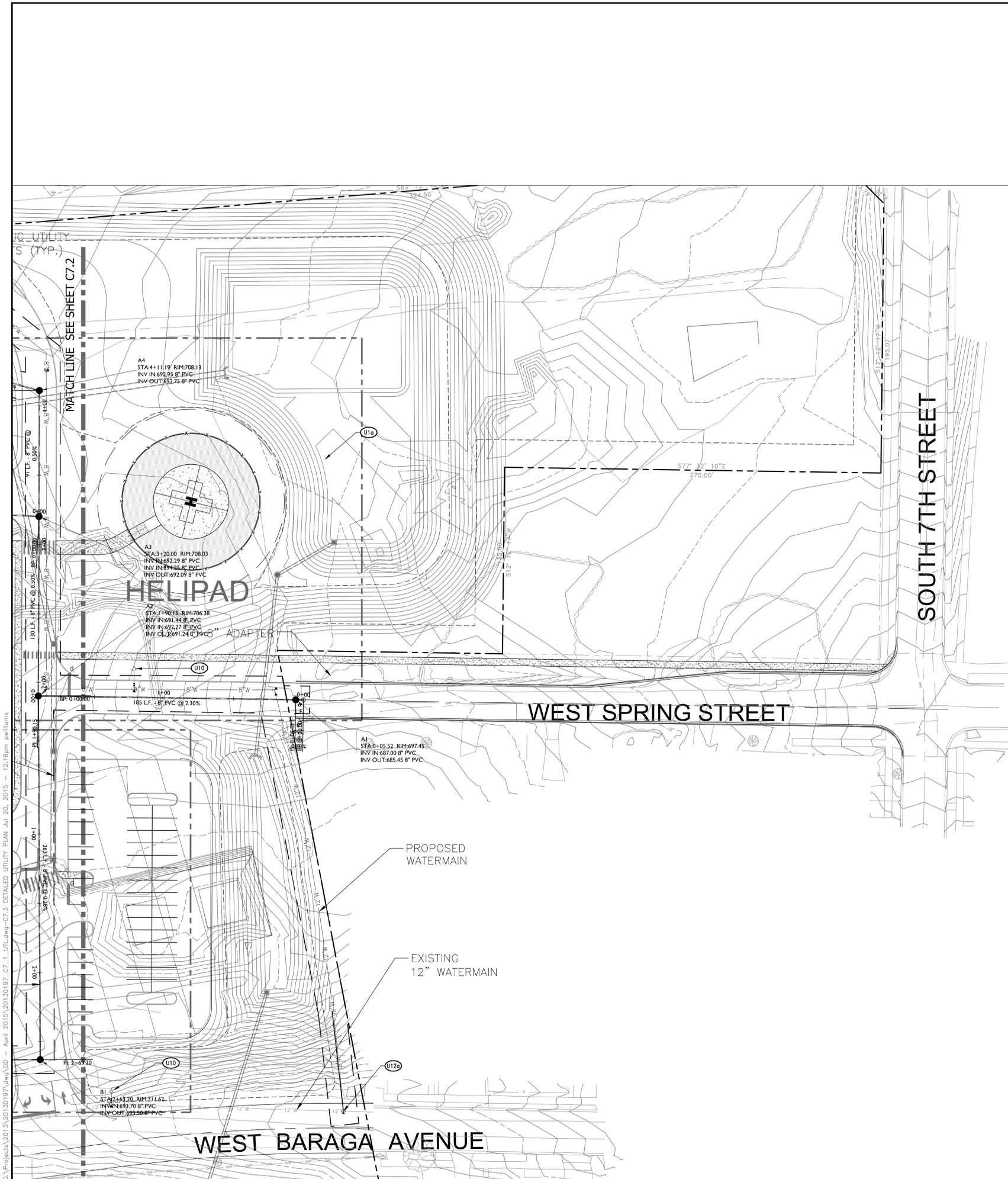


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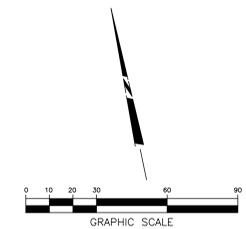
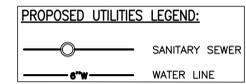
C7.2
 DETAILED UTILITY PLAN



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SITE UTILITY KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
U16	WATER LINE (8")	
U18	WATER LINE (12")	
U26	FIRE LINE (SPECIFY SIZE(S))	
U36	IRRIGATION LINE (SPECIFY SIZE(S))	
U46	WATER METER (SPECIFY SIZE(S))	
U5	___" REDUCED PRESSURE BACKFLOW PREVENTER	
U56	___" DOUBLE DETECTOR CHECK VALVE ASSEMBLY	
U7	WATER BLOCKING/KICKERS	1 / C8.3
U8	POST INDICATOR VALVE	
U9	FIRE DEPARTMENT CONNECTION	
U10	FIRE HYDRANT ASSEMBLY	1 / C8.3
U116	WATER VALVE (SPECIFY SIZE(S))	1 / C8.3
U126	TEE (SPECIFY SIZE(S))	1 / C8.3
U206	SANITARY SEWER SERVICE (SPECIFY SIZE(S))	1 / C8.1
U21	SANITARY SEWER FORCE MAIN (SPECIFY SIZE(S))	
U22	SANITARY SEWER MANHOLE	1 / C8.1
U23	TACTILE WARNING SURFACE	
U24	GREASE INTERCEPTOR	
U30	GAS SERVICE	
U31	GAS METER	
U46	ELECTRIC TRANSFORMER	
U41	UNDERGROUND ELECTRIC LINE	
U42	OVERHEAD ELECTRIC LINE	
U43	UNDERGROUND COMMUNICATION LINE	
U44	OVERHEAD COMMUNICATION LINE	
U45	SITE LIGHTING	
U48	CONDUIT SLEEVES (SPECIFY NUMBER & SIZE)	



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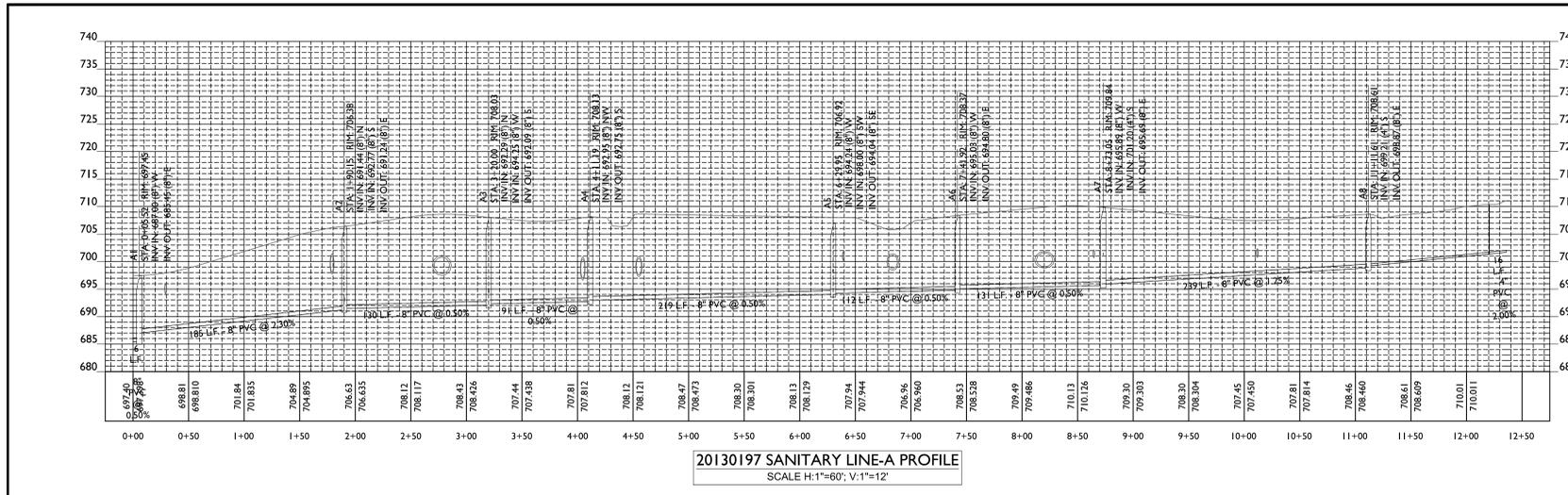
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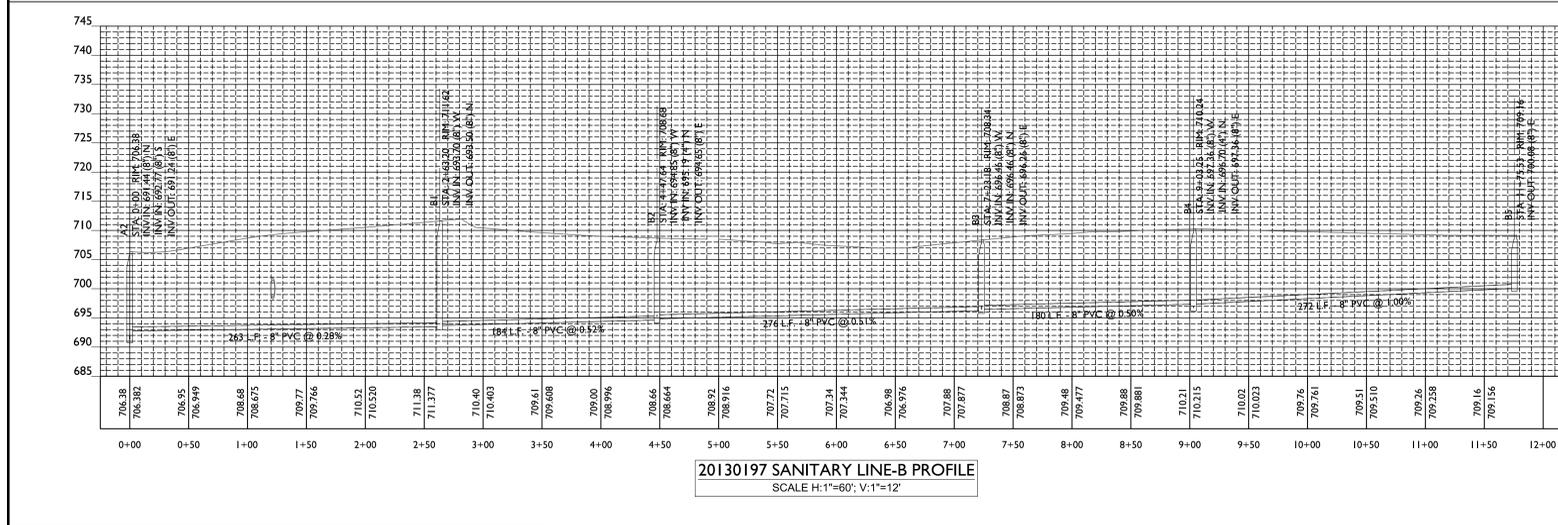
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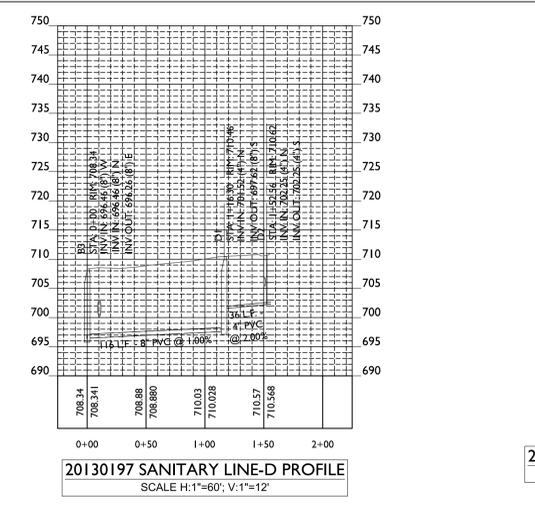
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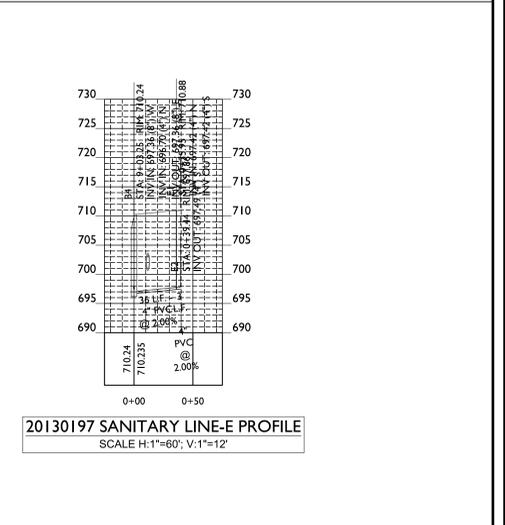
20130197 SANITARY LINE-A PROFILE
SCALE H:1"=60'; V:1"=12'



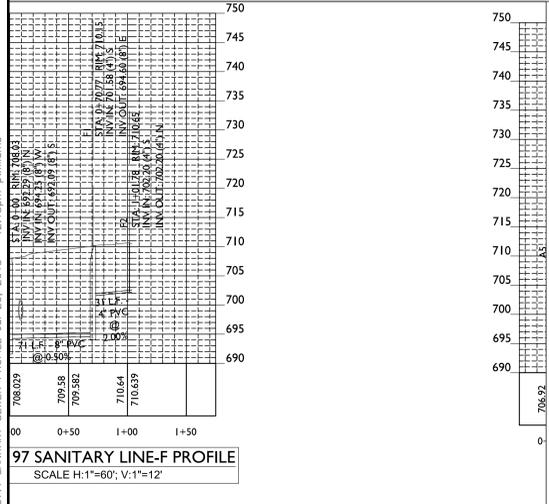
20130197 SANITARY LINE-B PROFILE
SCALE H:1"=60'; V:1"=12'



20130197 SANITARY LINE-D PROFILE
SCALE H:1"=60'; V:1"=12'



20130197 SANITARY LINE-E PROFILE
SCALE H:1"=60'; V:1"=12'

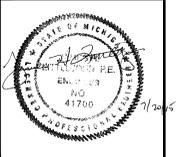


97 SANITARY LINE-F PROFILE
SCALE H:1"=60'; V:1"=12'

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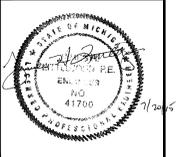
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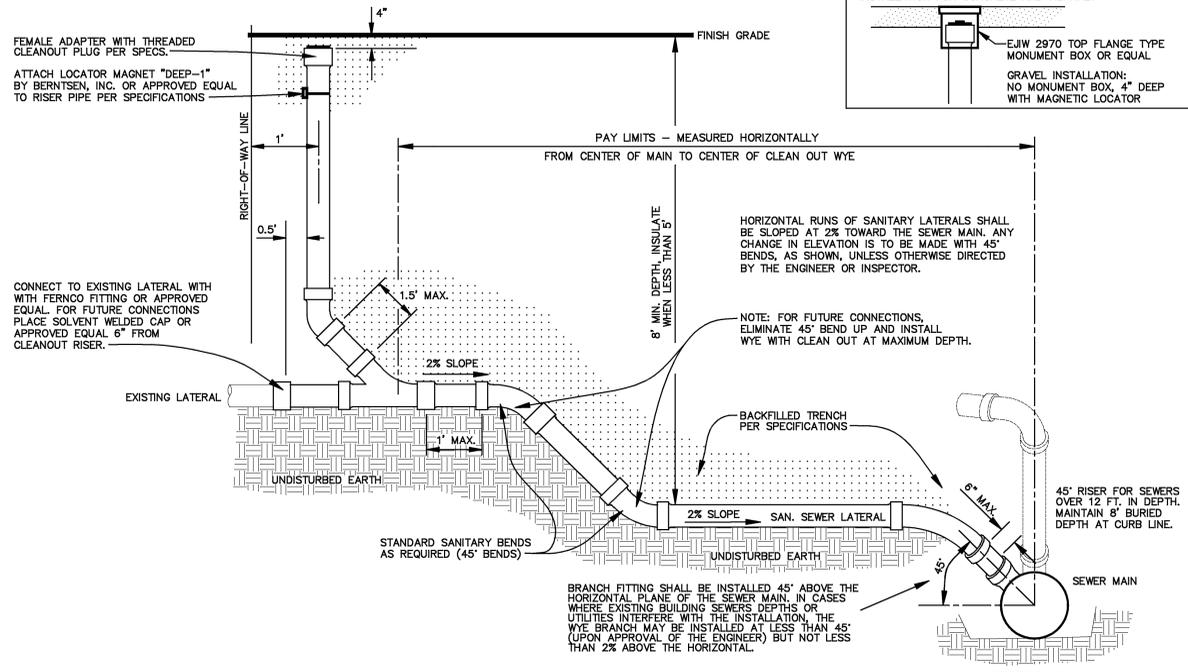
DATE	REVISIONS
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C7.4
 SANITARY SEWER PROFILE

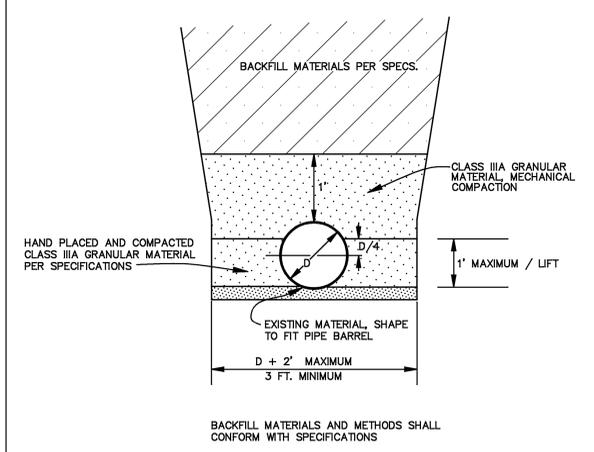


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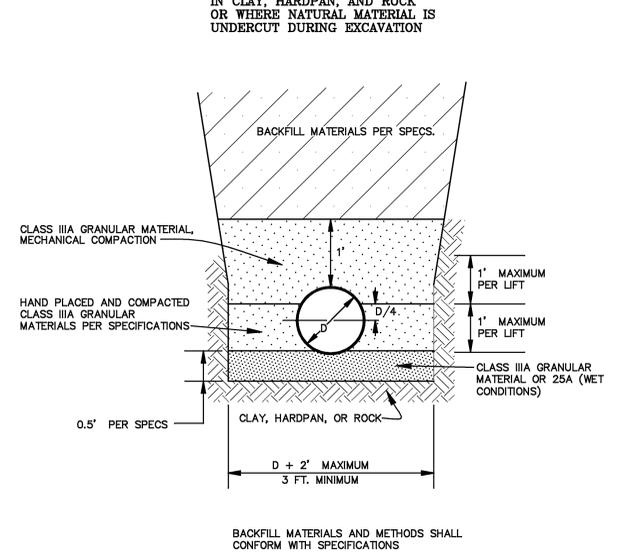
SANITARY SEWER LATERAL RISER DETAIL



