OWOSSO M-1-0-H-1-0-A-N

CITY OF OWOSSO PLANNING COMMISSION

Regular (VIRTUAL) Meeting

Monday, November 23, 2020 at 6:30 p.m.

AGENDA

City of Owosso is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

https://us02web.zoom.us/j/88974080932?pwd=WIRQcGZhQ0x6VUF5S3NDOXdHV21WUT09

Meeting ID: 889 7408 0932

Passcode: 314083
One tap mobile

+16465588656,,88974080932#,,,,,0#,,314083# US (New York) +13017158592,,88974080932#,,,,,0#,,314083# US (Germantown)

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago)

+1 669 900 9128 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 889 7408 0932

Passcode: 314083

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

APPROVAL OF AGENDA – November 23, 2020 APPROVAL OF MINUTES – August 24, 2020

PUBLIC HEARINGS:

- 1. Washington Park Smart Homes Development Site Plan Review
- 2. 210 Monroe Street Proposed Rezoning of City Owned Property

OLD BUSINESS:

NEW BUSINESS:

- 1. Memorial Healthcare Parking Lot Site Plan Review
- 2. Master Plan Survey Results

OTHER BOARD BUSINESS
PUBLIC COMMENTS AND COMMUNICATIONS:
ADJOURNMENT

Next regular meeting will be on Monday, December 14, 2020 (due to holidays)

The City of Owosso will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and recordings of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon seventy-two (72) hours' notice to the City of Owosso. Individuals with disabilities requiring auxiliary aids or services should contact the City of Owosso by writing or calling the following: Amy Kirkland, City Clerk, 301 W. Main St, Owosso, MI 48867 (989) 725-0500. The City of Owosso website is: www.ci.owosso.mi.us

MINUTES REGULAR MEETING OF THE OWOSSO PLANNING COMMISSION VIRTUAL MEETING

Monday, August 24, 2020 – 6:30 P.M.

City Manager Nathan Henne announced the meeting would be held as a Virtual Meeting due to the COVID-19 pandemic, under the authority of Executive Order No. 2020-15 of the Office of the Governor of the State of Michigan.

CALL TO ORDER: Chairman Wascher called the meeting to order at 6:30 p.m.

PLEDGE OF ALLEGIANCE: Recited

ROLL CALL: Recording Secretary Tanya Buckelew

MEMBERS PRESENT: Chairman Wascher, Vice-Chair Livingston, Secretary Fear,

Commissioners Jenkins, Law, Morris, Robertson, Taylor and

Yerian

MEMBERS ABSENT: None

OTHERS PRESENT: Justin Sprague, CIB Planning, City Manager Nathan Henne

APPROVAL OF AGENDA:

MOTION BY VICE-CHAIR LIVINGSTON, SUPPORTED BY SECRETARY FEAR TO APPROVE THE AGENDA FOR August 24, 2020.

YEAS ALL. MOTION CARRIED.

APPROVAL OF MINUTES:

MOTION BY VICE-CHAIR LIVINGSTON, SUPPORTED BY SECRETARY FEAR TO APPROVE THE MINUTES FOR THE July 27, 2020 MEETING.

YEAS ALL. MOTION CARRIED.

PUBLIC HEARINGS: NONE

OLD BUSINESS: NONE

NEW BUSINESS:

1. Discussion of animal ordinance regarding chickens

The following commented:

- City Manager Nathan Henne explained the various communities that had responded and the comparison spreadsheet included in the packet
- Vice-Chair Livingston stated he is familiar with the chicken process. He would recommend 4 hens, no roosters, enclosure required, fenced yard required with additional restrictions as to permits/fees and setbacks

- Commissioner Morris asked if this was about chickens for egg laying purposes yes.
 Has concerns regarding noise and agrees with restrictions
- Commissioner Robertson spoke of the negatives smell, feces, hens make noise, enforcing vaccines otherwise leads to disease and agrees to a lot of restrictions
- Commissioner Taylor agrees with restrictions and concerns regarding the negative issues with chickens
- Secretary Fear stated she has had several constituents express a want for chickens being allowed in the city. She doesn't believe this would be widespread as there would be permits/fees involved.
- Justin Sprague, CIB Planning, stated the city of Fenton adopted the ordinance to allow chickens 7 years ago. Currently 12 permits had been issued, the annual fee is \$45 and inspections are required.
- Commissioner Robertson stated chickens are not currently allowed but people still have them in the city
- Secretary Fear stated nobody would be grandfathered in and would have to get a permit
- Commissioner Yerian stated he is against it and asked what the violation numbers are in other communities
- Commissioner Law stated the issues with the noise, mess and having a dog within his own fenced in yard and chickens next door would be an issue.
- Chairman Wascher stated he is against it
- Commissioner Jenkins asked about Fenton and a way to enforce vaccines and fences
- Justin Sprague, CIB Planning, stated an issue with code enforcement is that they can't always see what is in the backyard and they need a lawful reason to enter yards.
- Laura VanHyte, 524 Corunna Ave, she is in favor of allowing chickens. They are not smelly and don't get loose. A fenced yard is not required as a 9' X 18' coop is reasonably priced
- Tom Kurtz, 721 Lee St, has concerns and the city is not being able to keep up code
 enforcement, can't meet demands. At his previous residence, he was at least 50' from
 the neighbors coop and it still wasn't adequate. Raccoons and possums are attracted to
 chickens and can be destructive.
- Levi Perry, 720 Pine St, grew up with chickens and enjoys fresh eggs. The concerns could be overcome by standards and inspections
- Mark Draden, 1116 N Ball St, asked if property values went down in Fenton for homes next to chickens
- Laura VanHyte, 524 Corunna Ave, encourage the Planning Commission to look at the feedback on Facebook and proceed with this
- Justin Sprague, CIB Planning asked if city council was wanting this and looking for recommendations for an ordinance or to put an end to the discussion
- Commissioner Law stated to put it on the ballot
- City Manager Nathan Henne does not think it is legal to put on a ballot as it is a policy
- Commissioner Morris asked if code enforcement falls under the control of the Planning Commission – no. He is now on the fence and would need more discussions

 Secretary Fear would like more information. Poll other cities – how many allow chickens, how many permits are issued, how many complaints they have had

MOTION BY COMMISSIONER TAYLOR SUPPORTED BY COMMISSIONER LAW THAT THIS NOT BE DISCUSSED FURTHER AND TO NOT MOVE FORWARD ON A CHICKEN ORDINANCE.

YEAS: COMMISSIONER LAW, ROBERTSON, TAYLOR, YERIAN AND CHAIRMAN

WASCHER

NAYS: SECRETARY FEAR, COMMISSIONERS JENKINS, MORRIS AND VICE-CHAIR

LIVINGSTON

RCV 5-4 MOTION CARRIED

OTHER BOARD BUSINESS: NONE

PUBLIC COMMENTS AND COMMUNICATIONS:

Justin Sprague, CIB Planning, stated that he still needs the Planning Commissioner's comments on the Master Plan so he can present a clean draft at the September meeting.

ADJOURNMENT

MOTION BY COMMISSIONER TAYLOR, SUPPORTED BY COMMISSIONER ROBERTSON TO ADJOURN AT 7:44 P.M. UNTIL THE NEXT MEETING ON September 28, 2020. YEAS ALL, MOTION CARRIED.

Janae L. Fear, Secretary

MINUTES REGULAR MEETING OF THE OWOSSO PLANNING COMMISSION VIRTUAL MEETING

Monday, September 28, 2020 – 6:30 P.M.

Virtual Meeting due to the COVID-19 pandemic, under the authority of Executive Order No. 2020-15 of the Office of the Governor of the State of Michigan.

CALL TO ORDER: Chairman Wascher called the meeting to order at 6:36 p.m.

ROLL CALL: Recording Secretary Tanya Buckelew

MEMBERS PRESENT: Chairman Wascher, Vice-Chair Livingston, Commissioners Morris

and Robertson

Secretary Fear, Commissioners Jenkins, Law, Taylor and Yerian MEMBERS ABSENT:

OTHERS PRESENT: Justin Sprague, CIB Planning

PRESENT - 4, ABSENT - 5, NO QUORUM

APPROVAL OF AGENDA: September 28, 2020 NO ACTION APPROVAL OF MINUTES: August 24,2020 NO ACTION

PUBLIC HEARINGS: NONE **OLD BUSINESS: NONE**

NEW BUSINESS: Master Plan Draft Updates NO ACTION

Justin Sprague, CIB Planning, stated that after he completes the Action Table this week, the draft will be ready for public comment. The city can utilize Facebook and website to ask residents for their comments before sending the draft to City Council to approve the 63-day comment period.

OTHER BOARD BUSINESS: NONE

PUBLIC COMMENTS AND COMMUNICATIONS: NONE

ADJOURNMENT: NO ACTION

OFFICIAL NOTICE OF SITE PLAN REVIEW VIRTUAL PUBLIC HEARING

City of Owosso is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

https://us02web.zoom.us/i/88974080932?pwd=WIRQcGZhQ0x6VUF5S3NDOXdHV21WUT09

Meeting ID: 889 7408 0932

Passcode: 314083 One tap mobile

+16465588656,,88974080932#,,,,,0#,,314083# US (New York) +13017158592,,88974080932#,,,,,0#,,314083# US (Germantown)

Dial by your location

+1 646 558 8656 US (New York) +1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago) +1 669 900 9128 US (San Jose)

+1 669 900 9128 US (San Jose +1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Mosting ID: 990 7409 0022

Meeting ID: 889 7408 0932

Passcode: 314083

A Public Hearing will be held for a Site Plan Review of the Planned Unit Development (PUD) of the Washington Park Smart Homes Development.

APPLICANT: #P2020-015 Thomas Cook

Anna Owens

Bailey Park Homes, L3C

815 Lakeside Owosso MI, 48867

PROPERTY ADDRESS: N. Washington Street

SW Corner of Washington and Wesley Streets

PURPOSE OF PUBLIC HEARING: Site Plan Review of the Planned Unit Development (PUD) to

develop the Washington Park Smart Homes consisting of 14 new

homes

PROPERTY DESCRIPTION: Parcel number: 050-535-000-001-00

Legal/Tax Description: COM 358' N & 33' W OF INTER S LN SEC 12 & C/L N WASH ST TH W 231' N 6' W 133.7' N 279' E 364.21' S 284' TO POB PART OF SE 1/4 SE 1/4 SEC 12T7N

R2E

LOT SIZE: 2.373 acres

Frontage: 364.21 feet Depth: 284.90 feet

MEETING INFORMATION: Owosso City Planning Commission VIRTUAL MEETING on

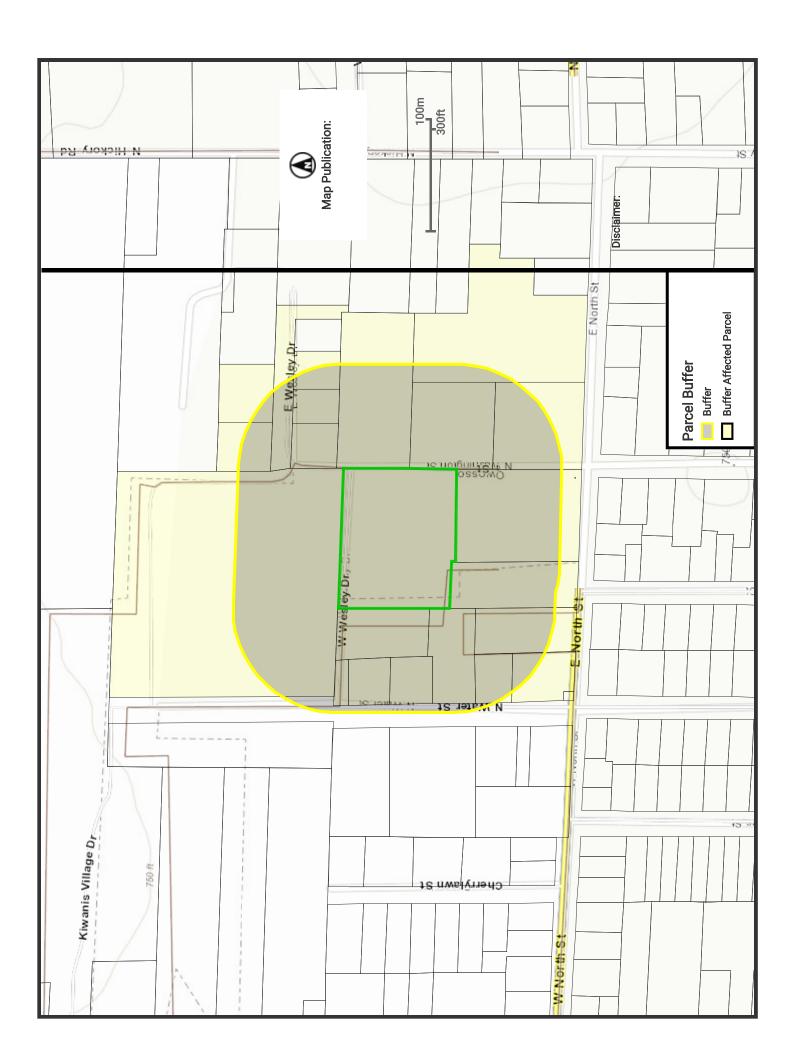
Monday, November 23, 2020 at 6:30 p.m.

WRITTEN COMMENTS: Written comments may be submitted to the building department

office at city hall or by email to building@ci.owosso.mi.us any time prior to the meeting. Further information on this case is on

file in the Building Department for your review.

The City of Owosso will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon seventy-two (72) hours notice to the City of Owosso. Individuals with disabilities requiring auxiliary aids or services should contact the City of Owosso by writing or calling the following: Amy Kirkland, City Clerk, 301 W. Main St, Owosso, MI 48867 (989) 725-0500. Website address is www.ci.owosso.mi.us.



SITE PLAN REVIEW APPLICATION AND CHECKLIST

Approval of the site plan is hereby requested for the following parcel(s) of land in the City of Owosso. This application is submitted with five (5) copies of the complete site plan and payment of the appropriate review fees. Applicant shall also submit a digital version of the site plan to the community development director. Application must be filed least 25 days prior to a scheduled planning commission meeting for staff review and proper notices.

Accompanying any site plan required hereunder, the applicant shall provide from a licensed engineer soil borings at the proposed construction site to ascertain bearing capacity of foundations soils at the time of footing excavation to certify such soil conditions meet or exceed design capacity of the foundation to support the proposed structure. These requirements shall comply with policies of the City of Owosso, copies of which can be obtained from the Building Department.

The attached checklist has been completed to certify the data contained on the site plan. If the required data has not been provided, the appropriate box has been checked with a statement of explanation on why the data has not been provided. I understand that if my site plan is deemed to be incomplete, it may be returned by the City for revisions without being forwarded to the Planning Commission for consideration, until such time as the requirements have been adequately met. By signing this application, the applicant hereby grants full authority to the City of Owosso, its agents, employees, representatives and/or appointees to enter upon the undersigned lands/parcel(s) for the purposes of inspection and examination.

	parente of the parente of the posterior and obtaining the
Appli	ication Filed On:
Appli	cation Transmitted by City On:10/12/2020
Prop	erty Details:
	Property Street Address: <u>SW Corner of Washington and Wesley (address not yet assigned)</u> Location of Property: On the (north, south, east, west side) of <u>Washington</u> Street, between North and Wesley
4. 5. 6.	
Owne	ership:
2. 3. 4.	Name of Title/Deed Holder: <u>Jerry & Carolyn Voight</u> Address: <u>25 Outerbridge Circle, Hilton Head, SC 29926</u> Telephone No: <u>843-681-2286</u> Fax No: <u>NA</u> Email address: <u>connievhh@aol.com</u>
Appli	cant:
	Applicant (If different from owner above): Bailey Park Homes L3C Address: 815 Lakeside, Owosso, MI 48867 Telephone No: 989-277-9700

4. Fax No: NA

5. Email address: annaowens1230@gmail.com
6. Interest in Property (potential buyer/lease holder/potential lessee/other): Legal Representative
Architect/Surveyor/Engineer preparing site plan:
Name of Individual: Beckett & Raeder, Inc. (Christy Summers, PLA / Chris DeGood, P.E.)
 Address: 535 W. William, Ste 101, Ann Arbor, MI 48103 Telephone No: 734-663-2622
4. Fax No: _734-663-6759
5. Email address: <u>csummers@bria2.com; cdegood@bria2.com</u>
PLEASE NOTE:
LLC establishments must have a current plan of operation.
Review Fees: Paid: Yes/No
*Site Plan Review Fees: \$150.00 (may be more if it requires review from outside firm)
Total Fees: \$_\$150.00
See attached letter
Signature of Applicant Date Signature of Deed/Title Holder Date
Please provide an overview of the project:
See attached.
BY CURISTY SUMMERS OF BECKETT & RAEDER, INC.
BY CURISTY SUMMERS OF BECKETT & RAEDER, INC.

SITE PLAN REVIEW CHECKLIST

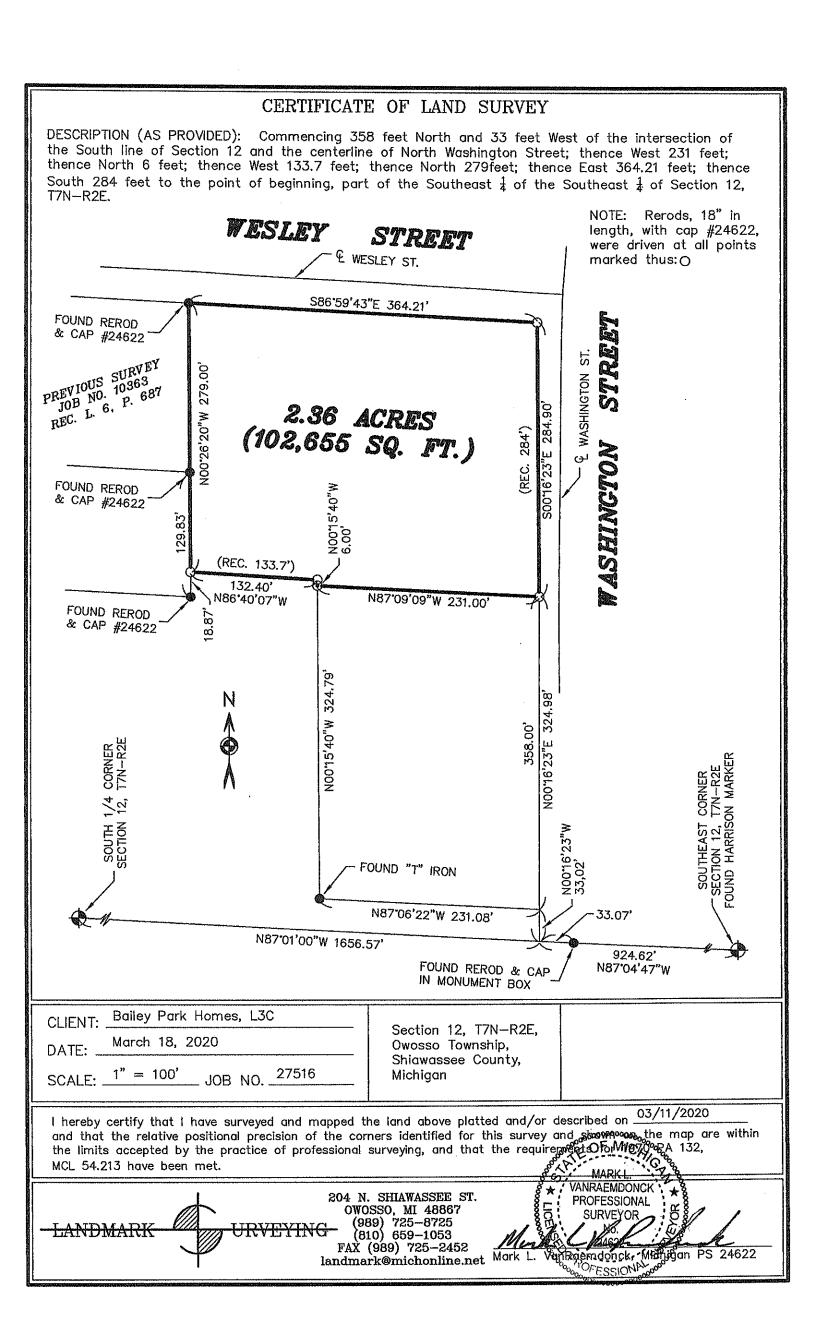
Check the appropriate line. If item is marked as 'not provided', attach detailed explanation.

Ite	n	Provided	Not Provided
1.	Site location Map.	V	
2.	North arrow, scale (one (1) inch equals fifty (50) feet if the subject	X	
	property is less than three (3) acres and one (1) inch equals one hundred		
	(100) feet if three (3) acres or more.	X	
3.	Revision dates.		
	Signature and Seal of Architect/Surveyor/Engineer.	X	
	Area of site (in acres and square feet).	X	
	Boundary of the property outlined in solid line.	X	
7.	Names, centerline and right-of-way widths of adjacent streets.	X	
	Zoning designation of property.	<u>X</u>	
	Zoning designation and use of adjacent properties.	Χ	
	Existing and proposed elevations for building(s) parking lot areas and		
	drives.	X	
11.	Direction of surface water drainage and grading plan and any plans for		
	storm water retention/detention on site.	X	
12.	Required setbacks from property lines and adjacent parcels.	X	-
	Location and height of existing structures on site and within 100 feet of		
	the property.	X	
14.	Location and width of existing easements, alleys and drives.	X	
	Location and width of all public sidewalks along the fronting street		
	right-of-way and on the site, with details.	X	
16.	Layout of existing/proposed parking lot, with space and aisle dimensions.		
	Parking calculations per ordinance.		NA NA
	Location of all utilities, including but not limited to gas, water, sanitary		
	sewer, electricity, telephone.	X	
19.	Soil erosion and sedimentation control measures during construction.	X	
	Location and height of all exiting/proposed fences, screens, walls or		
	other barriers.	X	
21.	Location and details of dumpster enclosure and trash removal plan.	X	
	Landscape plan indicating existing/proposed trees and plantings along		
	frontage and on the site.	Χ	
23.	Notation of landscape maintenance agreement.	X	
24.	Notation of method of irrigation.	X	
25.	Lighting plan indicating existing/proposed light poles on site, along site's		
	frontage and any wall mounted lights.		_NA
	a. Cut-sheet detail of all proposed light fixtures.		NA
26.	Architectural elevations of building (all facades). Identifying height,		
	Materials used and colors.	X	
27.	Existing/proposed floor plans.	X	
28.	Roof mounted equipment and screening.		NA NA
29.	Location and type of existing/proposed on-site signage.		NA
30.	Notation of prior variances, if any.		NA
31.	Notation of required local, state and federal permits, if any.	X	

32. Additional information or special data (for some sites only)		
a. Environmental Assessment Study.		NA
b. Traffic Study. Trip Generation.		NA
c. Hazardous Waste Management Plan.		NA
33. For residential development: a schedule indicating number of dwelling units, number of bedrooms, gross and usable floor area, parking provided total area of paved and unpaved surfaces.	X	
34. LLC establishments must have a current Plan of Operation.	X (for L3C)	
35. Is property in the floodplain?		Χ
36. Will this require MDEQ permitting?		X
37. Performance Bond – when required.		NA

2019 Meeting Date	Submittal Deadline
January 28	December 28
February 25	January 25
March 25	February 22
April 22	March 22
May 28	April 26
June 24	May 24
July 22	June 21
August 26	July 26
September 23	August 23
October 28	September 27
November 25	October 25
December 9	November 8

^{*}Additional data deemed necessary to enable to completion of an adequate review may be required by the Planning Commission, City and/or its consultants.



Jerry Voight Carolyn Voight 25 Outerbridge Circle Hilton Head SC 29926

March 12, 2020

To Whom It May Concern:

We have been working with Thomas Cook and Anna Owens and their company Bailey Park Homes L3C, to develop our vacant property on North Washington Street in the City of Owosso (Parcel 050-535-000-001-00), listed owner Jerry S. Voight, Trustee.

We grant permission for them to proceed with rezoning the property and seeking appropriate approvals from the City of Owosso. We support their development proposal. We also anticipate donating the property to a local land bank to facilitate the development of the property.

Thank you.

Jerry Voight

Carden & Vac Ho Carol Voight

Washington Park Smart Homes Development Project Overview

The proposed development is the creation of a new neighborhood with traditional Owosso characteristics: housing for a range of families, pedestrian accessibility, green spaces, and recreation opportunities for children. Using innovative design and construction techniques, the project would provide attainable market rate homeownership opportunities at a lower price than other new construction homes in the area, while preserving Owosso's neighborhood qualities.

Located on the north side of one of the community's established residential areas, Washington Park would provide ready access for residents to downtown Owosso. The sense of neighborhood would be enhanced by front porches and an orientation of the homes to a common walkway and courtyard. Sidewalks and a pedestrian-aware design would help strengthen relationships in the new neighborhood and connect it to existing ones.

Initial consultation has been held with the Owosso Public Schools and the City of Owosso to facilitate Safe Routes to Schools programs and infrastructure to complement the project. The proximity of two preschool programs, along with an onsite community playground, will also make Washington Park a supportive residential development for families with young children.

Washington Park has been designed with sustainability as a guiding principle. The purposeful, compact placement of the residential units on the site provides a more efficient use of the land compared to traditional single-family developments, while maintaining the character of the surrounding neighborhoods. Being planned as a cohesive residential development allows for responsible onsite stormwater management. The offsite construction of the residential units in a controlled environment helps to eliminate waste from the building process and reduce costs, which in turn allows for the incorporation of energy efficient features and durable building materials. The integrated pedestrian elements support non-motorized transportation, reducing the number of vehicular trip necessary, a benefit to both health and the environment. Moreover, the overall site design fosters a strong sense of community, building upon what makes Owosso such a great place to call home.



Landscape Architecture Planning, Engineering & Environmental Services

November 6, 2020

Mr. Justin Sprague Vice President Community Image Builders 17195 Silver Parkway, #309 Fenton, MI 48430

Regarding: Washington Park Smart Home Site Plan Review – Response to Comments

(i)initiative

Dear Mr. Sprague,

We are in receipt of your letter to the City of Owosso Planning Commission dated October 28, 2020 with your review comments related to the above-referenced project. We offer the following response to comments

- 1. Information Items: Please be advised that we have added Sheet C4.1 Common Area Plan to our drawings, which delineates that ownership of the units is from the wall/foundations-in and all land outside wall/foundations is common area.
- 2. Area and Bulk: We are in agreement with your assessment that certain setbacks and lot coverage regulations require a PC Waiver.

3. Building and Design Materials:

Fixed Porches: We are in agreement that the porches on the homes will be fixed, meaning constructed on a foundation and not free-standing/floating on grade. Front porches will be integral to the building foundation and rear porches will be wood decks (and wood steps) with poured concrete foundations.

Carports: The Developer intends to allow the initial buyers the option of carports or garages as a part of the menu of selections that buyers will be offered, which will impact the ultimate sale price of the unit. We have included a plan and illustration of the proposed car ports and bring to your attention that an enclosed storage area is included in the car port design in order to address your concern that storage is accommodated in a manner that will not be unsightly. However, if the Planning Commission does require garages per your recommendation, then the developer will construct such resulting in an increased base cost to each unit.

Home Replacement: Please be advised that the homes are not mobile and though they are manufactured offsite and shipped to the site for installation on a crawl space, once installed, they are permanently affixed to their foundation. The

Beckett & Raeder, Inc. 535 West William, Suite 101 113 Howard St. Ann Arbor, MI 48103

Petoskev Office Petoskey, MI 49770

Traverse City Office 148 East Front Street, Suite 207 419.242.3428 ph Traverse City, MI 49684

Toledo

Developer is willing to write language into the master deed that is consistent with City requirements for any other single-family home that is damaged or destroyed.

<u>Building Separation Waiver:</u> We agree with your suggested waiver to reduce the building separation dimension.

- 4. **Building Height**: Agreed.
- 5. Parking Requirements: Agreed.
- 6. Landscaping: Agreed.
- 7. Lighting Plan: Agreed.
- 8. **Fencing**: The Developer is not intending to provide any fencing in the initial development, and intends to allow the Home Owners' Association to create rules and regulations related to fencing. However, the Developer will write into the Master Deed that fencing shall be consistent in materials, and that chain link fencing will not be allowed.
- 9. Other Approvals: We are prepared to respond and adhere to the review comments provided by other city departments and agencies. Thus far, we have received comments from the City Engineer and the Fire Department. The City Engineering comments mostly address details that will be finalized as the design proceeds into preparation of construction drawings. Likewise, we are confident that the Fire Department's comments will reach an agreeable conclusion.

We look forward to seeing you on November 23 when the project will be before the Planning Commission for Site Plan Review. Please do not hesitate to contact me should you have any questions or concerns.

