# 340 DEPOT STREET

# CITY OF ANN ARBOR, WASHTENAW, MICHIGAN PRELIMINARY PLANNED UNIT DEVELOPMENT

## **OWNER**

MARK PFAFF 340 DEPOT ST. ANN ARBOR, MICHIGAN 48104

## ENGINEER/SURVEY/LANDSCAPE ARCH.

3815 PLAZA DR. ANN ARBOR, MI 48108 CONTACT: THOMAS J. COVERT 734-995-0200

## **ARCHITECT**

HOBBS & BLACK ARCHITECTS 100 N. STATE STREET ANN ARBOR, MI 48104 PH: (734) 663-4189 ATTN: DÁVID NIMS

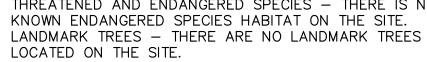
## **NOTES**

- 1. PROJECT NARRATIVE AND REQUIRED STATEMENTS LOCATED WITHIN THE ARCHITECTURAL PLAN SET.
- RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND DETAILS.
- 3. SIDEWALKS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY SHALL MEET ALL REQUIREMENTS AND GUIDELINES AS SET FORTH IN THE ADA STANDARDS FOR ACCESSIBLE DESIGN. SIDEWALK AND CURB RAMP GRADES WILL BE REVIEWED DURING CONSTRUCTION PLAN SUBMITTALS.
- 4. ALL SIDEWALKS SHALL BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME. PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE, ALL EXISTING SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.
- 5. PAVEMENT MARKINGS DISTURBED DUE TO PAVEMENT CUTS OR CONSTRUCTION RELATED ACTIVITIES SHALL BE REPLACED. REPLACEMENT DURING CONSTRUCTION MAY BE CONSIDERED TEMPORARY, WITH FINAL PAVEMENT MARKING RESTORATION TO OCCUR AT THE END OF THE PROJECT.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING PUBLIC ROAD PAVEMENT. DAMAGE TO THE PUBLIC ROAD PAVEMENT DURING CONSTRUCTION MAY NECESSITATE MILLING AND RESURFACING OF THE DAMAGED
- 7. SIGN RE-USE OR RELOCATION INCLUDES THE INSTALLATION OF EXISTING SIGN ON A NEW POST.

## NATURAL FEATURES SUMMARY

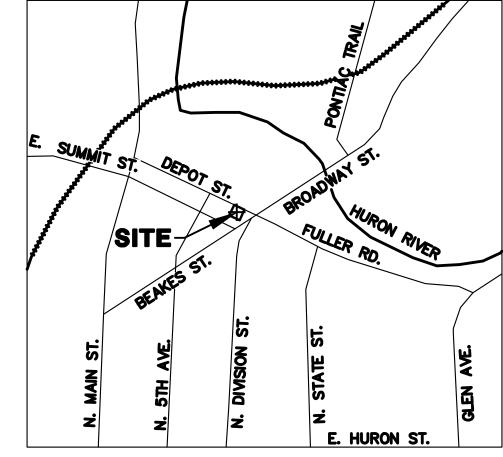
THE SITE IS CURRENTLY DEVELOPED WITH AN EXISTING SINGLE STORY BUILDING AND ASSOCIATED PARKING AND LANDSCAPING. THE MAJORITY OF THE LANDSCAPING IS LAWN WITH SOME SHRUBS AND PERENNIALS.

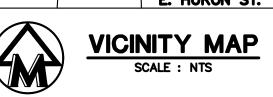
- WATERCOURSES THERE ARE NO WATERCOURSES
- LOCATED ON THE SITE. FLOODPLAIN/FLOODWAY — THE SITE IS LOCATED WITHIN THE FLOODPLAIN MANAGEMENT OVERLAY ZONING DISTRICT. THE ALLEN CREEK 1% ANNUAL CHANCE FLOODPLAIN AND THE 0.2% ANNUAL CHANCE FLOODPLAIN EXTEND ONTO THE NORTHERN CORNERS OF THE SITE.
- STEEP SLOPES NO KNOWN IMPACTS EXIST ON THE SITE. THERE IS AN EXISTING RETAINING WALL ALONG THE DEPOT STREET RIGHT-OF-WAY.
- WOODLAND NO WOODLANDS EXIST ON THE SITE. THREATENED AND ENDANGERED SPECIES — THERE IS NO
- LANDMARK TREES THERE ARE NO LANDMARK TREES