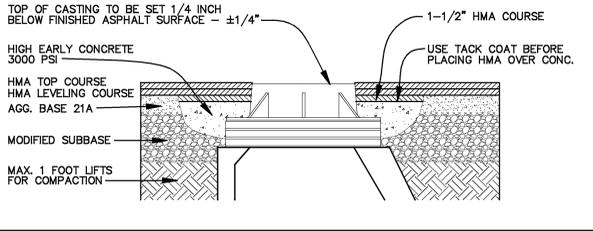
PIPE BEDDING DETAIL "G" IN SAND AND GRAVEL



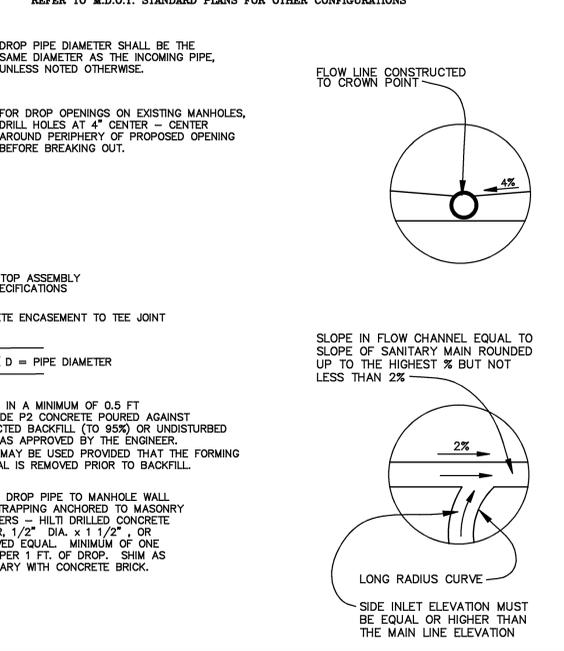
PIPE BEDDING DETAIL "G" IN CLAY, HARDPAN, AND ROCK OR WHERE NATURAL MATERIAL IS UNDERCUT DURING EXCAVATION



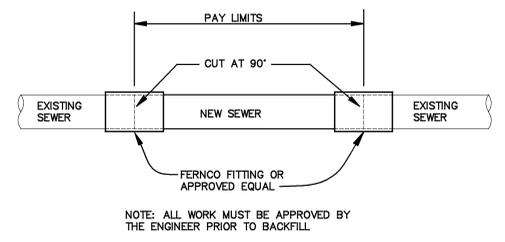
TYPICAL MANHOLE COVER INSTALLATION



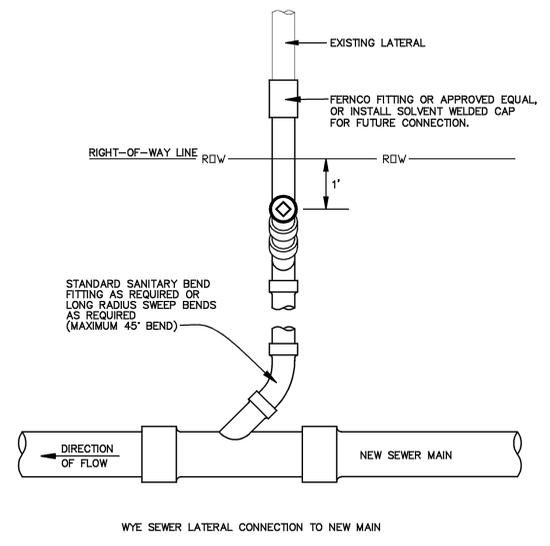
STANDARD CONCRETE DROP MANHOLE



SANITARY SEWER LATERAL REPAIR DETAIL AND SANITARY SEWER POINT REPAIR

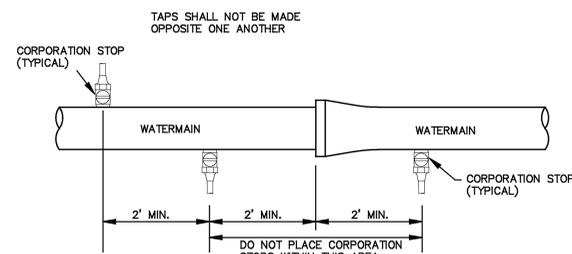


PLAN VIEW OF SANITARY SEWER LATERAL



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TAP SPACING ON WATERMAIN

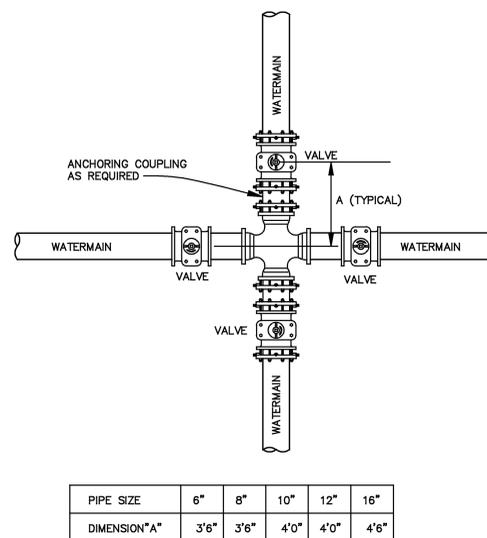


PIPE RESTRAINT SCHEDULE

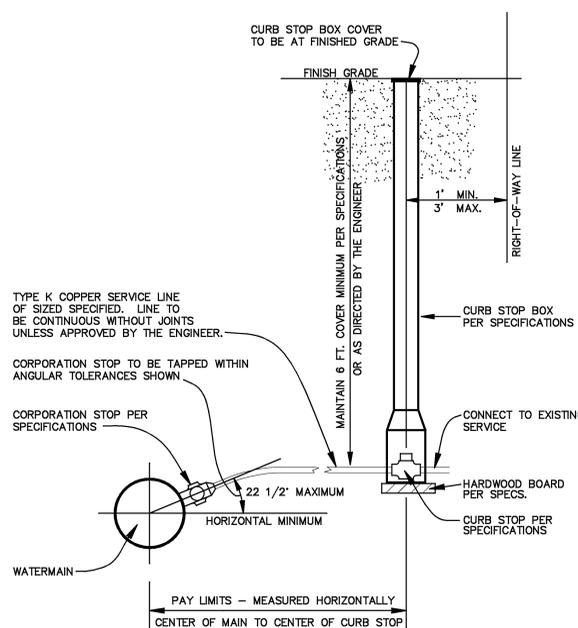
PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)									
	HORIZONTAL BENDS					DEAD ENDS (2)	45° VERTICAL BENDS		REDUCER ONE SIZE REDUCTION	REDUCER TWO SIZE REDUCTION
	TEE, 90°	45°	22-1/2'	11-1/4'	UPPER		LOWER			
4	23	9	5	2	55	23	8	-	-	
6	32	13	6	3	77	32	11	21	-	
8	40	17	8	4	100	41	14	21	49	
12	56	23	11	6	141	58	20	40	81	
16	71	29	14	7	181	75	25	41	96	
20	84	35	17	8	218	90	30	42	94	
24	96	40	19	10	253	105	35	42	106	
30	112	47	22	11	303	125	41	59	117	

- RESTRAIN ALL PIPE JOINTS WITHIN THE DISTANCE SHOWN ON THE TABLES MEASURED FROM THE POINT OF CONNECTION.
- ISOLATION VALVES SHALL BE TREATED AS DEAD ENDS WITH RESTRAINT ON BOTH SIDES OF THE VALVE.

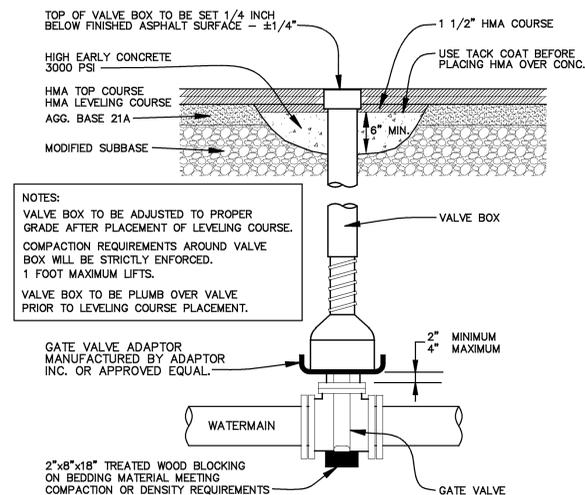
STANDARD VALVE LOCATION



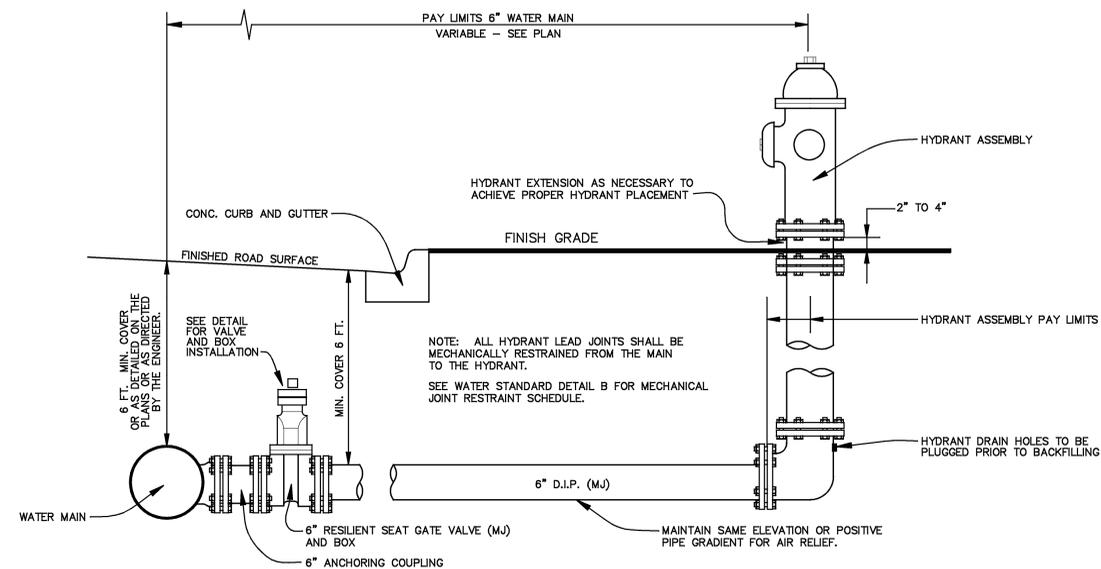
TYPICAL SERVICE CONNECTION



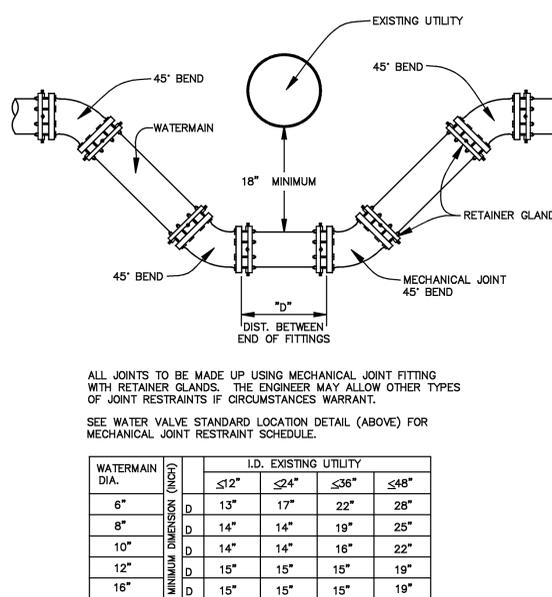
TYPICAL VALVE BOX INSTALLATION



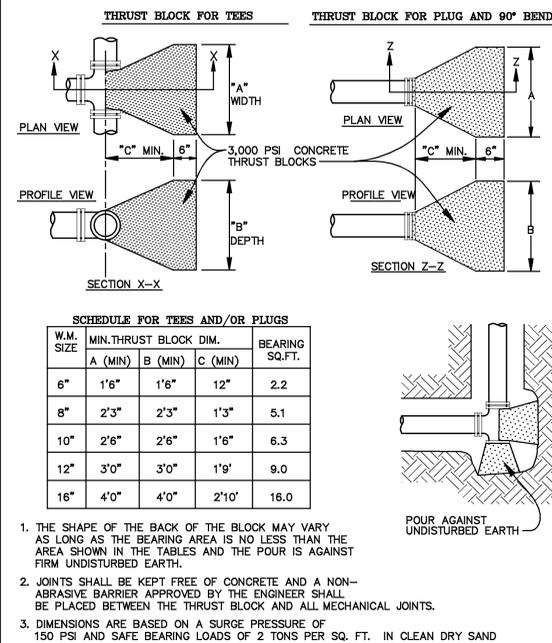
TYPICAL HYDRANT CONNECTION



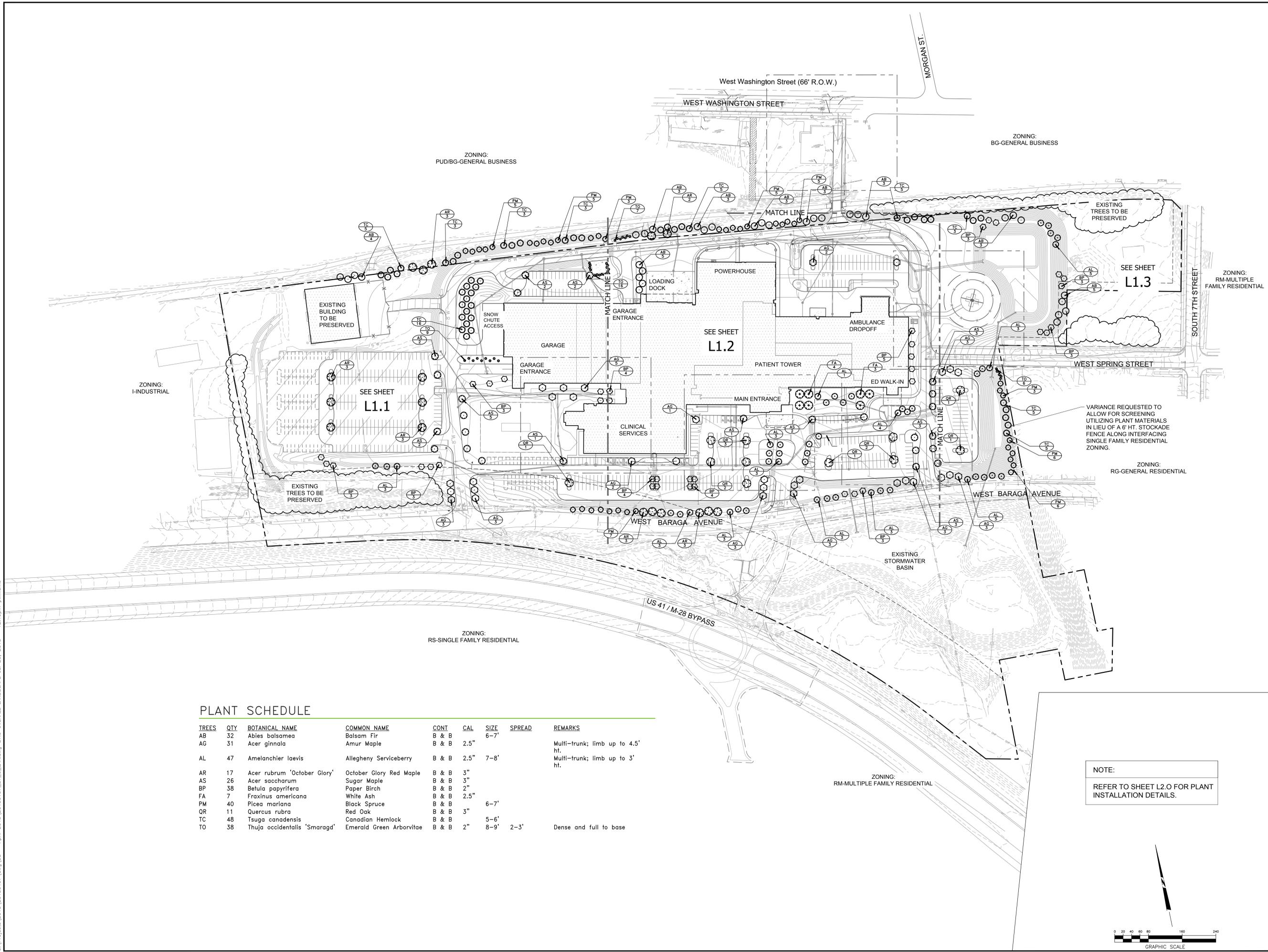
WATER MAIN CROSSING DETAIL



THRUST BLOCK DETAIL



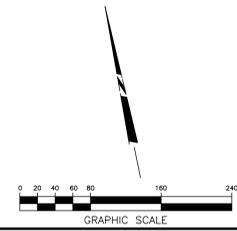
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PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	SPREAD	REMARKS
AB	32	Abies balsamea	Balsam Fir	B & B	2.5"	6-7'		
AG	31	Acer ginnala	Amur Maple	B & B	2.5"			Multi-trunk; limb up to 4.5' ht.
AL	47	Amelanchier laevis	Allegheny Serviceberry	B & B	2.5"	7-8'		Multi-trunk; limb up to 3' ht.
AR	17	Acer rubrum 'October Glory'	October Glory Red Maple	B & B	3"			
AS	26	Acer saccharum	Sugar Maple	B & B	3"			
BP	38	Betula papyrifera	Paper Birch	B & B	2"			
FA	7	Fraxinus americana	White Ash	B & B	2.5"			
PM	40	Picea mariana	Black Spruce	B & B		6-7'		
QR	11	Quercus rubra	Red Oak	B & B	3"			
TC	48	Tsuga canadensis	Canadian Hemlock	B & B		5-6'		
TO	38	Thuja occidentalis 'Smaragd'	Emerald Green Arborvitae	B & B	2"	8-9'	2-3'	Dense and full to base

NOTE:
REFER TO SHEET L2.0 FOR PLANT
INSTALLATION DETAILS.