Thank you,

initiative

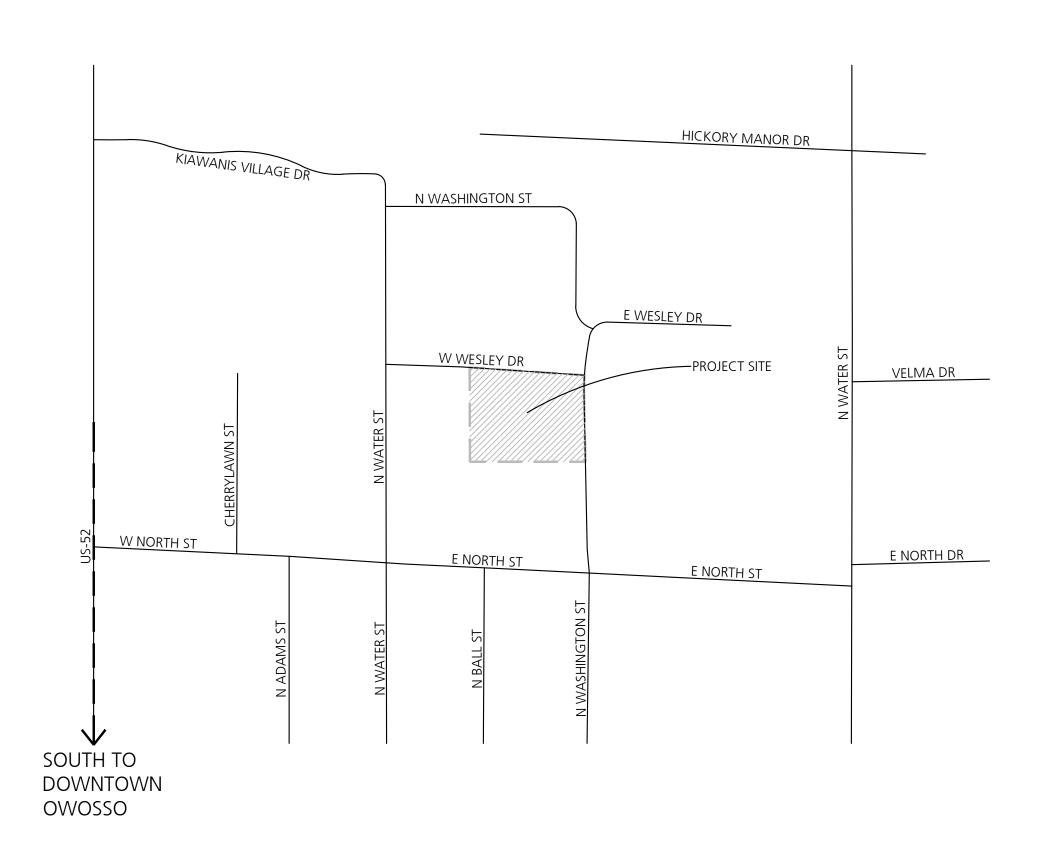
Christy D. Surprers, PLA, ASLA, LEED AP

Principal

Encl. Site Plan Approval Resubmission Drawings dated 11.05.2020

Issued For: Site Plan Approval Resubmission

Owosso, MI 48867

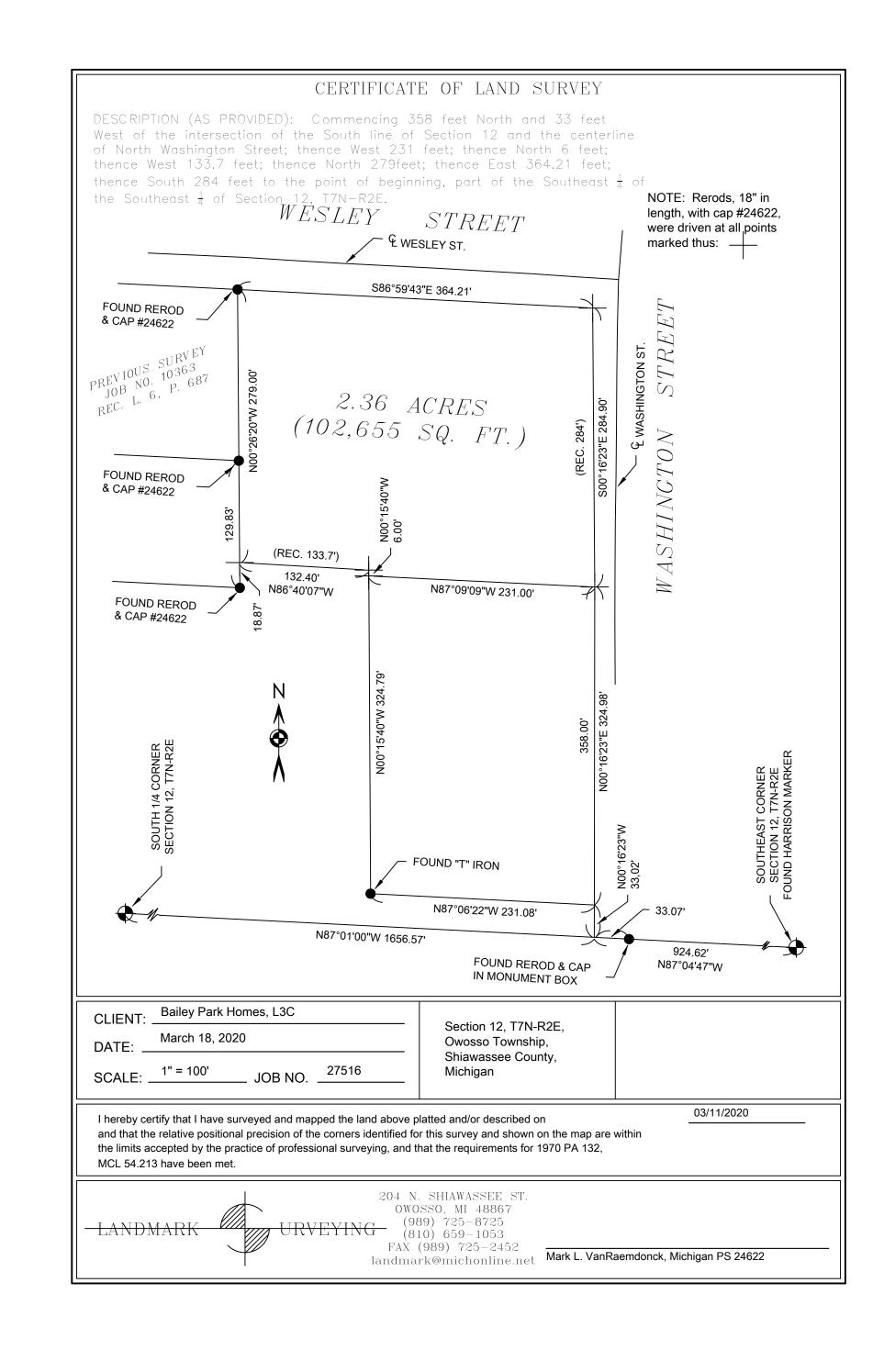


Location Map

NTS

Seal





SHEET INDEX

	Cover Sheet
C1.0	Topographic Survey
C1.1	Existing Conditions Plan
C2.0	Demolition Plan (Reserve For Future)
C3.0	Soil Erosion and Sedimentation Control Pla
C4.0	Layout and Materials Plan
C4.1	Common Area Plan
C5.0	Grading Plan
C6.0	Utilities Plan
C7.0	Stormwater Management Plan
C8.0	Utility Profiles (Reserve For Future)
C9.0	Fire Safety Plan
C10.0	Site Details
C11.0	Utility Details
A1.0	Building Plans and Elevations
A1.1	Building Plans and Elevations
A1.2	Building Plans and Elevations
L1.0	Landscape Plan
L2.0	Landscape Details

Landscape Architect / Engineer

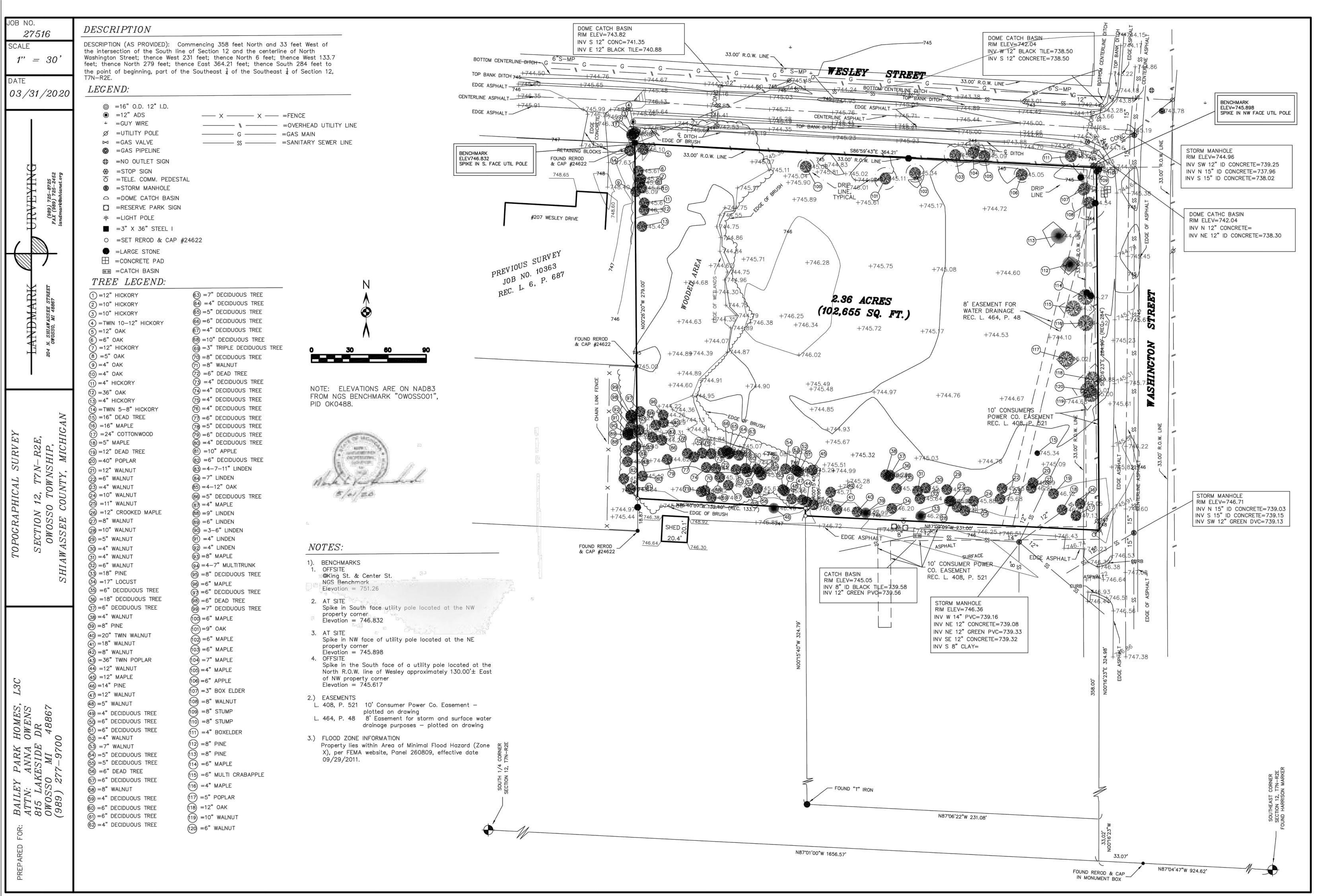
B R i Beckett&Raeder Landscape Architecture Planning, Engineering and Environmental Services

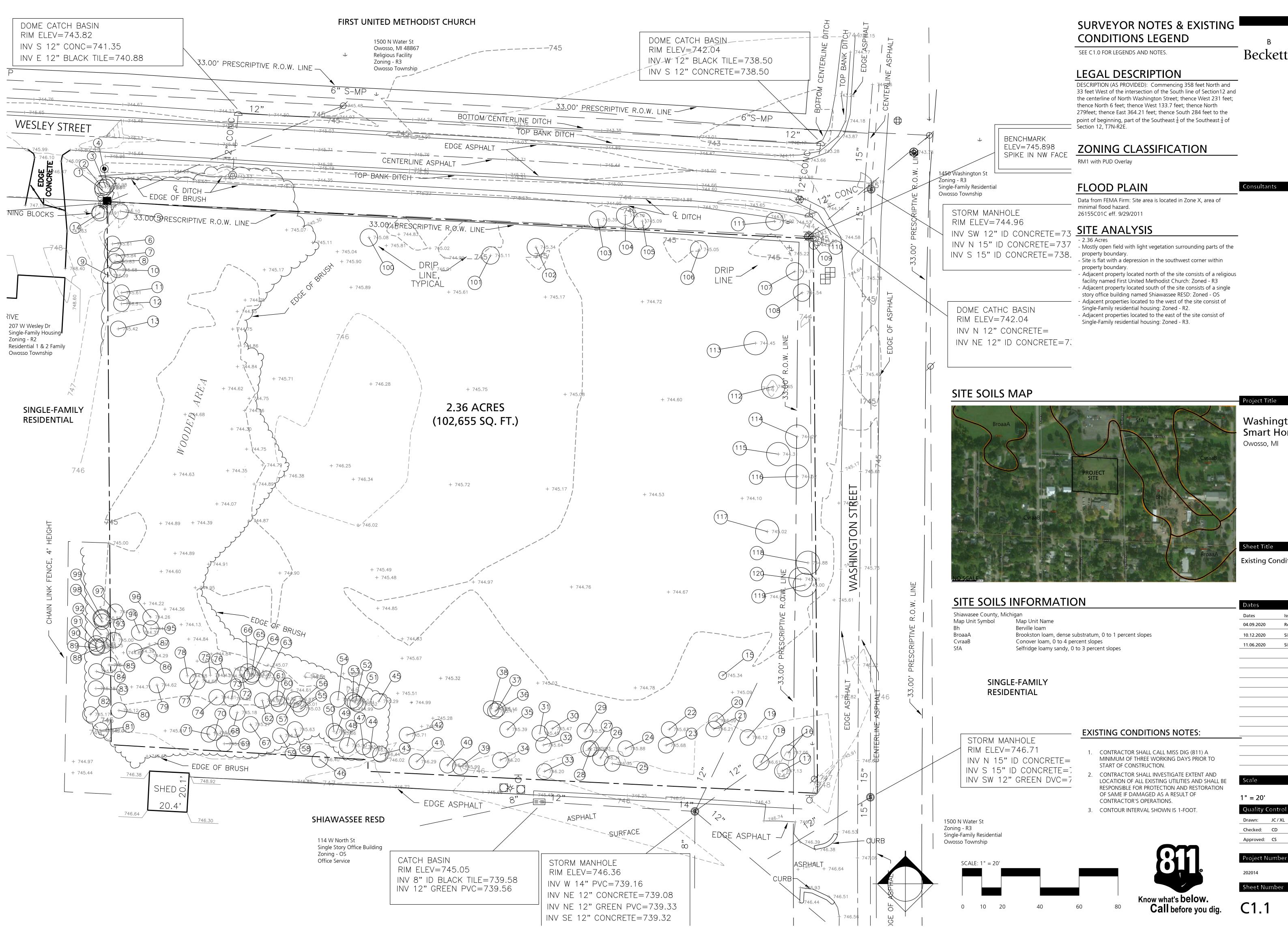
Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Surveyor



Developer: Bailey Park Homes L3C





Beckett&Raeder

Landscape Architecture Planning & Engineering

734 **663.6759** fx

Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 **663.2622** ph

Washington Park **Smart Homes Development**

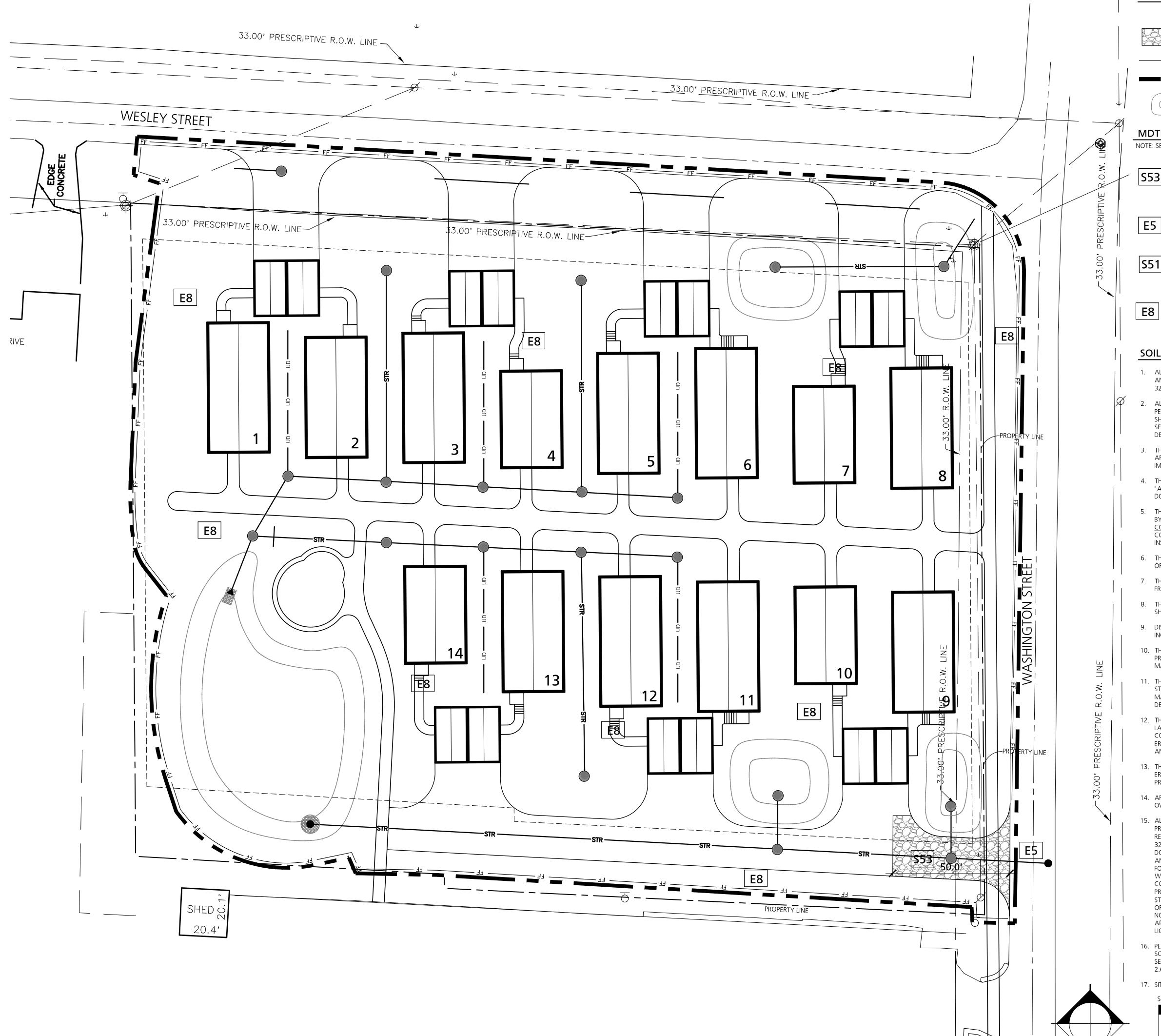
Existing Conditions Plan

Issued for

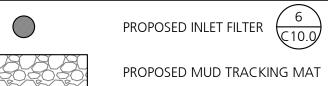
Re-zoning Submission

Site Plan Approval Resubmission

Site Plan Approval



SOIL EROSION AND SEDIMENTATION CONTROL LEGEND

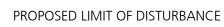


PROPOSED INLET FILTER $\frac{6}{(C10.0)}$











PROPOSED STORMWATER MANAGEMENT BASIN

MDTMB SESC LEGEND

NOTE: SEE SPECIFICATIONS FOR WRITTEN DESCRIPTION INSTALLATION AND MAINTENANCE.

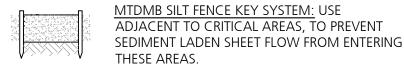


MTDMB STABILIZED CONSTRUCTION ACCESS EY SYSTEM: USED AT EVERY POINT WHERE Construction traffic enters or leaves a CONSTRUCTION SITE. ALL CONSTRUCTION ACCESS POINTS ARE NEW, IF NEEDED.





MTDMB DUST CONTROL KEY SYSTEM: FOR USE ON CONSTRUCTION SITES, UNPAVED ROADS, ETC. TO REDUCE DUST AND SEDIMENTATION FROM WIND AND CONSTRUCTION ACTIVITIES, IF NEEDED.





MTDMB PERMANENT SEEDING / SODDED KEY
SYSTEM: STABILIZATION METHOD UTILIZED ON SITES WHERE EARTH CHANGE HAS BEEN COMPLETED (FINAL GRADING ATTAINED) (REFERENCE SHEET WL-07 LANDSCAPE PLAN FOR PERMANENT SEEDING LOCATIONS.)

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

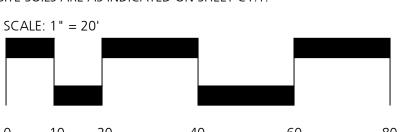
- 1. ALL WORK SHALL COMPLY WITH THE APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL (SESC) RULES AND REGULATIONS (SOIL EROSION AND SEDIMENTATION CONTROL - 1994 PA 451, PART 91, AS AMENDED, MCL 324.9101 ET. SEQ.).
- ALL EARTH CHANGES OF ONE ACRE OR MORE OR WITHIN 500 FEET OF WATERS OF THE STATE REQUIRE A SESC PERMIT. IF A SESC PERMIT IS REQUIRED, THE PROFESSIONAL SERVICES CONTRACTOR (DESIGN CONSULTANT) SHALL PREPARE AN SESC PLAN. THE SESC PLAN SHALL ADDRESS BOTH WIND AND WATER EROSION AND SEDIMENTATION. SESC PERMIT MUST BE OBTAINED FROM SHIAWASSEE COUNTY ENVIRONMENTAL HEALTH
- 3. THE CONTRACTOR SHALL REVIEW THE DESIGN CONSULTANT'S SESC PLAN IN ORDER TO PREPARE AND ISSUE FOR APPROVAL AN "SESC IMPLEMENTATION PLAN", WHICH INDICATES THE CONTRACTOR'S INTENDED IMPLEMENTATION OF THE SESC PLAN FOR THE PROJECT, INCLUDING A SCHEDULE.
- 4. THE DTMB SESC PROGRAM, UPON APPROVAL OF THE IMPLEMENTATION PLAN, WILL ISSUE THE CONTRACTOR AN "AUTHORIZATION TO PROCEED WITH EARTH CHANGE", WHICH IS TO BE POSTED AT THE JOB SITE. THIS DOCUMENT IS ISSUED IN LIEU OF A PERMIT FROM THE COUNTY OR OTHER LOCAL ENFORCING AGENCY.
- THE CONTRACTOR SHALL IMPLEMENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY THE PROJECT'S SESC PLAN, SESC IMPLEMENTATION PLAN, DTMB'S SOIL EROSION AND SEDIMENTATION CONTROL GUIDEBOOK, DATED FEBRUARY 2005, AND AS DIRECTED BY THE PROFESSIONAL SERVICES CONTRACTOR, DTMB SESC INSPECTOR, AND / OR DTMB PROJECT DIRECTOR. THE DTMB SESC INSPECTOR SHALL INSPECT THE SITE WEEKLY AND AFTER SIGNIFICANT RAIN EVENTS.
- 6. THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO OR UPON COMMENCEMENT TO EARTHWORK ACTIVITIES.
- 7. THE CONTRACTOR WILL PERFORM SWEEPING AS NEEDED TO REMOVE ANY SEDIMENT TRACKED OFF SITE. FREQUENCY OF SWEEPING WILL BE BASED ON SITE CONDITIONS.
- 8. THE CONTRACTOR WILL PERFORM DUST CONTROL AS NEEDED BASED ON SITE CONDITIONS. DUST CONTROL SHOULD OCCUR ALONG THE TRAIL AND PARKING AREA AS WELL AS IN THE VICINITY OF ACCESS INTO THE SITE.
- 9. DISTURBED AREAS THAT WILL REMAIN IDLE DURING CONSTRUCTION MUST BE TEMPORARILY STABILIZED,
- INCLUDING SOIL STOCKPILES, USING DTMB SESC BEST MANAGEMENT PRACTICES. 10. THE CONTRACTOR SHALL MAINTAIN AND INSPECT SESC MEASURES THROUGHOUT THE COURSE OF THE

PROJECT., RECOMMENDED ON A DAILY BASIS. AT A MINIMUM, THE CONTRACTOR SHALL INSPECT AND

MAINTAIN SESC MEASURES ONCE A WEEK AND AFTER RAIN EVENTS.

- 11. THE CONTRACTOR SHALL CORRECT NON-CONFORMING SESC MEASURES WITHIN 24 HOURS, IF WATERS OF THE STATE ARE BEING IMPACTED OR WITHIN 48 HOURS FOR ROUTINE MAINTENANCE ITEMS. OTHER SESC MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NEVER MORE THAN FIVE (5) DAYS AFTER
- 12. THE CONTRACTOR SHALL COMPLETE PERMANENT SOIL EROSION CONTROL MEASURES FOR ANY DISTURBED LAND AREA WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. THE CONTRACTOR SHALL MAINTAIN TEMPORARY CONTROL MEASURES UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IN PLACE AND THE AREA IS STABILIZED. .THERE WILL BE A \$500/DAYFINE AND ASSESSMENT OF ACTUAL DAMAGE.
- 13. THE CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER PERMANENT SOIL EROSION MEASURES ARE IN PLACE AND THE AREA IS STABILIZED. CARE SHALL BE TAKEN DURING REMOVAL TO PREVENT SOIL EROSION AND SEDIMENTATION.
- 14. AFTER THE COMPLETION OF THE PROJECT, PERMANENT SESC MEASURES WILL BE MAINTAINED BY THE PROPERTY
- 15. ALL WORK UNDER THIS CONTRACT MUST MEET THE STORM WATER MANAGEMENT REQUIREMENTS OF THE PROJECT AND COMPLY WITH THE APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL (SESC) RULES AND REGULATIONS (SOIL EROSION AND SEDIMENTATION CONTROL- 1994 PA 451, PART 91, AS AMENDED, MCL 324.9101 ET SEQ.) AND SPECIFIC PROVISIONS AND REGULATIONS FOR SAME WITHIN THE CONTRACT DOCUMENTS. THE DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, FACILITIES ADMINISTRATION, AN AUTHORIZED PUBLIC AGENCY (APA), HAS PROMULGATED STANDARD PROCEDURES AND SPECIFICATIONS FOR EROSION CONTROL THAT SHALL BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS. SESC MEASURES WILL BE MONITORED AND ENFORCED BY FACILITIES ADMINISTRATION THROUGH THE REVIEW OF THE CONTRACTOR'S IMPLEMENTATION PLANS AND SITE INSPECTIONS. FACILITIES ADMINISTRATION OR THE PROFESSIONAL WILL NOTIFY THE CONTRACTOR IN WRITING OF ANY VIOLATION(S) OF THE APPLICABLE SESC STATUTES AND/OR THE CORRECTIVE ACTION(S) UNDERTAKEN BY THE OWNER AND MAY ISSUE STOP WORK ORDERS. FACILITIES ADMINISTRATION HAS THE RIGHT TO ASSESS A FINE TO THE CONTRACTOR FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE CONTRACT DOCUMENTS AND/OR SESC REGULATIONS APPLICABLE TO THIS WORK AND FINES SHALL BE IN ADDITION TO ANY OTHER REMEDIATION COSTS OR LIQUIDATED DAMAGES APPLICABLE TO THE PROJECT AND MAY EXCEED THE VALUE OF THE CONTRACT.
- 16. PERIMETER EROSION CONTROL MEASURES SHOWN, SUCH AS SILTFENCE OR TURBIDITY CURTAIN, ARE SCHEMATIC. CONTRACTOR SHALL MAKE ANY ADJUSTMENTS REQUIRED TO ENSURE PROPER SOIL EROSION AND SEDIMENTATION CONTROL OR AS DIRECTED BY THE ENFORCING AGENCYTHE TOTAL AREA OF DISTURBANCE IS

17. SITE SOILS ARE AS INDICATED ON SHEET C1.1.







Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 **663.2622** ph

734 **663.6759** fx

Project Title

Washington Park **Smart Homes Development** Owosso, MI

Soil Erosion and **Sedimentation Control Plan**

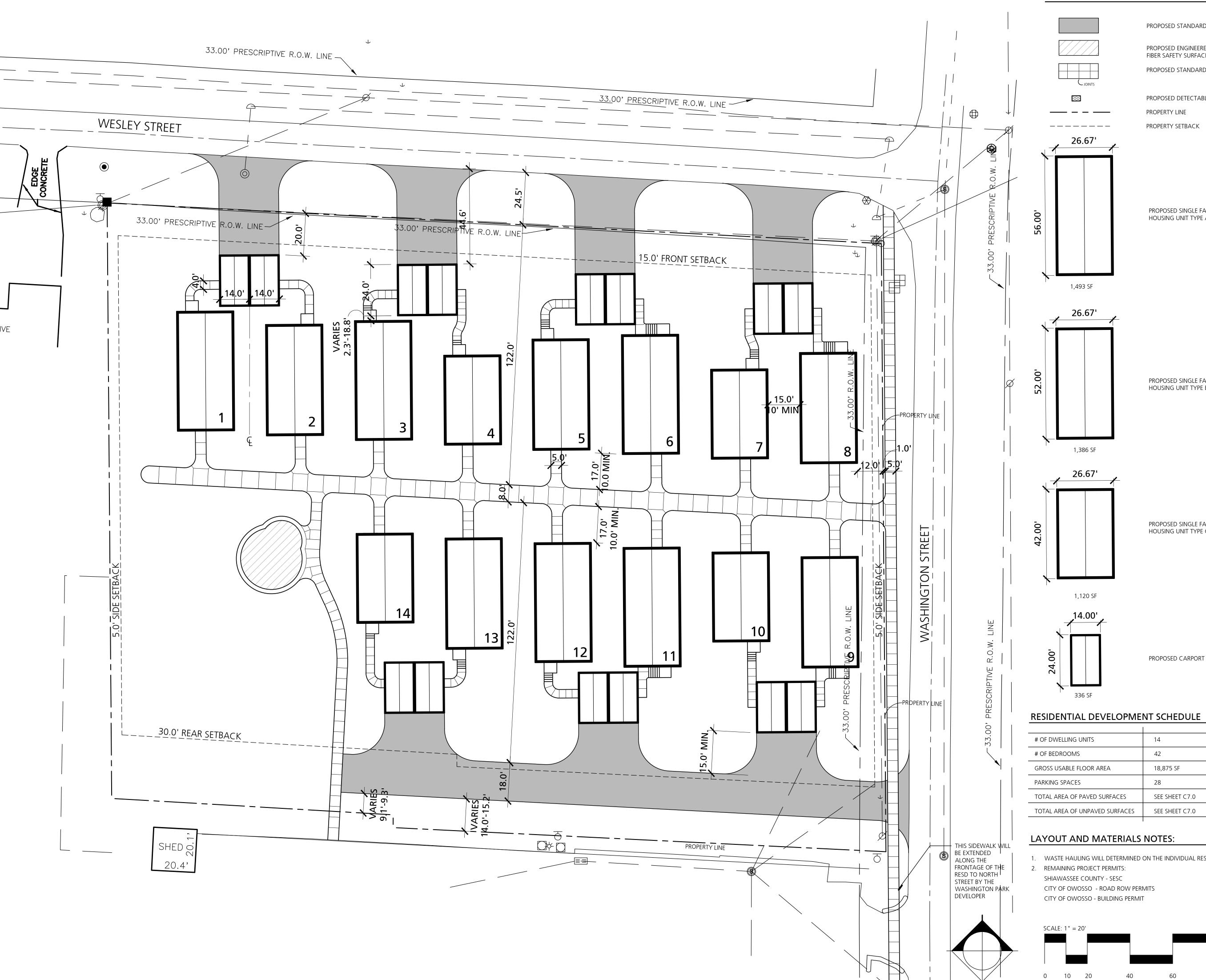
Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

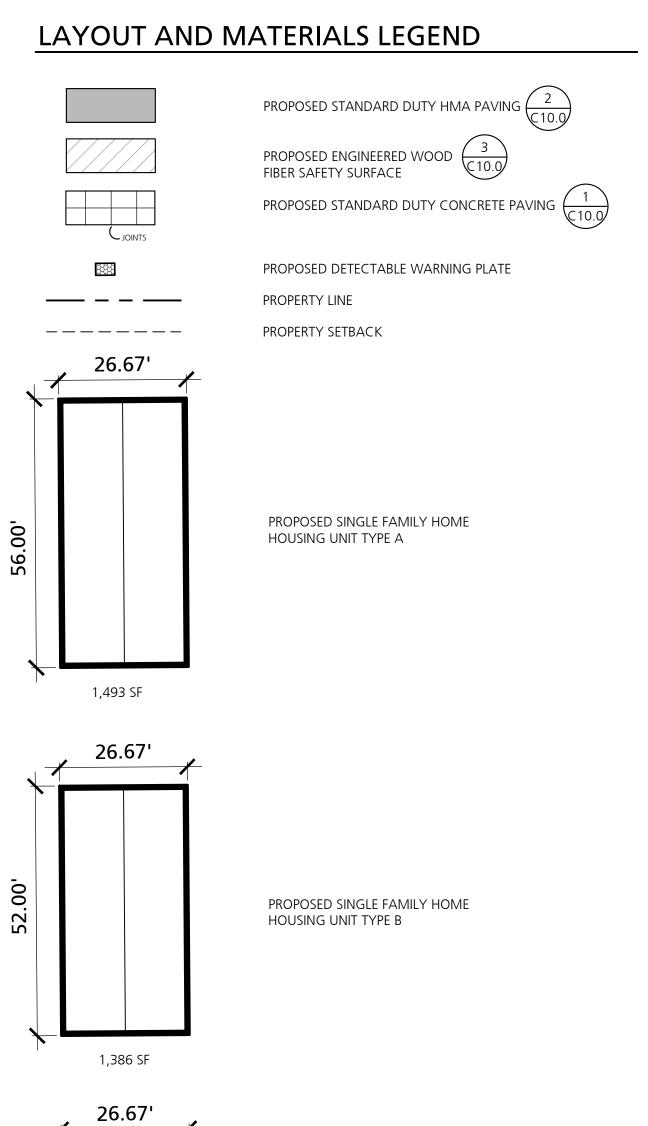
1" = 20' **Quality Control**

Drawn: JC / XL

Approved: CS

Project Number





PROPOSED SINGLE FAMILY HOME

HOUSING UNIT TYPE C

PROPOSED CARPORT

14

42

28

18,875 SF

SEE SHEET C7.0

SEE SHEET C7.0

Project Title

Washington Park Smart Homes Development Owosso, MI

Beckett&Raeder

Landscape Architecture Planning & Engineering

Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103

734 **663.2622** ph 734 **663.6759** fx

Sheet Title

Layout and Materials Plan

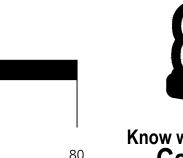
Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

LAYOUT AND MATERIALS NOTES:

- 1. WASTE HAULING WILL DETERMINED ON THE INDIVIDUAL RESIDENTIAL HOME BASIS.
- 2. REMAINING PROJECT PERMITS: SHIAWASSEE COUNTY - SESC CITY OF OWOSSO - ROAD ROW PERMITS

1,120 SF







1" = 20'

Quality Control Drawn: JC / XL Checked: CD

Project Number

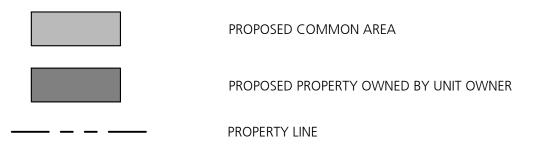
Approved: CS

Sheet Number

C4.0



LAYOUT AND MATERIALS LEGEND



PROPERTY SETBACK



Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Concultants

Project Title

Washington Park
Smart Homes Development
Owosso, MI

heet Title

Common Area Plan

ites	
tes	Issued for
09.2020	Re-zoning Submission
12.2020	Site Plan Approval
06.2020	Site Plan Approval Resubmission

Scale

1" = 20'

Quality Control

Drawn: JC/XL

Checked: CD

Project Number

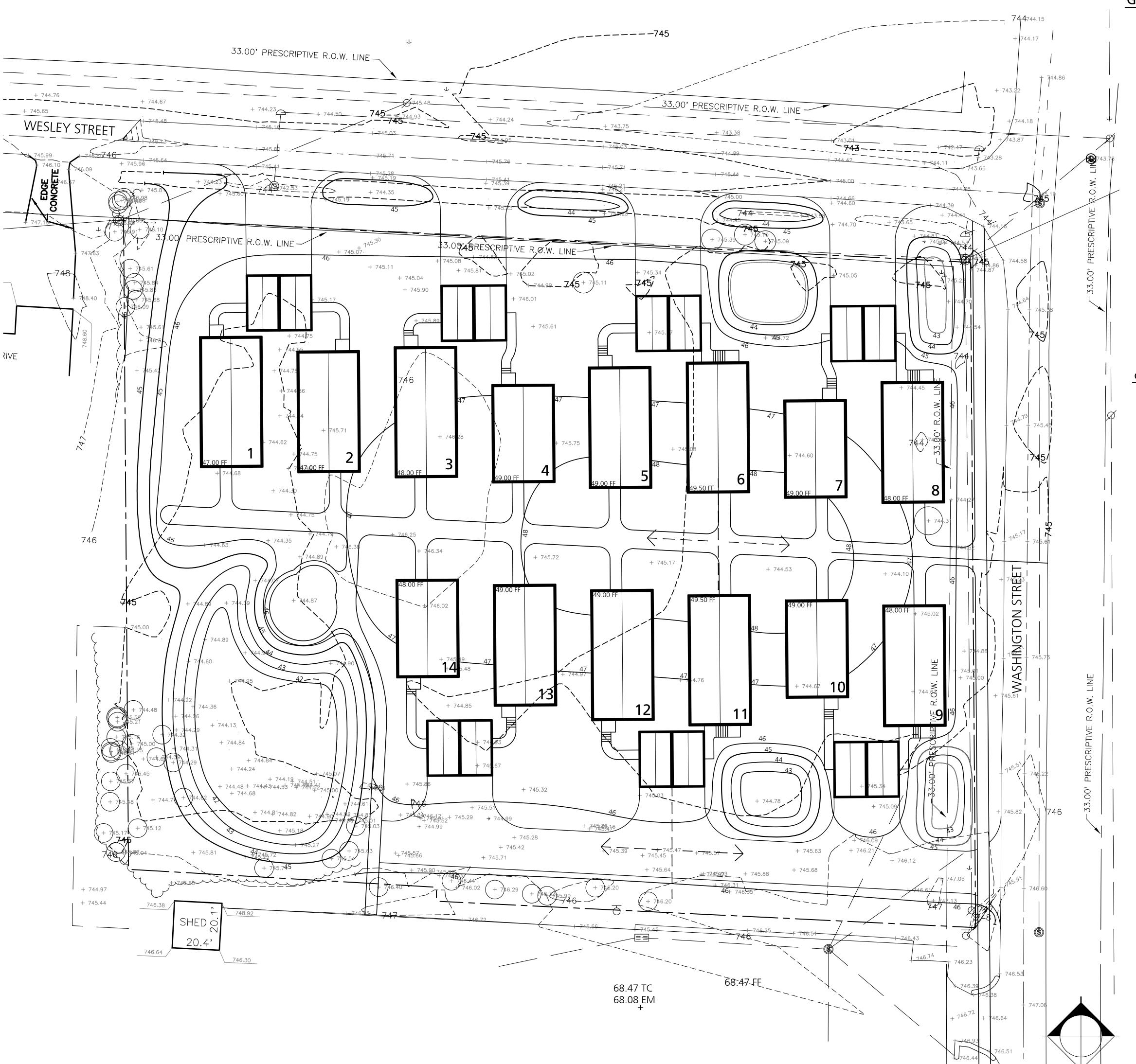
202014

Approved: CS

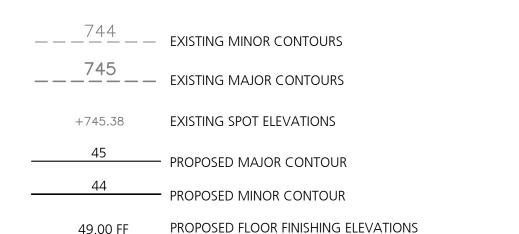
Sheet Number

^<u>4</u> 1

Know what's below.
Call before you dig.



GRADING PLAN LEGEND





Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Consultan

GRADING PLAN NOTES:

SCALE: 1" = 20'

- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION ALL WORK COMPLETED IN CONFORMANCE WITH CURRENT ADA STANDARDS.
- 2. PROPOSED CONTOUR LINES AND SPOT ELEVATIONS REFLECT FINISH GRADES. HOLD DOWN SUBGRADE ELEVATIONS ACCORDINGLY.
- 3. ADJUST RIM ELEVATIONS OF ALL UTILITIES AFFECTED BY WORK IN THIS CONTRACT.
- 4. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE ON THE SITE. ANY AREA THAT APPEARS TO NOT PROPERLY DRAIN SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT/ ENGINEER FOR RESOLUTION.

Project Title

Washington Park
Smart Homes Development
Owosso, MI

Sheet Title

Grading Plan

ates	
ates	Issued for
1.09.2020	Re-zoning Submission
0.12.2020	Site Plan Approval
1.06.2020	Site Plan Approval Resubmission

1" = 20'

Approved: CS

Quality Control

Drawn: JC / XL

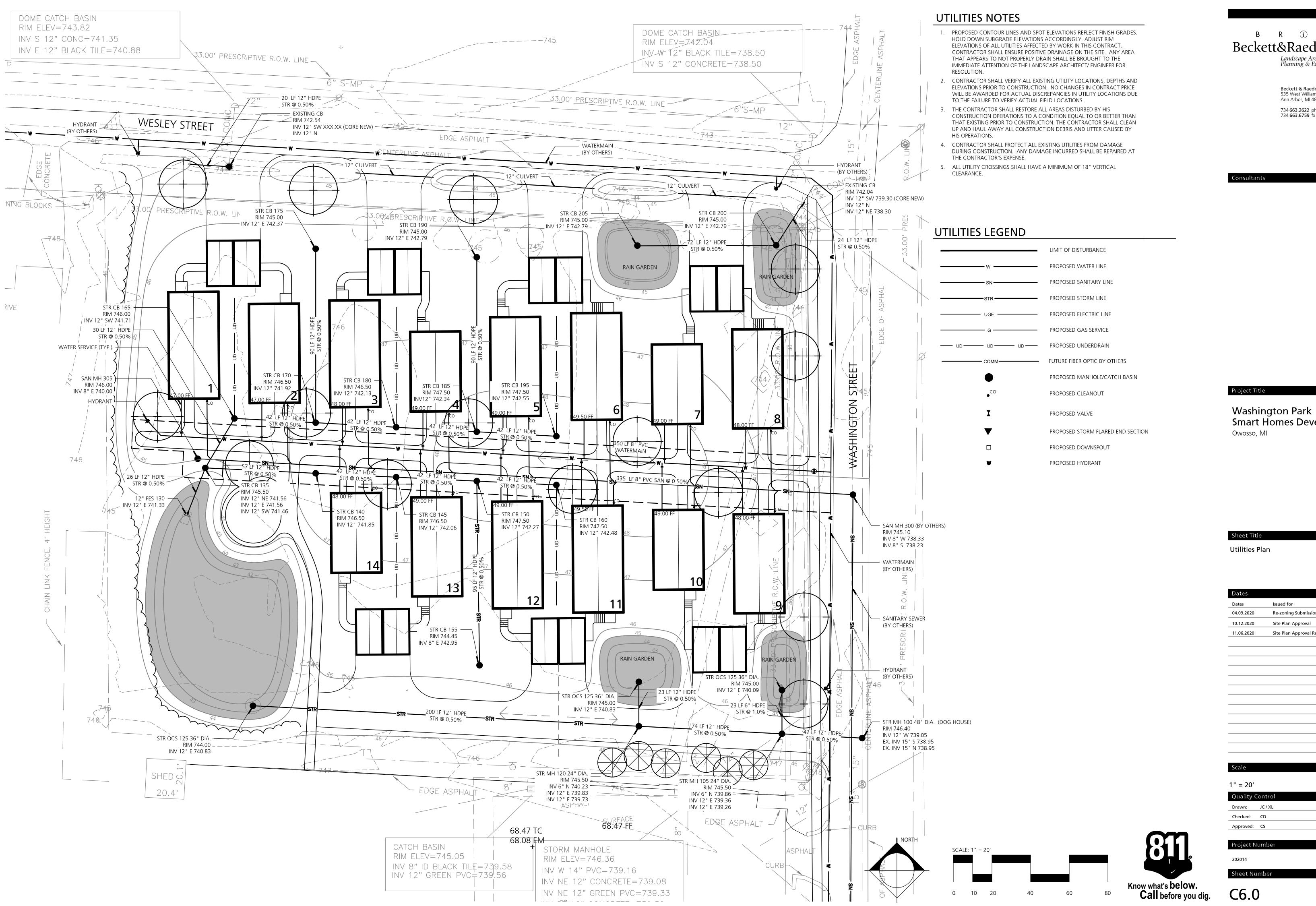
Checked: CD

Project Number

02014

ГΛ

Know what's below.
Call before you dig.

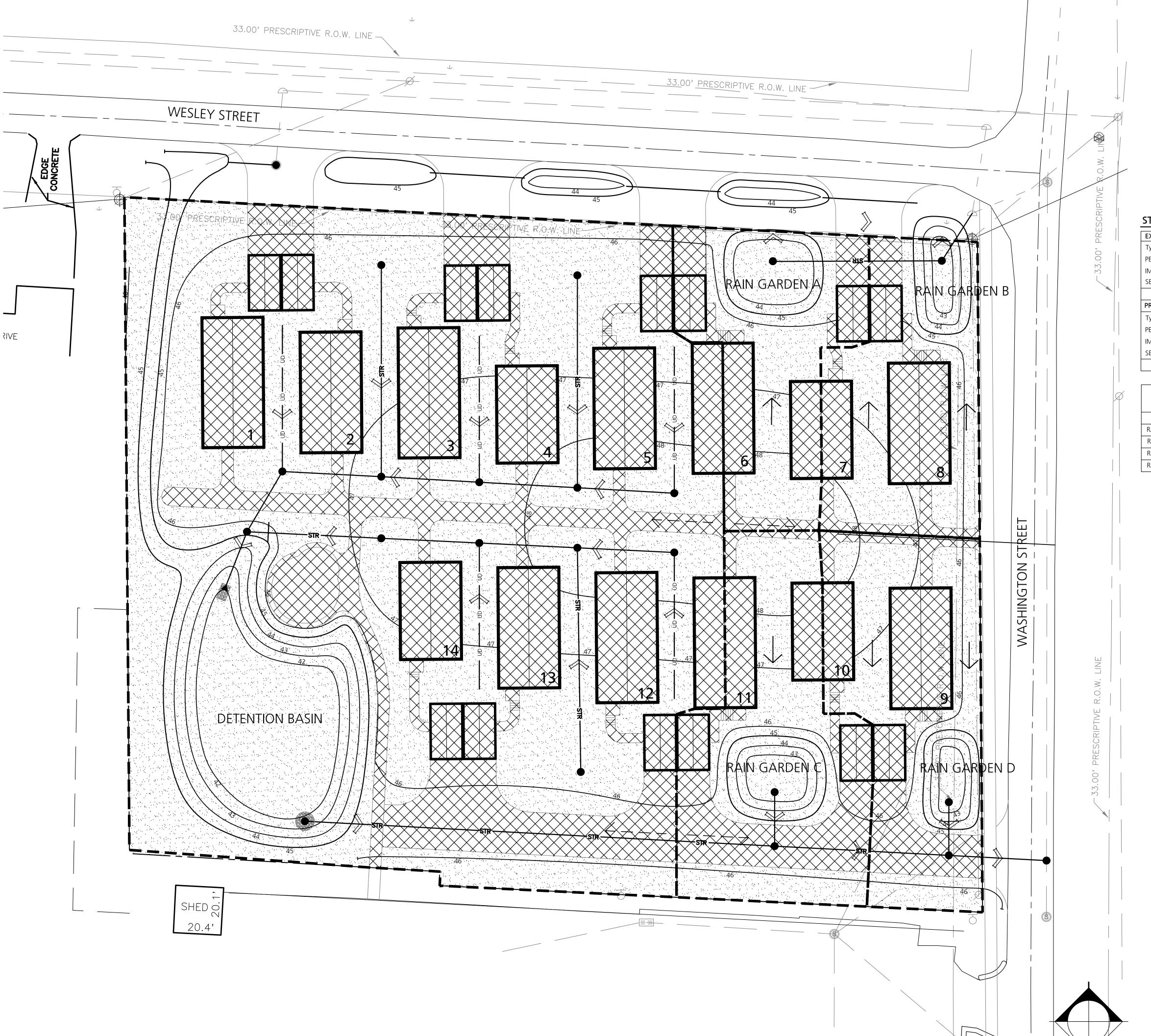




Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 **663.2622** ph

Washington Park **Smart Homes Development**

Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission



STORMWATER MANAGEMENT PLAN LEGEND

IMPERVIOUS PAVEMENT & BUILDINGS

PERVIOUS OPEN SPACES

OVERLAND FLOW LINE

STORMWATER PIPE FLOW LINE

LIMIT OF DISTURBANCE

PROPOSED STORM SEWER

EXISTING STORM SEWER

DRAINAGE AREA SUB-AREA DELINEATION LINE



Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Consultants

STORMWATER MANAGEMENT PLAN NOTES:

EXISTING CONDITIONS		
Type of Surface	Size (SF)	Size (ac)
PERVIOUS (Lawn & Landscape)	102,576	2.35
IMPERVIOUS (Pavement)	0	0
SEMI PERVIOUS (Gravel)	0	0
	102,575	2.35
PROPOSED CONDITIONS		
Type of Surface	Size (SF)	Size (ac)
PERVIOUS (Lawn & Landscape)	60,782	1.40
IMPERVIOUS (Building & Pav't)	41,793	0.96
SEMI PERVIOUS (Gravel)	0	0.00
	102,575	2.35

WATERSHED	TOTAL AREA (AC)	% IMP	REQ. DETENTION VOL. (CFT)	PROVIDED DETENTION VOL. (CFT)	RELEASE RATE (CFS)
DET. BASIN	1.58	38%	9,988	10,500	0.32
rain garden a	0.17	43%	1,146	1,250	0.03
RAIN GARDEN B	0.17	46%	1,189	1,289	0.03
rain garden c	0.23	47%	1,629	1,746	0.05
RAIN GARDEN D	0.20	48%	1,436	1,512	0.04

Project Title

Washington Park
Smart Homes Development
Owosso, MI

Sheet Title

Stormwater Management Plan

Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

1" = 20'

Quality Control

Drawn: JC/XL

Checked: CD

Project Number

202014

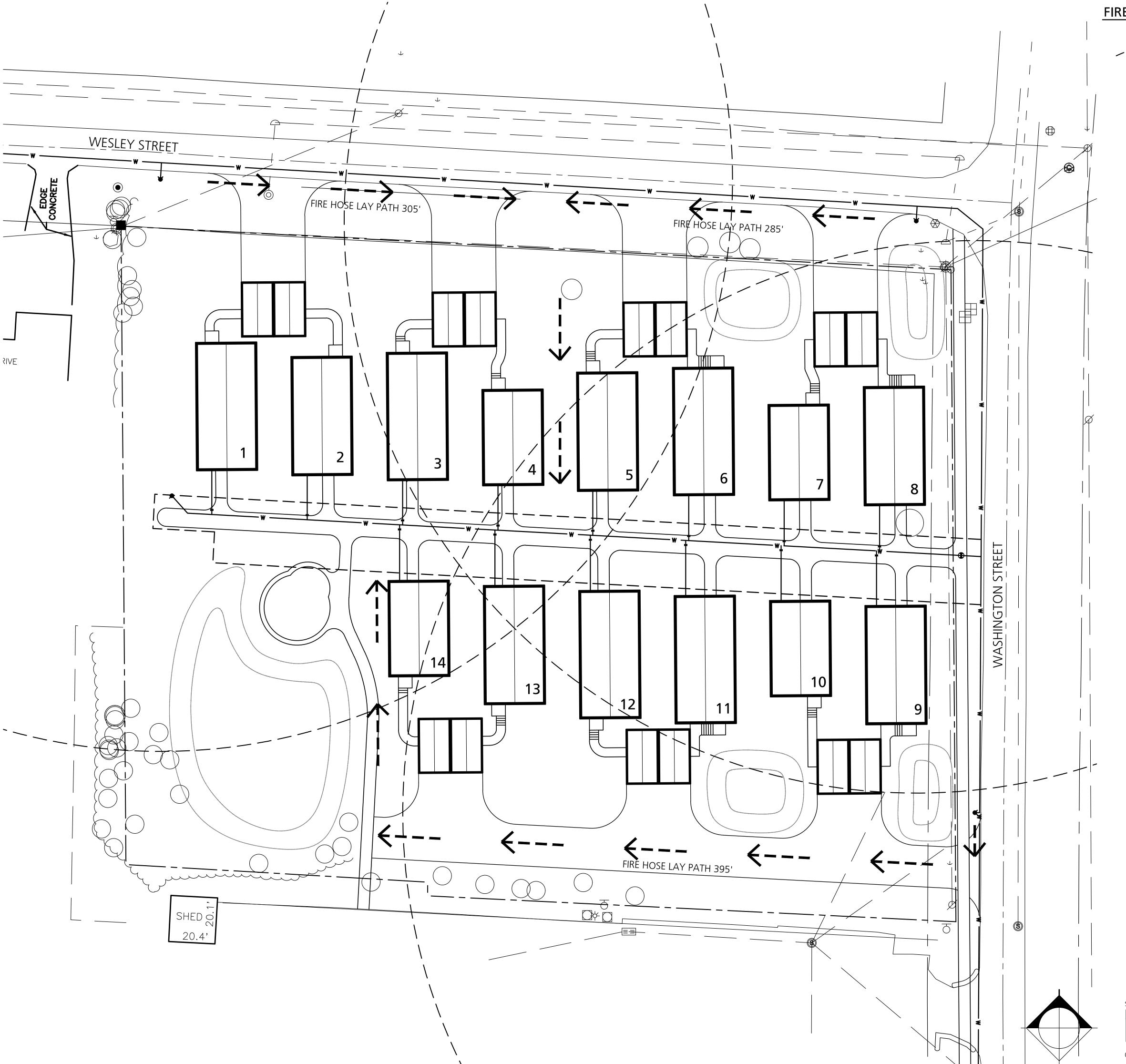
Approved: CS

Sheet Number

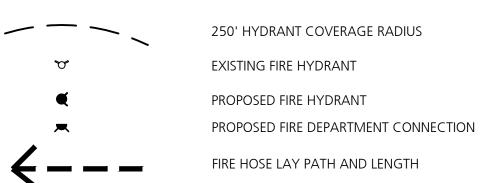
7.0







FIRE SAFETY PLAN LEGEND





Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Consultan

Project Title

Washington Park
Smart Homes Development
Owosso, MI

Sheet Title

Fire Safety Plan

ates	
tes	Issued for
.09.2020	Re-zoning Submission
.12.2020	Site Plan Approval
.06.2020	Site Plan Approval Resubmission

1" = 20'

Quality Control

Drawn: JC/XL

Project Number

02014

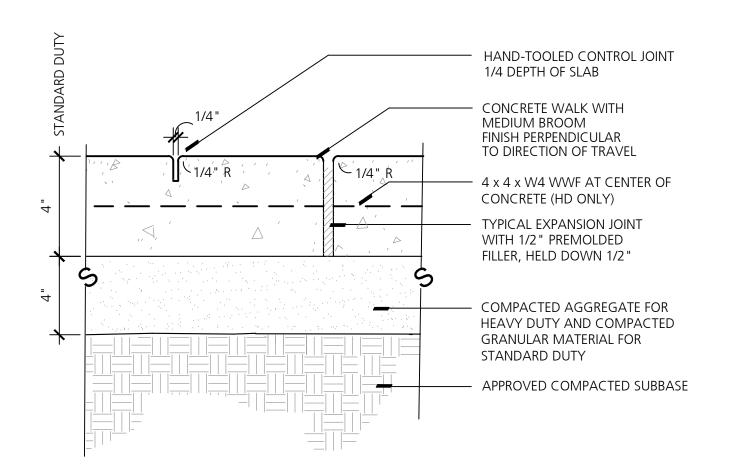
Approved: CS

neet Number

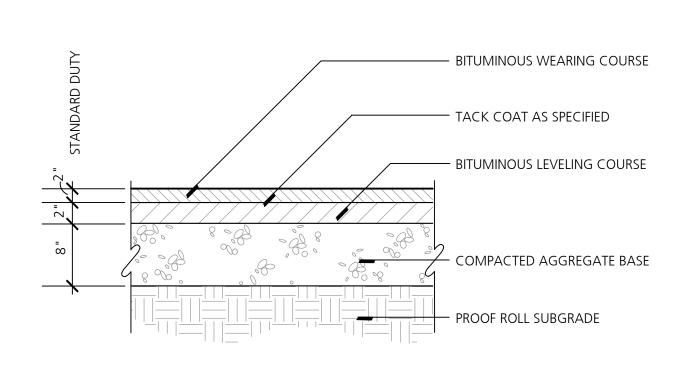
9 0

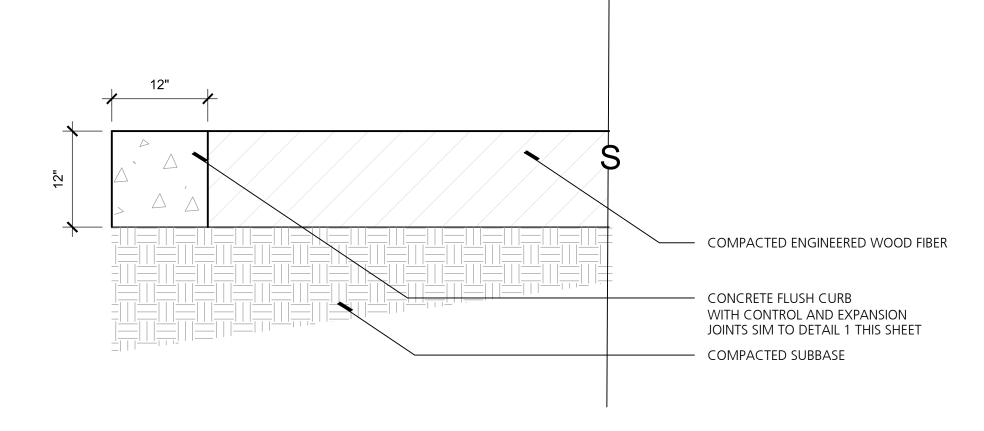
Know what's **below. Call** before you dig.

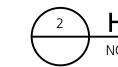




Concrete Pavement

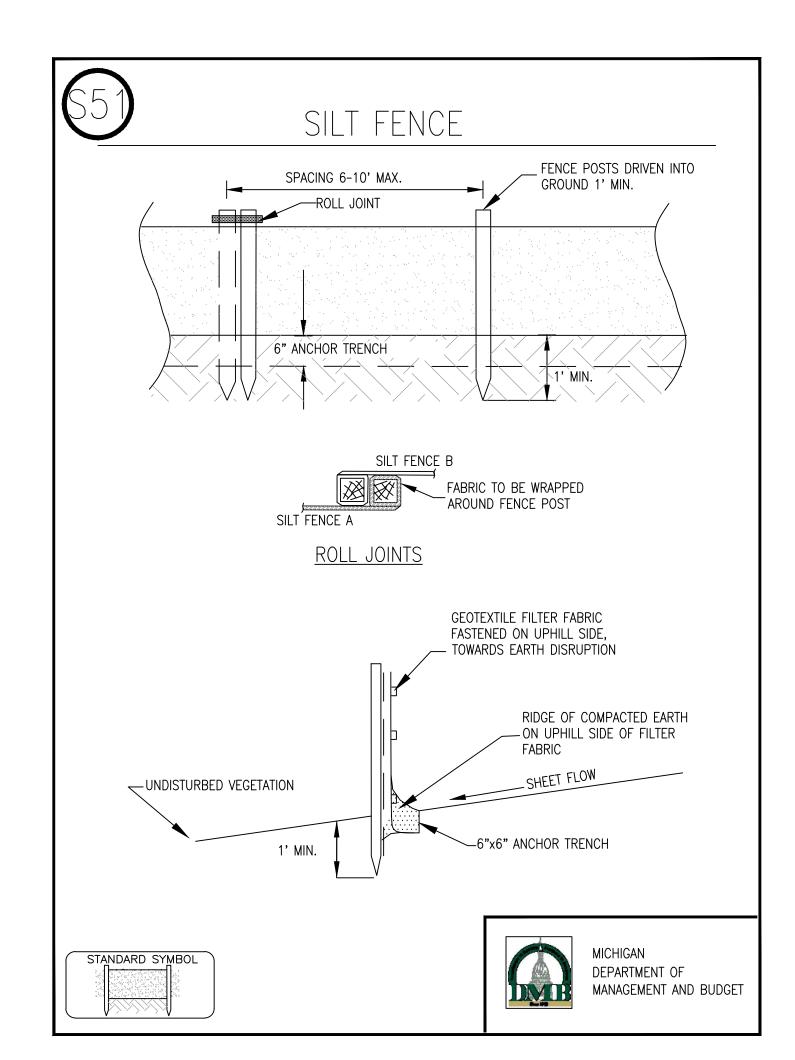




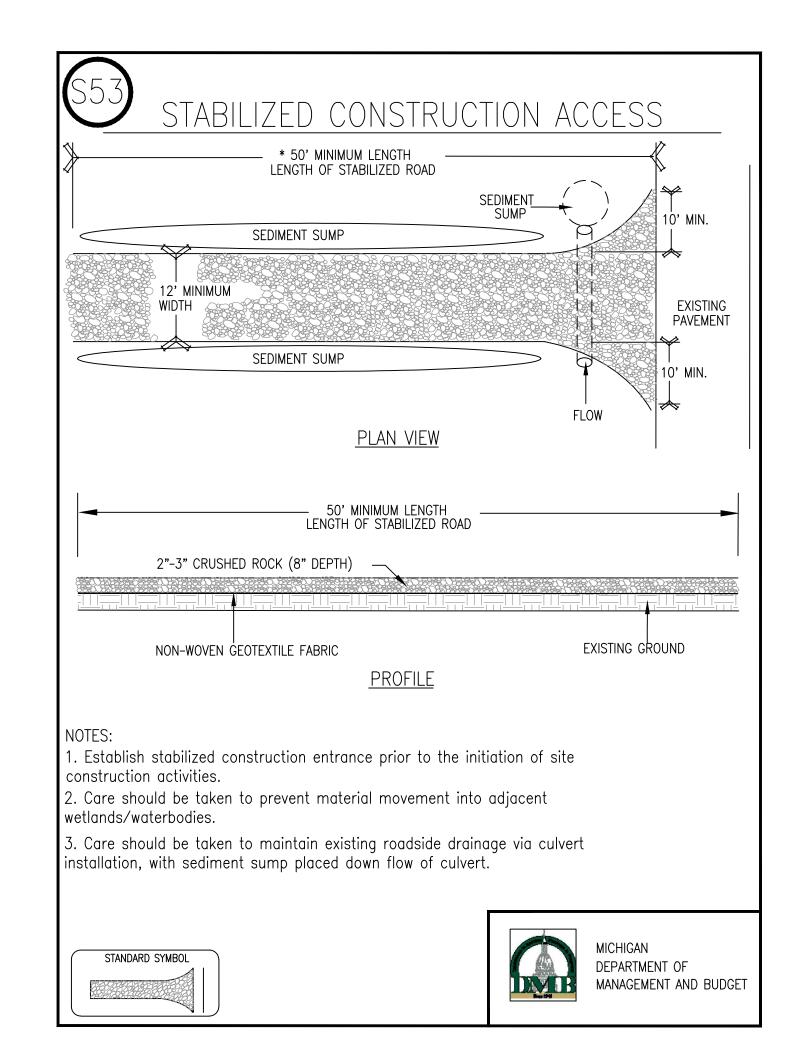


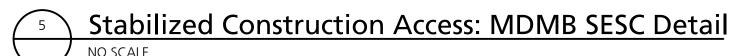
HMA Pavement

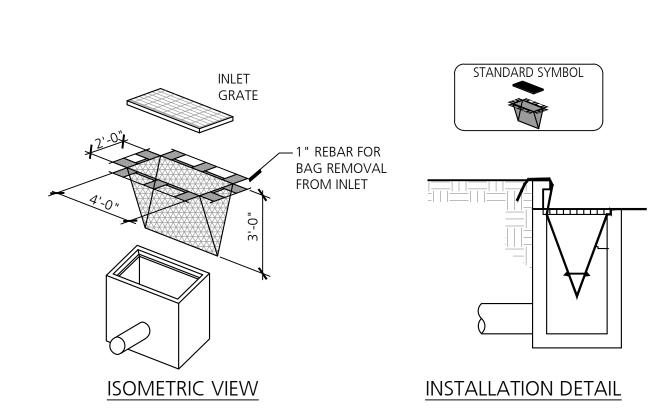
Engineered Wood Fiber Safety Surface















Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Consultants

Project Title

Washington Park
Smart Homes Development
Owosso, MI

Sheet Title

Site Details

Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

1" = 20'

Quality Control

Drawn: JC/XL

Checked: CD

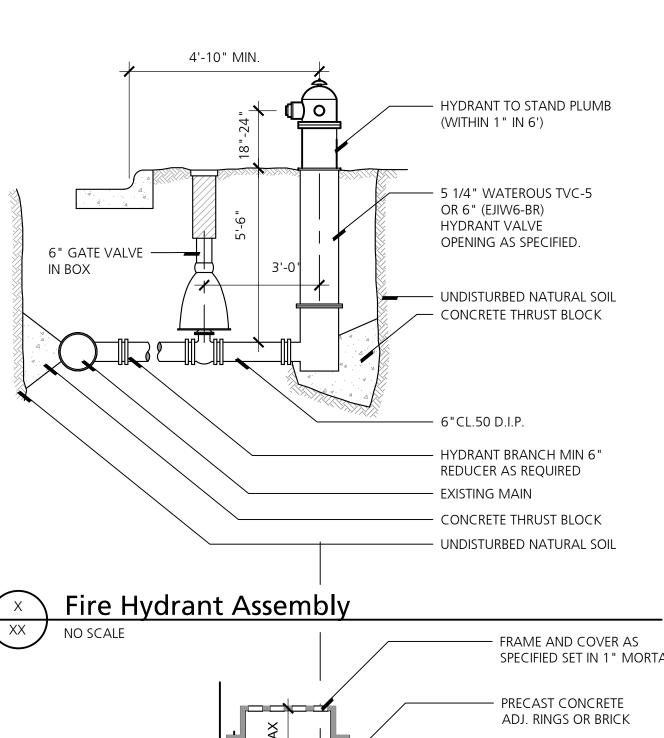
Project Number

202014

Approved: CS

heet Number

C10.0



SPACING MAX.

POURED-IN-PLACE BASE

MATERIAL AS SPECIFIED

UNDISTURBED EARTH -

,______

4'-0" DIA.

4' Diameter Catch Basin
NO SCALE

AS SPECIFIED

10' MIN. LENGTHS OF 6"

WRAPPED SUBDRAIN AT

ALUMINUM OR REINFORCED

POLYPROPYLENE STEPS, 16"

PRECAST CONCRETE BASE -OR POURED-INO-PLACE AS

6" COMPACTED GRANULAR -

MATERIAL AS SPECIFIED

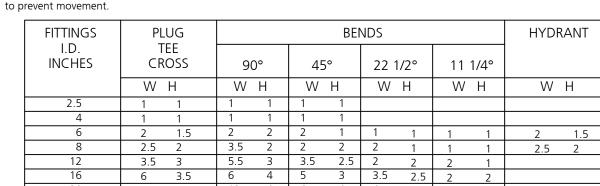
UNDISTURBED EARTH

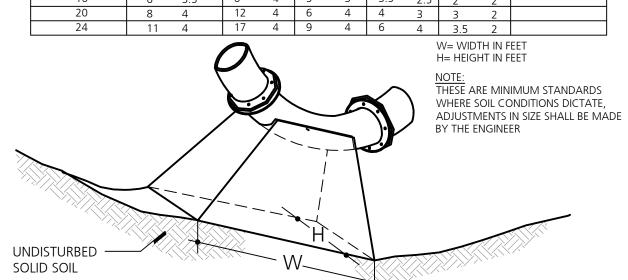
QUAARTER POINTS

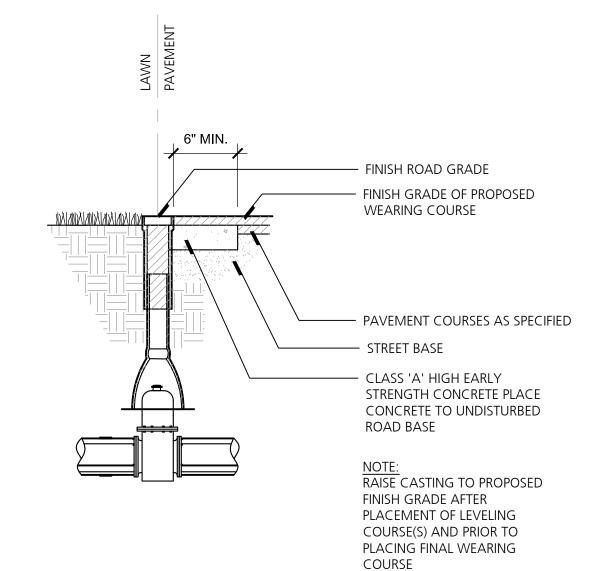
SPACING MAX.