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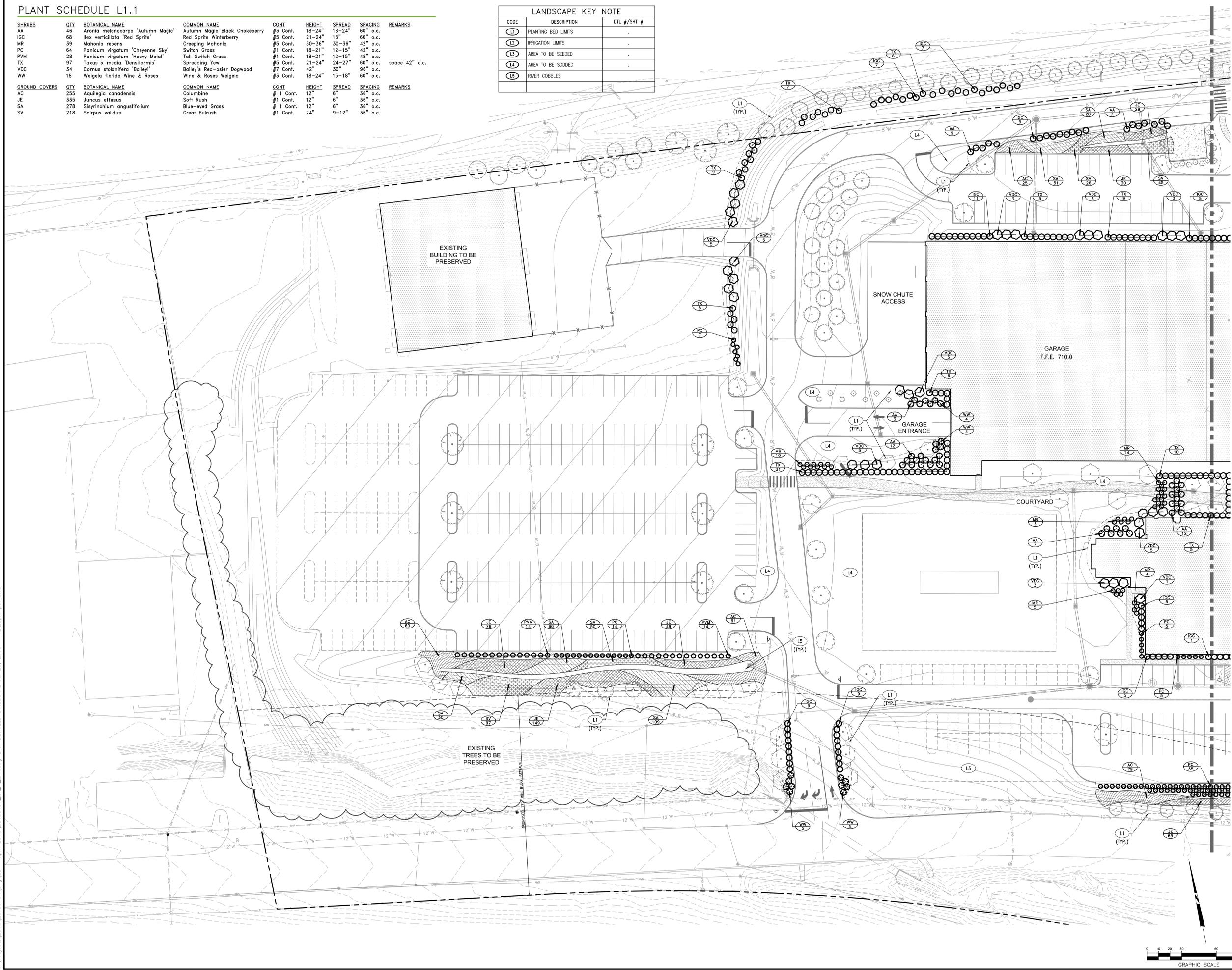
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L1.0
OVERALL
LANDSCAPE

PLANT SCHEDULE L1.1

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT	HEIGHT	SPREAD	SPACING	REMARKS
AA	46	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Black Chokeberry	#3 Cont.	18-24"	18-24"	60" o.c.	
IGC	68	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	#5 Cont.	21-24"	18"	60" o.c.	
MR	39	Mahonia repens	Creeping Mahonia	#5 Cont.	30-36"	30-36"	42" o.c.	
PC	64	Panicum virgatum 'Cheyenne Sky'	Switch Grass	#1 Cont.	18-21"	12-15"	42" o.c.	
PVM	28	Panicum virgatum 'Heavy Metal'	Tall Switch Grass	#1 Cont.	18-21"	12-15"	48" o.c.	
TX	97	Taxus x media 'Densaformis'	Spreading Yew	#5 Cont.	21-24"	24-27"	60" o.c.	space 42" o.c.
VDC	34	Cornus stolonifera 'Bailey'	Bailey's Red-osier Dogwood	#7 Cont.	42"	30"	96" o.c.	
WW	18	Weigela florida Wine & Roses	Wine & Roses Weigela	#3 Cont.	18-24"	15-18"	60" o.c.	
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT	HEIGHT	SPREAD	SPACING	REMARKS
AC	255	Aquilegia canadensis	Columbine	#1 Cont.	12"	6"	36" o.c.	
JE	335	Juncus effusus	Soft Rush	#1 Cont.	12"	6"	36" o.c.	
SA	278	Styrinchium angustifolium	Blue-eyed Grass	#1 Cont.	12"	6"	36" o.c.	
SV	218	Scirpus validus	Great Bulrush	#1 Cont.	24"	9-12"	36" o.c.	

LANDSCAPE KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
L1	PLANTING BED LIMITS	
L2	IRRIGATION LIMITS	
L3	AREA TO BE SEEDED	
L4	AREA TO BE SOODED	
L5	RIVER COBBLES	



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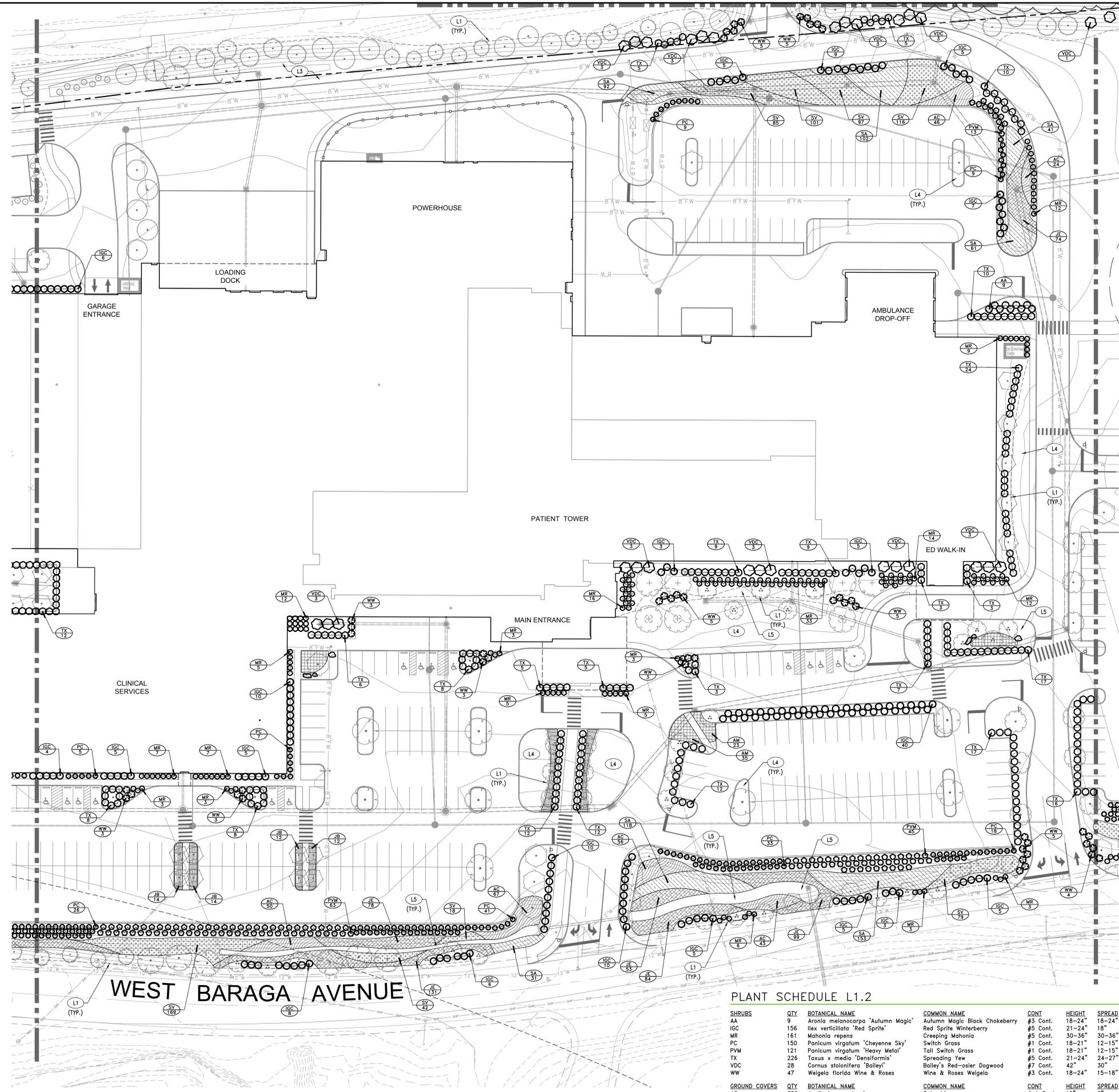


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L1.1
 DETAILED LANDSCAPE

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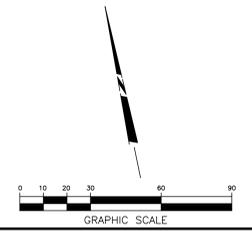
G:\Projects\2013\20130197\dwg\DO - April 2015\20130197_L1.2 DETAILED LANDSCAPE Jun 20, 2015 - 12:20pm pavilliams



PLANT SCHEDULE L1.2

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT	HEIGHT	SPREAD	SPACING	REMARKS
AA	9	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Black Chokeberry	#3 Cont.	18-24"	18-24"	60" o.c.	
IGC	156	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	#5 Cont.	21-24"	18"	60" o.c.	
MR	161	Mahonia repens	Creeping Mahonia	#5 Cont.	30-36"	30-36"	42" o.c.	
PC	150	Panicum virgatum 'Cheyenne Sky'	Switch Grass	#1 Cont.	18-21"	12-15"	42" o.c.	
PVM	121	Panicum virgatum 'Heavy Metal'	Tall Switch Grass	#1 Cont.	18-21"	12-15"	48" o.c.	
TX	226	Toxus x media 'Densiformis'	Spreading Yew	#5 Cont.	21-24"	24-27"	60" o.c.	space 42" o.c.
VDC	28	Cornus stolonifera 'Bailey'	Bailey's Red-osier Dogwood	#7 Cont.	42"	30"	96" o.c.	
WW	47	Weigela florida Wine & Roses	Wine & Roses Weigela	#3 Cont.	18-24"	15-18"	60" o.c.	
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT	HEIGHT	SPREAD	SPACING	REMARKS
AC	286	Aquilegia canadensis	Columbine	# 1 Cont.	12"	6"	36" o.c.	
AM	124	Perennial Color	Perennial Color	1 gal			36" o.c.	
JB	87	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	#1 Cont.	12"	6"	48" o.c.	
JE	584	Juncus effusus	Soft Rush	#1 Cont.	12"	6"	36" o.c.	
SA	598	Sisyrinchium angustifolium	Blue-eyed Grass	# 1 Cont.	12"	6"	36" o.c.	
SY	707	Scirpus validus	Great Bulrush	#1 Cont.	24"	9-12"	36" o.c.	

CODE	DESCRIPTION	DTL #/SHT #
L1	PLANTING BED LIMITS	
L2	IRRIGATION LIMITS	
L3	AREA TO BE SEEDED	
L4	AREA TO BE SOODED	
L5	RIVER COBBLES	



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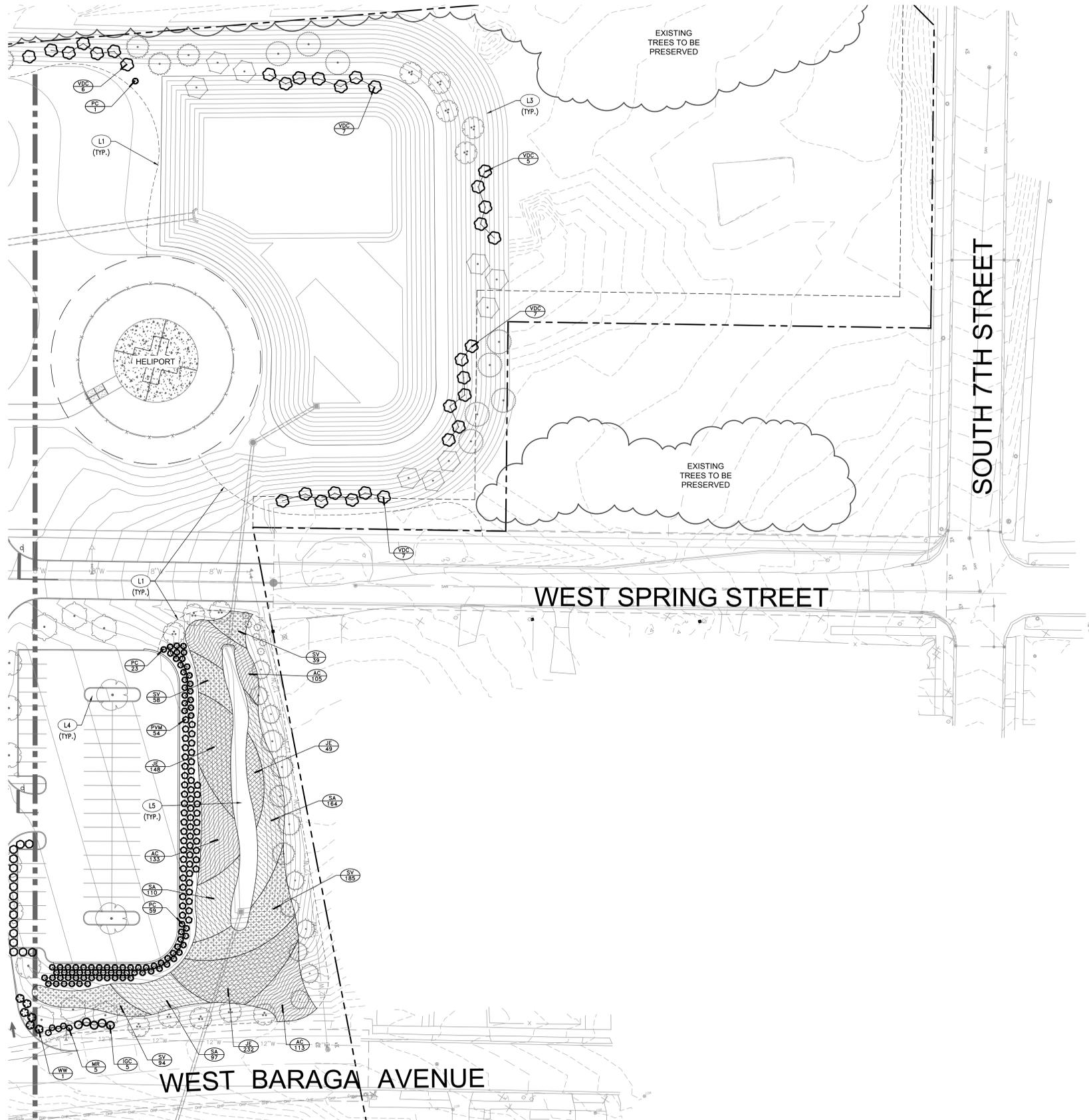


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L1.2

DETAILED LANDSCAPE

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PLANT SCHEDULE L1.3

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT.	HEIGHT	SPREAD	SPACING	REMARKS
IGC	5	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	#5 Cont.	21-24"	18"	60" o.c.	
MR	5	Mahonia repens	Creeping Mahonia	#5 Cont.	30-36"	30-36"	42" o.c.	
PC	83	Panicum virgatum 'Cheyenne Sky'	Switch Grass	#1 Cont.	18-21"	12-15"	42" o.c.	
PVM	54	Panicum virgatum 'Heavy Metal'	Tall Switch Grass	#1 Cont.	18-21"	12-15"	48" o.c.	
YDC	32	Cornus stolonifera 'Bailey'	Bailey's Red-osier Dogwood	#7 Cont.	42"	30"	96" o.c.	
WW	1	Weigela florida Wine & Roses	Wine & Roses Weigela	#3 Cont.	18-24"	15-18"	60" o.c.	
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT.	HEIGHT	SPREAD	SPACING	REMARKS
AC	351	Aquilegia canadensis	Columbine	#1 Cont.	12"	6"	36" o.c.	
JE	429	Juncus effusus	Soft Rush	#1 Cont.	12"	6"	36" o.c.	
SA	371	Sisyrinchium angustifolium	Blue-eyed Grass	#1 Cont.	12"	6"	36" o.c.	
SV	376	Scirpus validus	Great Bulrush	#1 Cont.	24"	9-12"	36" o.c.	

LANDSCAPE KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
(L1)	PLANTING BED LIMITS	.
(L2)	IRRIGATION LIMITS	.
(L3)	AREA TO BE SEEDED	.
(L4)	AREA TO BE SODDED	.
(L5)	RIVER COBBLES	.