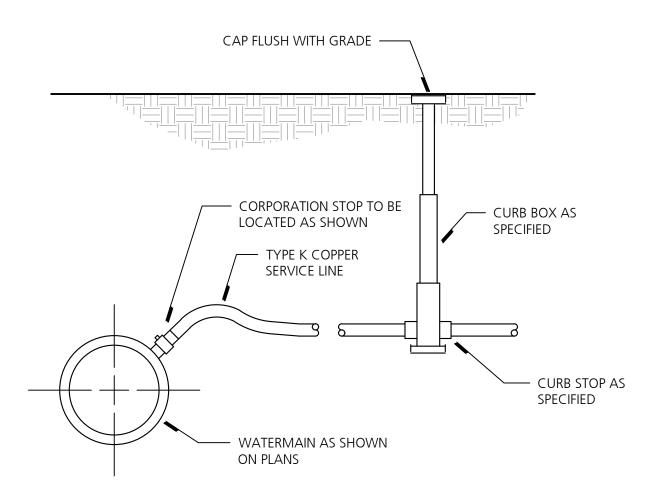
SPECIFIED

MINIMUM STANDARDS REACTION BACKING: The Class "A" concrete at the Fitting face shall extend to within (2) inches of the bell and shall extend from the fitting face a minimum of (2) feet to the UNDISTURBED SOLID GROUND. The dimensions of the reaction backing (thrust block) at the face of the undisturbed solid ground shall be as shown in the Table below If there is not sufficient space for the installation of the "thrust block" without interference with other services, a metal harness shall be used or another arrangement satisfactory to the engineer shall be used, i.e. encasement. When the thrust is upwards, as in the case of vertical offsets, a metal harness shall be used







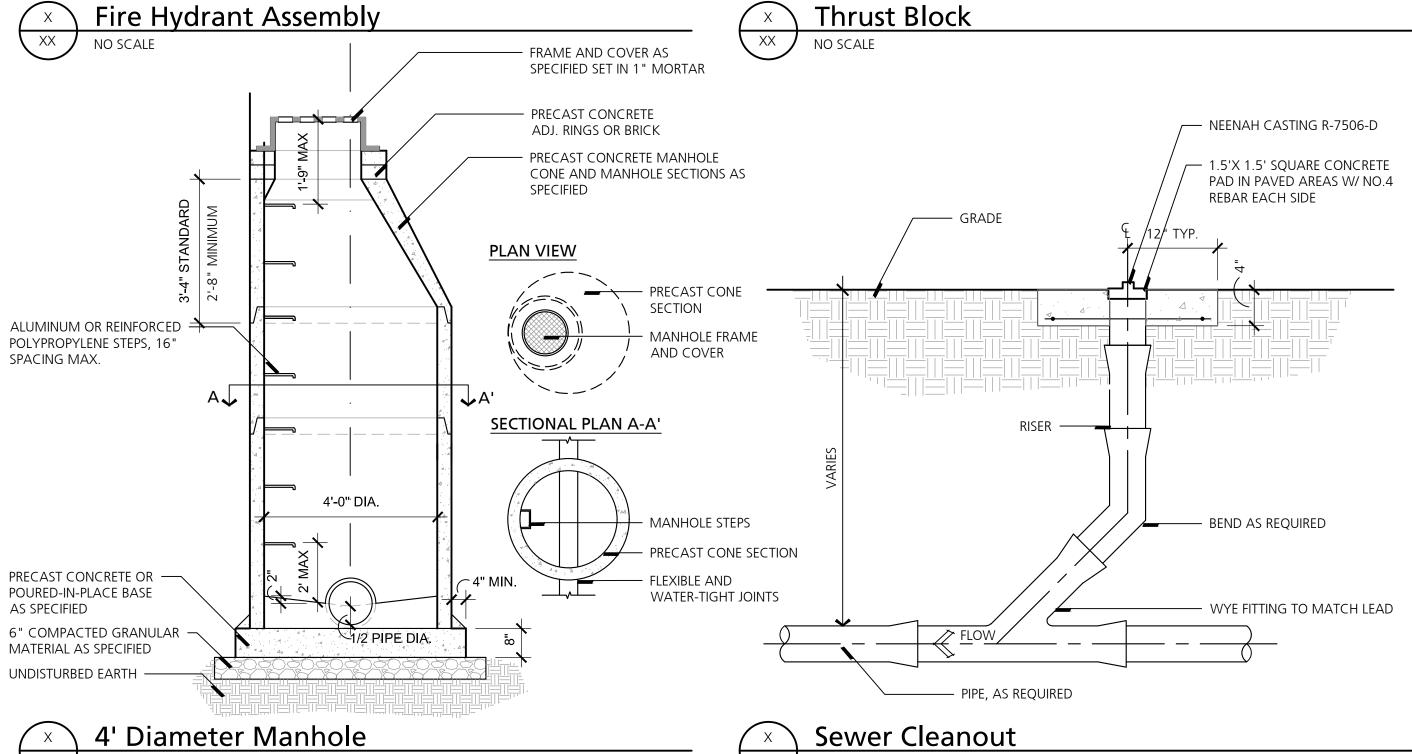


Beckett&Raeder Landscape Architecture Planning & Engineering Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 **663.2622** ph 734 **663.6759** fx

Consultants

Water Valve Box

Watermain Service



FRAME AND COVER AS

SPECIFIED; SET IN 1"

PRECAST CONCRETE

ADJ. RINGS OR BRICK

PRECAST CONCRETE MANHOLE CONE AS

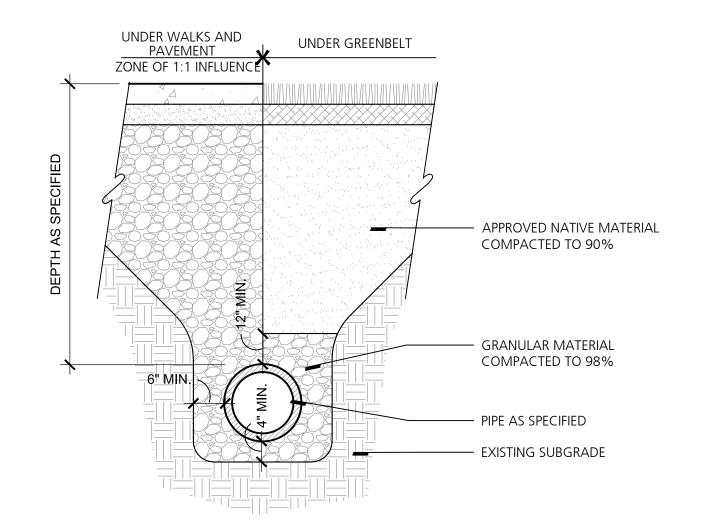
- PRECAST CONCRETE MANHOLE SECTIONS OR 6" CONCRETE

MORTAR FILLET (TYP.)

BLOCK AS SPECIFIED

MORTAR

SPECIFIED



Project Title Washington Park **Smart Homes Development** Owosso, MI

Sheet Title

Utility Details

Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

1" = 20' Quality Control Drawn: JC / XL

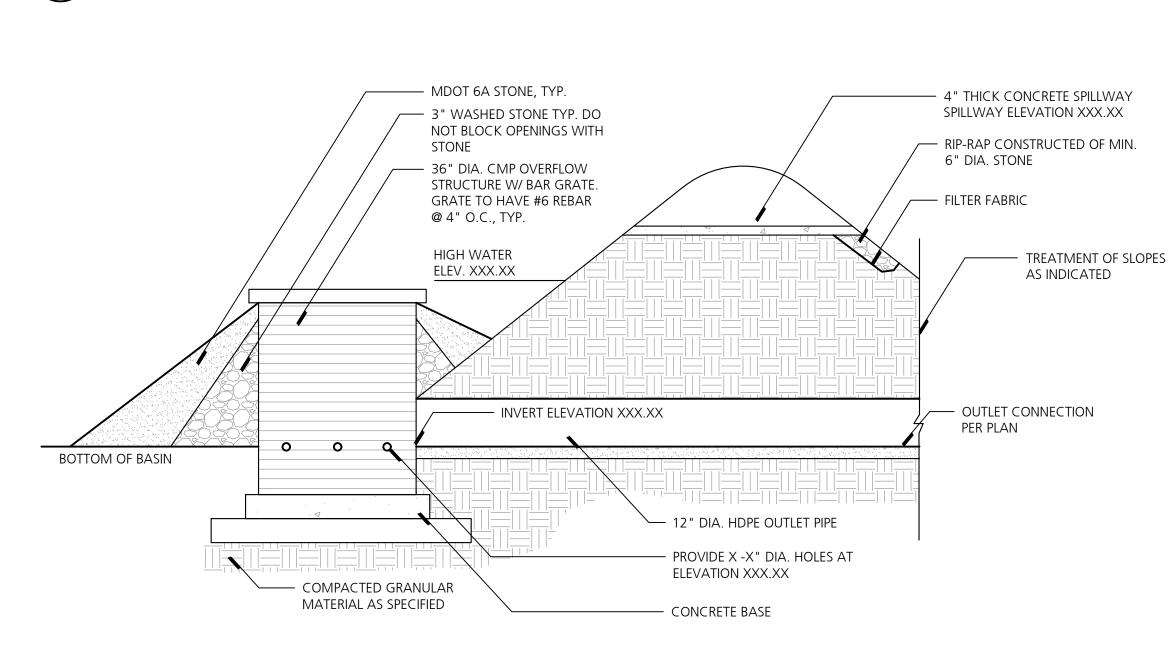
Project Number

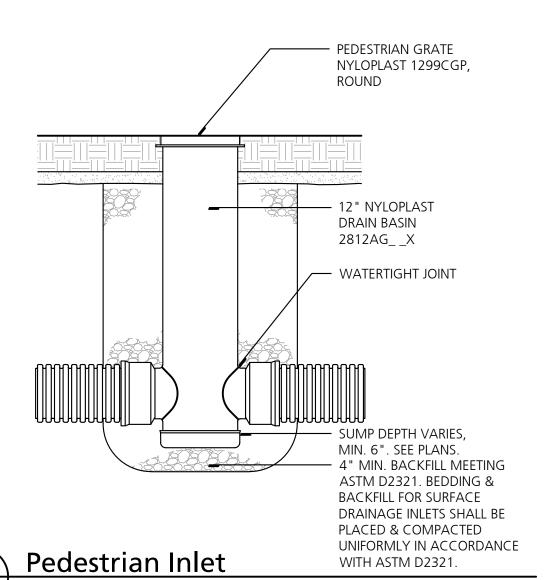
202014 Sheet Number

Checked: CD

Approved: CS

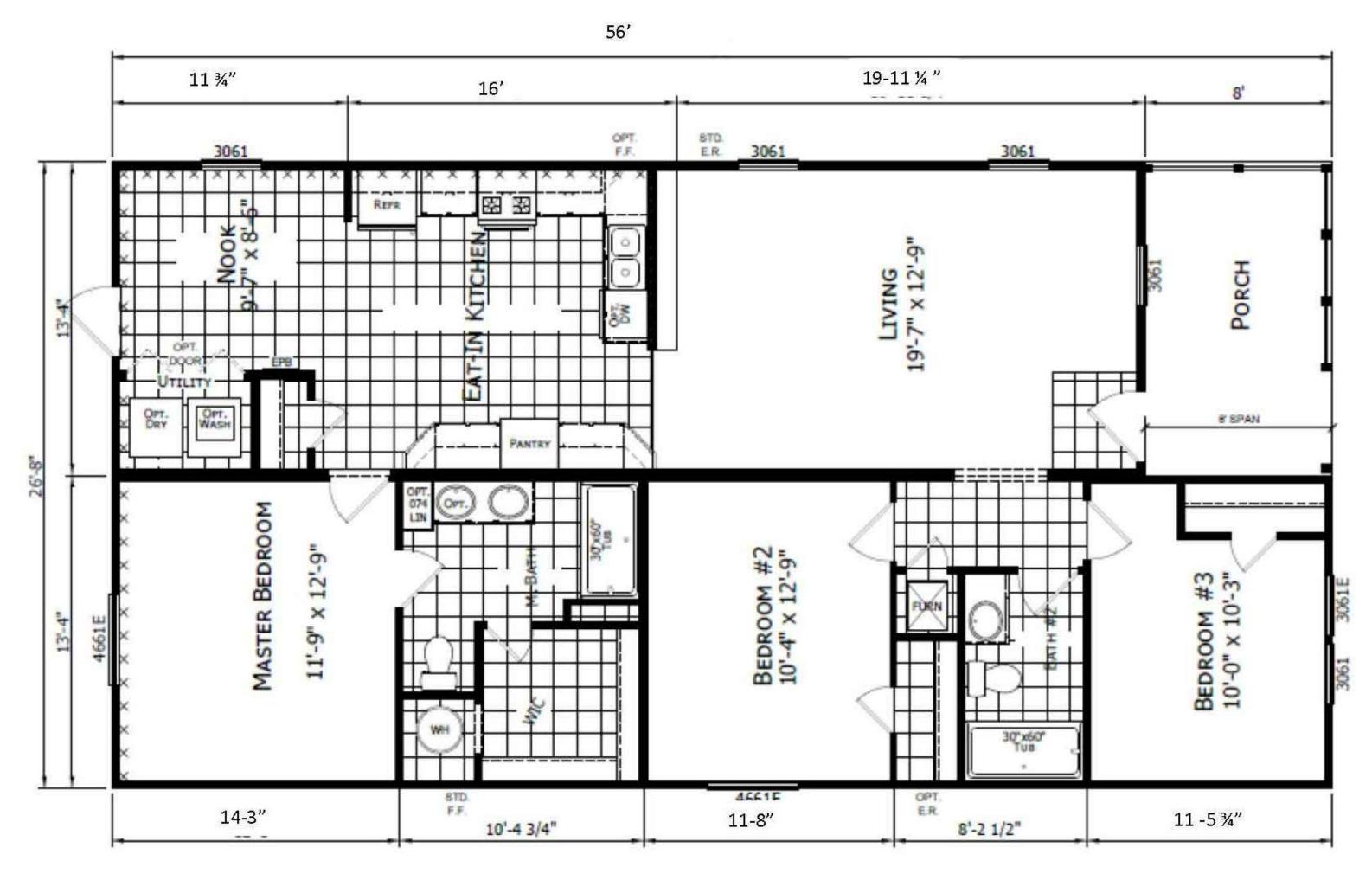
C11.0





Detention Basin Outlet Structure

Trench Detail
NO SCALE



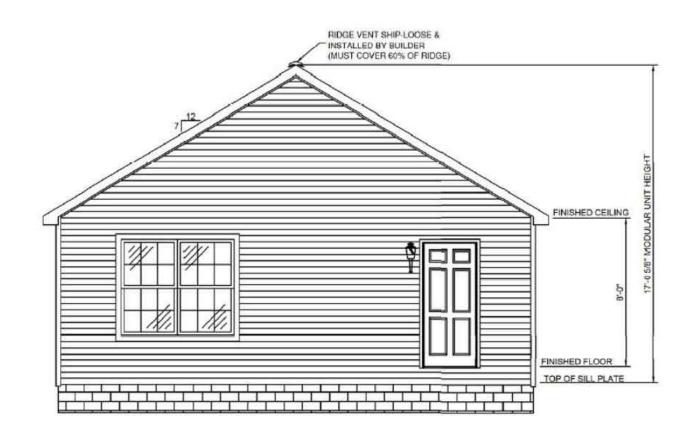
HOUSING UNIT TYPE A FLOOR PLAN

EXAMPLE PERSPECTIVE IMAGE





EXAMPLE PERSPECTIVE IMAGE 2



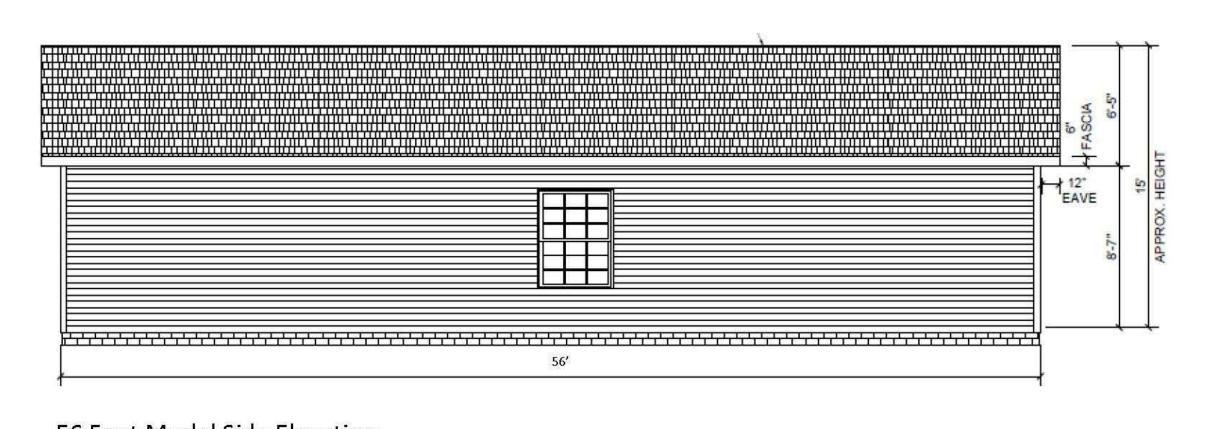


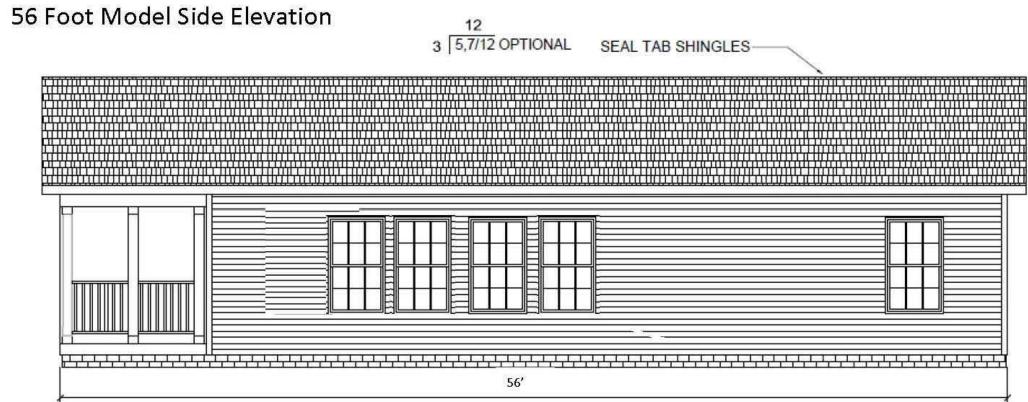
B R (i) Beckett&Raeder Landscape Architecture Planning & Engineering

Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Concultants

HOUSING UNIT TYPE A FRONT & REAR ELEVATIONS





HOUSING UNIT TYPE A SIDE ELEVATIONS

Project Title

Washington Park
Smart Homes Development
Owosso, MI

heet Title

Building Plans and Elevations

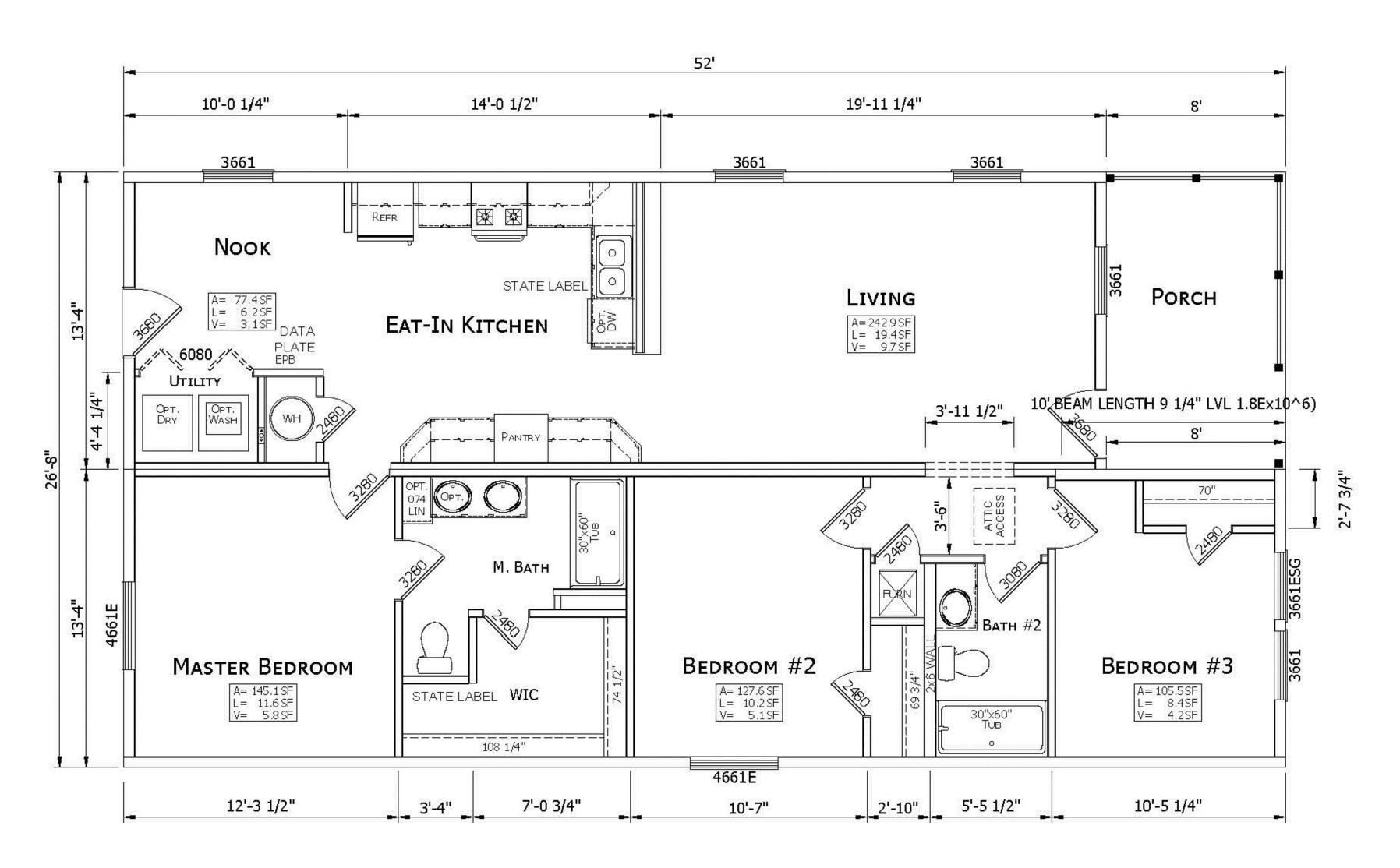
Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

Scale

Quality C	ontrol
Drawn:	JC / XL
Checked:	CD
Approved:	CS

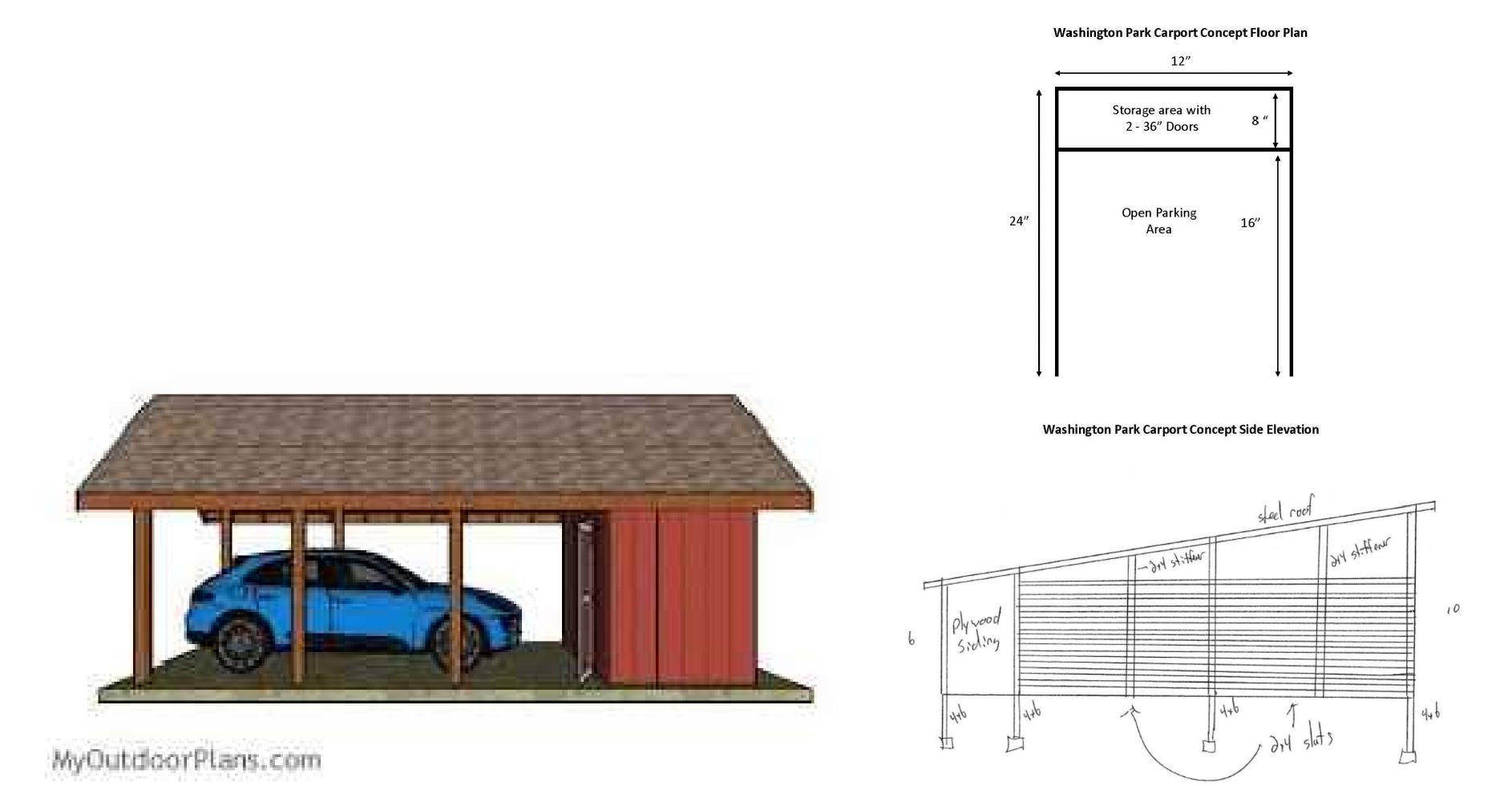
Project Number

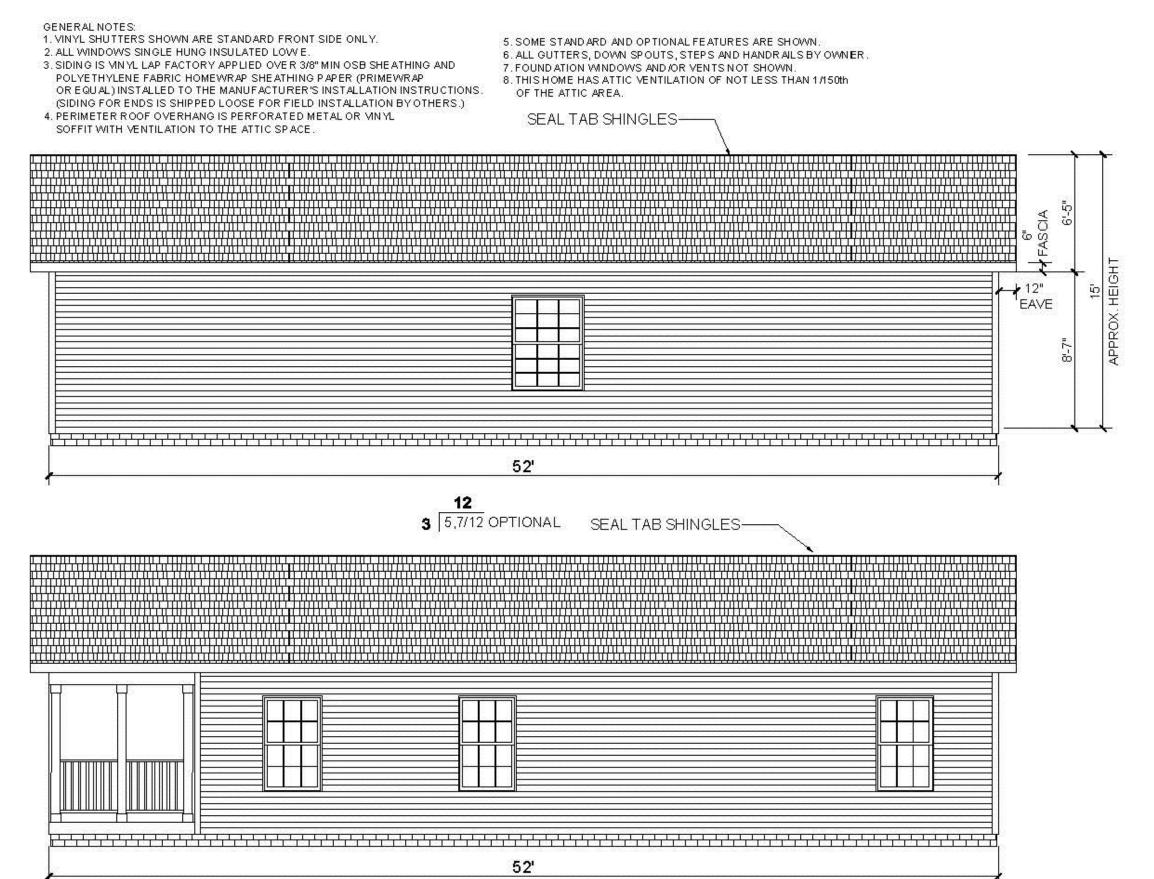
A1.0



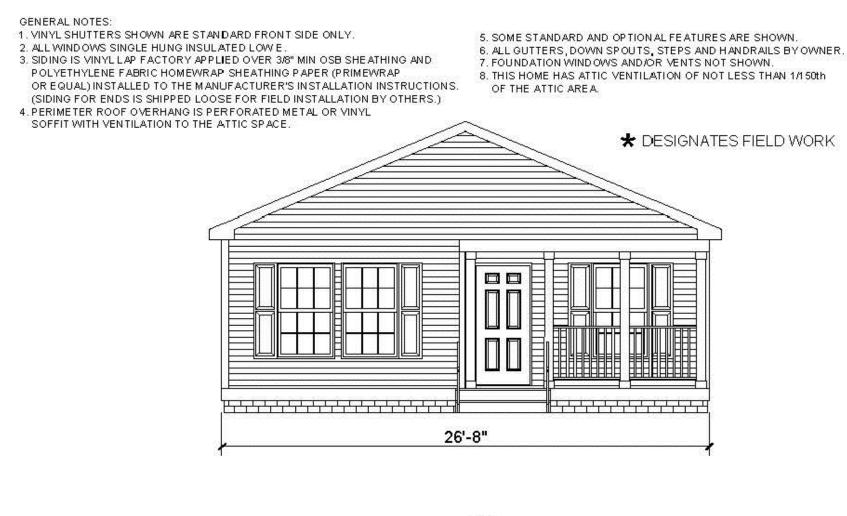
HOUSING UNIT TYPE B FLOOR PLAN

CARPORT CONCEPT





HOUSING UNIT TYPE B SIDE ELEVATIONS





HOUSING UNIT TYPE B FRONT & REAR ELEVATIONS



Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 **663.2622** ph 734 **663.6759** fx

Project Title

Washington Park Smart Homes Development Owosso, MI

Sheet Title

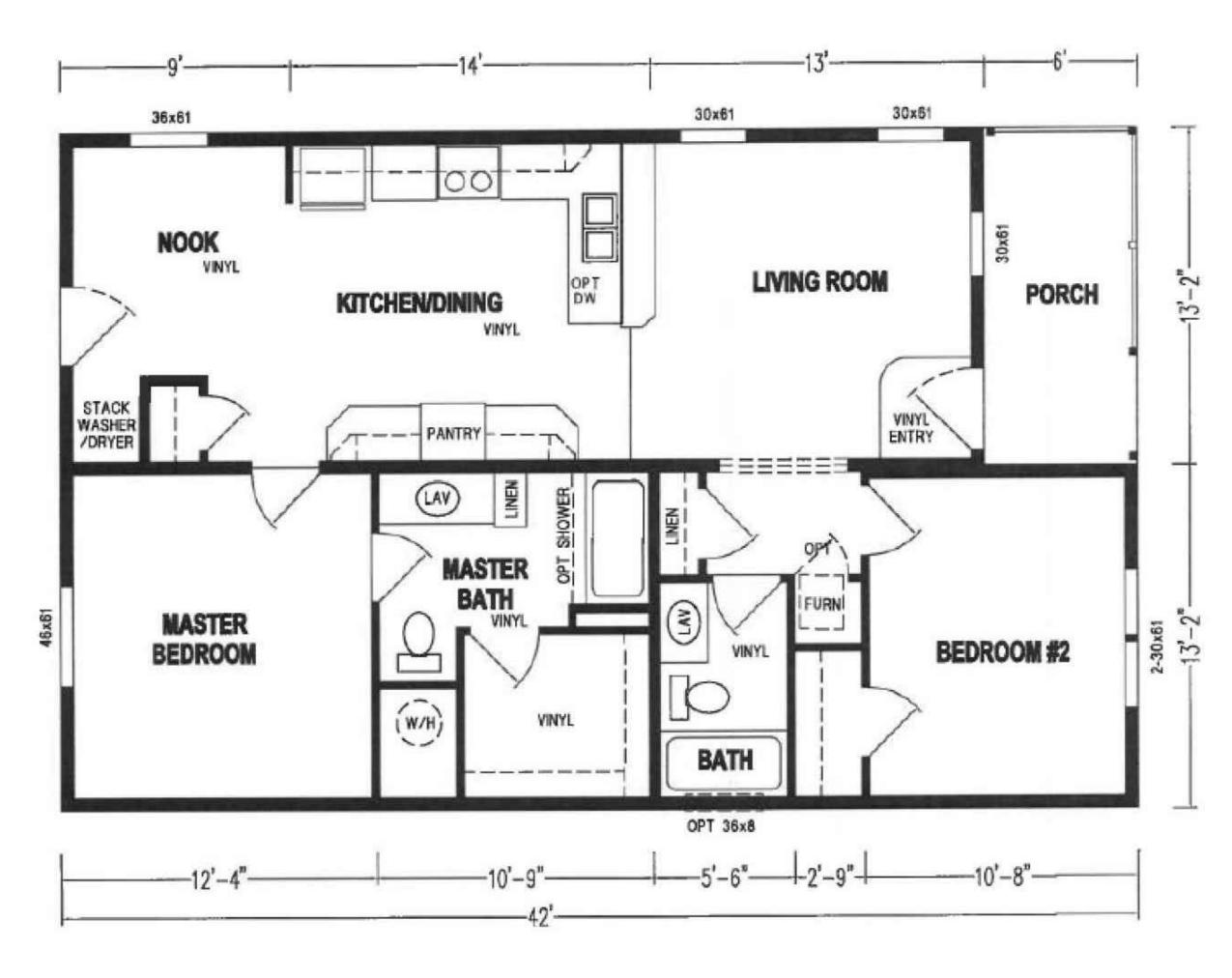
Building Plans and Elevations

Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

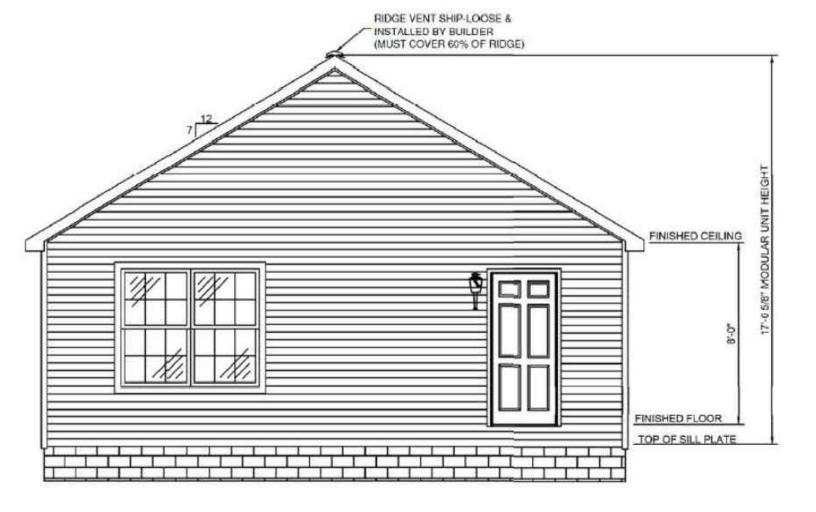
Quality Control Drawn: JC / XL

Project Number

A1.1

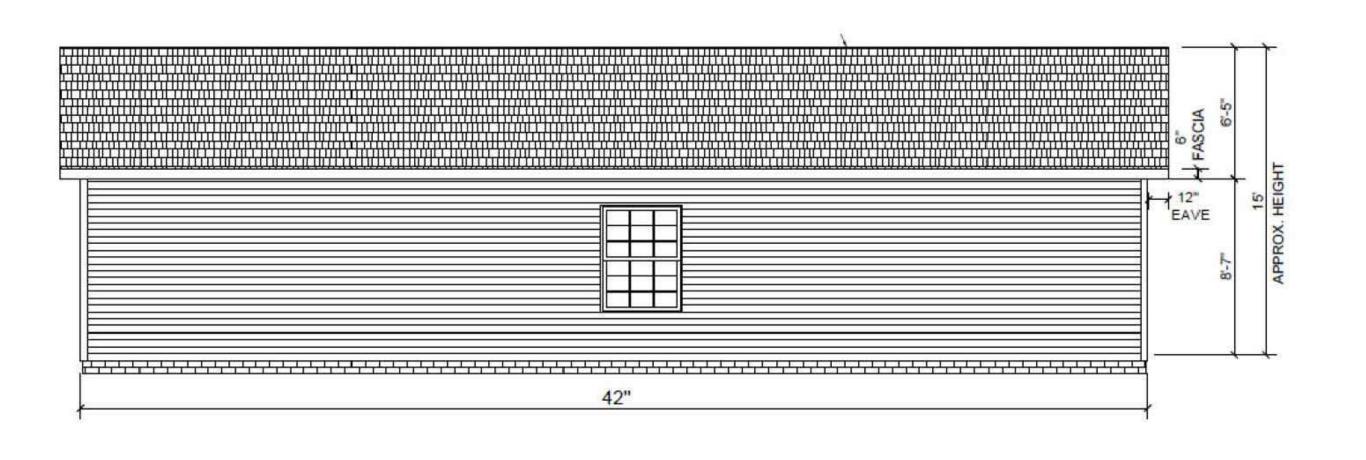


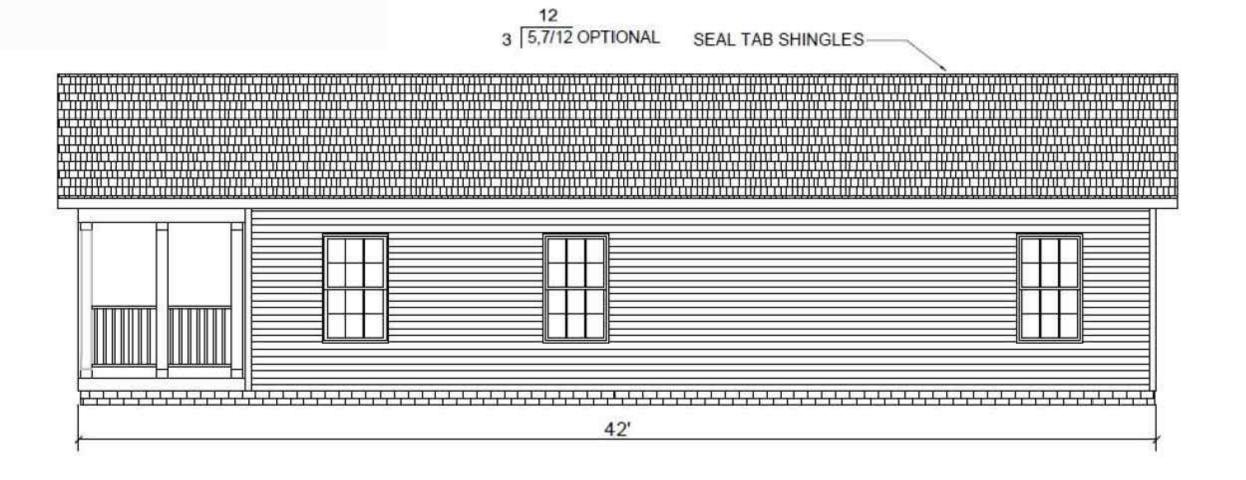
HOUSING UNIT TYPE C FLOOR PLAN





HOUSING UNIT TYPE C FRONT & REAR ELEVATIONS





HOUSING UNIT TYPE C SIDE ELEVATIONS



Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Consultan

Project Title

Washington Park Smart Homes Development Owosso, MI

Sheet Titl

Building Plans and Elevations

Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

Scale

Quality C	Control
Drawn:	JC / XL
Checked:	CD
Approved:	cs
	Quality C Drawn: Checked: Approved:

oiect Number

202014

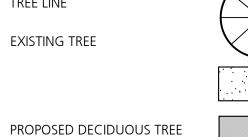
.....

A1.2

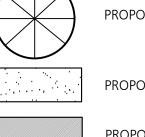


LANDSCAPE PLAN LEGEND

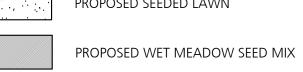
EXISTING PROPOSED TREE LINE **EXISTING TREE**



PROPOSED EVERGREEN TREE



PROPOSED SEEDED LAWN



Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 **663.2622** ph 734 **663.6759** fx

Landscape Architecture Planning & Engineering

Beckett&Raeder

LANDSCAPE PLAN NOTES:

PROVIDE 4" TOPSOIL AND SEED ONLY IN ALL AREAS DENOTED TO BE RESTORED AS

2. PROVIDE 4" TOPSOIL AND SEED IN ALL AREAS DENOTED AS SEEDED LAWN.

3. ALL IMPORTED TOPSOIL SHALL BE SCREENED AND BE APPROVED BY LANDSCAPE ARCHITECT/ENGINEER PRIOR TO INSTALLATION. PROVIDE CERTIFICATION FOR ALL IMPORTED TOPSOIL.

4. MULCH ALL LANDSCAPE BEDS PER SPECIFICATIONS.

5. THE SITE WILL NOT BE IRRIGATED.

6. A LANDSCAPE MAINTENANCE AGREEMENT WILL BE EXECUTED BY THE HOME OWNERS' ASSOCIATION.

EXISTING TREE LEGENDS

(1) =12" HICKORY (63) =7" DECIDUOUS TREE (94) =4-7" MULTITRUNK (32) =6" WALNUT (33) =18" PINE) =4" DECIDUOUS TREE (95) =8" DECIDUOUS TREE (2) =10" HICKORY (34) =17" LOCUST 55) =5" DECIDUOUS TREE =10" HICKORY 6) =6" MAPLE (35) =6" DECIDUOUS TREE (66) =6" DECIDUOUS TREE =6" DECIDUOUS TREE (4) =TWIN 10-12" HICKORY 36) =18" DECIDUOUS TREE =4" DECIDUOUS TREE 98) =6" DEAD TREE 5) =12" OAK =6" DECIDUOUS TREE) =7" DECIDUOUS TREE 6) =6" OAK 8) =10" DECIDUOUS TREE 38) =4" WALNUT (7) =12" HICKORY 9 =3" TRIPLE DECIDUOUS TREE (100) =6" MAPLE (39) =8" PINE 70) =8" DECIDUOUS TREE 8) =5" OAK (101) =9" OAK (9) =4" OAK (40) =20" TWIN WALNUT 71) =8" WALNUT (102) =6" MAPLE (10) =4" OAK (4) =18" WALNUT 72) =6" DEAD TREE (103) =6" MAPLE (11) =4" HICKORY (42) =8" WALNUT 73) =4" DECIDUOUS TREE (104) =7" MAPLE 43) =36" TWIN POPLAR 74) =4" DECIDUOUS TREE =36" OAK (44) =12" WALNUT (105) =4" MAPLE (75) =4" DECIDUOUS TREE) =4" HICKORY (45) =12" MAPLE (76) =4" DECIDUOUS TREE TWIN 5-8" HICKORY (106) =6" APPLE 15) =16" DEAD TREE 77) =6" DECIDUOUS TREE 107) =3" BOX ELDER (47) =12" WALNUT 6) =16" MAPLE (78) =5" DECIDUOUS TREE 108) =8" WALNUT) =24" COTTONWOOD (48) =5" WALNUT 79) =6" DECIDUOUS TREE 109) =8" STUMP) =5" MAPLE (49) =4" DECIDUOUS TREE 80) =4" DECIDUOUS TREE 110) =8" STUMP 9) =12" DEAD TREE 50 =6" DECIDUOUS TREE) =10" APPLE 2) =6" DECIDUOUS TREE) =40" POPLAR =6" DECIDUOUS TREE 111) =4" BOXELDER 52) =4" WALNUT 1) =12" WALNUT (112) =8" PINE 3) =7" WALNUT 84) =7" LINDEN) =6" WALNUT (113) =8" PINE (54) =5" DECIDUOUS TREE 5) =4-12" OAK) =4" WALNUT 55) =5" DECIDUOUS TREE 114) =6" MAPLE =10" WALNUT 6) =5" DECIDUOUS TREE 56) =6" DEAD TREE) =11" WALNUT (115) =6" MULTI CRABAPPLE 7) =4" MAPLE =6" DECIDUOUS TREE =12" CROOKED MAPLE (88) =9" LINDEN (116) =4" MAPLE 58) =8" WALNUT) =8" WALNUT 89) =6" LINDEN (59) =4" DECIDUOUS TREE (90) =3-6" LINDEN (117) =5" POPLAR 28) =10" WALNUT (118) =12" OAK (60) =6" DECIDUOUS TREE (91) =4" LINDEN (29) =5" WALNUT 6) =6" DECIDUOUS TREE 92 =4" LINDEN (119) =10" WALNUT (30) =4" WALNUT (62) =4" DECIDUOUS TREE (93) =8" MAPLE (31) =4" WALNUT (120) =6" WALNUT

Big Bluestem

Bristly Sedge

Crested Oval-Sedge

Bottle Brush Sedge*

Virginia Wild Rye

Dark Green Rush

Prairie Cord Grass

Switch Grass

Wool Grass

Fowl Manna Grass

Rough Clustered Sedge Brown Fox Sedge

Project Title

Washington Park **Smart Homes Development** Owosso, MI

Sheet Title

Landscape Plan

Dates	
Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

Water Plantain (Various Mix) Swamp Milkweed Asclepias incarnata New England Aster Aster novae-angliae Tall Coreopsis Coreopsis tripteris Eupatorium maculatum Spotted Joe-Pye Weed Iris virginica Blue Flag Iris Liatris spicata Marsh Blazing Star Lobelia cardinalis Cardinal Flower Lobelia siphilitica Great Blue Lobelia Sagittaria latifolia Broad-Leaf Arrowhead Silphium terebinthinaceum Prairie Dock Verbena hastata Blue Vervain Zizia aurea Golden Alexanders

TEMPORARY COVER:

Common Oats Avena sativa Annual Rye Lolium multiflorum

PLANT SCHEDULE

QTY. KEY BOTANICAL NAME

AR ACER RUBRUM

AP ACER PLATANOIDES 'CRIMSON KING' UA ULMUS AMERICANA 'VALLEY FORGE'

PA PICEA ABIES

RED MAPLE CRIMSON KING MAPLE VALLEY FORGE AMERICAN ELM NORWAY SPRUCE

COMMON NAME





COMMENT

1" = 20'

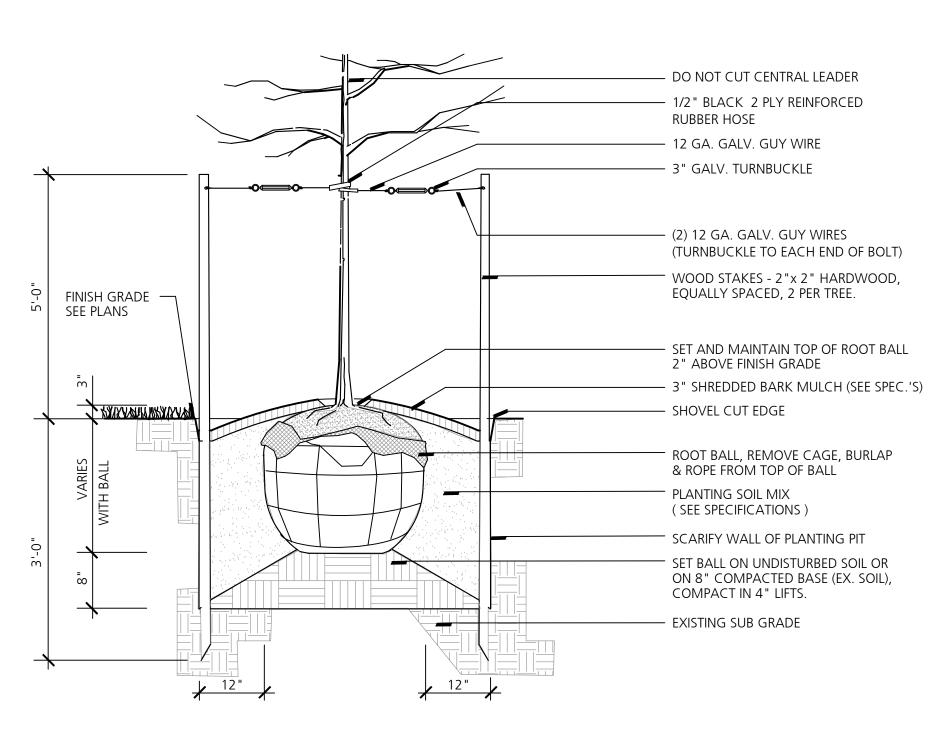
Quality Control Drawn: JC / XL Checked: CD

Project Number

202014

Approved: CS

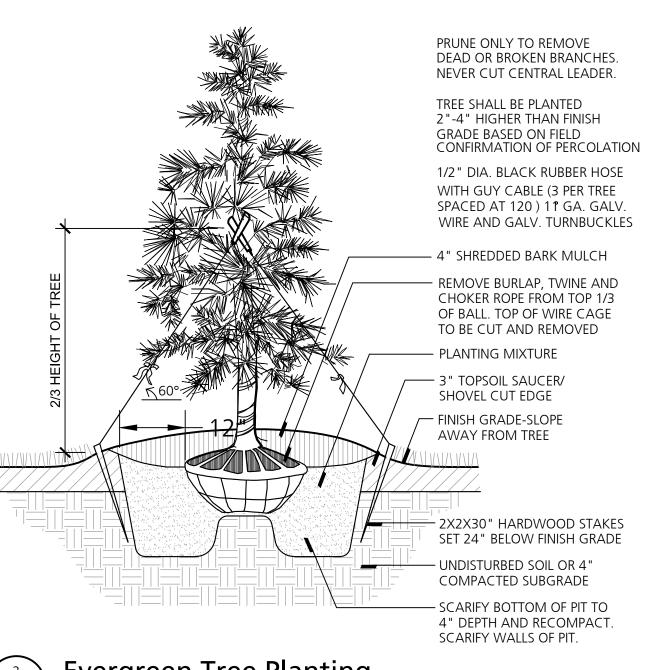
Sheet Number



1

Deciduous Tree Planting - 3" Or Smaller

NO SCALE



Evergreen Tree Planting

B R (i)
Beckett&Raeder

Landscape Architecture
Planning & Engineering

Beckett & Raeder, Inc. 535 West William, Suite 101 Ann Arbor, MI 48103 734 663.2622 ph 734 663.6759 fx

Consultants

Project Title

Washington Park Smart Homes Development Owosso, MI

Sheet Title

Landscape Details

Dates	Issued for
04.09.2020	Re-zoning Submission
10.12.2020	Site Plan Approval
11.06.2020	Site Plan Approval Resubmission

Scale

Quality Control			
Drawn:	JC / XL		
Checked:	CD		
Approved:	CS		

Project Number

202014

Sheet Number

L2.0



November 17, 2020

Planning Commission City of Owosso 301 W. Main Street Owosso, Michigan 48867

Subject: Washington Park Smart Home Site Plan Review (Second Review). Approximately 2.36

acres at located at the intersection of Washington and Wesley at the northern end of the

city limit. Zoned RM-1 PUD, Multi-Family Residential PUD.

Attention: Mr. Brad Hissong, Building Official

Dear Planning Commissioners:

At your request, we have reviewed the above revised application from Bailey Park Homes to develop 2.36 acres of the subject property utilizing PUD Standards within the Zoning Ordinance. The applicant is proposing to develop a 14-unit, single-family residential Planned Unit Development that would be permitted under the existing zoning but requires the flexibility that the PUD will be provided to meet certain approval requirements such as setbacks and property coverage requirements. The development will meet the density requirements of the RM-1 district, and the new housing to be constructed will help to relieve the current significant need for new, middle-income housing within the City of Owosso.

The opinions in this report are based on a review of the site plan submitted by the applicant and conformance to ordinance standards. Please note that the applicant and their design professionals shall be responsible for the accuracy and validity of information presented with the application. In reaching a decision on the application, the Planning Commission should consider our comments along with those from other staff and consultants, additional information provided by the applicant, and your own findings based on ordinance standards as part of your deliberation.

REVIEW COMMENTS

Section 36-390 of the City of Owosso Zoning Ordinance lists the submittal requirements for site plan review. Based on our review of the proposal, discussions with Mr. Brad Hissong, Building Manager, and a visit to the site, we offer the following comments for your consideration:

1. Information items. The applicant has provided a complete detail of informational requirements; however, some clarification is needed on the site plan. While the property is being developed as a PUD Site Condominium, the plan should delineate specifically what areas of the development are common areas and what areas are for purchase units. The current plan identifies structure locations, and we are led to assume that the ownership of the unit is only from the wall-in and all land outside of the unit is common area. The applicant has since provided information clarifying which areas will be common and which areas will be owned as requested.

Phone: 810-734-0000

Email: sprague@cibplanning.com

2. Area and Bulk. The proposed site was reviewed in accordance with *Article 16, Schedule of Regulations,* as described in the following table.

	Required	Provided	Comments
Residential PUD Development			
Front Yard Building Setback (Wesley)	30 ft.	15 ft.	Requires PC Waiver per PUD
Front Yard Building Setback (Washington)	20 ft.	12 ft.	Requires PC Waiver per PUD
Rear Yard Building Setback	30 ft.	83 ft.	In compliance
Maximum Building Lot Coverage (Impervious Surface)	25%	40%	Requires PC Waiver per PUD

3. Building Design & Materials. The proposed homes have an attractive design and utilizes multicolor and multi-design vinyl siding with traditional windows, shutters and front porches. We will require as part of the PUD that side egress for the homes have fixed porches or fixed steps as part of the home structure per building code. Additionally, per the PUD we would highly recommend traditional detached garages opposed to car sheds or ports and will included that recommendation in any final development agreement for the property. The applicant would like to offer both car ports as well as a garage as an option to buyers. It is still our belief that garages should be required as a condition of approval to meet site plan standards for maintaining essential neighborhood character.

Lastly, as part of the development agreement and the master deed for the condominium, we will require that any home which may be damaged or destroyed as an act of god (fire, storm damage or other) which requires replacement of an existing structure, that a new structure shall be the only appropriate replacement on the unit site. *The applicant has agreed with this request.*

Further, a waiver will be required from the Planning Commission per the PUD Standards from the requirement buildings be separated by a minimum of 20-feet. This is a requirement typically applied to apartment buildings and is only a 10-foot requirement for single-family, detached units.

- **4. Building Height.** The maximum building height for the district will not be exceeded for this project.
- **5. Parking Requirements.** The following table lists the requirements for parking requirements for the proposed development.

PARKING SPACE REQUIREMENTS	Required	Provided	Comments
Parking Spaces	28	28	In compliance

- * barrier free spaces are subject to the State of Michigan Department of Labor, Construction Code Commission, Barrier Free Design Division regulations.
- **6. Landscaping.** A landscaping plan has been provided that meets the intent of the ordinance.
- **7. Lighting Plan.** No street lighting is proposed for this development.
- **8. Fencing.** The site plan does not indicate any fencing for the development, but we recommend if fencing is permitted per the condominium bylaws, that it be high quality fencing such as vinyl, wood or other material and that chain link fencing be prohibited. *The developer will add a clause to the master deed prohibiting chain link fencing.*
- **9. Other Approvals.** The proposed site plan must be reviewed and approved by the appropriate city departments, consultants, and agencies.

RECOMMENDATION

Based upon the above comments, we recommend approval of the Washington Park Smart Home Condominium Development, conditioned upon the following:

- 1. That waivers are granted by the Planning Commission for front yard setbacks along Washington and Wesley Streets;
- 2. That a waiver is granted by the Planning Commission for total lot coverage;
- 3. That a waiver is granted by the Planning Commission for minimum distance between buildings to be allowed at less than 20-feet;
- 4. That the Planning Commission require traditional detached garages opposed to car ports or sheds to preserve neighborhood character;
- 5. That side egress on the homes have fixed porches or stairs attached to the structure;
- 6. That the Master Deed require any homes to be replaced due to an act of God, be replaced by a new structure and not a previously used structure;
- 7. That the by-laws for the condominium development strictly prohibit chain link fencing; and
- 8. That all other agencies, departments and reviewing entities grant approval prior to the issuance of any building permits.

If you have any further questions, please contact us at 810-734-0000.

Sincerely,

CIB Planning

Vice President

OFFICIAL NOTICE OF PROPOSED REZONING VIRTUAL MEETING

City of Owosso is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

https://us02web.zoom.us/i/88974080932?pwd=WIRQcGZhQ0x6VUF5S3NDOXdHV21WUT09

Meeting ID: 889 7408 0932

Passcode: 314083 One tap mobile

+16465588656,,88974080932#,,,,,0#,,314083# US (New York) +13017158592,,88974080932#,,,,,0#,,314083# US (Germantown)

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago)

+1 669 900 9128 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 889 7408 0932

Passcode: 314083

A Public Hearing will be held on a proposal to rezone the property described below. The proposed rezoning would allow for future residential development and to be compatible with the surrounding neighborhood.

APPLICANT: #PREZ 2020-04 City of Owosso

301 W Main Street

Owosso, MI 48867

PROPERTY OWNER: City of Owosso

301 W Main Street Owosso, MI 48867

PROPERTY ADDRESS: 210 Monroe Street

PROPOSED REZONING: FROM: I-1 Light Industrial

TO: R-2 Two-Family Residential District

PROPERTY DESCRIPTION: Parcel number: 050-652-001-004-00

Legal/Tax Description: LOTS 9, 10, 13, BLK 1, ALL OF BLK. 2 INCLUDING CLOSED ALLEY, PT OF CLOSED S. PARK ST. A L

WILLIAMS 2ND ADD.

LOT SIZE: 2.460 acres

MEETING INFORMATION: Owosso City Planning Commission VIRTUAL MEETING on Monday,

November 23, 2020 at 6:30 p.m.

WRITTEN COMMENTS: Written comments may be submitted to the building department office at

city hall or by email to building@ci.owosso.mi.us any time prior to the meeting. Further information on this case is on file in the Building

Department for your review.

The City of Owosso will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon seventy-two (72) hours notice to the City of Owosso. Individuals with disabilities requiring auxiliary aids or services should contact the City of Owosso by writing or calling the following: Amy Kirkland, City Clerk, 301 W. Main St, Owosso, MI 48867 (989) 725-0500. Website address is www.ci.owosso.mi.us.

OWOSSO





November 12, 2020

Planning Commission City of Owosso 301 W. Main Street Owosso, Michigan 48867

Subject: REZONING

Location: 210 Monroe Street

Size of Site: 2.46 acres

Request: To rezone roughly 2.46 acres at 210 Monroe Street from I-1, Light Industrial to R-2 Two-

Family Residential.

Applicant: City of Owosso

Dear Planning Commissioners:

At your request, we have reviewed the above application from the City of Owosso to rezone 2.46 acres from I-1, Light Industrial to R-2, Two-Family Residential. The property is currently owned by the City of Owosso, and the city would like to prepare the property for potential future residential development as outlined in the draft master plan for the city.

Our comments are based on a review of the information submitted by the applicant, a site visit, meetings with the applicant, discussions with the Planning Commission, and conformance to the City's Master Plan and Zoning Ordinance. In reaching a decision on the application, the Planning Commission should consider our comments along with those from other staff and consultants, relevant input from the public, additional information provided by the applicant, and your own findings based on ordinance standards as part of your deliberation and recommendation to City Council.

LOCATION AND DESCRIPTION

The subject parcel is located along the northern side of Monroe Street, adjacent to the rail line. The property is identified in the draft master plan as an area for development of new housing, specifically of the missing-middle variety which can include row-housing, townhouses, apartments or higher-density detached one-family residential.

EXISTING LAND USE, ZONING AND FUTURE LAND USE

	Existing Land Use	Zoning	Master Plan	
Subject Site	Vacant	I-1 Light industrial *	Industrial	
North	Industrial	I-1, Light Industrial	I-1, Light Industrial, General Commercial	

Phone: 810-734-0000

Email: sprague@cibplanning.com

South	One-family residential and Commercial	R-1, One-Family Residential, B- 1, Local Business (Josh's Frogs)	Residential	
East	Industrial and Rail	I-1, Light Industrial	Industrial	
West	Industrial and Commercial	B-4, General Commercial and I- 1, Light Industrial	Local business and industrial	

*The map below is the existing zoning map for the City of Owosso



PERMITTED AND SPECIAL LAND USES

While the area is a mish-mash of zoning districts including R-1, R-2 Commercial and Industrial, it is important to consider what land uses could be utilized on these properties should the Planning Commission approve the rezoning -R-2, Two-Family Residential. A full list of uses is provided below;

In an R-2 district, no building or land shall be used and no building shall be erected except for one (1) or more of the following specified uses unless otherwise provided in this chapter:

(1) All uses permitted and as regulated in the one-family residential districts. The standards of the "schedule of regulations" applicable to the R-1 one-family residential district shall apply as minimum standards when one-family detached dwellings are erected;

City of Owosso Planning Commission **210 Monroe Rezoning Review** November 12, 2020 Page 3

- (2) Two-family dwellings;
- (3) Accessory buildings and uses customarily incident to any of the above permitted uses and subject to the conditions of section 38-379, accessory buildings;
- (4) A dwelling constituting the home for not more than three (3) aged and physically handicapped persons provided such use is in accordance with all state and local requirements;
- (5) Bed and breakfast operations as a subordinate use to single-family dwelling units subject to city licensing provisions and a determination by the city planning commission that the applicant has shown proof of historic significance of the dwelling unit. In making the determination, the planning commission shall reference the historic criteria developed and adopted by the commission.
- (6) Family day care home, foster family group homes and foster family homes shall be permitted subject to the following provisions:
 - a. For family day care homes only, a minimum of four hundred (400) square feet of usable outdoor play area in the rear or side yard shall be available on the premises.
 - b. Such uses are duly licensed by the state department of social services or other equivalent public agencies authorized to license these uses.
 - c. Building and lots so used shall conform to all state and local code requirements, except that such uses or structures shall be permitted in buildings and lots which are nonconforming uses or structures as defined in this chapter.

DISCUSSION

In considering any petition for an amendment to the official zoning map, the planning commission and city council shall consider the following criteria in making its findings, recommendations and decision:

Consistency with the goals, policies, and future land use map of the City of Owosso Master Plan.
If conditions upon which the master plan was developed (such as market factors, demographics,
infrastructure, traffic and environmental issues) have changed significantly since the master plan
was adopted, as determined by the city, the planning commission and council shall consider the
consistency with recent development trends in the area.

<u>Finding</u> – While the current future land use map identifies this area as industrial, it is important to highlight what is proposed in the city's new draft master plan. The following text describes the intent for this area.

Washington and Monroe Street - Located south of Downtown and Corunna Avenue, this 5.5-acre site is located in a transitional zone between commercial and industrial uses and a residential neighborhood to the south. The site includes multiple parcels including a city-owned property along the railroad corridor and the Former Grace Church, 715 S. Washington (built in 1950). The site is connected to public water/sewer. In the near term, the site provides an opportunity for infill residential. The adaptive reuse of church building for condominium development may be considered, however, the building does not have architectural or historical significance and could

City of Owosso Planning Commission **210 Monroe Rezoning Review** November 12, 2020 Page 4

be demolished as part of the redevelopment. A desirable future use for the site is single-family attached residential. Infill development should be compatible with the existing neighborhood incorporating front porches/stoops, alley access, parking in the rear, and building heights between 2-3 stories. Existing street trees should be preserved.