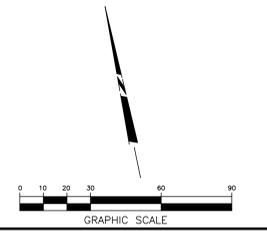
**MARQUETTE REPLACEMENT
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DATE	REVISIONS
07/20/2015	20130197

L1.3
 DETAILED LANDSCAPE



PLANTING NOTES

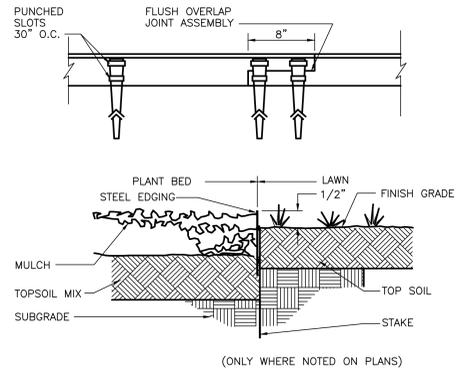
1. BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY LITTLEJOHN ENGINEERING ASSOCIATES AND ANY OF THEIR CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.
2. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO CONFIRM ALL MATERIAL QUANTITIES. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES SHOWN ON THE PLAN SHALL TAKE PRECEDENCE OVER THE MATERIAL SCHEDULE.
3. NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED ON THIS PLAN MAY BE MADE WITHOUT THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
4. THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
5. ALL PLANTING BEDS TO RECEIVE "CHANCELLOR" HARDWOOD MULCH OR RIVER COBBLE MULCH (WHERE NOTED). MULCH TO BE INSTALLED TO 4" DEPTH UNLESS OTHERWISE INDICATED ON THE PLANTING DETAILS.
6. NEW TREE PLANTINGS TO BE STAKED PER PLANTING DETAILS.
7. DIMENSIONS LISTED FOR HEIGHTS, SPREAD AND TRUNK SPECIFICATIONS ON THE PLANT MATERIAL SCHEDULE ARE GENERAL GUIDE FOR THE MINIMUM REQUIRED SIZE OF EACH PLANT.
8. PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANTING BEDS IMMEDIATELY PRIOR TO PLACEMENT OF MULCH FOR WEED CONTROL.
9. ALL DISTURBED AREAS OF THE SITE ARE TO BE SEEDED AND/OR SODDED IN ACCORDANCE WITH THE SPECIFICATIONS.
10. NO EXCAVATION OR PLANTING PIT SHALL BE LEFT OPEN OVERNIGHT.
11. THE LANDSCAPE CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS, LICENSES, ETC. AND SHALL GIVE ALL NOTICES AND COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, CODES, RULES AND REGULATIONS DURING THE COURSE OF THE INSTALLATION OF THIS PROJECT.
12. ALL PLANT MATERIALS TO BE NURSERY GROWN AND TO COMPLY WITH THE AMERICAN STANDARD FOR NURSERY STOCK FOR SIZE AND QUALITY.
13. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REFUSE ANY PLANT MATERIAL OR ANY DEFECTIVE WORKMANSHIP.
14. ALL PLANTS SHALL HAVE A WELL-FORMED HEAD WITH MINIMUM CALIPER, HEIGHT AND SPREAD OF THE SIDE BRANCHES AS SHOWN ON THE PLANT LIST. TRUNKS SHALL BE UNDAWAGED AND SHAPE SHALL BE TYPICAL OF THE SPECIES.
15. MEASUREMENT OF CONE/HEIGHT SHALL INCLUDE NOT MORE THAN FIFTY PERCENT (50%) OF THIS YEAR'S VERTICAL GROWTH (TOP CANDLE).
16. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR STAKING AND LAYOUT OF PLANTINGS ON THIS PROJECT. THE LANDSCAPE ARCHITECT OR OWNER SHALL BE ADVISED WHEN STAKES ARE READY FOR INSPECTION ON VARIOUS PLANTING AREAS. ALL LAYOUT WORK SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER PRIOR TO OPENING ANY PLANT PITS.
17. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO VERIFY THAT EACH EXCAVATED TREE OR SHRUB PIT WILL PERCOLATE (DRAIN) PRIOR TO ADDING TOPSOIL AND INSTALLING TREES OR SHRUBS. THE CONTRACTOR SHALL FILL THE BOTTOM OF SELECTED HOLES WITH SIX INCHES OF WATER. THIS WATER SHOULD PERCOLATE OUT WITHIN A 24-HOUR PERIOD. THE OWNER OR LANDSCAPE ARCHITECT SHALL VERIFY ACCURACY AND EFFECT OF PERCOLATION TESTING. IF THE SOIL AT A GIVEN AREA DOES NOT DRAIN PROPERLY, A P.V.C DRAIN OR GRAVEL SLUMP SHALL BE INSTALLED OR THE PLANTING RELOCATED.
18. SHOULD THE LANDSCAPE CONTRACTOR ENCOUNTER UNSATISFACTORY SURFACE OR OTHER SUBSURFACE DRAINAGE CONDITIONS, SOIL DEPTH, LATENT SOILS, HARD PAN, STEAM OR OTHER UTILITY LINES OR OTHER CONDITIONS THAT WILL IMPROVE THE HEALTH AND GROWTH OF THE PLANTS, HE MUST ADVISE THE LANDSCAPE ARCHITECT IN WRITING OF THE CONDITIONS PRIOR TO INSTALLING THE PLANTS, OTHERWISE THE LANDSCAPE CONTRACTOR WARRANTS THAT THE PLANTING AREAS ARE SUITABLE PROPER GROWTH AND DEVELOPMENT OF THE PLANTS TO BE INSTALLED.
19. NO MATERIAL SHALL BE PLANTED BEFORE FINISH GRADING HAS BEEN COMPLETED.
20. EXISTING TREES TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION. IN ACCORDANCE WITH THE TREE PRESERVATION NOTES AND DETAILS ON THE LANDSCAPE PLAN.
21. SELECTIVE CLEARING CONSISTING OF REMOVAL OF VINES, SAPLINGS UNDER 1" DIAMETER AND UNDERBRUSH SHALL BE PERFORMED IN TREE PRESERVATION AREAS INTERNAL TO THE PROJECT AND NOTED ON PLANS.
22. PLANTS IDENTIFIED IN ALTERNATE AREAS ARE TO BE BID SEPARATELY.
23. ALL BEDS ARE TO BE TILLED TO A DEPTH OF 8" WITH THE ADDITION OF: (1) 6 CU. FT. BALE OR SPHAGNUM PEAT MOSS PER 40 SQ. FT. OF BED AREA; (2) 10-10-10 FERTILIZER PER 1000 SQ. FT. IF OZONOLE, RHODODENDRONS OR PIERS ARE USED, ADD 1.3 CU. FT. FINELY GROUND "HANE" BARK MULCH PER 25 SQ. FT. OF BED AREA. ALL ADDITIONS ARE TO BE SPREAD AND TILLED INTO THE SOIL UNIFORMLY.
24. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT WHEN THE PLANT MATERIALS ARE AVAILABLE AT THE JOB SITE FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

TREE PROTECTION NOTES:

1. PRIOR TO CONSTRUCTION ACTIVITY, THE GENERAL CONTRACTOR SHALL STAKE THE LIMITS OF CLEARING, GRADING AND BUILDING FOOTPRINTS THAT AFFECT THE TREE PRESERVATION AREAS.
2. THE LOCATION OF TREE PROTECTION MEASURES SHALL BE REVIEWED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION COMMENCING. TREE PROTECTION BARRICADES SHALL CONSIST OF GRADE PLASTIC BARRIER, CONSTRUCTION FENCING, AND SHALL BE INSTALLED IN LOCATIONS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
3. CONTRACTOR SHALL INSTALL ADEQUATE TREE PROTECTION MEASURES PRIOR TO ANY GRADING ACTIVITIES TO PREVENT CONSTRUCTION ACTIVITIES WITHIN PROXIMITY OF SPECIMEN TREES.
4. ALL GRADING WITHIN PROTECTED-ROOT-ZONE AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE.
5. ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE GROUND AND COVERED WITH BACKFILL AS SOON AS POSSIBLE. IF EXPOSED ROOTS ARE NOT COVERED WITHIN 24 HOURS, COVER THEM WITH MULCH AND THOROUGHLY WATER UNTIL COVERED WITH BACKFILL.
6. DO NOT OPERATE OR STORE HEAVY EQUIPMENT, NOR HANDLE OR STORE MATERIALS, WITHIN THE DRIP LINES OF TREES TO BE PRESERVED.
7. WHENEVER GRADING OR EXCAVATION IS DIRECTED WITHIN THE CANOPY COVERAGE AREA OF A TREE TO BE PRESERVED, FIRST CUT ROOTS USING A "NOTCH" WHICH OR SIMILAR DEVICE TO PROVIDE CLEAN CUT OF ROOTS AT LIMITS OF ACTIVITY (PRIOR TO USE OF BACKHOE OR BULLDOZER). DO NOT ALLOW HEAVY EQUIPMENT WITHIN THE AREA BETWEEN CUT LINE AND TRUNK OF TREE. TRENCHES TO BE BACKFILLED AND TAMPERED TO MINIMIZE SETTLEMENT.
8. BARRICADES SHALL ENCRUSH ON AREAS TO BE PAVED UNTIL PAVING AND/OR GRADE ADJUSTMENT ACTIVITIES BEGIN. ONLY THEN SHALL BARRICADES BE MOVED TO THE MAXIMUM ALLOWABLE PROTECTED ROOT TREE SAFE ZONE THAT WILL NOT ENCRUSH ON THE PLANNED CONSTRUCTION. REMOVAL OF BARRICADES SHALL OCCUR ONLY AFTER PAVING IS COMPLETED AND CURBING IS INSTALLED, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
9. PROVIDE WATERING OF SPECIMEN TREES DURING CONSTRUCTION WHEN PERIODS OF DROUGHT EXCEED SEVEN DAYS. UTILIZE OSCILLATING TYPE SPRINKLERS TO COVER ENTIRE PROTECTED ROOT ZONE FOR FOUR HOURS EACH.
10. -----
11. ROOT AREA OF TREES WHERE SOIL HAS BEEN COMPACTED DUE TO CONSTRUCTION ACTIVITY SHALL BE VERTICALLY MULCHED (AERATED) AT DIRECTION OF THE QUALIFIED PROFESSIONAL. THIS SHALL BE ACCOMPLISHED BY AUGURING THE SOIL IN A 2' GRID PATTERN TO WITHIN 3" OF TRUNK AND TO 10' BEYOND THE DRIP LINE. A 2" TO 3" HAND OPERATED AUGUR SHALL BE USED TO DRILL HOLES TO A MINIMUM DEPTH OF 12". TYPE OF BACKFILL WILL BE DETERMINED BY THE QUALIFIED PROFESSIONAL.
12. HEAVY ACCUMULATION OF DUST FROM CONSTRUCTION ACTIVITY MAY OCCUR ON THE SURFACE OF TREE FOLIAGE. TO CONTROL DUST, TREE FOLIAGE MAY BE HOSED DOWN UPON THE REQUEST OF THE QUALIFIED PROFESSIONAL.
13. REMOVAL OF ALL TREE PROTECTION FENCING, SILT FENCING AND SIGNAGE WILL BE DONE BY THE GENERAL CONTRACTOR WHEN PERMITTED BY THE LOCAL CODE ENFORCEMENT OFFICIALS. RESTORATION OF ALL AREAS DISTURBED BY THE FENCING AND/OR SIGNAGE WILL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY.

IRRIGATION NOTES:

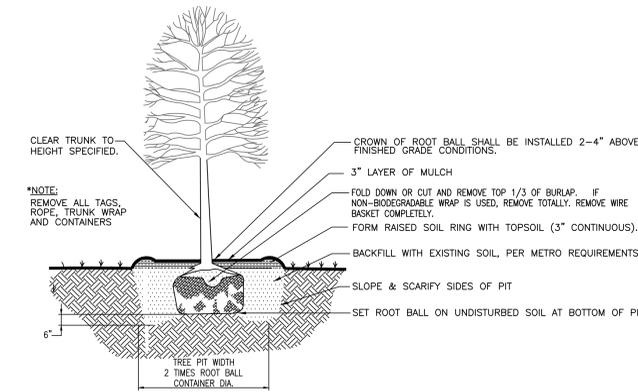
1. LANDSCAPE CONTRACTOR TO PROVIDE IRRIGATION SYSTEM ON A DESIGN/BUILD ARRANGEMENT FOR AREA NOTED ON THE PLAN. CONTRACTOR TO PREPARE DESIGN DRAWINGS IN ACCORDANCE WITH PERFORMANCE SPECIFICATIONS CONTAINED IN THE PROJECT MANUAL AND SUBMIT SAME FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO CONFIRM ADEQUATE PRESSURE EXISTS TO OPERATE SYSTEM PRIOR TO INSTALLATION.
3. IRRIGATION SPRINKLER HEADS SHALL BE MANUFACTURED BY EITHER TORO OR RAINBIRD. IRRIGATION CONTROLLER SHALL BE TORO VISION II MODEL OR APPROVED EQUAL.
4. MAIN LINE TO BE CLASS 200 PVC PIPE. LATERAL LINES TO BE CLASS 150 PVC.
5. IRRIGATION SYSTEM TO BE OPERATIONAL BEFORE PLANTING MATERIALS MAY BE INSTALLED IN PLANTING BEDS.
6. INSTALL SPRINKLER HEADS ACCORDING TO MANUFACTURERS SPECIFICATIONS. FLUSH ALL LINES BEFORE INSTALLING NOZZLES.
7. WIRE CONNECTIONS TO BE MADE BY USING RAINBIRD MODEL ST-103/PT-ST SWAP-TITE CONNECTIONS.
8. LEAVE 18 INCHES OF ADDITIONAL WIRE AT EACH VALVE LOCATION. ROLL WIRE INTO COIL AT EACH LOCATION.
9. ALL VALVES SHALL BE LOCATED IN AMATEX 10 INCH CIRCULAR VALVE BOXES WITH COVER, OR EQUAL.
10. IRRIGATION CONTRACTOR TO COORDINATE PLACEMENT OF REQUIRED SLEEVES WITH GENERAL CONTRACTOR PRIOR TO PAVING AND CONCRETE INSTALLATION BEING COMPLETED.



8

STEEL BED EDGER

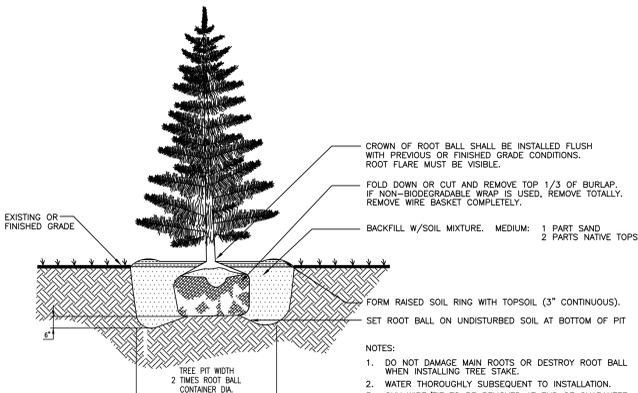
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4

TREE PLANTING

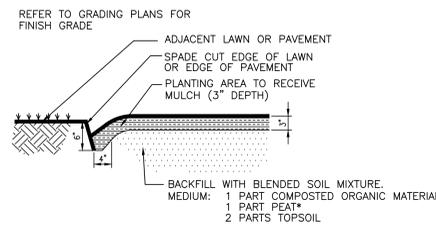
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5

CONIFEROUS TREE PLANTING

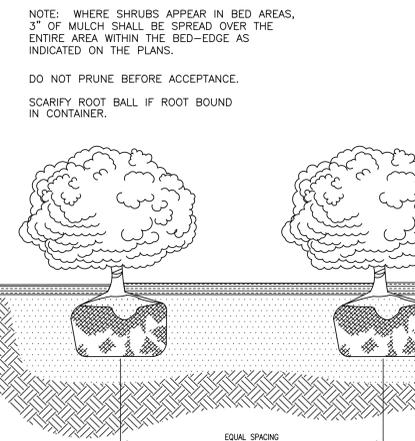
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6

SPADE BED EDGE

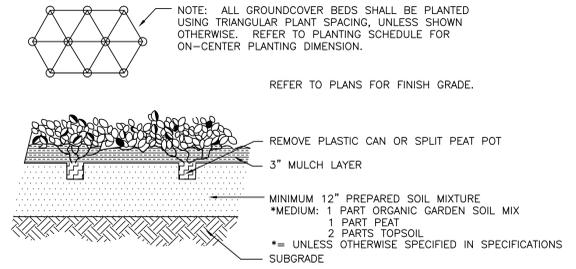
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7

SHRUB PLANTING

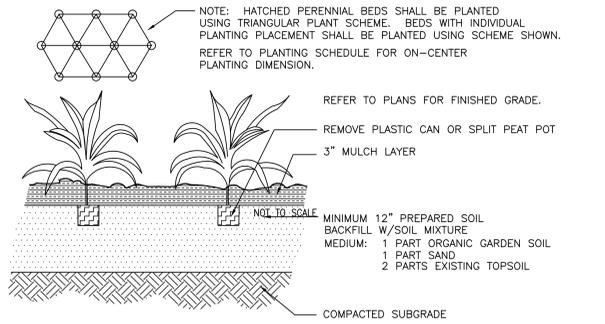
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1

GROUNDCOVER PLANTING

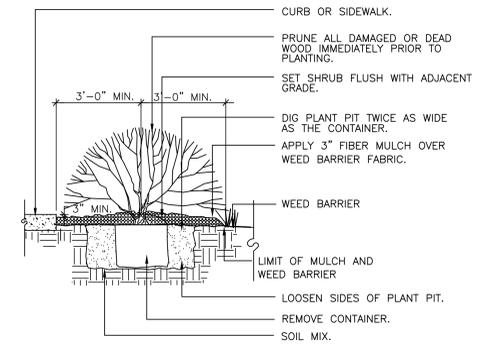
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2

PERENNIAL PLANTING

NOT TO SCALE



3

SHRUB PLACEMENT

NOT TO SCALE

- NOTE:
1. ANY BROKEN OR CRUMBLING ROOT BALL WILL BE REJECTED. REMOVING THE CONTAINERS WILL NOT BE AN EXCUSE FOR DAMAGED ROOT BALLS.
 2. HOLD MULCH 1" BELOW EDGE OF WALK OR CURB.
 3. PROTECT ALL SHRUBS WITH CAGES OF WELDED WIRE MESH 5" DIAMETER - 5" HEIGHT. SECURE WITH 6'-0" LONG STEEL T-POST, DRIVEN 1" MINIMUM INTO GROUND. WIRED TO CAGE.

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STATE OF MICHIGAN
 JEFFREY L. HENZE
 ARCHITECT
 No. 3901001900
 LICENSED LANDSCAPE ARCHITECT

DATE	REVISIONS
07/20/2015	20130197

L2.0
 LANDSCAPE DETAILS

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Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
R1	3	Lithonia Lighting	(1) DSXB-LED-12C-350-40K-ASY-MVOLT-*	D-SERIES BOLLARD WITH 12 4000K LEDS OPERATED AT 350mA AND ASYMMETRIC DISTRIBUTION	LED	1	DSXB_LED_12C_350_40K_ASY.ies	889.3837	0.9	16
SA2.1	1	Lithonia Lighting	(1) DSX1-LED-60C-1000-40K-T2M-MVOLT-RPA-* (fixture) + (1) RTA-25-7E-DM19AS--VD (25' pole)	DSX1 LED WITH (2) 30 LED LIGHT ENGINES, TYPE T2M OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_60C_1000_40K_T2M_MVOLT.ies	19403.6	0.9	209.28
SA3.1	6	Lithonia Lighting	(1) DSX1-LED-60C-1000-40K-T3M-MVOLT-RPA-* (fixture) + (1) RTA-25-7E-DM19AS--VD (25' pole)	DSX1 LED WITH (2) 30 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_60C_1000_40K_T3M_MVOLT.ies	19735.3	0.9	209.28
SA5.1	4	Lithonia Lighting	(1) DSX1-LED-60C-1000-40K-T5W-MVOLT-RPA-* (fixture) + (1) RTA-25-7E-DM19AS--VD (25' pole)	DSX1 LED WITH (2) 30 LED LIGHT ENGINES, LEFT ROTATED TYPE T5W OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_60C_1000_40K_T5W_MVOLT.ies	20094.75	0.9	209.28
SA5.2	14	Lithonia Lighting	(2) DSX1-LED-60C-1000-40K-T5W-MVOLT-RPA-* (fixture) + (1) RTA-25-7E-DM19AS--VD (25' pole)	DSX1 LED WITH (2) 30 LED LIGHT ENGINES, LEFT ROTATED TYPE T5W OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_60C_1000_40K_T5W_MVOLT.ies	20094.75	0.9	418.56
SB2.1	6	Lithonia Lighting	(1) DSX1-LED-40C-1000-40K-T2M-MVOLT-RPA-* (fixture) + (1) RTA-20-5G-DM28AS--VD (20' pole)	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, LEFT ROTATED TYPE T2M OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_40C_1000_40K_T2M_MVOLT.ies	13163.13	0.9	138.16
SB3.1	3	Lithonia Lighting	(1) DSX1-LED-40C-1000-40K-T3M-MVOLT-RPA-* (fixture) + (1) RTA-20-5G-DM28AS--VD (20' pole)	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_40C_1000_40K_T3M_MVOLT.ies	13388.14	0.9	138.16
SB5.2	4	Lithonia Lighting	(2) DSX1-LED-40C-1000-40K-T5W-MVOLT-RPA-* (fixture) + (1) RTA-20-5G-DM28AS--VD (20' pole)	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T5W OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_40C_1000_40K_T5W_MVOLT.ies	13631.99	0.9	276.32
SW3	3	Lithonia Lighting	(1) DSX1-LED-40C-1000-T3M-MVOLT-WBA-*	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_40C_1000_40K_T3M_MVOLT.ies	13388.14	0.9	138.16
SW4	7	Lithonia Lighting	(1) DSX1-LED-40C-1000-T4M-MVOLT-WBA-*	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, LEFT ROTATED TYPE T4M OPTIC, 4000K, @ 1000mA	LED	1	DSX1_LED_40C_1000_40K_T4M_MVOLT.ies	13411.71	0.9	138.16

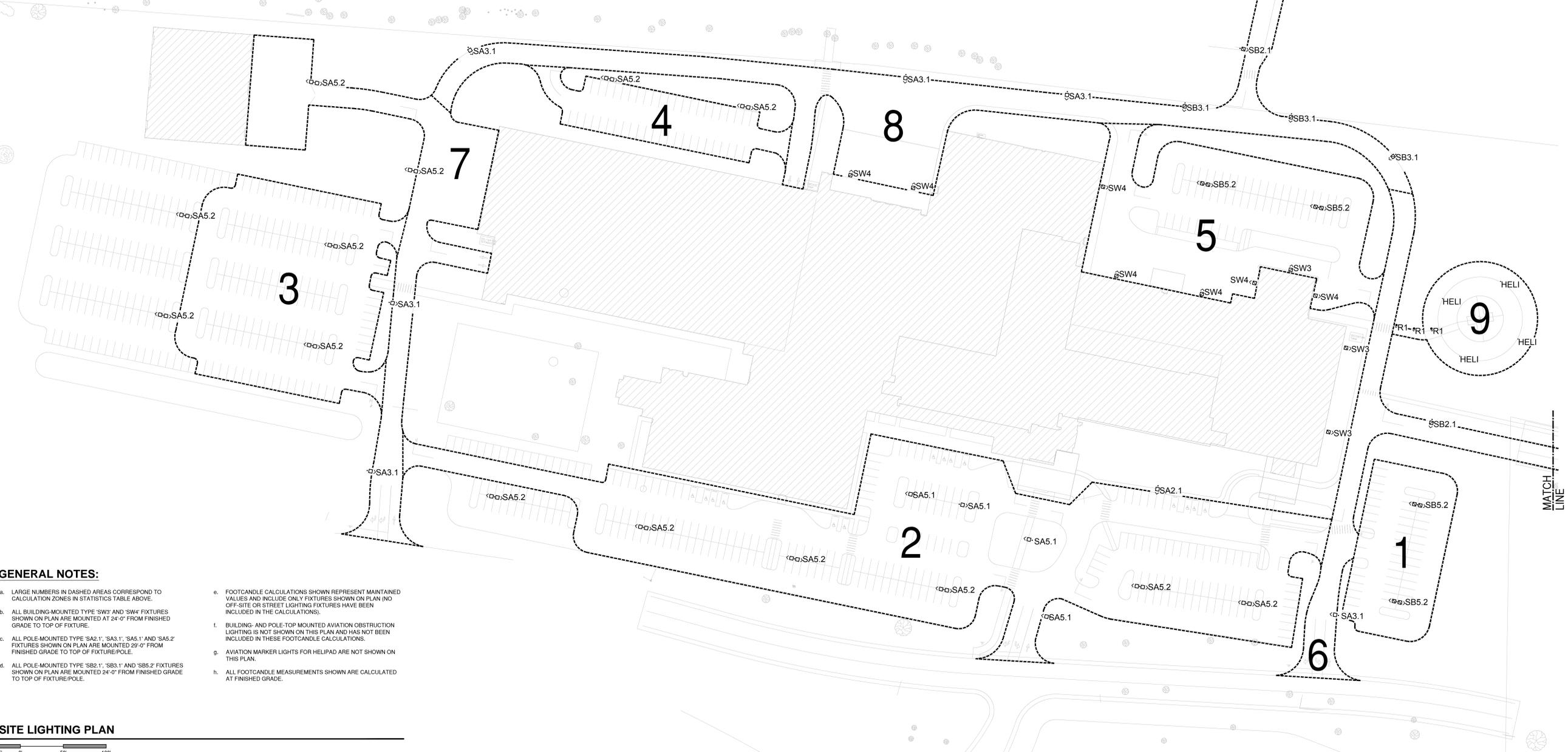
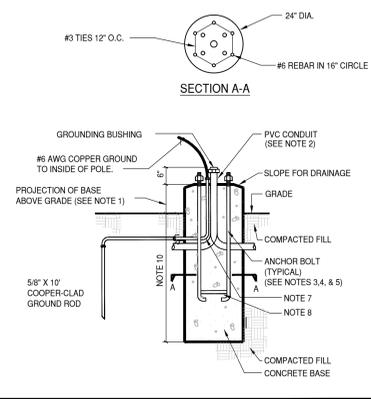
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
0. Overall Site: Horizontal FC @ Grade	✕	0.3 fc	7.5 fc	0.0 fc	N/A	N/A
1. East Parking: Horizontal FC @ Grade	◇	1.6 fc	2.5 fc	0.9 fc	2.8:1	1.8:1
2. South Parking & Drives: Horizontal FC @ Grade	◇	1.6 fc	3.0 fc	0.5 fc	6.0:1	3.2:1
3. West Parking: Horizontal FC @ Grade	◇	1.6 fc	2.6 fc	0.7 fc	3.7:1	2.3:1
4. Northwest Parking: Horizontal FC @ Grade	◇	1.4 fc	2.3 fc	0.9 fc	2.6:1	1.6:1
5. Northeast Parking: Horizontal FC @ Grade	◇	1.8 fc	3.3 fc	0.9 fc	3.7:1	2.0:1
6. East Drives: Horizontal FC @ Grade	+	1.3 fc	4.2 fc	0.2 fc	21.0:1	6.5:1
7. West Drives: Horizontal FC @ Grade	+	1.4 fc	3.2 fc	0.2 fc	16.0:1	7.0:1
8. North Drives & Loading: Horizontal FC @ Grade	+	1.5 fc	3.2 fc	0.5 fc	6.4:1	3.0:1
9. Helipad & Walk: Horizontal FC @ Grade	◇	0.2 fc	7.5 fc	0.0 fc	N/A	N/A

POLE BASE NOTES:

- PROJECTION OF POLE BASE ABOVE GRADE SHALL BE 4'-0" ABOVE FINISHED GRADE, UNLESS OTHERWISE NOTED ON PLAN.
- NUMBER AND SIZE OF CONDUITS TO BE AS CALLED FOR ELSEWHERE.
- ANCHOR BOLTS SHALL BE THOSE FURNISHED BY THE MANUFACTURER OF THE LIGHTING POLE.
- ANCHOR BOLTS FOR LIGHTING POLE ARE TO BE SET IN CONCRETE BASE UTILIZING TEMPLATE FURNISHED BY POLE MANUFACTURER.
- ANCHOR BOLTS PROJECTION ABOVE SURFACE OF CONCRETE BASE IS TO BE AS PER LIGHTING POLE MANUFACTURER'S RECOMMENDATIONS.
- CONCRETE SHALL BE A MINIMUM OF 3,000 PSI.
- 3/4" PVC CONDUIT RACEWAY IN CONCRETE BASE FOR GROUND WIRE.
- TIE ANCHOR BOLTS TOGETHER WITH WELDED #6.
- TROWEL AND RUBDOWN FOR A SMOOTH FINISH.
- REFER TO POLE BASE DIMENSIONS TABLE FOR REQUIRED TOTAL HEIGHT.

SITE LIGHTING POLE BASE DETAIL

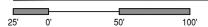
NO SCALE



GENERAL NOTES:

- LARGE NUMBERS IN DASHED AREAS CORRESPOND TO CALCULATION ZONES IN STATISTICS TABLE ABOVE.
- ALL BUILDING-MOUNTED TYPE 'SW3' AND 'SW4' FIXTURES SHOWN ON PLAN ARE MOUNTED AT 24'-0" FROM FINISHED GRADE TO TOP OF FIXTURE.
- ALL POLE-MOUNTED TYPE 'SA2.1', 'SA3.1', 'SA5.1' AND 'SA5.2' FIXTURES SHOWN ON PLAN ARE MOUNTED 29'-0" FROM FINISHED GRADE TO TOP OF FIXTURE/POLE.
- ALL POLE-MOUNTED TYPE 'SB2.1', 'SB3.1' AND 'SB5.2' FIXTURES SHOWN ON PLAN ARE MOUNTED 24'-0" FROM FINISHED GRADE TO TOP OF FIXTURE/POLE.
- FOOTCANDLE CALCULATIONS SHOWN REPRESENT MAINTAINED VALUES AND INCLUDE ONLY FIXTURES SHOWN ON PLAN (NO OFF-SITE OR STREET LIGHTING FIXTURES HAVE BEEN INCLUDED IN THE CALCULATIONS).
- BUILDING- AND POLE-TOP MOUNTED AVIATION OBSTRUCTION LIGHTING IS NOT SHOWN ON THIS PLAN AND HAS NOT BEEN INCLUDED IN THESE FOOTCANDLE CALCULATIONS.
- AVIATION MARKER LIGHTS FOR HELIPAD ARE NOT SHOWN ON THIS PLAN.
- ALL FOOTCANDLE MEASUREMENTS SHOWN ARE CALCULATED AT FINISHED GRADE.

SITE LIGHTING PLAN



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 Dr. Leads | Phoenix | Tampa Bay | Fort Lauderdale

MARQUETTE REPLACEMENT HOSPITAL

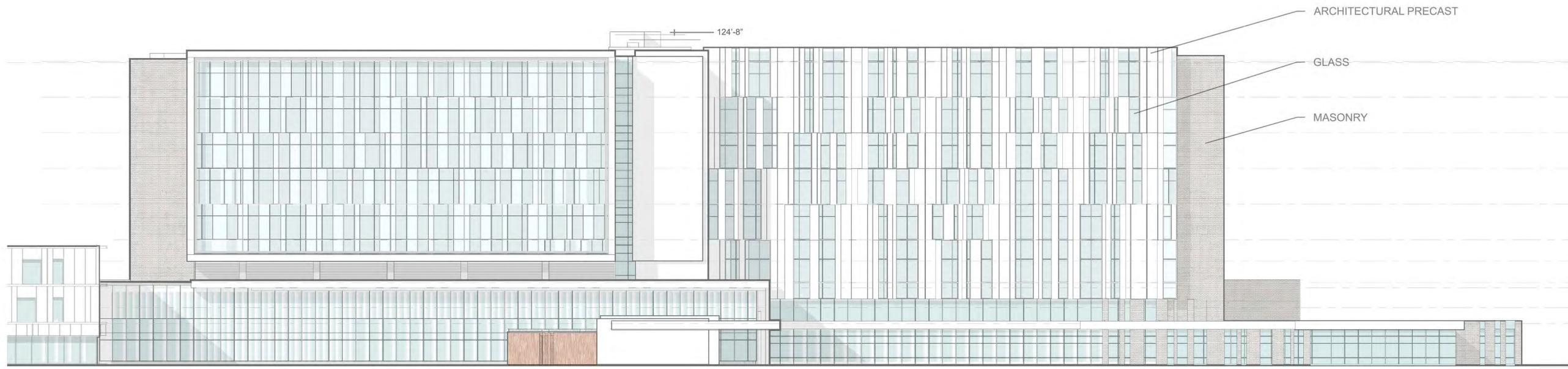
DUKE LIFEPPOINT HEALTHCARE
 330 SEVEN SPRINGS WAY BRENTWOOD, TN 37027 615.920.7678



DATE	REVISIONS
07/20/2015	20130197

SITE LIGHTING PLAN

T:\PROJECTS\2014\14022 - Marquette General Hospital\14022 - Drawings\14022 - E-dwg\A1.1 - Site Lighting Plan.dwg - Layout1 Jul 20, 2015 - 10:08am .ipn



ARCHITECTURAL PRECAST
GLASS
MASONRY

SOUTH ELEVATION
1:16



VERTICAL EXPANSION UP TO 6 STORIES
VERTICAL EXPANSION UP TO 6 STORIES

SOUTH ELEVATION CONT.
1:16

**MARQUETTE REPLACEMENT
HOSPITAL**

**DUKE
LIFEPOINT
HEALTHCARE**
330 SEVEN SPRINGS WAY
BRENTWOOD, TN 37027
615.920.7678

DATE	REVISIONS
06/04/2015	20130197

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ARCHITECTURAL PRECAST

GLASS

MASONRY

124'-8"

ROOF 113'-4" ROOF 112'-1"

8TH FLOOR 100'-0"

7TH FLOOR 86'-6"

6TH FLOOR 73'-4"

5TH FLOOR 60'-0"

CONCRETE MASONRY UNIT

NORTH ELEVATION 1:16

ROOF 113'-4" ROOF TOS 112'-10 3/4"

8TH FLOOR 100'-0"

7TH FLOOR 86'-6"

6TH FLOOR 73'-4"

5TH FLOOR 60'-0"

VERTICAL EXPANSION UP TO 6 STORIES

NORTH ELEVATION CONT. 1:16

MARQUETTE REPLACEMENT HOSPITAL

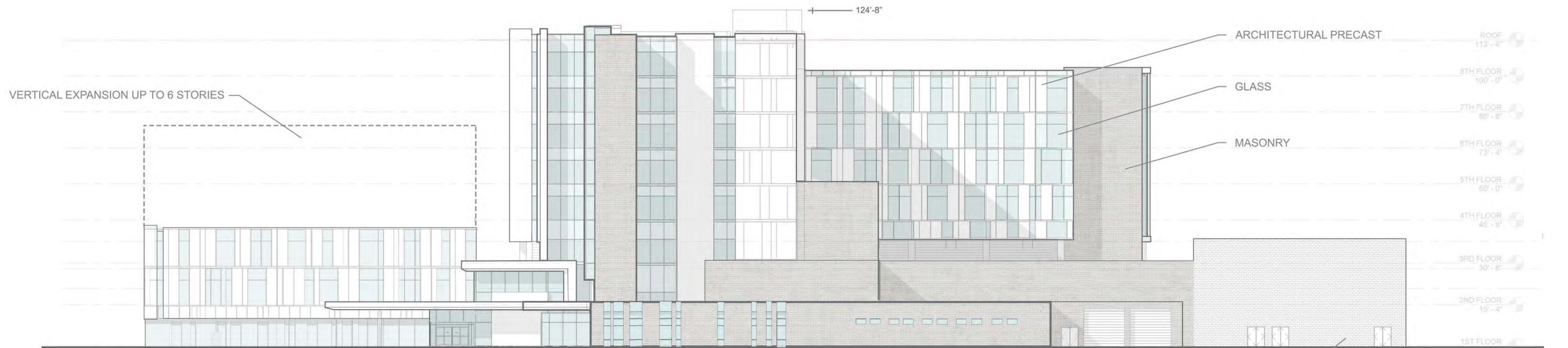
DUKE LIFEPOINT HEALTHCARE
330 SEVEN SPRINGS WAY
BRENTWOOD, TN 37027
615.920.7678