It is our belief that this rezoning would significantly improve the neighborhood and would not be in conflict with the overall goals of the Master Plan, nor impact the intent of the Zoning Ordinance.

2. Compatibility of the site's physical, geological, hydrological, and other environmental features with the host of uses permitted in the proposed zoning district.

Finding – <u>This site would be compatible with the host of uses permitted under the R-2 Zoning</u> Classification.

3. Evidence the applicant cannot receive a reasonable return on investment through developing the property with at least one (1) use permitted under the current zoning.

Finding – <u>To our knowledge, no evidence exists showing that the applicant could not receive a reasonable return on investment through developing the property as industrial, however the City of Owosso is generally not in the position to be the developer of this property.</u>

4. The compatibility of all the potential uses allowed in the proposed zoning district with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of use, traffic impacts, aesthetics, infrastructure and potential influence on property values.

Finding – It is our belief that land uses within the R-2 district are more compatible with this site and its location to the neighborhood to the south than if the site were to be developed as industrial.

5. The capacity of the city's infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the "health, safety, and welfare."

Finding – There should be no issues with existing infrastructure being able to accommodate and service this site.

6. The apparent demand for the types of uses permitted in the requested zoning district in relation to the amount of land currently zoned and available to accommodate the demand.

Finding – We find that there is high demand for new housing throughout the City of Owosso and surrounding areas. While there is no imminent development proposed for this site, the city is positioning itself to have vacant, city-owned property available for redevelopment as opportunities present themselves.

7. The request has not previously been submitted within the past one (1) year, unless conditions have changed, or new information has been provided.

Finding – This application has not been previously before the City.

RECOMMENDATION

Based upon the above comments, we recommend approval of the rezoning request for 210 based on the following items;

- 1. That the request is not in overwhelming conflict with the Master Plan or the Zoning Ordinance;
- 2. The site is compatible with uses in the proposed R-2 Zoning District;
- 3. The applicant is not rezoning to increase the return on investment of the property;
- 4. That the Planning Commission understands that the proposed use may be more compatible with surrounding land uses;
- 5. Infrastructure to the site is appropriate for the proposed use; and
- 6. The request has not been previously submitted to the City for consideration.

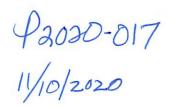
We look forward to discussing this with you at your November Planning Commission meeting. If you have any further questions, please contact us at 810-734-0000.

Sincerely,

CIB Planning

City of Owosso Planning Commission **210 Monroe Rezoning Review** November 12, 2020 Page 6

Justin Sprague Vice President





CITY OF OWOSSO, MICHIGAN SITE PLAN REVIEW APPLICATION AND CHECKLIST

- Application must be filed at least 25 days prior to a scheduled planning commission meeting for staff review and proper notices.
- > This application is submitted with 1 copy of the complete site plan and appropriate fees. Applicant shall also submit a digital version of the site plan to the community development director
- Accompanying any site plan required hereunder, the applicant shall provide from, a licensed engineer, soil borings at the proposed construction site to ascertain bearing capacity of foundations soils at the time of footing excavation to certify such soil conditions meet or exceed design capacity of the foundation to support the proposed structure. These requirements shall comply with policies of the City of Owosso, copies of which can be obtained from the Building Department.
- > The attached checklist has been completed to certify the data contained on the site plan. If the required data has not been provided, the appropriate box has been checked with a statement of explanation on why the data has not been provided.
- I understand that if my site plan is deemed to be incomplete, it may be returned by the City for revisions without being forwarded to the Planning Commission for consideration, until such time as the requirements have been adequately met.
- > By signing this application, the applicant hereby grants full authority to the City of Owosso, its agents, employees, representatives and/or appointees to enter upon the undersigned lands/parcel(s) for the purposes of inspection and examination.

Appro	val of the site plan is hereby requested for the following parcel(s) of land in the City of Owosso.
Applic	ation Filed On:
Applic	ation Transmitted by City On:
Proper	rty Details:
1.	Name of Proposed Development: Owosso Memorial Hospital NOW Addition
2.	Property Street Address: 819 N. Shiawassee Street Owosso, MI 48867
3.	Location of Property: On the (north, south, east, west side) of Street, between
4.	Legal Description of Property:
5.	Site Area (in acres and square feet): 10,075 Future Paving Area Shaded in Blue/Grey for Site Plan Approva
6.	Zoning Designation of Property: OS-1(Office Service)
Owner	ship:
1.	Name of Title/Deed Holder: Memorial Health Care
2.	Address: 819 N. Shiawassee Street Owosso, MI 48867
3.	Telephone No: 989-729-4567
4.	Email address: Cthompson@memorialhealthcare.org
Applic	ant:
1.	Applicant (If different from owner above): Spence Brothers
2.	Address: 203 S. Washington Ave. Ste. 360 Saginaw, MI 48607

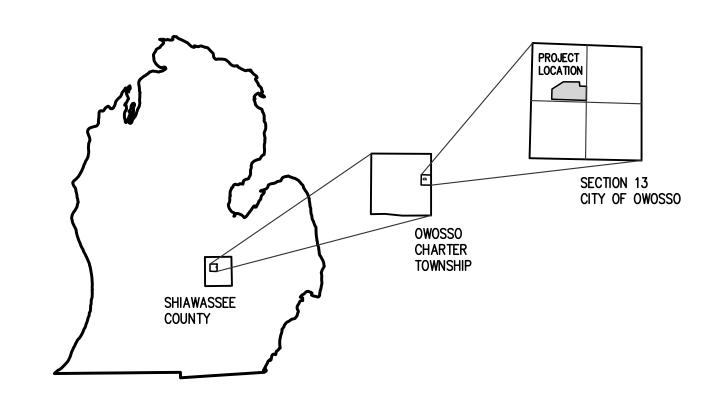
3. Telephone No: 989-752-0400	
4. Email address: jakegolden@spencebrothers.com	
5. Interest in Property (potential buyer/lease holder/potential lessee/other)	· Construction Manager
Architect/Surveyor/Engineer preparing site plan: Rowe Engineering	
Name of Individual: Doug Scott	
2. Address: 540 s. saginaw Street Flint, MI 48502	
3. Telephone No: 810-341-7500	
4. Email address: Decott@rowepsc.com	
PLEASE NOTE: LLC establishments must have a current plan of operation.	
APPLICATION FEES:	\$550.00 \ \$4.50\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Apartment/townhouse Commercial/Industrial	• \$550.00 + \$4.50/unit • \$500.00 + \$50.00/acre
Institutional (Schools, Public Services, Hospitals)	• \$475.00 + \$40.00/acre
Mobile home park	• \$575.00 + \$5.00/unit
Planned Unit Development/Mixed use development	• \$550.00 + \$50.00/acre
Preliminary site plan review	 75% of site plan review fee
Single family site condo (prelim or final)	• \$700.00 + \$5.00/lot
Site plan revision/review	75% of site plan review fee + any needed consulting fees determined by administration
Site plan requiring review by city engineer	 all costs by owner/applicant via escrow
- Cpecial friedrings with plantiferrengineer	 all costs by owner/applicant via escrow
Escrow Fee Signature of Applicant Signature of Applicant	• \$1,500 11-4-2020 Date
11V. Am	11-4-2020
Signature of Deed/Title Holder	Date
PLEASE PROVIDE AN OVERVIEW OF THE PROJECT:	
Remove existing material down to sub base, Install sand, stone, and new	paving. New light Poles, line striping,
New retaining on NW corner. Fencing and Landscaping	

SITE PLAN REVIEW CHECKLIST:

Check the appropriate line. If item is marked as 'not provided', attach detailed explanate ITEM	PROVIDED	NOT PROVIDED
1. Site location Map.	×	
2. North arrow, scale (one (1) inch equals fifty (50) feet if the subject property is		
less than three (3) acres and one (1) inch equals one hundred (100) feet if	×	
three (3) acres or more.	_	
3. Revision dates.	×	
4. Signature and Seal of Architect/Surveyor/Engineer.	×	
5. Area of site (in acres and square feet).	×	
6. Boundary of the property outlined in solid line.	×	
7. Names, centerline and right-of-way widths of adjacent streets.	×	
8. Zoning designation of property.	ж	
Zoning designation and use of adjacent properties.	×	
10. Existing and proposed elevations for building(s) parking lot areas and drives	×	
11. Direction of surface water drainage and grading plan and any plans for storm		
water retention/detention on site.	×	
12. Required setbacks from property lines and adjacent parcels.	×	
13. Location and height of existing structures on site and within 100 feet of the		
property.	×	
14. Location and width of existing easements, alleys and drives.	×	
15. Location and width of all public sidewalks along the fronting street right-of-way		
and on the site, with details.	×	
16. Layout of existing/proposed parking lot, with space and aisle dimensions.	x	
17. Parking calculations per ordinance.	×	
18. Location of all utilities, including but not limited to gas, water, sanitary sewer,		
electricity, telephone.	x	
19. Soil erosion and sedimentation control measures during construction.	×	
20. Location and height of all exiting/proposed fences, screens, walls or other		
barriers.	×	
21. Location and details of dumpster enclosure and trash removal plan.		х
22. Landscape plan indicating existing/proposed trees and plantings along		
frontage and on the site.	×	
23. Notation of landscape maintenance agreement.		×
24. Notation of method of irrigation.	×	
25. Lighting plan indicating existing/proposed light poles on site, along site's		
frontage and any wall mounted lights.	×	
a. Cut-sheet detail of all proposed light fixtures.		x
26. Architectural elevations of building (all facades). Identifying height, Materials		
used and colors.		x
27. Existing/proposed floor plans.		
28. Roof mounted equipment and screening.		
29. Location and type of existing/proposed on-site signage.	·	
30. Notation of prior variances, if any.		
31. Notation of required local, state and federal permits, if any.		
32. Additional information or special data (for some sites only)		
a. Environmental Assessment Study.		
b. Traffic Study. Trip Generation.		
c. Hazardous Waste Management Plan.		
33. For residential development: a schedule indicating number of dwelling units,		
number of bedrooms, gross and usable floor area, parking provided, total		
area of paved and unpaved surfaces.		
34. LLC establishments must have a current Plan of Operation.		
35. Is property in the floodplain?		
36. Will this require MDEQ permitting?	no	
37. Performance Bond – when required.	no	

SITE PLANS FOR MEMORIAL HEALTHCARE PARKING AREA EXPANSION

826 W. KING STREET CITY OF OWOSSO, SECTION 13, T.7N.-R.2E. SHIAWASSEE COUNTY, MICHIGAN

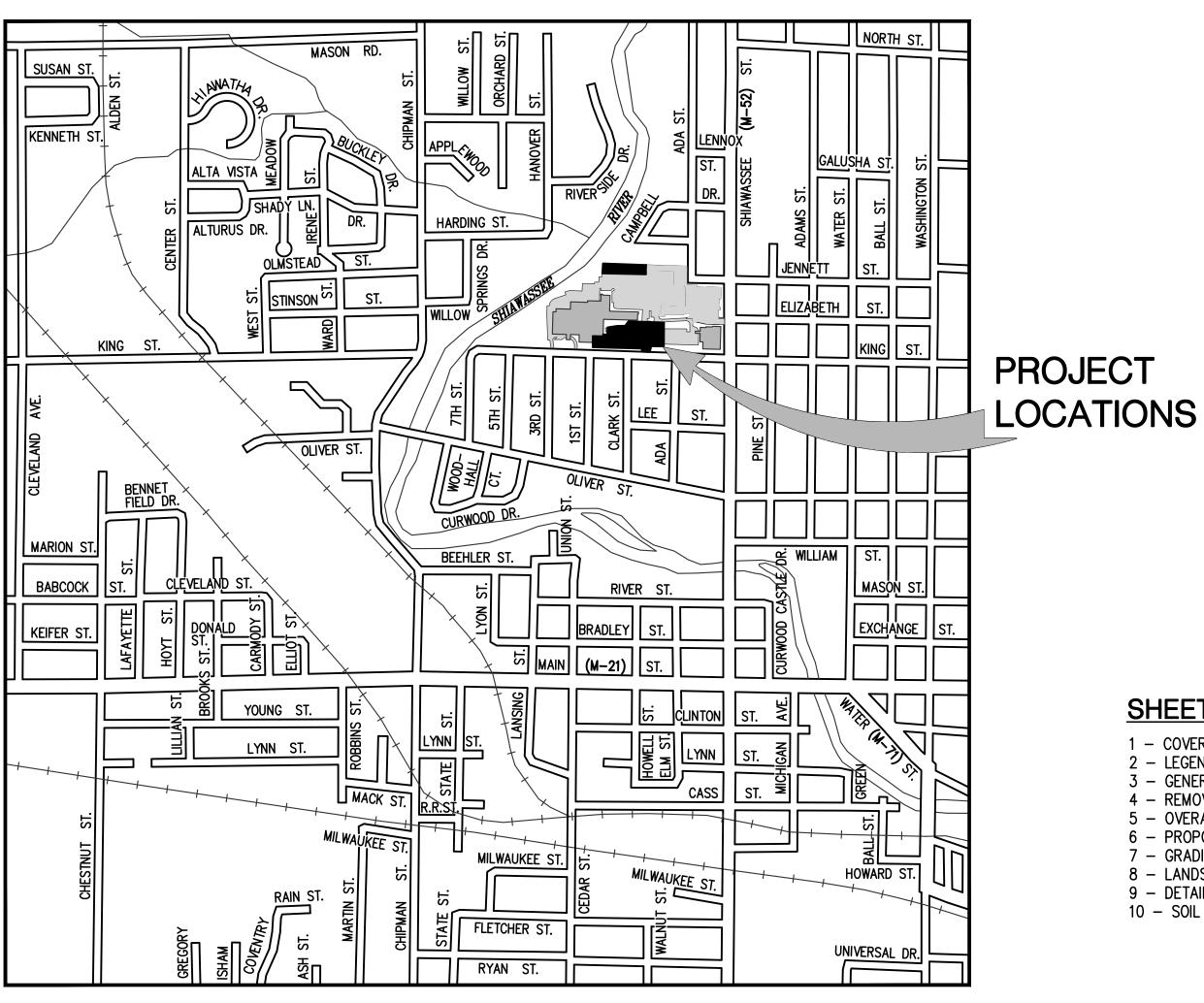


UTILITY CONTACT LOG

	AGENCY	UTILITY
1.	CITY OF OWOSSO PUBLIC WORKS DEPARTMENT 522 MILWAUKEE STREET OWOSSO, MI 48867 MR. MARK MITCHELL (989) 725-0550 mark.mitchell@ci.owosso.mi.us	D.P.W.
2.	CONSUMERS ENERGY 530 WEST WILLOW STREET LANSING, MI 48909 MR. TYLER LAWRENCE (517) 788-1191 tyler.lawrence@cmsenergy.com	GAS
3.	CONSUMERS ENERGY 1801 W. MAIN STREET OWOSSO, MI 48867 MR. JOEL HIMM (989) 729-3256 joel.himm@cmsenergy.com	ELECTRIC
4.	CHARTER COMMUNICATIONS 7372 DAVISON ROAD DAVISON, MI 48423 MR. DAVID BUJAK (734) 915-2895 david.bujak@charter.com	CABLE
5.	FRONTIER/VERIZON 1943 W. M-21 OWOSSO, MI 48867 MR. MARK STEVENS (989) 723-0373 Mark.Stevens@ftr.com	TELEPHONE

PROJECT DESCRIPTION

THIS PROJECT INCLUDES THE EXPANSION OF TWO EXISTING PARKING LOT AREAS WITH REQUISITE UTILITY IMPROVEMENTS.





LOCATION MAP

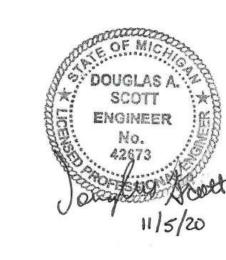
OWNER INFORMATION MEMORIAL HEALTHCARE 826 W. KING STREET OWOSSO, MI 48867

M.D.O.T STANDARD ROAD

* INDICATES SPECIAL DETAIL

SHEET INDEX

- 1 COVER SHEET 2 LEGEND SHEET
- 3 GENERAL NOTES
- 4 REMOVAL PLAN SHEET NORTH LOT
- 5 OVERALL SITE PLAN SHEET
- 6 PROPOSED PLAN SHEET NORTH LOT
- 7 GRADING & STORM SEWER PLAN 8 - LANDSCAPE SHEET
- 9 DETAIL SHEET
- 10 SOIL EROSION KEY SHEET





Know what's **below.** Call before you dig. PLAN SUBMITTALS AND CHANGES BIDDING DOCUMENTS DATE DESCRIPTION 4/3/20 ISSUED FOR BIDS

1/6/2020 LANDSCAPE PLAN

of **10** JOB No: 19C0221

ALTHCARE EXPANSION

MEMORIAL HEA PARKING AREA E

STRUCTURE SYMBOLS **UTILITY SYMBOLS** PLAN VIEW LINE TYPES PAVEMENT IDENTIFICATION EXISTING CATCH BASIN IN CURB LINE UTILITY POLE ----- EXISTING STORM SEWER EXISTING CURB AND GUTTER PROPOSED CATCH BASIN IN CURB LINE GUY ANCHOR CABLE EXISTING CULVERT PROPOSED CURB AND GUTTER PROPOSED STORM SEWER LIGHT POLE / ORNAMENTAL LIGHT -----EXISTING CATCH BASIN IN GREEN SPACE LESS THAN 24" PROPOSED PAVEMENT PROPOSED STORM SEWER PROPOSED CATCH BASIN IN GREEN SPACE POWER LIGHT POLE 24" AND GREATER EXISTING STORM MANHOLE EXISTING SANITARY SEWER TELEPHONE MANHOLE UNDERGROUND GAS LINE MARKER PROPOSED STORM MANHOLE PROPOSED SANITARY SEWER PROPOSED CULVERT END SECTION GAS RISER EXISTING WATER MAIN HATCHING LEGEND EXISTING HEADWALL GAS VENT PROPOSED WATER MAIN REMOVE PAVEMENT PROPOSED HEADWALL GAS VALVE EXISTING WATER SHUTOFF (SERVICE VALVE) RAILROAD SIGNAL EXISTING RIGHT OF WAY REMOVE SIDEWALK EXISTING GATE VALVE AND BOX (STOP BOX) PROPOSED RIGHT OF WAY METAL LIGHT POLE * * * * * OUTLET PROPOSED GATE VALVE AND BOX ----- PROPOSED EASEMENT CIRCUIT BREAKER PANEL EXISTING GATE VALVE AND WELL EXISTING CENTER LINE DITCH PROPOSED GATE VALVE AND WELL ELECTRICAL TRANSFORMER PAD PROPOSED DITCH CENTERLINE ELECTRICAL TRANSFORMER RISER EXISTING SPRINKLER HEAD EXISTING CENTER LINE ROADWAY ELECTRIC METER EXISTING WATER WELL PARCEL LINE / LOT LINE EXISTING FIRE HYDRANT TELEPHONE PEDESTAL / RISER EXISTING OVERHEAD UTILITIES TRAFFIC SIGNAL ON POLE PROPOSED FIRE HYDRANT UNDERGROUND ELECTRICAL LINE PROPOSED WATER MAIN FITTINGS PHONE BOOTH / PAY PHONE GAS LINE OR PETROLEUM PIPELINE PROPOSED CALLOUTS EXISTING CLEAN OUT UNDERGROUND TELEPHONE LINE TOPO CALLOUTS **SURVEY SYMBOLS** EXISTING SANITARY SEWER MANHOLE (ADJ) MONUMENT PROPOSED SANITARY SEWER MANHOLE ADJ-X ADJ-X BENCHMARK PROJECT CONTROL LINE EXISTING MONITORING WELL (ADJ-B/O) ADJ-B/O TRAVERSE POINT TREE LINE SECTION CORNER EXISTING TOPOGRAPHICAL SYMBOLS REL RELOCATE FOUND SURVEY MONUMENTATION SIGN REL-B/O REL-B/O STREET SIGN — X — X — X — PROPOSED FENCE R REMOVE MISCELLANEOUS SYMBOLS END OF PIPE EXISTING GUARD RAIL EXISTING STORM SEWER STRUCTURE NUMBER SWAMP OR WETLAND · · · · · · · · · PROPOSED SLOPE STAKE LINE (SALV) SALVAGE EX 5236 EXISTING SANITARY SEWER STRUCTURE NUMBER DECIDUOUS TREE PROPOSED SILT FENCE SAVE PROPOSED STORM SEWER STRUCTURE NUMBER CONIFEROUS TREE A **TOPOGRAPHY** ABANDON A PROPOSED SANITARY SEWER STRUCTURE NUMBER TREE STUMP CLEARING FLOW DIRECTION EXISTING CONTOURS MAJOR MAIL BOX BULKHEAD EXISTING RIP-RAP EXISTING CONTOURS MINOR SOIL BORING SR-F SIDEWALK RAMP TYPE PROPOSED RIP-RAP PROPOSED CONTOUR MAJOR ROCK 6 SOIL EROSION CONTROL MEASURE PROPOSED CONTOURS MINOR **CAUTION SYMBOLS** METAL POST ••CAUTION•• HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND BUMPER BLOCK PARCEL INFORMATION USED WITH UNDERGROUND GAS & ELECTRICAL LINES PARCEL/TAX IDENTIFICATION NUMBER 401-069 DATE DESCRIPTION 4/3/20 ISSUED FOR BIDS ••CAUTION•• FIBER OPTIC USED WITH FIBER OPTICS LINES ADDRESS/BUSINESS NAME *#*5324

REMOVE CURB AND GUTTER

ADJUST STRUCTURE ADJUST STRUCTURE W/ NEW COVER ADJUST STRUCTURE BY OTHERS RECONSTRUCT STRUCTURE RELOCATE BY OTHERS REMOVE AND REPLACE

> Know what's **below.** Call before you dig.

PLAN SUBMITTALS AND CHANGES BIDDING DOCUMENTS REV:

SHT# 2 OF 10 JOB No: 19C0221

SERVICES

ALTHCARE EXPANSION

MEMORIAL HEA PARKING AREA E

GENERAL CONSTRUCTION NOTES

EMERGENCY CONTACTS

BEFORE BEGINNING WORK ON THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF EMERGENCY CONTACTS. AT LEAST ONE PERSON REPRESENTING THE CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO EMERGENCIES THROUGHOUT THE LIFE OF THE PROJECT, 24 HOURS A DAY, 7 DAYS A WEEK.

UNDERGROUND UTILITY IDENTIFICATION AND LOCATION

THE CONTRACTOR SHALL CALL MISS DIG (1-800-482-7171) A MINIMUM OF THREE WORK DAYS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO IDENTIFY AND NOTIFY UTILITY AGENCIES WITHIN THE PROJECT AREA WHICH DO NOT PARTICIPATE IN THE MISS DIG NOTIFICATION PROGRAM.

PUBLIC UTILITIES

EXISTING UTILITIES ARE SHOWN BASED UPON RECORDS AND LOCATIONS PROVIDED BY UTILITY AGENCIES. THE INFORMATION SHOWN IS CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR. UNLESS THE PLANS SPECIFICALLY SHOW THAT EXISTING UTILITIES ARE TO BE MOVED, THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN EXISTING UTILITIES.

VERIFICATION OF UNDERGROUND UTILITIES

THE CONTRACTOR SHALL EXCAVATE AND LOCATE ALL EXISTING UTILITIES IN THE PROJECT AREA IN ADVANCE OF CONSTRUCTION TO VERIFY THEIR ACTUAL LOCATION. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL MAKE SUCH CHANGES TO GRADE AND ALIGNMENT OF PROPOSED WORK AS DIRECTED BY THE ENGINEER TO AVOID CONFLICTS, AT NO INCREASE IN COST TO THE OWNER.

UTILITY SERVICE

UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS, ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE DURING THE PROJECT.

SOIL BORINGS / PAVEMENT CORES

IF PROVIDED ON THE PLANS OR IN THE CONTRACT DOCUMENTS, LOGS OF SOIL BORINGS OR PAVEMENT CORES REPRESENT THE SUBSURFACE CONDITIONS ENCOUNTERED AT SPECIFIC POINTS. THE INFORMATION IS PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY.

MAINTAINING TRAFFIC

LOCAL AND EMERGENCY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT AREA.

WHEN EXCAVATION, FRESH CONCRETE, OR OTHER CONSTRUCTION WORK WILL RESULT IN THE CLOSURE OF A STREET OR DRIVEWAY FOR A PERIOD OF TIME, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES IN ADVANCE.

THE CONTRACTOR SHALL NOTIFY EMERGENCY RESPONSE AGENCIES IN ADVANCE OF ROAD CLOSURES OR THE ESTABLISHMENT OF DETOURS.

TRAFFIC SIGNS

TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED AND REPLACED BY THE AGENCY HAVING JURISDICTION OVER THE STREETS OR ROADS IN THE PROJECT AREA. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE AGENCY TO ARRANGE FOR REMOVAL OF THE SIGN AND IS RESPONSIBLE TO PAY ANY FEES ASSOCIATED WITH THE REMOVAL AND REPLACEMENT OF THE SIGNS.

THE CONTRACTOR SHALL COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP WORK ON THE PROJECT ONCE BEGUN.

ALIGNMENT

ALIGNMENT AND GRADES FOR CURB AND GUTTER (INCLUDING THROUGH RAMPS AND DRIVEWAY OPENINGS) SHOWN ON THE PLANS ARE FOR THE TOP, BACK OF CURB, UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE PLANS.

THE HORIZONTAL ALIGNMENT SHOWN ON THE DRAWINGS FOR DRAINAGE STRUCTURES LOCATED IN THE CURB LINE IS TO THE CENTER OF THE CASTING.

THE HORIZONTAL ALIGNMENT SHOWN ON THE DRAWINGS FOR DRAINAGE STRUCTURES WHICH ARE NOT IN THE CURB LINE AND FOR MANHOLES IS TO THE CENTER OF THE STRUCTURE.

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR MANHOLE CASTINGS, THE ELEVATION PROVIDED IS FOR THE TOP OF THE CASTING.

WHERE RIM ELEVATIONS ARE PROVIDED FOR INLET TYPE CASTINGS. THE ELEVATIONS ARE PROVIDED AS

FOLLOWS: CURB INLETS - THE ELEVATION OF THE TOP OF CURB • ALL OTHER INLETS - THE ELEVATION OF THE FLOW LINE

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR INLETS OR MANHOLE CASTINGS, THE ELEVATIONS PROVIDED ARE CONSIDERED PRELIMINARY. THE CONTRACTOR SHALL MAKE THE FINAL ADJUSTMENT FOLLOWING THE ESTABLISHMENT OF ACTUAL GRADING AND PAVEMENT ELEVATIONS.

CONSTRUCTION STAKING

WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER. THE CONTRACTOR SHALL REQUEST STAKING AT LEAST THREE WORKING DAYS IN ADVANCE.

WHEN CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, STAKING WILL BE PROVIDED ONE TIME. THE CONTRACTOR SHALL PROTECT AND PRESERVE SURVEY CONTROL AND STAKING. RE-STAKING WILL BE AT THE CONTRACTOR'S EXPENSE.

SURVEY CORNERS, BENCHMARKS, AND CONTROL POINTS

THE CONTRACTOR SHALL PRESERVE ALL GOVERNMENT CORNERS, PROPERTY CORNERS, BENCHMARKS, SURVEY CONTROL POINTS AND OTHER SURVEY POINTS WITHIN THE PROJECT AREA. WHERE CORNERS. BENCHMARKS. OR SURVEY POINTS ARE ENCOUNTERED WHICH WILL BE DISTURBED BY THE CONTRACTOR'S ACTIVITIES: A LICENSED SURVEYOR SHALL WITNESS THE POINT BEFORE DISTURBANCE AND SHALL RE-SET THE POINT FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PAY THE SURVEYOR TO WITNESS AND TO RE-SET THE POINTS.

PROTECTION OF TREES, SHRUBS, AND LANDSCAPING

ALL TREES, SHRUBS, AND LANDSCAPING WITHIN THE CONSTRUCTION AREA WHICH ARE NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED TREES, SHRUBS, AND LANDSCAPING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SIGNING AND BARRICADING

THE CONTRACTOR SHALL PROTECT HAZARDOUS AREAS WITH BARRICADES. BARRICADES LEFT IN PLACE AFTER SUNSET SHALL BE LIGHTED.

THE CONTRACTOR SHALL PROVIDE SUITABLE SANDBAGS OR OTHER SUITABLE MEASURES FOR ANCHORING OF TEMPORARY SIGNS AND BARRICADES, TO PREVENT THEIR TIPPING OR DISPLACEMENT BY WIND OR AIR FLOW FROM VEHICLES.

THE CONTRACTOR SHALL PROVIDE SIGNING, BARRICADES, TRAFFIC REGULATORS, CONES, AND OTHER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OVER STREETS OR ROADS IN THE PROJECT AREA, THE CURRENT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COVER OR REMOVE TEMPORARY SIGNS DURING PERIODS WHEN THEY ARE NOT APPROPRIATE.

TURF ESTABLISHMENT

ALL DISTURBED AREAS WHICH ARE NOT TO BE SURFACED WITH PAVEMENT, AGGREGATE OR OTHER APPROVED SURFACES SHALL BE ESTABLISHED WITH TURF.

TURF AREAS SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE.

DISTURBED AREAS SHALL BE SURFACED WITH FOUR INCHES OF SCREENED TOPSOIL.

THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH TURF WHICH IS SUBSTANTIALLY FREE OF BARE SPOTS AND FREE OF WEEDS. THE GROUND SURFACE IN TURF AREAS SHALL BE SMOOTH AND PROVIDE A NATURAL TRANSITION TO ADJACENT, UNDISTURBED AREAS.

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE WATERING, WEEDING, RESEEDING, AND REWORKING AS NECESSARY TO ESTABLISH TURF AREAS TO THE REQUIRED STANDARD.

ADA COMPLIANCE

ALL PROPOSED CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA), AND APPLICABLE GUIDELINES OR STANDARDS. WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET THE ADA REQUIREMENTS, GUIDELINES, OR STANDARDS; THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REMOVE AND REPLACE WORK DETERMINED TO BE NOT IN ACCORDANCE WITH APPLICABLE REQUIREMENTS, GUIDELINES, OR STANDARDS.

EARTHWORK

THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF THE EARTHWORK QUANTITIES, AND BASE HIS BID ON HIS DETERMINATION OF THE QUANTITIES OF WORK REQUIRED.

IF ADDITIONAL FILL MATERIAL MUST BE PROVIDED TO ATTAIN THE FINISH GRADES SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE THE REQUIRED FILL MATERIAL, UNLESS A SPECIFIC BORROW AREA IS IDENTIFIED ON THE PLANS.

EXCESS SOILS RESULTING FROM EXCAVATION AND EARTHWORK SHALL BECOME THE CONTRACTOR'S PROPERTY AND DISPOSED OF PROPERLY, UNLESS AN AREA(S) HAS BEEN DESIGNATED FOR STOCKPILING OR "BLENDING IN" THE EXCESS MATERIAL WITHIN THE PROJECT LIMITS.

BACKFILL AND EMBANKMENT

BACKFILL OF AN EXCAVATION UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE, SHALL BE SAND. MEETING THE REQUIREMENTS OF GRANULAR MATERIAL CLASS III AS DESCRIBED IN THE CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAND BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

BACKFILL OF AN EXCAVATION WHICH IS NOT UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE MAY BE SUITABLE EXCAVATED MATERIAL OR OTHER SOIL, WHICH IS FREE OF ORGANIC MATTER, STONES AND ROCKS, ROOTS, BROKEN CONCRETE, FROZEN MATERIAL, OR DEBRIS. THE BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL INDICATE THE SOURCE OF SAND USED FOR BACKFILL TO THE ENGINEER, AND PROVIDE THE ENGINEER WITH THE RESULTS OF A GRADATION TEST PERFORMED ON A SAMPLE OF THE SAND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF USING SAND FROM OTHER SOURCES.

EMBANKMENT USED TO BUILD THE SUBGRADE TO REQUIRED ELEVATION SHALL BE SUITABLE SOIL EXCAVATED FROM THE PROJECT SITE. OR FURNISHED BY THE CONTRACTOR FROM OTHER SOURCES. SUITABLE SOIL IS FREE FROM ORGANIC MATTER, ROCKS AND STONES, FROZEN MATERIAL, BROKEN CONCRETE, AND DEBRIS.