DATE	REVISIONS
06/04/2015	20130197

A2.0
ARCHITECTURAL ELEVATIONS

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CONCRETE MASONRY UNIT

EAST ELEVATION
1:16



VERTICAL EXPANSION UP TO 6 STORIES

WEST ELEVATION
1:16

**MARQUETTE REPLACEMENT
HOSPITAL**

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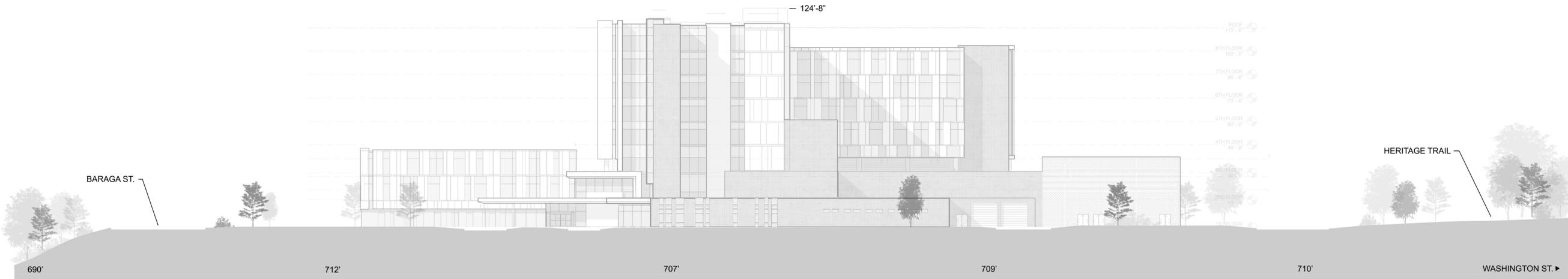
A3.0
ARCHITECTURAL
ELEVATIONS

MARQUETTE REPLACEMENT HOSPITAL

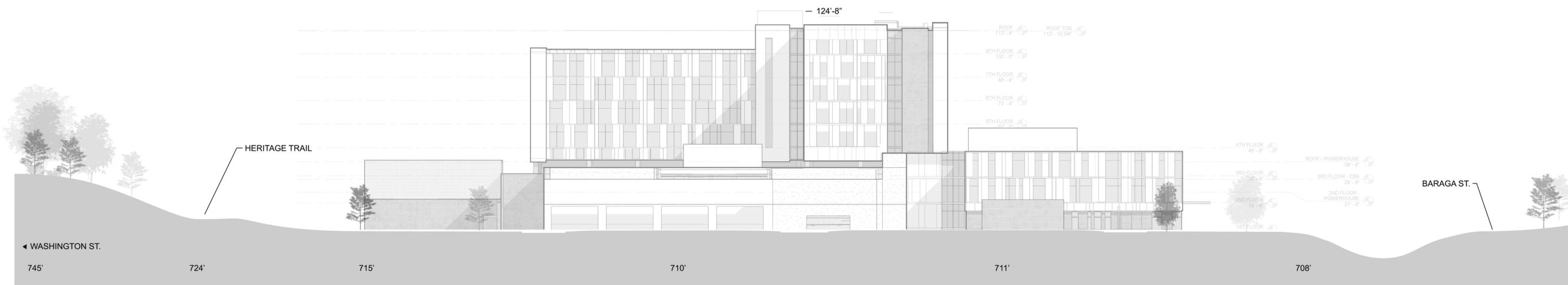
DUKE LIFEPOINT HEALTHCARE
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DATE	REVISIONS

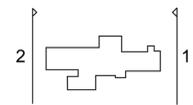
A4.0
 SITE SECTIONS



EAST SITE SECTION
 1" : 24'



WEST SITE SECTION
 1" : 24'





U.P. Health Marquette - Replacement Hospital

DUKE LIFEPOINT HEALTH ■ MARQUETTE, MICHIGAN

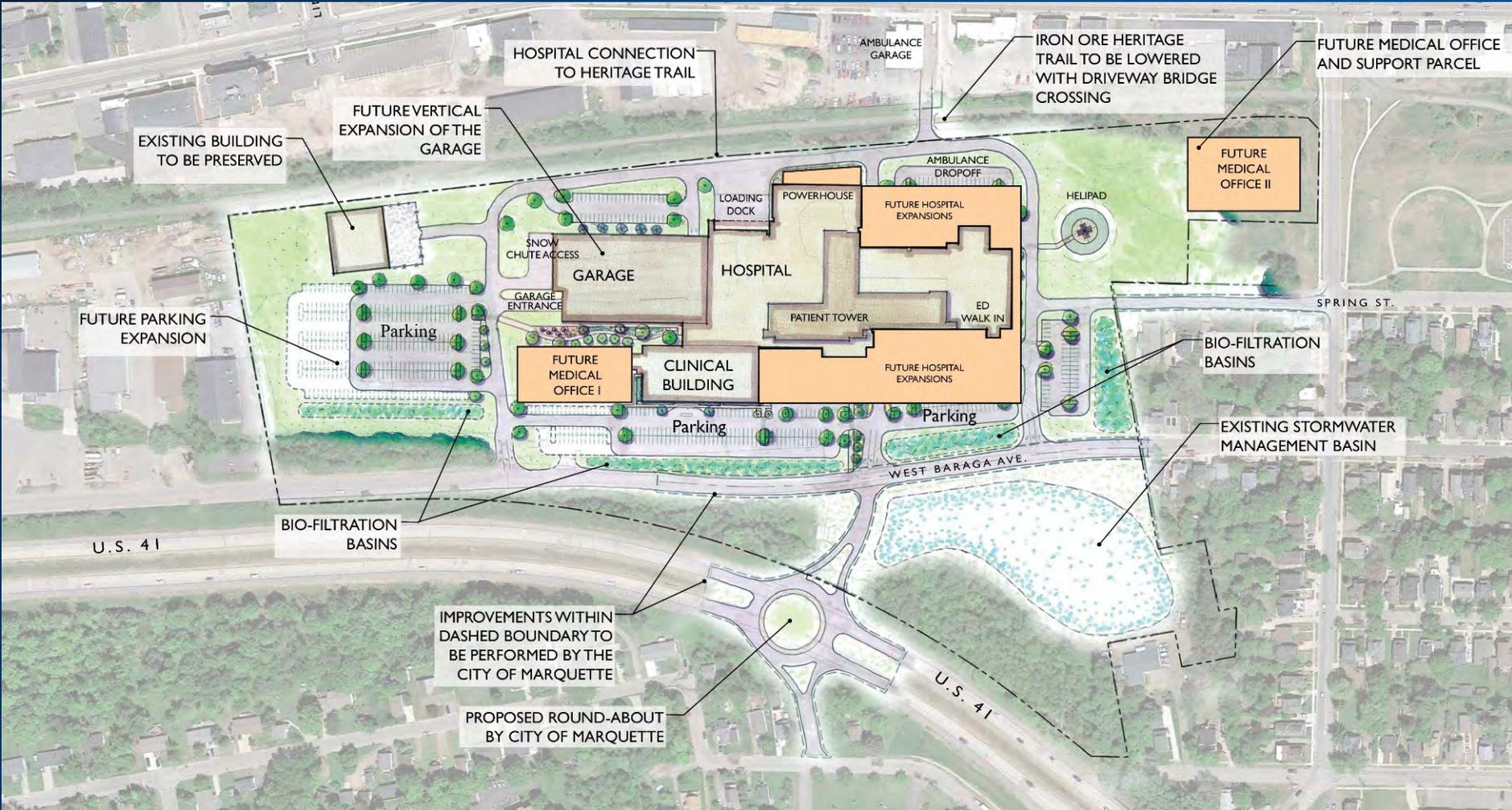


Making Communities Healthier



Overall Site

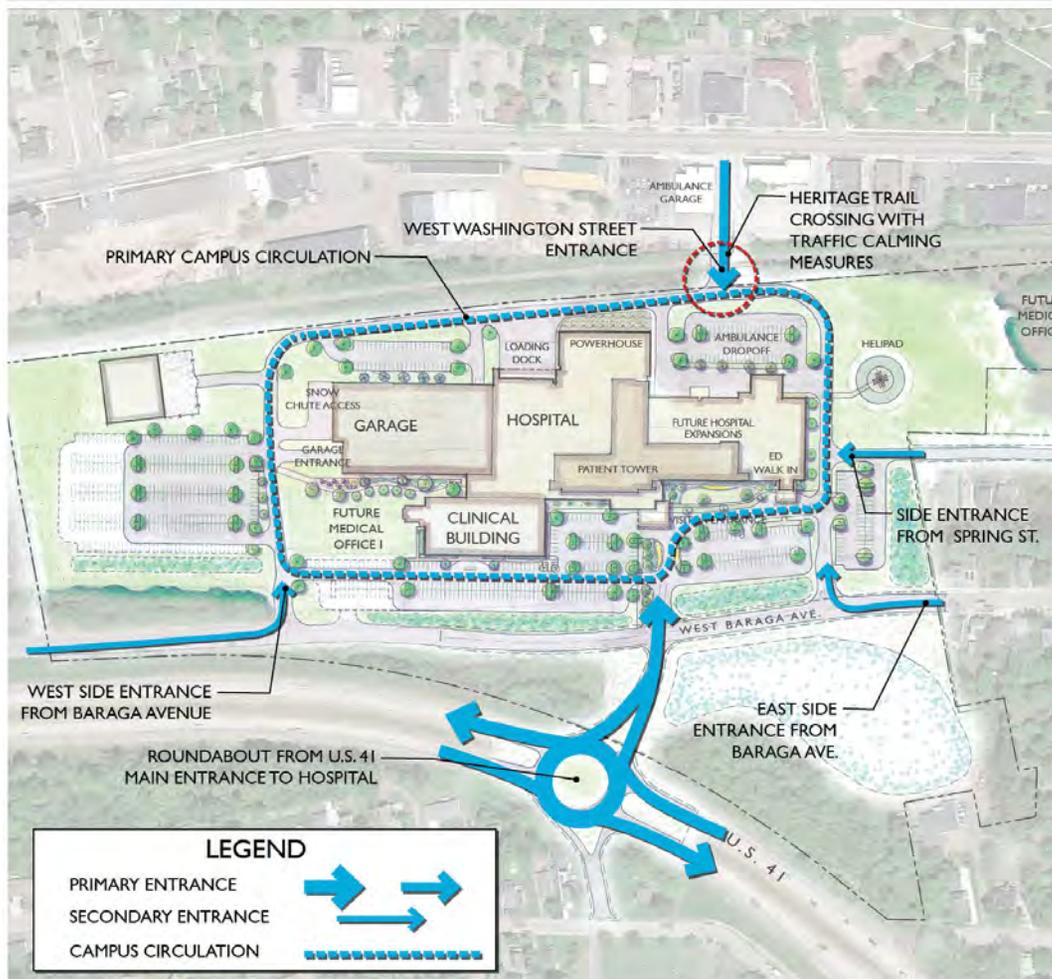




**Schematic Site Plan
Proposed Site Plan**



VEHICULAR CIRCULATION

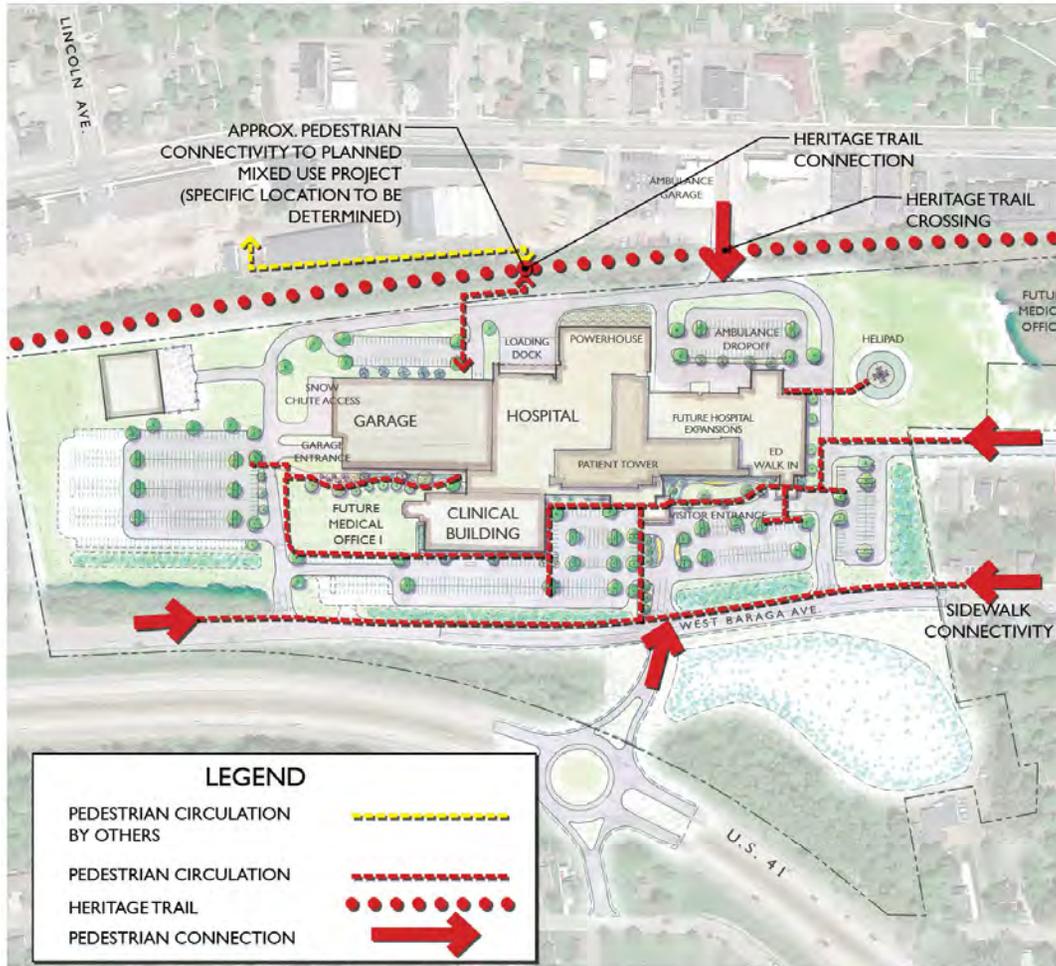


Objectives:

- Incorporate traffic calming measures such as crosswalk signage, pedestrian bulb-outs, textured crosswalks, and a grade-separated driveway crossing at the Heritage Trail to promote a safe pedestrian environment.
- Encourage drivers to proceed cautiously at commensurate low speeds within the internal campus network.
- Allow for controlled drive entry streets from the adjoining roadway network. The main entry street from U.S. 41 is designed to efficiently allow traffic to enter the campus and then disperse into the appropriate parking fields. Entering the campus is supplemented by connectivity to the community street grid at multiple locations; Baraga Ave. (both East and West directions), Spring Street and a driveway connection to Washington Street.



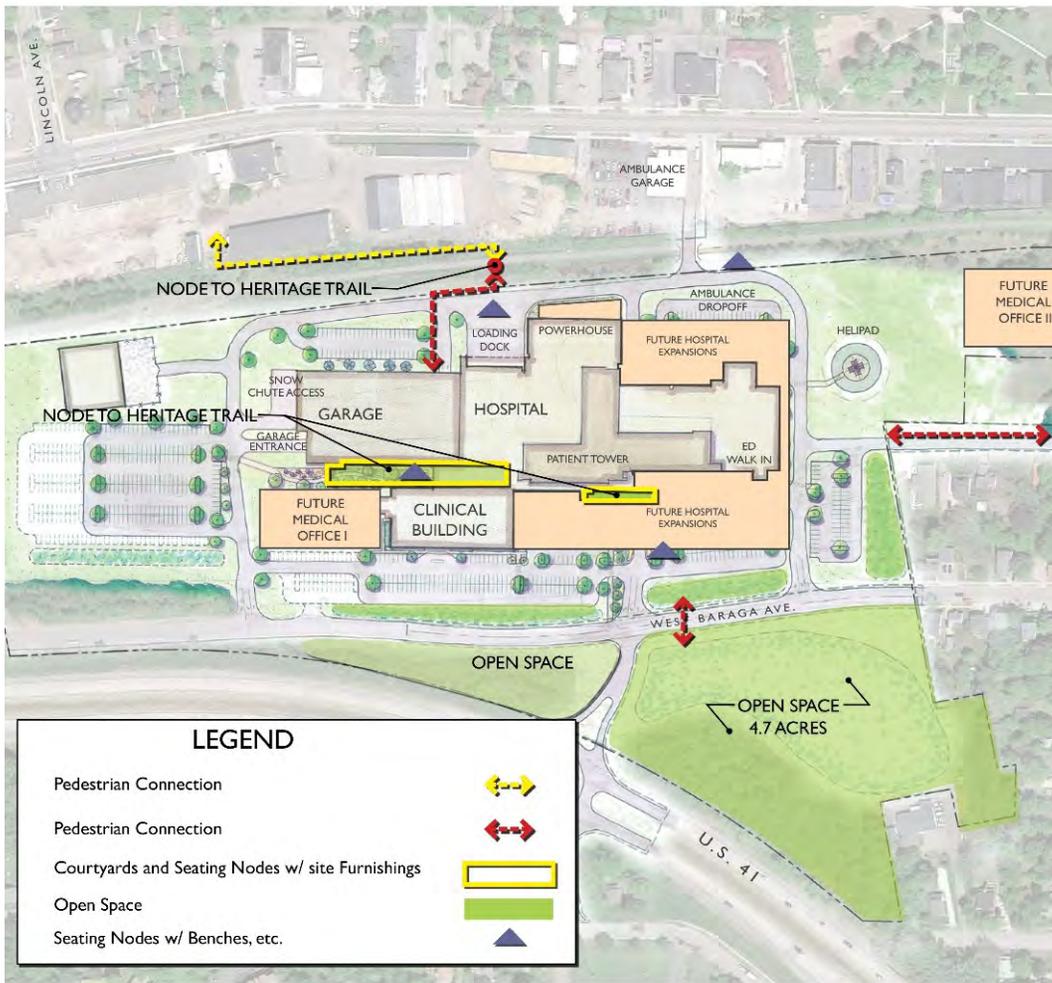
PEDESTRIAN CONNECTORS & ZONES



Objectives:

- Creating a safe and walkable environment to encourage pedestrian interaction from the community via the street sidewalks, Heritage Trail connectivity and throughout the campus.
- Implement a walking connection to the Heritage Trail throughout the campus, encourage exercise and promote healthy lifestyle choices.
- Establish pedestrian linkages throughout the campus wherein walkways are supplemented with shade tree canopies, walkways are well lighted, site furnishings and rest nodes are interspersed along the linkages, and the walkway system is accessibility compliant.
- Architectural elements are to be utilized to reinforce walkway vistas and wayfinding. A positive experience shall be created for the pedestrian through the introduction of site furnishings, and unique signage treatments.

OPEN SPACES AND STREETSCAPES



Objectives:

- Create small courtyards and rest nodes that will serve as outdoor gathering and amenity areas for the general public and medical staff.
- Develop a peripheral open space and connections to the Heritage trail system to promote exercise and an attractive edge to the campus.
- Design a stormwater mitigation system that utilizes the open space areas for supplemental stormwater and aesthetic benefits, whenever possible.
- Reinforce circulation corridors and visual axes with street tree plantings to visually reinforce these elements
- 4.7 acres of preserved open space south of Barraga ave. along Whetstone Brook.

LANDSCAPING & SCREENING

Objective:

Devise a vehicular parking system that accommodates an appropriate number of spaces for the uses located on the property and implement the system in a manner that maintains a distinctive and inviting image for the campus.

Criteria:

- Lay out and screen parking lots so as to minimize direct views of parked vehicles from the street right-of-way.
 - Design parking lots with a hierarchy of circulation: access drives with no parking, lot circulation drives with minimal parking, and parking access aisles for direct access to building entrances.
 - Incorporate snow removal areas that allow for ease in plowing and storage of snow.
- Design parking lot landscaping in a manner that reflects the hierarchy of circulation, placing importance on the driveways from the street, framing major circulation aisles, and highlighting pedestrian pathways.
- Attempt to or avoid large, unbroken expanses of pavement. Divide parking lots into smaller paved areas that are separated by landscaping, access driveways, or structures.
 - Refuse collection and service areas shall be screened from view by a masonry wall with a gate enclosure for trash receptacles or by planting materials.
 - Design the appearance of primary parking lot entries in a manner that reflects the overall character of the project. Use specimen plant material, etc. to create visual interest at key lot entry points.

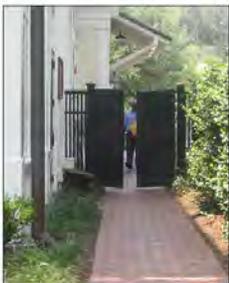


Parking lots separated from the building edge (above left) allow for better pedestrian circulation. Edge landscaping and low walls (above right) or fences enhance entry areas. Landscaping bays with trees and plantings (below) provide visual relief and shade where possible without impacting snow removal.



Buffering & Screening Guidelines

- **Parking Lot Screening:** Any parking lot adjoining a street right-of-way shall be screened to a height of three feet by walls, berms, landscaping, or a combination of these. If landscaping is used, the planting bed shall be a minimum of 5 feet wide and shall contain tree plantings at 40' maximum intervals on the perimeter.
 1. Native plant materials shall be used to the greatest extent possible. Existing plant materials shall be preserved to the greatest extent possible in this area.
 2. Native, flowering trees should be used to provide a show against the evergreens.
 3. The South parking along Baraga Avenue will be screened from the street by a mix of ornamental grasses, herbaceous plantings within the bioretention areas, evergreen shrubs and trees.



LIGHTING

Objective:

Utilize a lighting plan and fixtures that will provide for safe vehicular movement, without compromising pedestrian movement and that will enhance the overall appearance of the project area.

Criteria:

- Design lighting that is appropriate in function and scale for both the pedestrian and the vehicle.
- Design efficient lighting that minimizes light spill and pollution.
- Select luminaire styles, colors, and finishes that complement the architectural features of the campus.
- Luminaire style remain consistent throughout the campus.
- Parking lot light standards not to exceed thirty (30) feet in height.
- Pedestrian routes and driveway crossing zones shall be well lighted to promote safety.



Appropriately scaled street lighting can provide adequate light for roadways without detracting from the pedestrian experience. Light standards should reflect the general character of the other street furniture, architecture, and overall desired street character.

Objective:

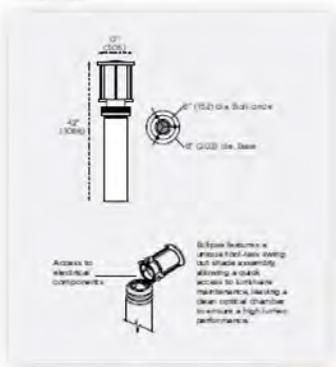
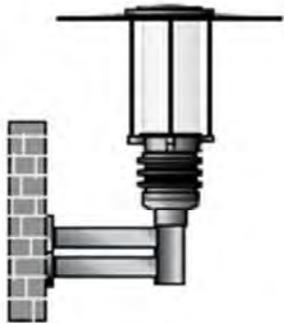
Develop a lighting plan that will provide for safe vehicular and pedestrian movement, and at the same time will help encourage pedestrian activity at night along pedestrian accesses between buildings and connections to parking areas.

Criteria:

- Design pedestrian scaled sidewalk lighting that defines the pedestrian space.
- Illuminate the sidewalk at a level that is consistent with pedestrian activities rather than vehicular movement.
- Fixtures mounted on buildings or used to accent architectural features or landscaping may also be used for pedestrian lighting. Choose fixtures based on their ability to enhance the overall architecture of the building while providing lighting for pedestrians at the same time.
- Use lighted bollards in order to delineate pedestrian pathways.
- Space pedestrian light fixture at consistent intervals throughout the site.
- Lighting used solely for the pedestrian not to exceed sixteen (16) feet in height.



wind writer





Hwy. 41



Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	
0. Overall Site: Horizontal FC @ Grade	✕	0.4 fc	7.5 fc	0.0 fc	N/A	N/A	
1. East Parking: Horizontal FC @ Grade	◇	1.6 fc	2.5 fc	0.9 fc	2.8:1	1.8:1	
2. South Parking & Drives: Horizontal FC @ Grade	◇	1.6 fc	3.0 fc	0.5 fc	6.0:1	3.2:1	
3. West Parking: Horizontal FC @ Grade	◇	1.6 fc	2.7 fc	0.7 fc	3.9:1	2.3:1	
4. Northwest Parking: Horizontal FC @ Grade	◇	1.6 fc	2.5 fc	1.0 fc	2.5:1	1.6:1	
5. Northeast Parking: Horizontal FC @ Grade	◇	1.5 fc	3.5 fc	0.0 fc	N/A	N/A	
6. East Drives: Horizontal FC @ Grade	+	1.3 fc	4.2 fc	0.1 fc	42.0:1	13.0:1	
7. West Drives: Horizontal FC @ Grade	+	1.4 fc	3.3 fc	0.3 fc	11.0:1	4.7:1	
8. North Drives & Loading: Horizontal FC @ Grade	+	1.5 fc	3.2 fc	0.5 fc	6.4:1	3.0:1	
9. Helipad & Walk: Horizontal FC @ Grade	◇	0.2 fc	7.5 fc	0.0 fc	N/A	N/A	

ARCHITECTURAL PALETTE

Architectural Principles

Architectural Character:

The UP Health Marquette Planned Urban Development seeks to form a campus that is modern, technically advanced, and employs cutting edge medical care, while also drawing upon the local region for context and inspiration. The language of the campus should aid in instilling confidence in its visitors and patients, and seek to establish a sense of welcoming and comfort.

Marquette draws a significant portion of its identity from its historic downtown of intricate brick and sandstone architecture and locally owned businesses. However, this campus does not seek to simply copy the qualities that define the city, but instead complement and enhance them. Rather than drawing inspiration from the built environment, the new replacement hospital employs a restrained palette formed from the city's other great asset, the natural qualities of the region, in order to avoid mimicking Marquette's unique historical architecture. Positioned together, the downtown is enhanced through the integration of modern, accessible healthcare amenities, while the UP Health campus is improved vastly through its close connection to one-of-a-kind, vibrant commercial districts and residential communities.

Modernity – The façade of the hospital and related buildings represents UP Health's commitment to the proficient delivery of state-of-the-art medical care, and the imagery of the hospital design should reinforce this adherence to quality for patients and visitors before they step foot on campus.

Architectural Palette – Inspiration for the material palette is drawn from the natural imagery of the Marquette region, including the repetition and color of birch trees and the gentle waves and varying colors of Lake Superior. The material palette of the campus is restrained, yet bold, and will have a strong architectural identity consistent with the hospital's important place within the city of Marquette's physical and cultural make-up. New structures shall adhere to the general aesthetic of the campus to promote unity and identity, while still possessing unique variations related to function.

Relationship to the City – The location and scale of the institution predicates that the major facades of the hospital will act as a billboard for the city of Marquette. The identities of both the hospital and the city are deeply connected, and the result should be architecturally unique facades that are as powerful to the campus as they are respectful to the city. The design should contribute to and enhance the skyline.

Scale and Proportion – While the details and composition of the facades are modern, the overall scale of each building should be traditional and balanced. The relationship from each building to the city, to Highway 41 and Washington Street, to other campus structures, and especially to the human scale should be carefully considered. This shall include manipulating the size and material of architectural features differently on ground levels than on facades that address the city and broader context.

Basic Facade Principles

Zone 1 - Hospital

- Highly visible facades shall consist primarily of white architectural precast panels and glass.
- Buildings should incorporate a hierarchy, which shall include a base element consisting primarily of masonry and glass to accommodate pedestrian scale relationships.
- Primary facades should appropriately address both Highway 41 and Washington Street.
- Long building exposures shall be articulated through the use of varied glass and white architectural precast compositions to avoid long uninterrupted facades. The predominant color palette shall be restrained and monochromatic to create a clean, contemporary compliment to the natural context.
- Other miscellaneous natural materials are encouraged, such as wood, masonry, or metal panel elements.
- Window frame colors should be complimentary to the façade and should be consistent across the campus.
- Low-Reflectivity glass shall be used to negate impact of glare on neighboring buildings, roadways, motorists, and pedestrians.
- Entrances should use glass as a means to improve visibility, transparency and foster an easy, welcoming environment.

- Pops of color and other materials may be used to aid in way-finding.
- Entrances should provide complete covered access from vehicle drop-off areas to the entry doorway.
- Dedicated loading areas shall be concealed from public views.
- Maximum building heights are not to exceed 8 stories plus screen walls, elevator overruns, stair overruns, etc.

Zone 1a – Integrated Clinical Services Building

- Highly visible facades shall consist primarily of either white architectural precast panels or masonry, and glass.
- Buildings should incorporate a hierarchy, which shall include a base element consisting primarily of masonry and glass to accommodate pedestrian scale relationships.
- Primary facades should appropriately address both Highway 41 and Washington Street, depending on the relative height of the building.
- Long building exposures shall be articulated through the use of varied glass, masonry, or white architectural precast compositions to avoid long uninterrupted facades. The predominant color palette shall be restrained and monochromatic to create a clean, contemporary compliment to the natural context.
- Other miscellaneous natural materials are encouraged, such as wood, masonry, or metal panel elements.
- Window frame colors should be complimentary to the façade and should be consistent across the campus.
- Low-Reflectivity glass shall be used to negate impact of glare on neighboring buildings, roadways, motorists, and pedestrians.
- Maximum building heights are not to exceed 6 stories plus screen walls, elevator and stair overruns, mechanical pent-houses, etc.



ARCHITECTURAL PALETTE

Zone 1b – Garage

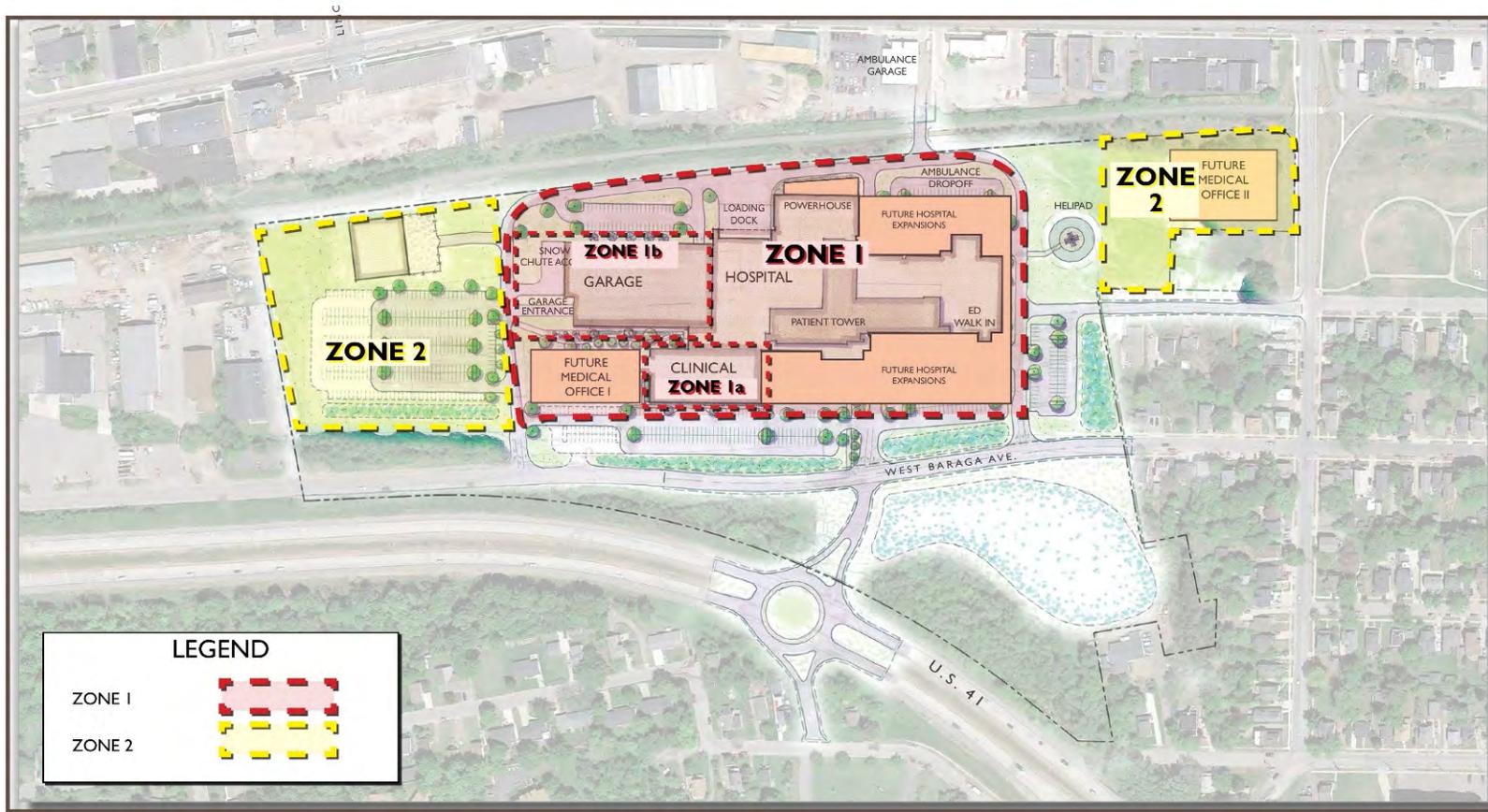
- The garage shall be a structural precast concrete assembly.
- Impact barriers shall be provided either by engineered precast panels, or containment cables.
- Maximum building height is not to exceed 6 stories plus screen walls, elevator and stair overruns, mechanical pent-houses, etc.

Zone 2 – Clinical, Office, and Associated Buildings

- Highly visible facades shall consist primarily of white architectural precast panels and glass.
- Buildings should incorporate a hierarchy, which shall include a base element consisting primarily of masonry and glass to accommodate pedestrian scale relationships.
- Long building exposures shall be articulated through the use of varied glass and white architectural precast compositions to avoid long uninterrupted facades. The predominant color palette shall be restrained and monochromatic to create a clean, contemporary compliment to the natural context.
- Buildings on campus should exhibit an appropriate hierarchy of heights relative to the hospital in order to help guide visitors naturally to its primary entrances.
- Other miscellaneous natural materials are encouraged, such as wood, masonry, or metal panel elements.
- Window frame colors should be complimentary to the façade and should be consistent across the campus.
- Low-Reflectivity glass shall be used to negate impact of glare on neighboring buildings, roadways, motorists, and pedestrians.
- Entrances should use glass as a means to improve visibility, transparency and foster an easy, welcoming environment. Pops of color and other materials may be used to aid in way-finding.
- Maximum building heights are not to exceed 6 stories plus screen walls, elevator overruns, stair overruns, etc.
- The garage shall be structural precast with vertical expansion not to exceed 6 stories.