EMBANKMENT CONSTRUCTED OF GRANULAR SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

EMBANKMENT CONSTRUCTED OF COHESIVE SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

DENSITY TESTING

THE MAXIMUM UNIT WEIGHT OF SAND AND OTHER GRANULAR SOILS WILL BE DETERMINED BY THE ONE POINT CONE TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

THE MAXIMUM UNIT WEIGHT OF COHESIVE SOILS WILL BE DETERMINED BY THE ONE POINT PROCTOR TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

WORK HOURS

UNLESS PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS OR LIMITED BY LOCAL ORDINANCE, THE CONTRACTOR SHALL WORK WITHIN OF THE FOLLOWING TIMES, UNLESS OTHERWISE APPROVED BY THE OWNER: MONDAY THROUGH FRIDAY 7 A.M. TO 8 P.M. 8 A.M. TO 6 P.M.

THE CONTRACTOR SHALL NOT WORK ON SUNDAYS OR HOLIDAYS, UNLESS OTHERWISE APPROVED BY THE

DRAINAGE

THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR BLOCKED BY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY PROVISIONS FOR DRAINAGE.

WHERE CONSTRUCTION HAS DISTURBED EXISTING DITCHES, SWALES, OR OTHER DRAINAGE FACILITIES; THE CONTRACTOR SHALL RESTORE THEM TO THEIR GRADES AND DIMENSIONS WHICH EXISTED PRIOR TO THE BEGINNING OF CONSTRUCTION, UNLESS DIRECTED OTHERWISE.

DRAINAGE SHALL NOT BE REROUTED ONTO ADJACENT PROPERTIES NOR ALLOWED TO DRAIN ONTO ADJACENT PROPERTIES AT AN INCREASED RATE. AS A RESULT OF THE CONTRACTOR'S WORK.

ROAD PROJECTS

ADJUSTING STRUCTURES

WHERE CASTINGS FOR MANHOLES, CATCH BASINS, INLETS, VALVE BOXES, AND MONUMENT BOXES ARE TO BE ADJUSTED TO MEET A NEW PAVEMENT SURFACE ELEVATION, THE FINAL ADJUSTMENT SHALL NOT BE COMPLETED UNTIL ALL PAVEMENT COURSES HAVE BEEN PLACED EXCEPT THE FINAL COURSE. THE FINAL ADJUSTMENT SHALL BE COMPLETED JUST PRIOR TO PLACEMENT OF THE FINAL COURSE OF PAVEMENT.

THE MATERIALS AND PROCEDURES FOR ADJUSTING STRUCTURES SHALL MEET THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION OVER THE ROAD AND UTILITIES.

SUBGRADE PREPARATION

TOPSOIL, PEAT, AND ORGANIC MATERIAL SHALL BE EXCAVATED AND REMOVED.

SOFT AND YIELDING SOILS SHALL BE REMOVED OR DRIED IF THE RESULT OF EXCESSIVE MOISTURE CONTENT.

PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENT ON A SUBGRADE; THE SUBGRADE SHALL BE PROOF-ROLLED TO DETERMINE THE SUITABILITY OF THE SUBGRADE. THE CONTRACTOR SHALL DRIVE A HEAVY PIECE OF WHEELED CONSTRUCTION EQUIPMENT OVER THE SUBGRADE WHILE THE ENGINEER IS OBSERVING. THE CONSTRUCTION OF FILLS, SUBBASE, OR PAVEMENTS SHALL NOT PROCEED UNTIL THE SUBGRADE HAS BEEN DEMONSTRATED TO BE FREE OF SOFT AREAS.

THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE MOISTURE CONTENT OF SUBGRADE SOILS WITHIN A SUITABLE RANGE TO ALLOW FOR COMPACTION TO THE REQUIRED DENSITY. WHEN THE SOIL IS TOO DRY, THE CONTRACTOR SHALL ADD WATER. WHEN THE SOIL IS TOO WET, THE CONTRACTOR SHALL PROVIDE DRAINAGE OR AERATE THE SOIL.

THE SURFACE OF THE SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT, PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENTS.

CURB AND GUTTERS

THE CONTRACTOR SHALL DETERMINE THE LOCATION AND DIMENSIONS OF CURB OPENINGS FOR DRIVEWAYS. RAMPS, AND DRAINAGE STRUCTURES.

HOT MIX ASPHALT (HMA) PAVING

PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE SHALL BE SWEPT TO REMOVE ALL DIRT AND DEBRIS.

A BITUMINOUS BOND COAT SHALL BE APPLIED TO PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE AND ALLOWED TO CURE PRIOR TO CONSTRUCTING THE NEW PAVEMENT COURSE.

HMA PAVEMENT SHALL NOT BE PLACED WHEN THE SURFACE BEING OVERLAID IS WET. OR WHEN RAIN IS FORECAST OR THREATENING.

STORM SEWER CONSTRUCTION NOTES

DRAINAGE STRUCTURES SHALL BE CONSTRUCTED FROM PRECAST CONCRETE MANHOLE SECTIONS, MEETING ASTM C478.

SUMPS IN DRAINAGE STRUCTURES AND PIPELINES SHALL BE FREE OF SEDIMENT AND DEBRIS AT THE TIME OF ACCEPTANCE BY THE OWNER.

S.H.

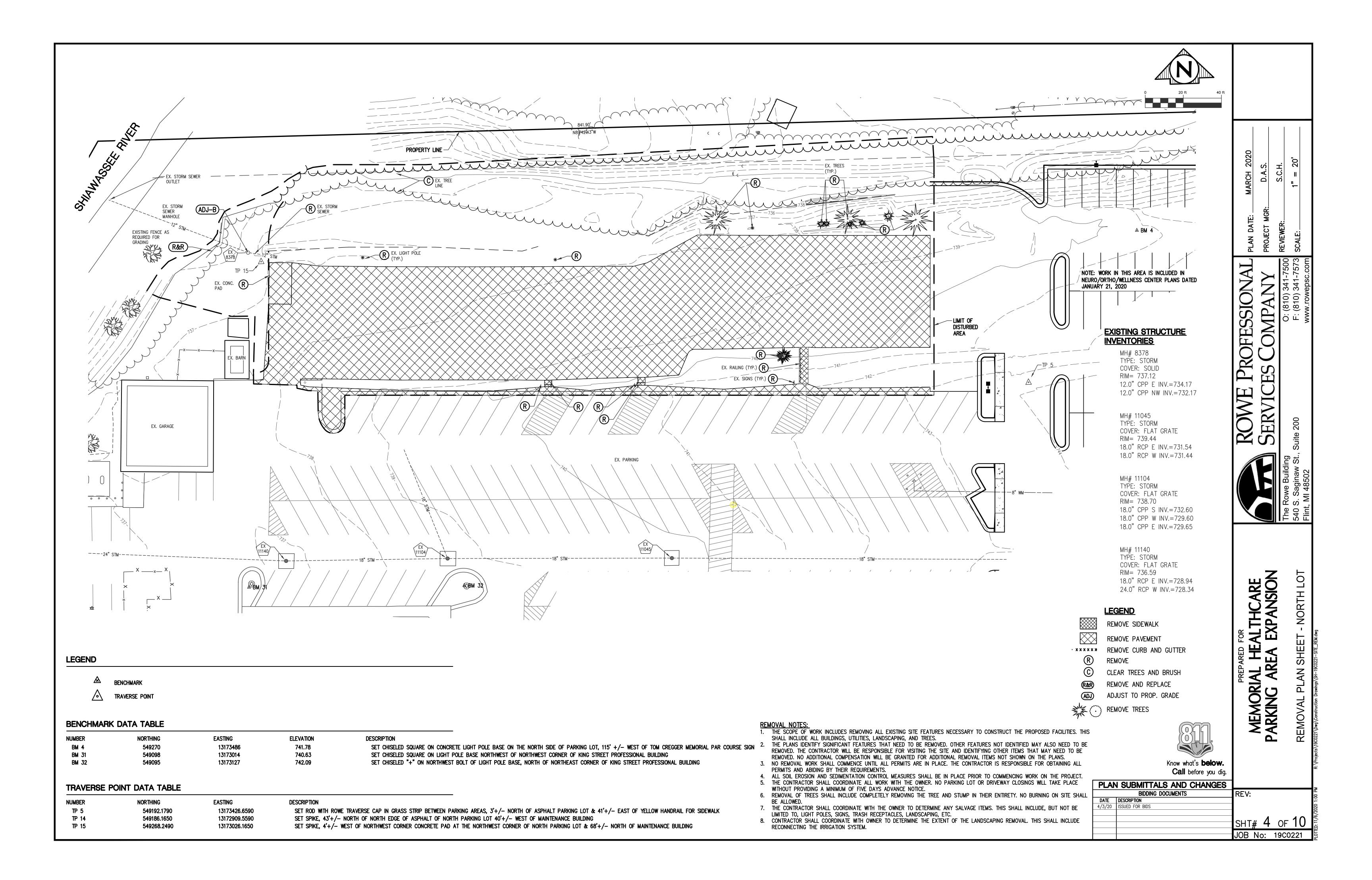
(810) (810) AP. ЮЩ Q ES SER

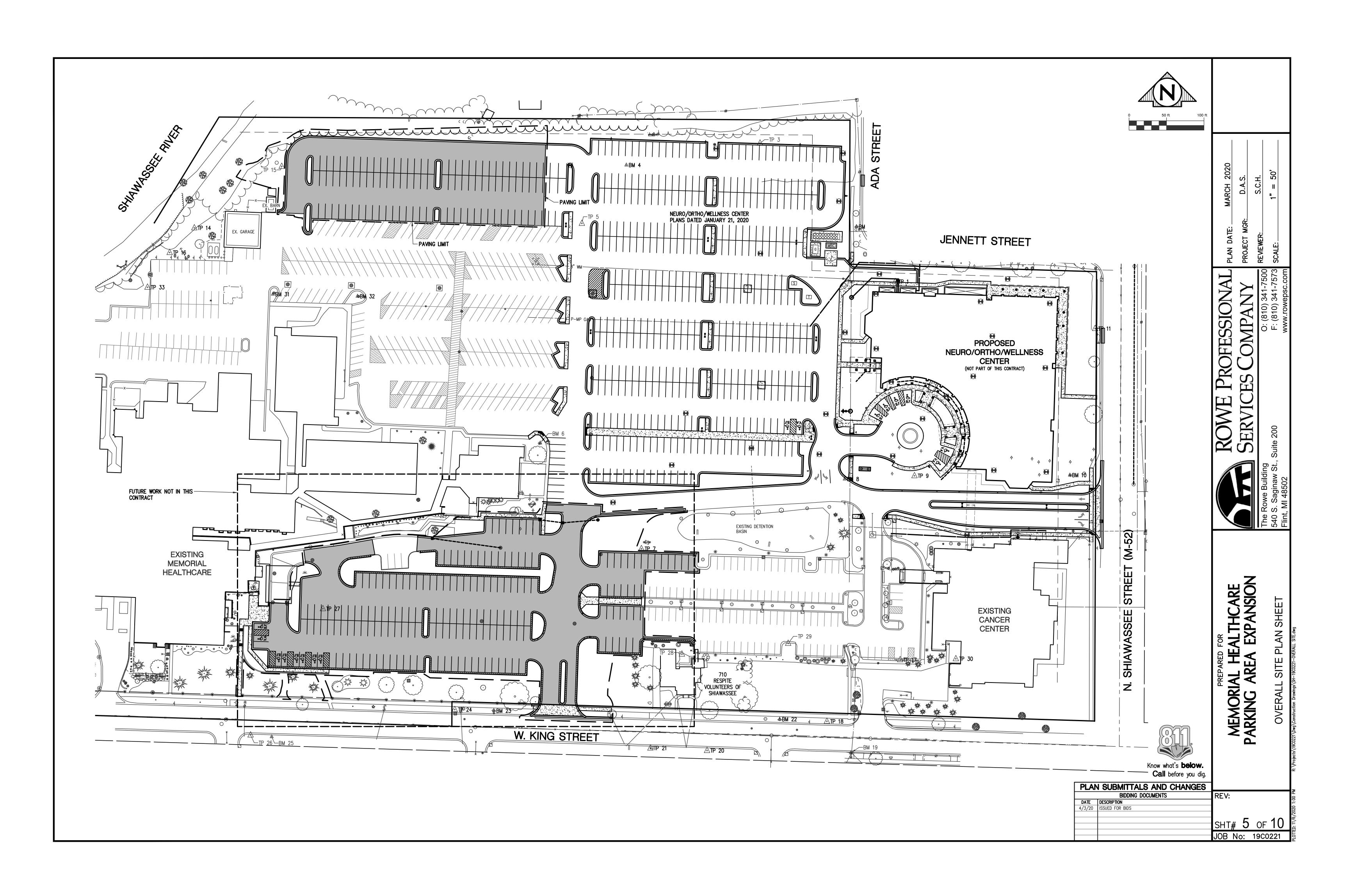
ALTHCARE EXPANSION MEMORIAL I

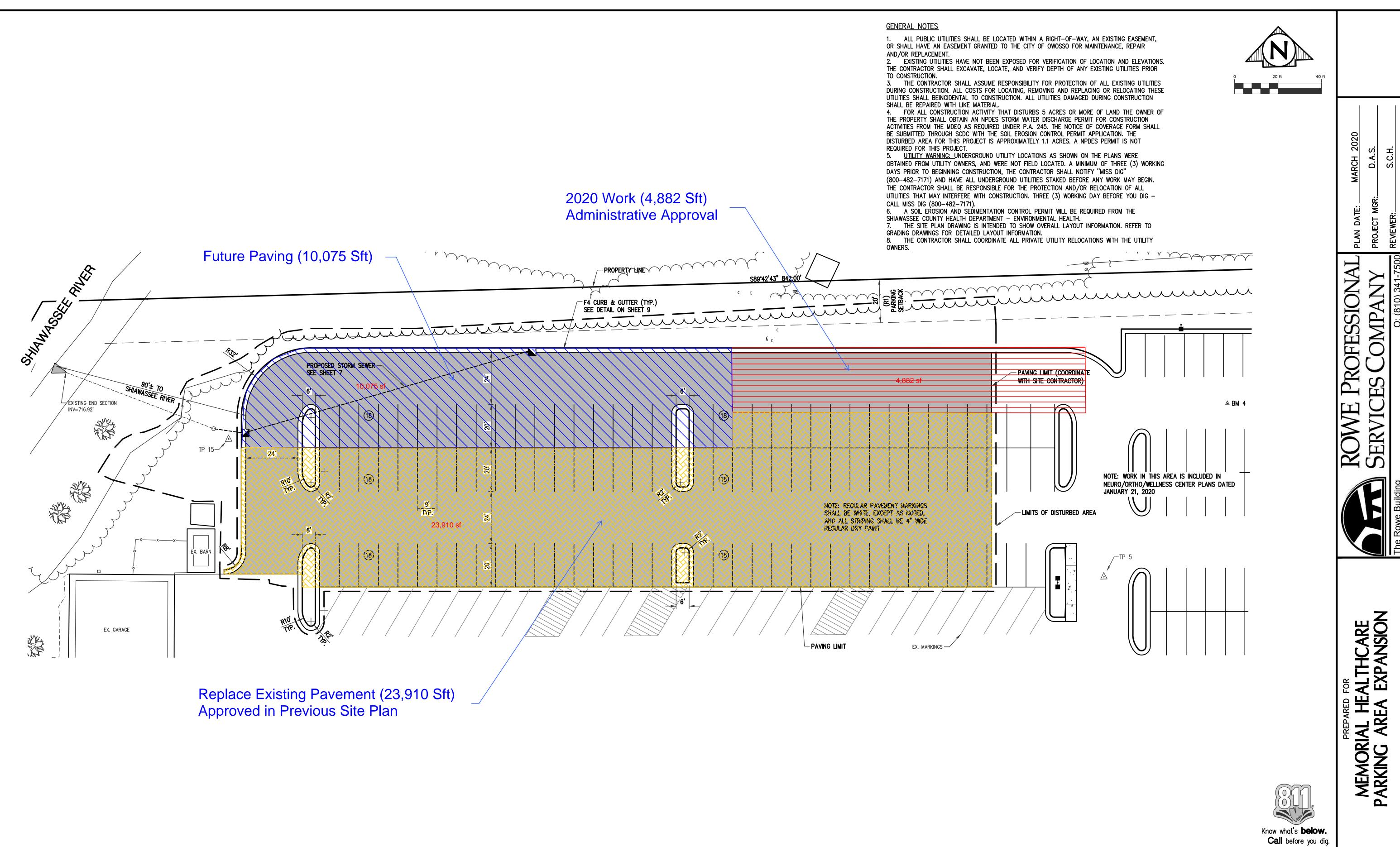
BIDDING DOCUMENTS DATE DESCRIPTION 4/3/20 ISSUED FOR BIDS

Know what's **below. Call** before you diq.

PLAN SUBMITTALS AND CHANGES REV: JOB No: 19C0221

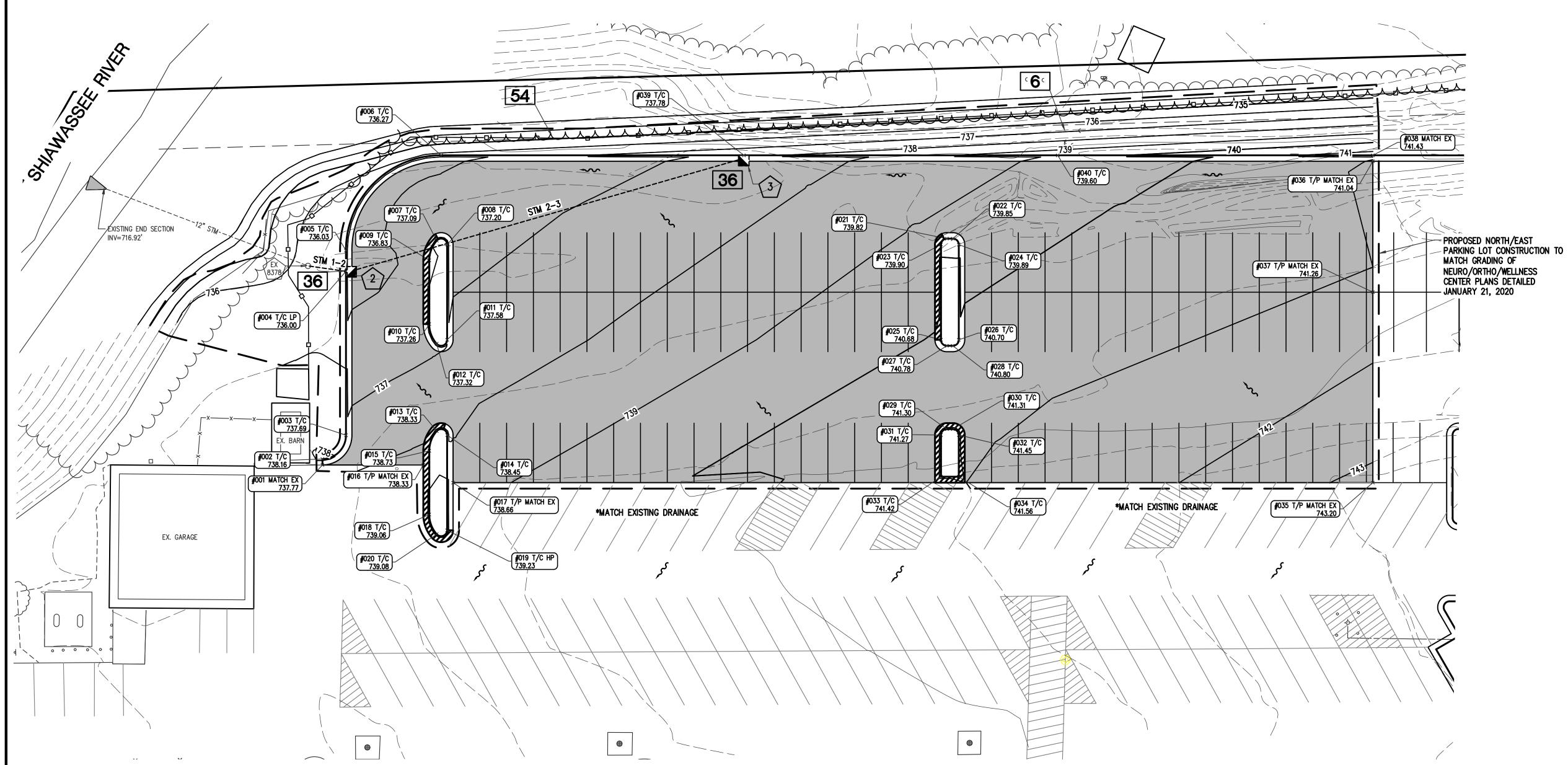








PLAN SUBMITTALS AND CHANGES
BIDDING DOCUMENTS REV: DATE DESCRIPTION
4/3/20 ISSUED FOR BIDS SHT# 6 OF 10 JOB No: 19C0221



DIAMETER TOTAL LENGTH SLOPE TRENCH DETAIL A (T.D. A) TRENCH DETAIL B (T.D. B) PIPE MATERIAL

0'

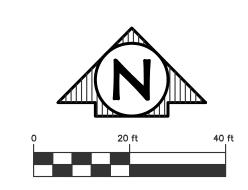
1.00%

0.50%

138'

14' SLCPP

138' SLCPP



MARCH 2020 D.A.S. S.C.H.

SERVICES

ALTHCARE EXPANSION

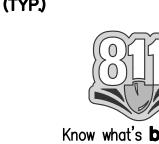
MEMORIAL HEA PARKING AREA E

GRADING POINTS

| POINT | DESCRIPTION | NORTHING | EASTING | ELEVATION

1 01111	DESORII IION	11011111110	LASTINO	
001	MATCH EX	549206.17	13173022.20	737.77
002	T/C	549208.17	13173022.25	738.16
003	T/C	549215.91	13173030.41	737.69
004	T/C LP	549270.97	13173032.16	736.00
005	T/C	549277.94	13173032.38	736.03
006	T/C	549308.91	13173065.38	736.27
007	T/C	549280.30	13173062.97	737.09
800	T/C	549278.86	13173066.43	737.20
009	T/C	549273.77	13173060.26	736.83
010	T/C	549252.36	13173059.58	737.26
011	T/C	549246.88	13173065.41	737.58
012	T/C	549245.67	13173061.87	737.32
013	T/C	549216.33	13173060.94	738.33
014	T/C	549214.90	13173064.40	738.45
015	T/C	549209.80	13173058.23	738.73
016	T/P MATCH EX	549205.09	13173056.08	738.33
017	T/P MATCH EX	549198.84	13173065.89	738.66
018	T/C	549188.39	13173057.55	739.06
019	T/C HP	549182.91	13173063.38	739.23
020	T/C	549181.70	13173059.84	739.08
021	T/C	549275.53	13173234.41	739.82
022	T/C	549275.47	13173236.41	739.85
023	T/C	549273.60	13173232.34	739.90
024	T/C	549273.41	13173238.34	739.89
025	T/C	549241.61	13173231.33	740.68
026	T/C	549241.42	13173237.33	740.70
027	T/C	549239.55	13173233.26	740.78
028	T/C	549239.49	13173235.26	740.80
029	T/C	549211.57	13173232.38	741.30
030	T/C	549211.50	13173234.37	741.31
031	T/C	549209.63	13173230.31	741.27
032	T/C	549209.44	13173236.31	741.45
033	T/C	549195.64	13173229.87	741.42
034	T/C	549195.45	13173235.87	741.56
035	T/P MATCH EX	549189.03	13173374.91	743.20
036	T/P MATCH EX	549296.98	13173378.34	741.04
037	T/P MATCH EX	549253.00	13173376.94	741.26
038	MATCH EX	549298.98	13173378.40	741.43
039	T/C	549305.68	13173167.09	737.78
040	T/C	549302.34	13173272.53	739.60

PROPOSED SPILL CURB (TYP.)



Know what's	pelo
Call befor	re you

	Call before you dig.	
PLAI	N SUBMITTALS AND CHANGES	
	BIDDING DOCUMENTS	REV:
DATE	DESCRIPTION	
4/3/20	ISSUED FOR BIDS	
		SHT# 7 OF 10
		JOB No: 19C0221

STRUCTURE NOTES: 1. RIM ELEVATIONS ARE BASED OFF TOP OF CURB ELEVATION

RIM ELEVATION

K T/C=736.00

STRUCT DIA.

COVER TYPE

SOIL	EROSION	CONTROL	KEY

6	SEEDING WITH MULCH AND/OR MATTING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLOTH OVER INLET
54	SILT FENCE	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.

PROPOSED STORM SEWER STRUCTURE TABLE

12" 732.64 W (PR) 12" 732.70 E (PR)

12" 732.50 E (PR) 12" 732.17 NW (EX)

K | T/C=737.78 | 12" 733.40 W (PR) | 549304.69 | 13173167.03

NORTHING

549270.79 | 13173033.15

549273.19 | 13173019.47

EASTING

PIPE Number

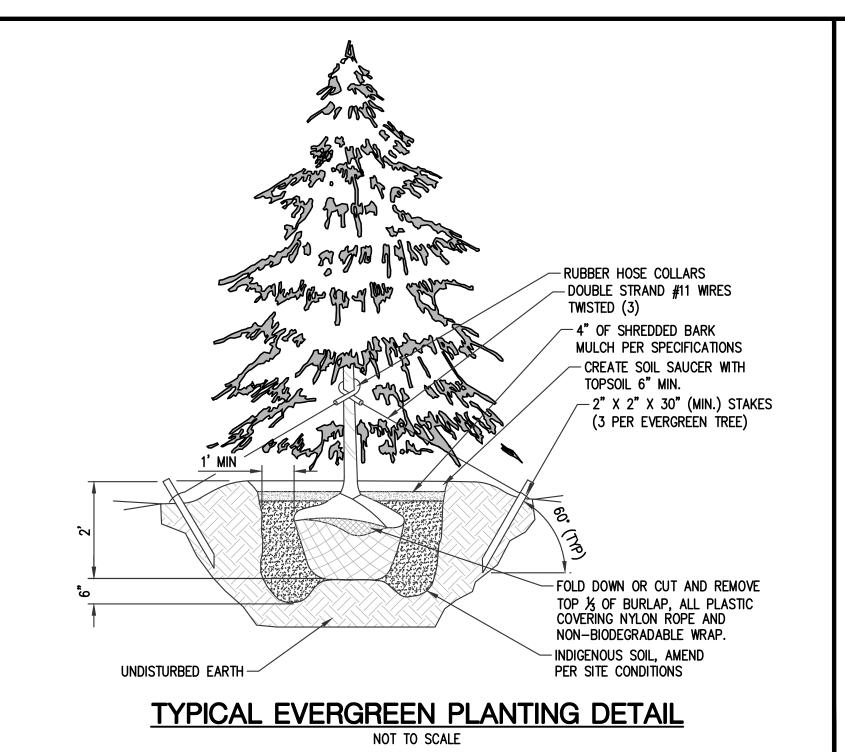
STM 1-2

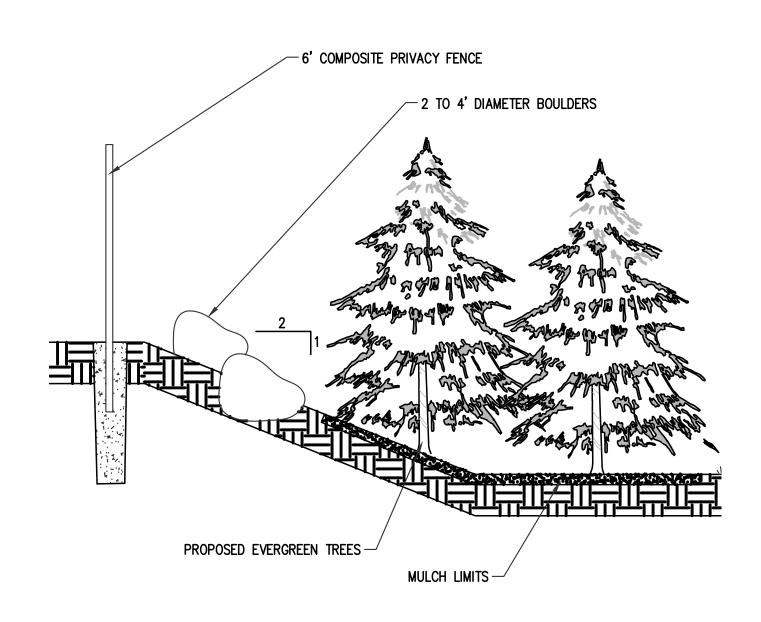
STM 2-3

12**"**

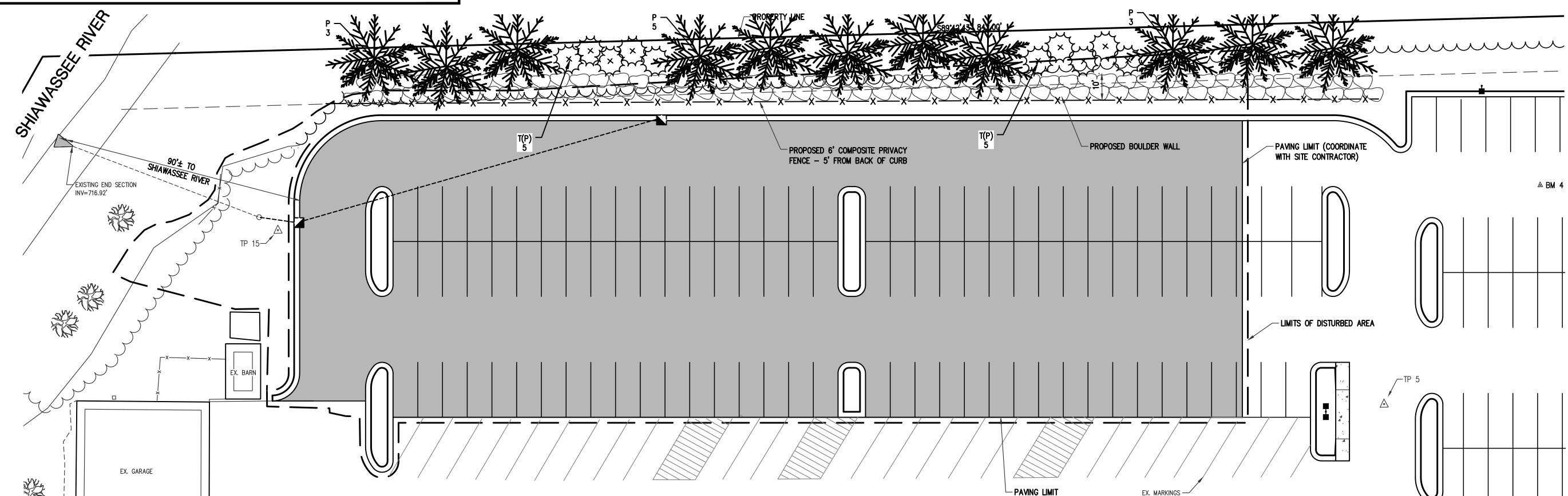
PROPOSED STORM SEWER PIPE TABLE

T/P - TOP OF PAVED SURFACE
T/C - TOP OF CURB
MATCH EX. - EXISTING GRADE
LP - LOW POINT
HP - HIGH POINT





TYPICAL CROSS-SECTION DETAIL



	TREE SCHEDULE					
SYM	KEY	SIZE	BOTANICAL NAME	COMMON NAME	NOTES	QUANTITY
*	Р	6' HT.	PICEA ABIES	NORWAY SPRUCE	B & B	11
) × \	T(P)	6' HT.	THUJA PLICATA 'GREEN GIANT'	GREEN GIANT WESTERN ARBORVITAE	B & B	10

LANDSCAPE NOTES

1. ALL LANDSCAPE MATERIALS SHALL BE HEALTHY AT THE TIME OF INSTALLATION.

2. CONTRACTOR SHALL SUPPLY FINISH GRADE AND EXCAVATE AS NECESSARY TO SUPPLY A MINIMUM 6" TOPSOIL DEPTH IN ALL PLANTING BEDS AND 4" TOPSOIL IN ALL LAWN AREAS UNLESS NOTED OTHERWISE.

3. ALL TOPSOIL SHALL BE IMPORTED AND SCREENED. EXISTING TOPSOIL MAY ONLY BE REUSED IF APPROVED BY THE

OWNER'S REPRESENTATIVE. 4. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS TO BE IN A HEALTHY CONDITION FOR A PERIOD OF TWO YEARS FOLLOWING ACCEPTANCE. CONTRACTOR SHALL REPLACE WITHOUT COST TO THE OWNER ANY DEAD OR

UNACCEPTABLE PLANTS, AS DETERMINED BY THE OWNER'S REPRESENTATIVE DURING AND AT THE END OF THE GUARANTEE PERIOD.

5. ALL PLANTINGS SHALL CONFORM TO ANSI 260.1 OR CURRENT EDITION.

6. AREAS SPECIFIED WITH PLANT MATERIAL SHALL BE FINE GRADED AND SEEDED FOR TURF ESTABLISHMENT. 7. ALL EXCESS EXCAVATED MATERIALS AND DEBRIS WHICH ARE NOT ACCEPTED FOR DISPOSAL ON SITE BY THE

OWNER SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF LEGALLY OFF SITE. 8. ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESS WATER FROM STANDING ON LAWN

AREAS OR AROUND TREES & SHRUBS.

9. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY MATERIAL NOT MEETING SPECIFICATIONS. 10. THE CONTRACTOR SHALL PLACE 4" OF SHREDDED BARK MULCH IN LANDSCAPE BEDS FOR SPECIFICATIONS.

11. STEEL LANDSCAPE EDGING IS TO BE INSTALLED ALONG PLANTING BED EDGES WHERE MULCH AND LAWN MEET. 12. IRRIGATION WILL BE PROVIDED THROUGHOUT THE SITE TO ENSURE THE HEALTH OF THE PLANTINGS SHOWN.

13. ALL LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY ENVIRONMENT. THE OWNER SHALL MAINTAIN THE LANDSCAPING USING OWN STAFF OR CONTRACT WITH AN OUTSIDE LANDSCAPING SERVICE.

Know what's **below. Call** before you dig.

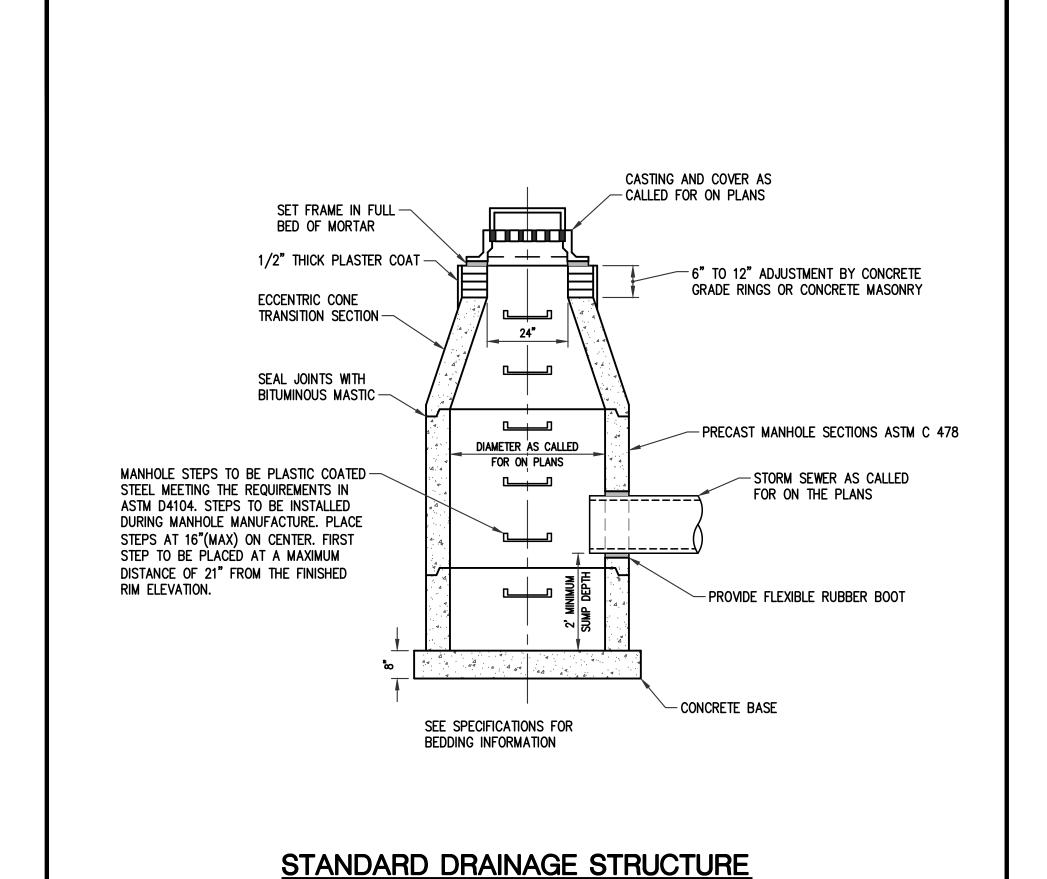
	Can bololo you dig.						
PLAN SUBMITTALS AND CHANGES							
	BIDDING DOCUMENTS	F					
DATE	DESCRIPTION						
., -,	ISSUED FOR BIDS						
11/6/2020	LANDSCAPE PLAN						
		ļ					
	1						

MEMORIAL HEAPARKING AREA I REV:

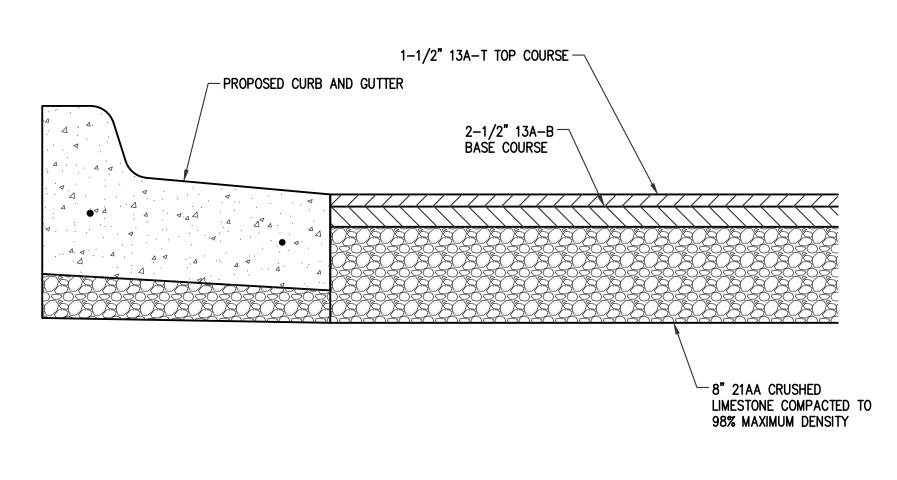
JOB No: 19C0221

SERVIC

ALTHCARE EXPANSION

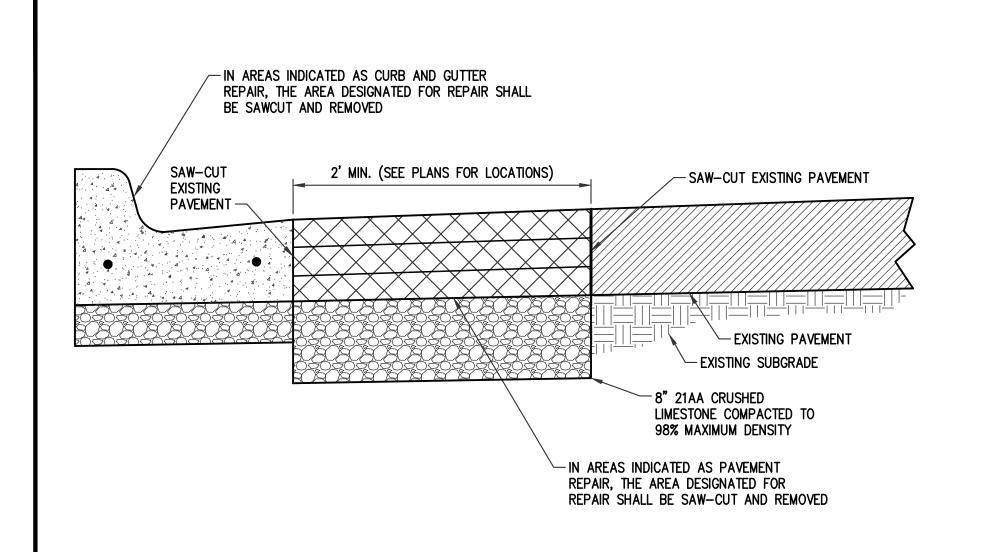


NOT TO SCALE



PARKING LOT PAVEMENT DETAIL NOT TO SCALE

HMA APPLICATION CHART											
IDENT NO	ITEM	HMA PAVEMENT	RATE OF APPLICATION	ESTIMATED THICKNESS	PERFORMANCE GRADE	COMMENTS					
13A-T	HMA, 13A, TOP	HMA, 13A	165#/SYD	1.5"	58-28	TOP COURSE (AWI = 220 MINIMUM)					
13A-B	HMA, 13A, BASE	HMA, 13A	275#/SYD	2.5"	58-28	BASE COURSE					
_	HMA BOND COAT	_	0-0.10 GAL	1	1	NOT A PAY ITEM; FOR INFORMATION ONLY					

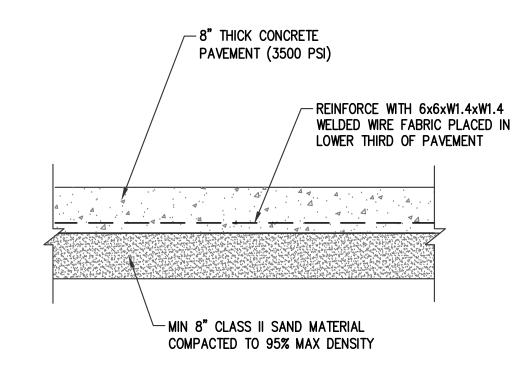


NOTES:

1. THIS DETAIL AS SHOWN IS FOR CROSS SECTION REFERENCE.

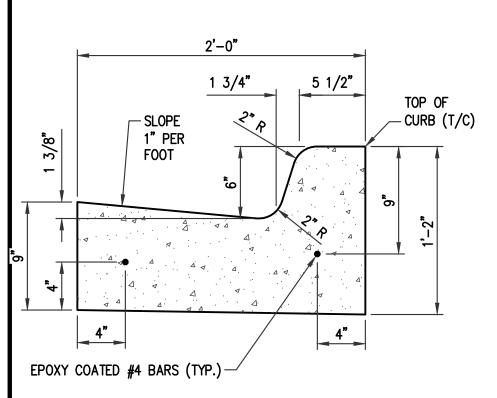
HMA PAVEMENT/CURB AND GUTTER REPAIR DETAIL

NOT TO SCALE

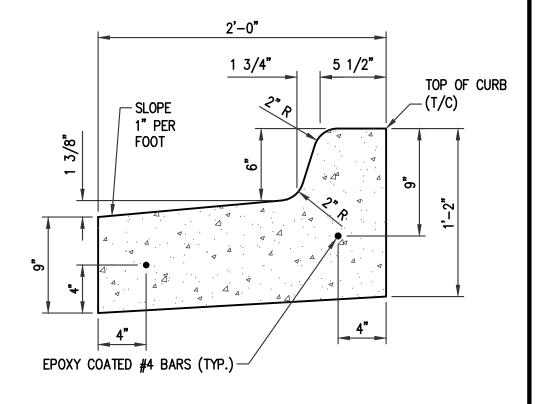


CONCRETE PAVEMENT CROSS SECTION

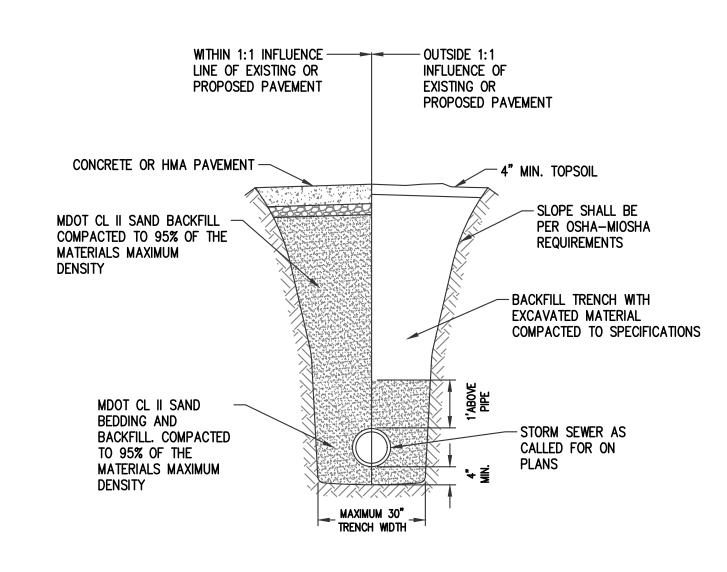
NOT TO SCALE



CONCRETE
CURB AND GUTTER
DETAIL F4, CATCH
NOT TO SCALE



CONCRETE
CURB AND GUTTER
DET F4, SPILL
NOT TO SCALE



STORM SEWER TRENCH DETAIL

NOT TO SCALE



Know what's **below. Call** before you dig.

	j j.	
PLA	SUBMITTALS AND CHANGES	
	BIDDING DOCUMENTS	REV:
DATE	DESCRIPTION	
4/3/20	ISSUED FOR BIDS	
		1 0 10
		SHT# 9 OF 10
		JOB No: 19C0221

MEMORIAL HEALTHCARE PARKING AREA EXPANSION

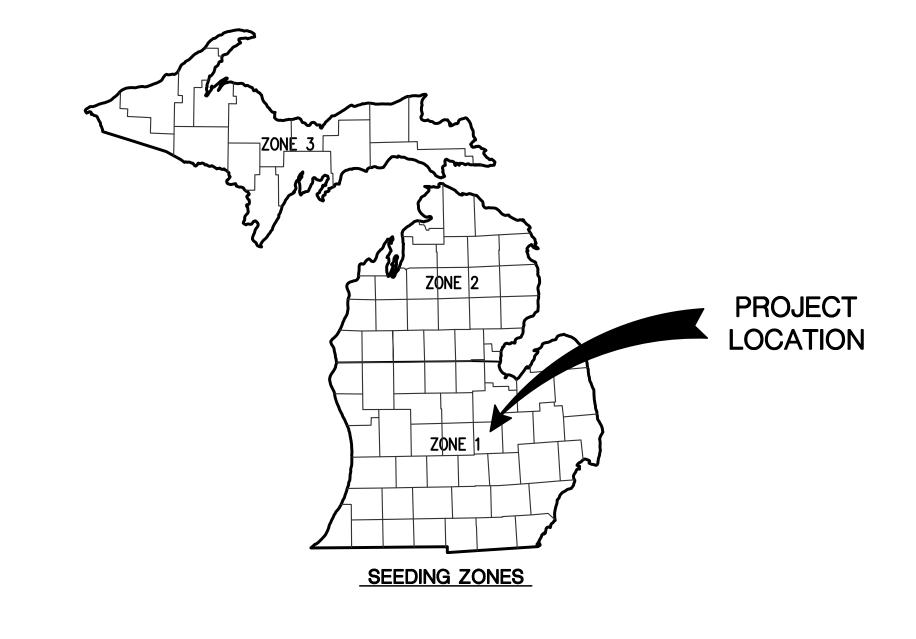
MARCH 2020 D.A.S.

ES

SERVIC

MICHIGAN UNIFIED KEYING SYSTEM FROSION SEDIMENTATION CONTROL MEASURES

SOIL E	HOSION	$\frac{\mathcal{O}}{\mathcal{O}}$		<u>川</u>			<u> </u>	A			ONIROL			A;				<u>5</u>
INDICATES APPLICABILITY TO ONE OR MORE OF TH	' OF A SPECIFIC CONTROL MEASURE HE SEVEN PROBLEM AREAS	SLOPES	STREAMS AND WATERWAYS	SURFACE DRAINAGEWAYS	ENCLOSED DRAINAGE (Inlet & Outfall Control)	LARGE FLAT SURFACE AREAS	BORROW AND STOCKPILE AREAS	ADJACENT PROPERTIES				SLOPES	STREAMS AND WATERWAYS	SURFACE DRAINAGEWAYS	ENCLOSED DRAINAGE (Inlet & Outfall Control)	LARGE FLAT SURFACE AREAS	BORROW AND STOCKPILE AREAS	ADJACENT PROPERTIES
KEY DETAIL	CHARACTERISTICS	Α	В	C	D	Ε	F	G	KEY	DETAIL	CHARACTERISTICS	Α	В	C	D	E	F	G
STRIPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION. STOCKPILE SHOULD BE TEMPORARILY SEEDED.	*				*	*		28	DROP SPILLWAY	SLOWS VELOCITY OF FLOW, REDUCING EROSIVE CAPACITY		*	*				
2 SELECTIVE GRADING & SHAPING	WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPES EASE EROSION PROBLEMS.	*				*	*	*	29	PIPE DROP	REDUCES RUNOFF VELOCITY REMOVES SEDIMENT AND TURBIDITY CAN BE DESIGNED TO HANDLE LARGE VOLUMES OF FLOW			*				
GRUBBING OMITTED	SAVES COST OF GRUBBING, PROVIDES NEW SPROUTS, RETAINS EXISTING ROOT MAT SYSTEM, REDUCES WIND FALL AT NEW FOREST EDGE DISCOURAGES EQUIPMENT ENTRANCE	*				*		*	30	PIPE SPILLWAY	REMOVES SEDIMENT AND TURBIDITY FROM RUNOFF MAY BE PART OF PERMANENT EROSION CONTROL PLAN			*				
VEGETATIVE STABILIZATION	MAY UTILIZE A VARIETY OF PLANT MATERIAL STABILIZES SOIL SLOWS RUNOFF VELOCITY FILTERS SEDIMENT FROM RUNOFF	*	*	*		*	*	*	31	ENERGY DISSIPATER	SLOWS RUNOFF VELOCITY TO NON-EROSIVE LEVEL PERMITS SEDIMENT COLLECTION FROM RUNOFF	*		*	*			
5	INEXPENSIVE AND VERY EFFECTIVE STABILIZES SOIL, THUS MINIMIZING EROSION PERMITS RUNOFF TO INFILTRATE SOIL, REDUCING RUNOFF VOLUME SHOULD INCLUDE PREPARED TOPSOIL BED	*		*		*	*	*	32	LEVEL SPREADER	CONVERTS COLLECTED CHANNEL OR PIPE FLOW BACK TO SHEET FLOW AVOIDS CHANNEL EASEMENTS AND CONSTRUCTION OFF PROJECT SITE SIMPLE TO CONSTRUCT			*				
SEEDING WITH MULCH AND/OR MATTING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED	*		*			*	*	33	SEDIMENTATION TRAP	MAY BE CONSTRUCTED OF A VARIETY OF MATERIALS TRAPS SEDIMENT AND REDUCES VELOCITY OF FLOW CAN BE CLEANED AND EXPANDED AS NEEDED		*	*				
HYDRO-SEEDING	EFFECTIVE ON LARGE AREAS MULCH TACKING ACENT USED TO PROVIDE IMMEDIATE PROTECTION UNTIL GRASS IS ROOTED SHOULD INCLUDE PREPARED TOPSOIL BED	*				*	*	*	34	SEDIMENT BASIN	TRAPS SEDIMENT RELEASES RUNOFF AT NON-EROSIVE RATES CONTROLS RUNOFF AT SYSTEM OUTLETS CAN BE VISUAL AMENITIES		*	*	*			
SODDING	PROVIDES IMMEDIATE PROTECTION CAN BE USED ON STEEP SLOPES WHERE SEED MAY BE DIFFICULT TO ESTABLISH EASY TO PLACE; MAY BE REPAIRED IF DAMAGED SHOULD INCLUDE PREPARED TOPSOIL BED	*		*		*	*	*	35	STORM SEWER	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF CONDUCTS RUNOFF TO MUNICIPAL SEWER SYSTEM OR STABILIZED OUTFALL LOCATION USE CATCH BASINS TO COLLECT SEDIMENT					*		*
VEGETATIVE BUFFER STRIP	SLOWS RUNOFF VELOCITY FILTERS SEDIMENT FROM RUNOFF REDUCES VOLUME OF RUNOFF ON SLOPES	*	*					*	36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLOTH OVER INLET					*		*
MULCHING	USED ALONE TO PROTECT EXPOSED AREAS FOR SHORT PERIODS PROTECTS SOIL FROM IMPACT OF FALLING RAIN PRESERVES SOIL MOISTURE AND PROTECTS GERMINATING SEED FROM TEMPERATURE EXTREMES	*				*	*		37	SOD FILTER	INEXPENSIVE AND EASY TO CONSTRUCT PROVIDES IMMEDIATE PROTECTION PROTECTS AREAS AROUND INLETS FROM EROSION				*			
ROUGHENED SURFACE	REDUCES VELOCITY AND INCREASES INFILTRATION RATES COLLECTS SEDIMENT HOLDS WATER, SEED, AND MULCH BETTER THAN SMOOTH SURFACES	*				*			38	STRAW BALE FILTER	INEXPENSIVE AND EASY TO CONSTRUCT CAN BE LOCATED AS NECESSARY TO COLLECT SEDIMENT MAY BE USED IN CONJUNCTION WITH SNOW FENCE FOR ADDED STABILITY				*			*
12	HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION	*				*			39	ROCK FILTER	CAN UTILIZE MATERIAL FOUND ON SITE EASY TO CONSTRUCT FILTERS SEDIMENT FROM RUNOFF				*			*
RIPRAP, RUBBLE, GABIONS	USED WHERE VEGETATION IS NOT EASILY ESTABLISHED EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS PERMITS RUNOFF TO INFILTRATE SOIL DISSIPATES ENERGY FLOW AT SYSTEM OUTLETS	*	*	*					40	INLET SEDIMENT TRAP	EASY TO SHAPE COLLECTS SEDIMENT MAY BE CLEANED AND EXPANDED AS NEEDED				*			
14	STABILIZES SOIL SURFACE, THUS MINIMIZING EROSION PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS					*			41	STONE AND ROCK CROSSING	MAY BE ROCK OR CLEAN RUBBLE MINIMIZES STREAM TURBIDITY INEXPENSIVE MAY ALSO SERVE AS DITCH CHECK OR SEDIMENT TRAP		*					
15	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VOLUME AND VELOCITY IRREGULAR SURFACE WILL HELP SLOW VELOCITY	*				*			42	TEMPORARY CULVERT	ELIMINATES STREAM TURBULENCE AND TURBIDITY PROVIDES UNOBSTRUCTED PASSAGE FOR FISH AND OTHER WATER LIFE CAPACITY FOR NORMAL FLOW CAN BE PROVIDED WITH STORM WATER FLOWING OVER ROADWAY		*					
16	KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE COLLECTS AND CONDUCTS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED DRAINAGEWAY					*		*	43	CULVERT SEDIMENT TRAP	EASY TO INSTALL AT INLET KEEPS CULVERT CLEAN AND FREE FLOWING MAY BE CONSTRUCTED OF LUMBER OR LOGS		*					*
BENCHES	REDUCES RUNOFF VELOCITY BY REDUCING EFFECTIVE SLOPE LENGTH COLLECTS SEDIMENT PROVIDES ACCESS TO SLOPES FOR SEEDING, MULCHING AND MAINTENANCE	*					*		44	CULVERT SEDIMENT TRAP	DEFLECTS CURRENTS AWAY FROM STREAMBANK AREAS		*					
18	DIVERTS WATER FROM VULNERABLE AREAS COLLECTS AND DIRECTS WATER TO PREPARED DRAINAGEWAYS MAY BE PLACED AS PART OF NORMAL CONSTRUCTION OPERATION	*					*	*	45	TEMP. STREAM CHANNEL CHANGE	NEW CHANNEL KEEPS NORMAL FLOWS AWAY FROM CONSTRUCTION REQUIRES STATE PERMIT		*					
19	COLLECTS AND DIVERTS WATER TO REDUCE EROSION POTENTIAL MAY BE INCORPORATED IN PERMANENT PROJECT DRAINAGE SYSTEMS	*					*	*	46	SHEET PILINGS	PROTECTS ERODIBLE BANK AREAS FROM STREAM CURRENTS DURING CONSTRUCTION MINIMAL DISRUPTION WHEN REMOVED		*					
20 BERM & DITCH	DIVERTS WATER TO A PREPARED DRAINAGEWAY MAY BE USED AT INTERVALS ACROSS SLOPE FACE TO REDUCE EFFECTIVE SLOPE LENGTH	*					*	*	47	COFFERDAM	WORK CAN BE CONTINUED DURING MOST ANTICIPATED STREAM CONDITIONS CLEAR WATER CAN BE PUMPED DIRECTLY BACK INTO STREAM		*					
FILTER BERM	CONSTRUCTED OF GRAVEL OR STONE INTERCEPTS AND DIVERTS RUNOFF TO STABILIZED AREAS OR PREPARED DRAINAGE SYSTEMS SLOWS RUNOFF AND COLLECTS SEDIMENT	*	*					*	48	CONSTRUCTION DAM	PERMITS WORK TO CONTINUE DURING NORMAL STREAM STAGES CONTROLLED FLOODING CAN BE ACCOMPLISHED DURING PERIODS OF INACTIVITY		*					
22 BRUSH FILTER	USES SLASH AND LOGS FROM CLEARING OPERATIONS CAN BE COVERED AND SEEDED RATHER THAN REMOVED ELIMINATES NEED FOR BURNING OR REMOVAL OF MATERIAL FROM SITE							*	49	CHECK DAMS	REDUCES FLOW VELOCITY CATCHES SEDIMENT CAN BE CONSTRUCTED OF LOGS, STRAW, HAY ROCK, LUMBER, MASONRY, OR SAND BAGS		*	*				
BARE CHANNEL	LEAST EXPENSIVE FORM OF DRAINAGEWAY MAY BE USED ONLY WHERE GRADIENT IS VERY LOW AND WITH SOILS OF MINIMUM EROSION POTENTIAL			*					50	WEIR	CONTROLS SEDIMENTATION IN LARGE STREAMS CAUSES MINIMAL TURBIDITY		*	*				
24	MUCH MORE STABLE FORM OF DRAINAGEWAY THAN BARE CHANNEL GRASS TENDS TO SLOW RUNOFF AND FILTER OUT SEDIMENT USED WHERE BARE CHANNEL WOULD BE ERODED			*					51	RETAINING WALL	REDUCES GRADIENT WHERE SLOPES ARE EXTREMELY STEEP PERMITS RETENTION OF EXISTING VEGETATION, KEEPING SOIL STABLE IN CRITICAL AREAS MINIMIZES MAINTENANCE	*						*
SLOPE DRAIN (SURFACE PIPE)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA USUALLY PERMANENT CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES	*							52	SEEPAGE CONTROL	PREVENTS PIPING AND SOIL SLIPPAGE ON CUT SLOPES	*						*
26	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA USUALLY PERMANENT CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES	*							53	WINDBREAK	MINIMIZES WIND EROSION MAY BE SNOW FENCE					*		
27 SLOPE DRAIN (SUBSURFACE PIPE)	PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA USUALLY PERMANENT CAN BE CONSTRUCTED AS GRADING PROGRESSES	*							54	SILT FENCE	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.			*				*



PERMANENT SEEDING GUIDE									
	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	1	
IRRIGATED AND/OR MULCH								70NF 1	
WITHOUT IRRIGATION OR MULCH	$-\Box$				П			ZONE 1	

SOIL EROSION & SEDIMENTATION CONTROL

DEVELOPER/PROPERTY OWNER SHALL SUBMIT A DETAILED EROSION CONTROL PLAN AND OBTAIN A SOIL EROSION & SEDIMENTATION CONTROL PERMIT PRIOR TO ANY EARTH CHANGES. CONSTRUCTION OPERATION SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING AND/OR GRADING BORROW AND FILL DISPOSAL AREAS WILL BE SELECTED AND APPROVED AT TIME OF PLAN REVIEW. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS

THAT PROMOTE EROSION. 5. CLEANUP WILL BE DONE IN A MANNER TO INSURE THAT EROSION CONTROL MEASURES ARE NOT 6. THE PROJECT WILL CONTINUALLY BE INSPECTED FOR SOIL EROSION AND SEDIMENT CONTROL COMPLIANCE. DEFICIENCIES WILL BE CORRECTED BY THE DEVELOPER WITHIN 24 HOURS. TEMPORARY EROSION CONTROL MEASURES SHALL BE COMPLETELY REMOVED BY THE DEVELOPER UPON ESTABLISHMENT OF PERMANENT CONTROL MEASURES.

ALL TEMPORARY SOIL EROSION CONTROL MEASURES MUST BE REMOVED FROM ROAD RIGHT-OF-WAY AREAS PRIOR TO ACCEPTANCE OF STREETS FOR ROUTINE MAINTENANCE. VEGETATION MUST BE ACCEPTABLY ESTABLISHED PRIOR TO FINAL RELEASE OF THE CONSTRUCTION GUARANTEE BY THE DESIGNATED SOIL EROSION SEDIMENTATION CONTROL AGENT.

TEMPORARY SEEDING GUIDE										
<u>ZONE 1</u>										
TYPE OF SEED	APR	MAY	JUN	JUL	ΑU	IG	SEP	00	CT	
SPRING OATS/BARLEY OR DOMESTIC RYEGRASS						15TH				
SUDANGRASS										
RYE OR PERENNIAL RYE										
WHEAT									j	

STREAM CROSSING NOTES

- 1. CONSTRUCTION OF STREAM CROSSINGS SHALL BE SUBJECT TO THE SPECIFICATIONS FOR PROTECTION OF NATURAL RESOURCES AT UTILITY CROSSINGS AS GIVEN IN THE ADMINISTRATIVE RULES FOR ACT 346(RULES
- 2. A SILTATION BARRIER SHALL BE CONSTRUCTED IMMEDIATELY DOWNSTREAM OF THE CONSTRUCTION SITE PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. (SEE MICHIGAN UNIFIED KEYING SYSTEM FOR SPECIFIED BARRIER) THE SILTATION BARRIER SHALL BE MAINTAINED IN GOOD WORKING ORDER THROUGHOUT THE DURATION OF THE PROJECT.
- 3. BACKFILL SHALL CONSIST OF INERT MATERIALS WHICH WILL NOT CAUSE SILTATION NOR CONTAIN SOLUBLE CHEMICALS OR ORGANIC MATTER WHICH IS BIODEGRADABLE. ALL FILL SHALL BE CONTAINED IN SUCH A MANNER SO AS NOT TO ERODE INTO ANY WATERCOURSE. 4. ALL RAW BANKS SHALL BE STABILIZED WITH RIPRAP TO THREE FEET ABOVE THE ORDINARY HIGH

WATERMARK, THEN SEEDED, FERTILIZED AND MULCHED, OR SODDED TO PREVENT EROSION.

- 5. UPON PROJECT COMPLETION THE EXCESS SPOILS SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED upland site. 6. SILTATION BARRIER MAY BE REMOVED UPON PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.

SUI EB	POSION /	2EDIM		TION	COA	ITDA	1					
SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE												
CONSTRUCTION SEQUENCE	JA	N FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
STRIP & STOCKPILE TOPSOIL												
ROUGH GRADE SEDIMENT CONTROL												
TEMP. CONTROL MEASURES												
STORM FACILITIES												
TEMP. CONSTRUCTION ROADS												
SITE CONSTRUCTION												
PERM. CONTROL MEASURES												
TILLION AD ADMIA		_	$\overline{}$									

CONSTRUCTION SEQUENCE

- EXCAVATION AND STOCKPILING OF SOIL.

 IMPLEMENTATION OF TEMPORARY EROSION CONTROL MEASURES; SELECTIVE GRADING, DIVERSIONS AS REQUIRED IN FIELD, PROTECTION OF STORM SEWER FACILITIES. PERIODIC MAINTENANCE OF AFFECTED EROSION CONTROL MEASURES. 4. PERMANENT MEASURES; FINAL GRADING, SEEDING AND MULCHING.
 - Know what's **below**. Call before you did

FINISH GRADING

PLAN	N SUBMITTALS	S AND CHANGES
	BIDDING DO	CUMENTS
DATE	DESCRIPTION	
4/3/20	ISSUED FOR BIDS	

AN SUBMITTALS AND CHANGES								
	BIDDING DOCUMENTS	R						
E	DESCRIPTION							
20	ISSUED FOR BIDS							
		5						

JOB No: 19C0221

ALTHCARE EXPANSION MEMORIAL HE PARKING AREA

From: sprague cibplanning.com

To: Tanya S. Buckelew; Nathaniel R. Henne; Bradley Hissong; Glenn M. Chinavare; Randy J. Chesney; Clayton R.

Wehner; Matthew B. Harvey

Subject: RE: Hospital Parking Lot Reviews

Date: Wednesday, November 11, 2020 4:34:44 PM

Tanya,

The plans provided (for the existing parking area and additional 5,000 sf only) are in compliance with the zoning code (9x20 stalls and 24' aisle). I am approving the plan review for conformance with zoning requirements.

Justin Sprague Vice President



17195 Silver Parkway, #309 Fenton, Michigan 48430 810-919-2901 sprague@cibplanning.com

CONFIDENTIALITY NOTICE: This email message and any accompanying data or files is confidential and may contain privileged information intended only for the named recipient(s). If you are not the intended recipient(s), you are hereby notified that the dissemination, distribution, and or copying of this message is strictly prohibited. If you receive this message in error, or are not the named recipient(s), please notify the sender at the email address above, delete this email from your computer, and destroy any copies in any form immediately. Receipt by anyone other than the named recipient(s) is not a waiver of any attorney-client, work product, or other applicable privilege.