DEVELOPMENT ZONES





Massing Studies







View from Highway 41





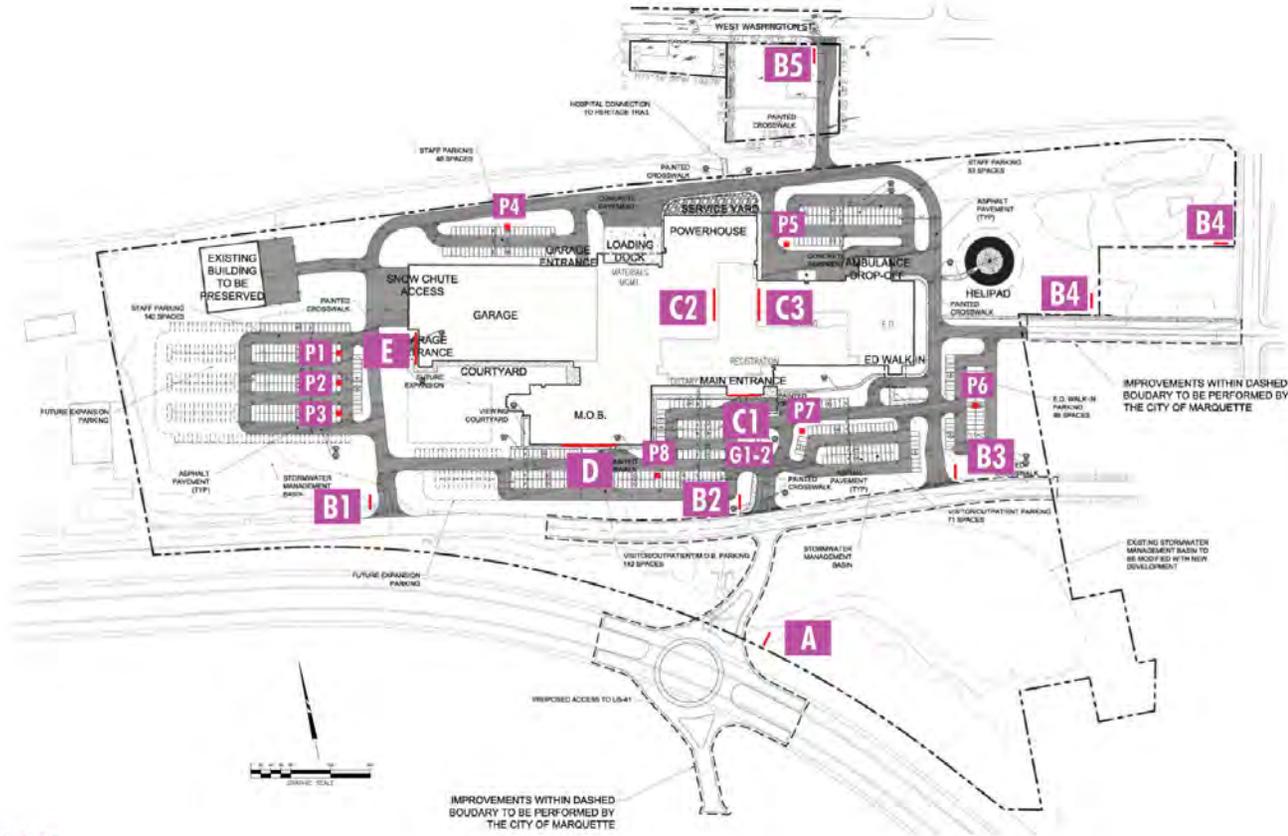
Main Entrance

View from Entry Drive

Guiding Design Imagery – Main Entrance



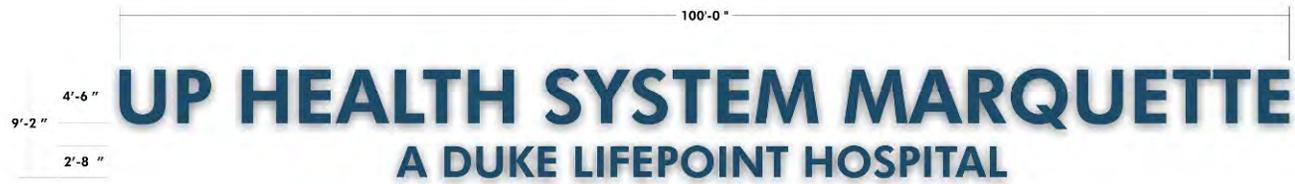
SITE SIGNAGE PLAN



SITE PLAN

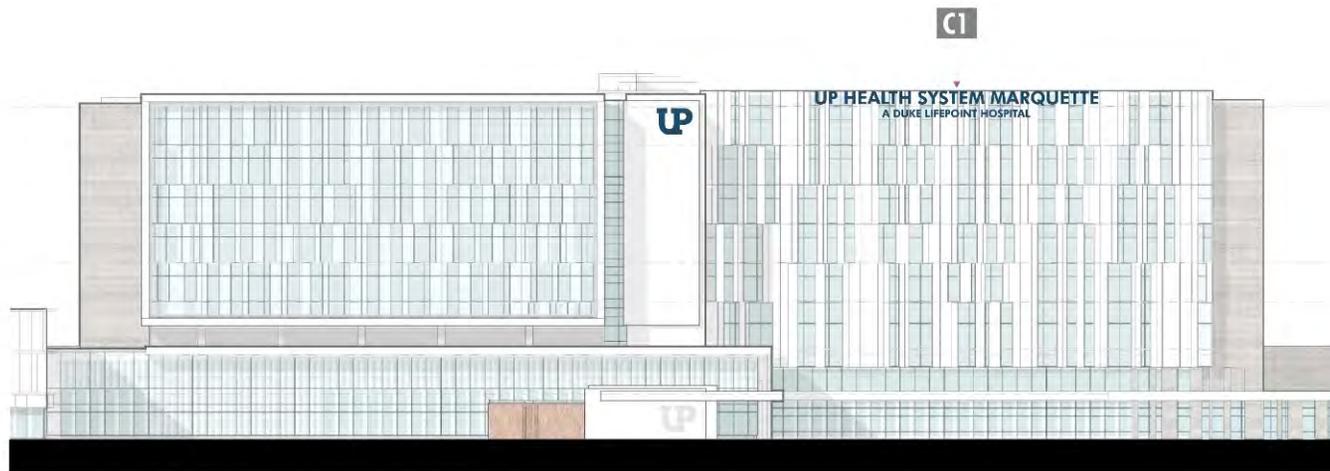


BUILDING SIGNAGE ELEVATIONS



C1 C2 C3

ALTERNATE
NEW SINGLE FACED INTERNALLY ILLUMINATED WALL DISPLAY
SCALE 1/8"=1'-0"
USE PLEX FACED CHANNELS WITH THROUGH FACE ILLUMINATION,
CONTENT AND COLORS TBD BY UP HEALTH
916 SQUARE FOOTAGE SHOWN



PROPOSED PARTIAL SOUTH ELEVATION (RIGHT SIDE) SCALE 1/32"=1'-0"

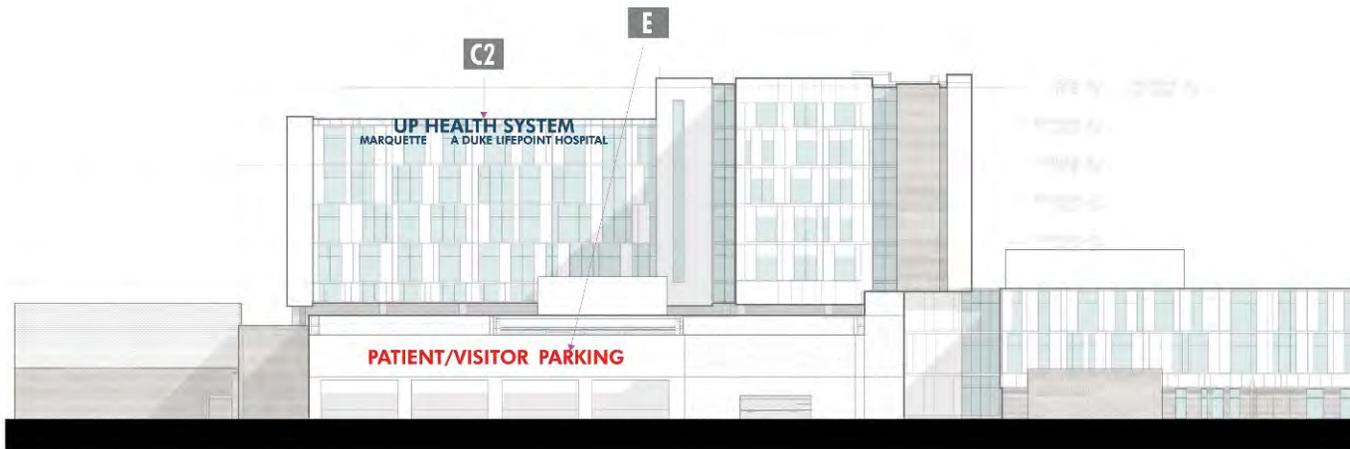


BUILDING SIGNAGE ELEVATIONS

5'-6" 5'-0" 87'-0"

PATIENT/VISITOR PARKING

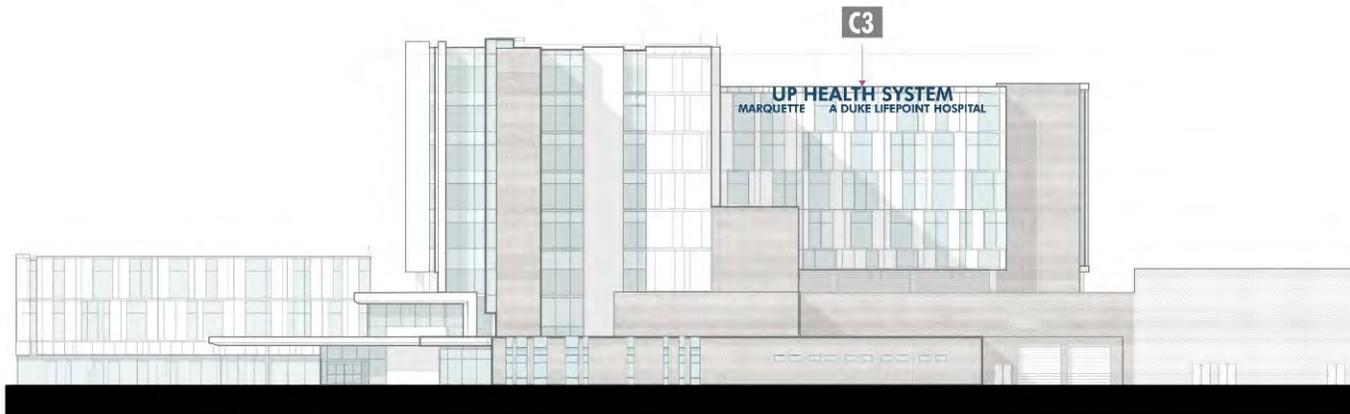
E NEW SINGLE FACED INTERNALLY ILLUMINATED WALL DISPLAY
SCALE 1/8"=1'-0"
USE PLEX FACED CHANNELS WITH THROUGH FACE ILLUMINATION,
CONTENT AND COLORS TBD BY UP HEALTH
478.5 SQUARE FOOTAGE SHOWN



PROPOSED WEST ELEVATION SCALE 1/32"=1'-0"

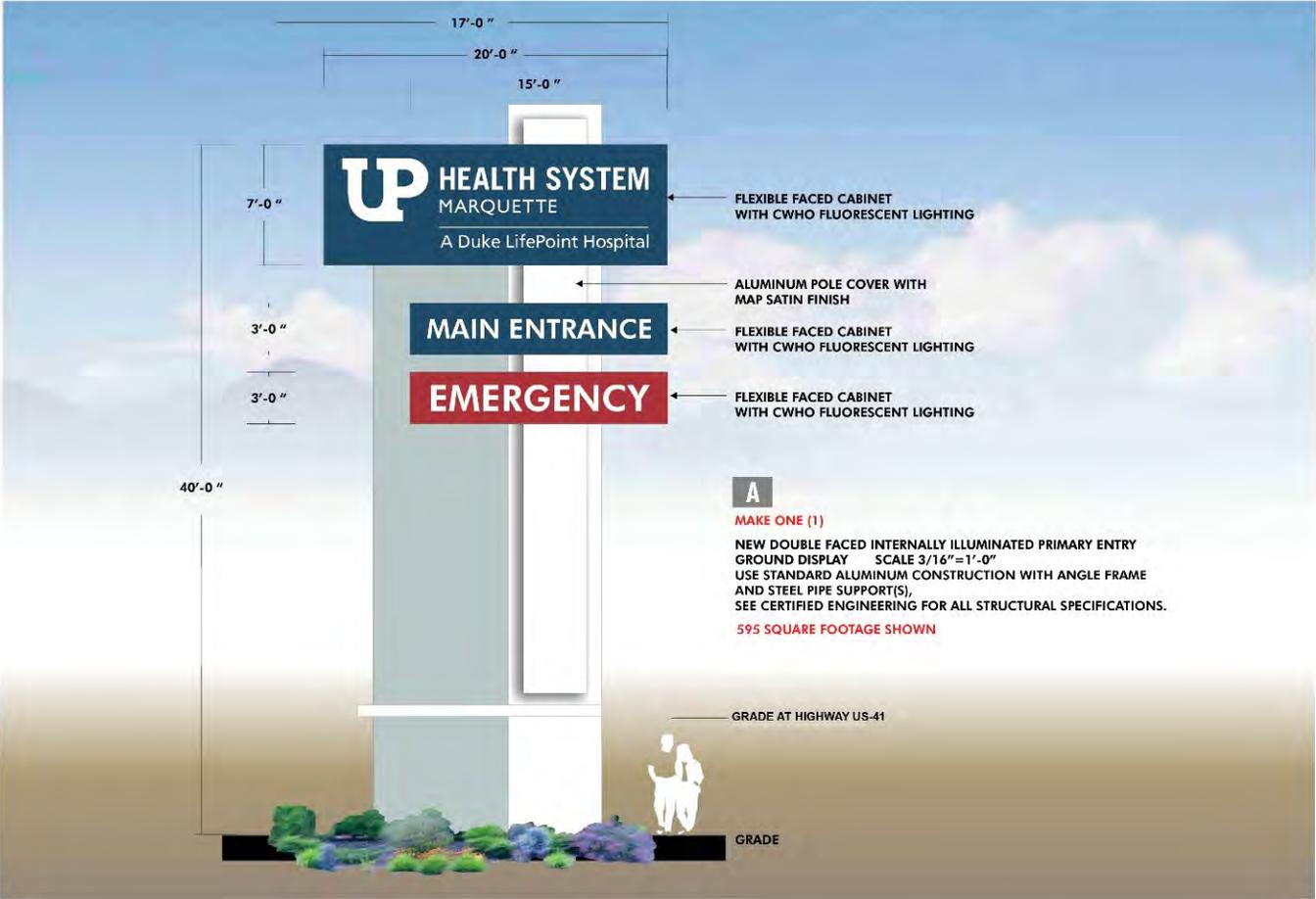


BUILDING SIGNAGE ELEVATIONS



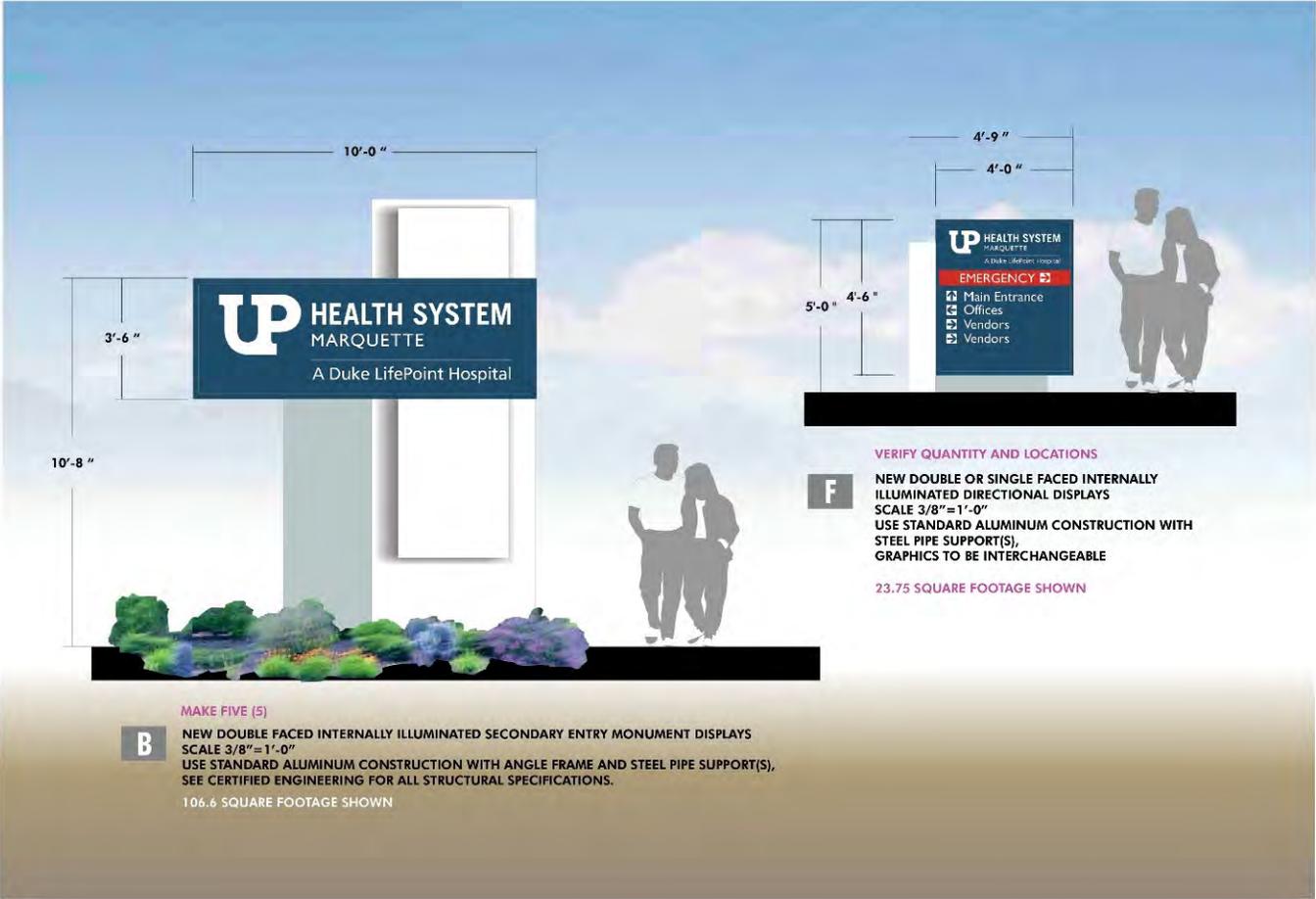
PROPOSED EAST ELEVATION SCALE 1/32"=1'-0"

SIGN ELEVATIONS



Sign Elevations

SIGN ELEVATIONS



B MAKE FIVE (5)
 NEW DOUBLE FACED INTERNALLY ILLUMINATED SECONDARY ENTRY MONUMENT DISPLAYS
 SCALE 3/8"=1'-0"
 USE STANDARD ALUMINUM CONSTRUCTION WITH ANGLE FRAME AND STEEL PIPE SUPPORT(S),
 SEE CERTIFIED ENGINEERING FOR ALL STRUCTURAL SPECIFICATIONS.
 106.6 SQUARE FOOTAGE SHOWN

F VERIFY QUANTITY AND LOCATIONS
 NEW DOUBLE OR SINGLE FACED INTERNALLY ILLUMINATED DIRECTIONAL DISPLAYS
 SCALE 3/8"=1'-0"
 USE STANDARD ALUMINUM CONSTRUCTION WITH STEEL PIPE SUPPORT(S),
 GRAPHICS TO BE INTERCHANGEABLE
 23.75 SQUARE FOOTAGE SHOWN

Sign Elevations

Your Questions?



 UP HEALTH SYSTEM | MARQUETTE
GRESHAM, SMITH & PARTNERS