## SHEET INDEX

- # SHEET TITLE
- 01 COVER SHEET

02 ALTA

- 03 EXISTING CONDITIONS
- 03A DEMOLITION PLAN
- 04 DIMENSIONAL SITE PLAN
- 05 GRADING AND SOIL EROSION CONTROL PLAN
- 06 SOIL EROSION CONTROL NOTES AND SPECIFICATIONS
- 07 UTILITY PLAN
- 08 STORMWATER MANAGEMENT PLAN
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- 10 FIRE PROTECTION AND REFUSE PLAN
- 11 NATURAL FEATURES AND LANDSCAPING PLAN
- 12 LANDSCAPE NOTES AND DETAILS

## 340 DEPOT STREET

JOB No. **21131** SHEET 01 OF 12 PER MUNICIPAL REVIEW



M ID W E S T E R N

CONSULTING 3815 Plaza Drive Ann Arbor, Michigan 48108 (734) 995-0200 • www.midwesternconsulting.com Land Development • Land Survey • Institutional • Municipal Wireless Communications • Transportation • Landfill Services

RELEASED FOR:	DATE	
REVISED SITE PLAN	01/14/22	
REVISED SITE PLAN	04/15/22	
REVISED SITE PLAN	05/11/22	
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The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

1388 | 11" | White Mulberry

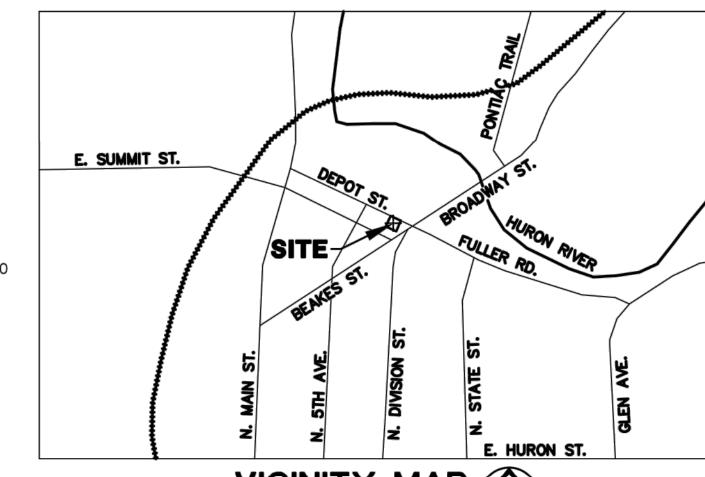
1389 7" White Mulberry

utilities shown are in the exact location indicated. Although the surveyor does certify that they are

located as accurately as possible from the information available.

Morus alba

Morus alba



# **VICINITY MAP**

838 EXIST. CONTOUR EXIST. SPOT ELEVATION ×836.2 EXIST. UTILITY POLE -0- U.P. GUY WIRE ELEC. TRANSFORMER EXIST. OVERHEAD UTILITY LINE EXIST. LIGHT POLE EXIST. TELEPHONE LINE EXIST. ELECTRIC LINE EXIST. GAS LINE EXIST. GAS VALVE EXIST. FIBER OPTIC LINE EXIST. WATER MAIN EXIST. HYDRANT EXIST. GATE VALVE IN BOX EXIST. GATE VALVE IN WELL EXIST. STORM SEWER EXIST. CATCH BASIN OR INLET EXIST. SANITARY SEWER TELEPHONE RISER CABLE TELEVISION RISER ELECTRIC METER GAS METER GAS LINE MARKER FIBER OPTIC MARKER PEDESTRIAN CROSSING SIGNAL TRAFFIC SIGNAL CONTROL BOX MONITORING WELL **FENCE GUARDRAIL** SINGLE TREE OUTLINE EVERGREEN SHRUB MONUMENT BOX

**LEGEND** 

## TREE LEGEND

FOUND IRON PIPE

FOUND IRON ROD

SET IRON ROD

SET P.K.

BOX ELDER LOCUST MAPLE MULBERRY

PEAR SPRUCE

To: Absolute Title, Inc.: Earmark Consulting, Ltd., an Ohio limited liability company:

accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 8, 11, 13, and 18 of Table A thereof. The fieldwork was completed on 06/01/2021.

MIDWESTERN CONSULTING, LLC

Mark Vander Veen

PROFESSIONAL

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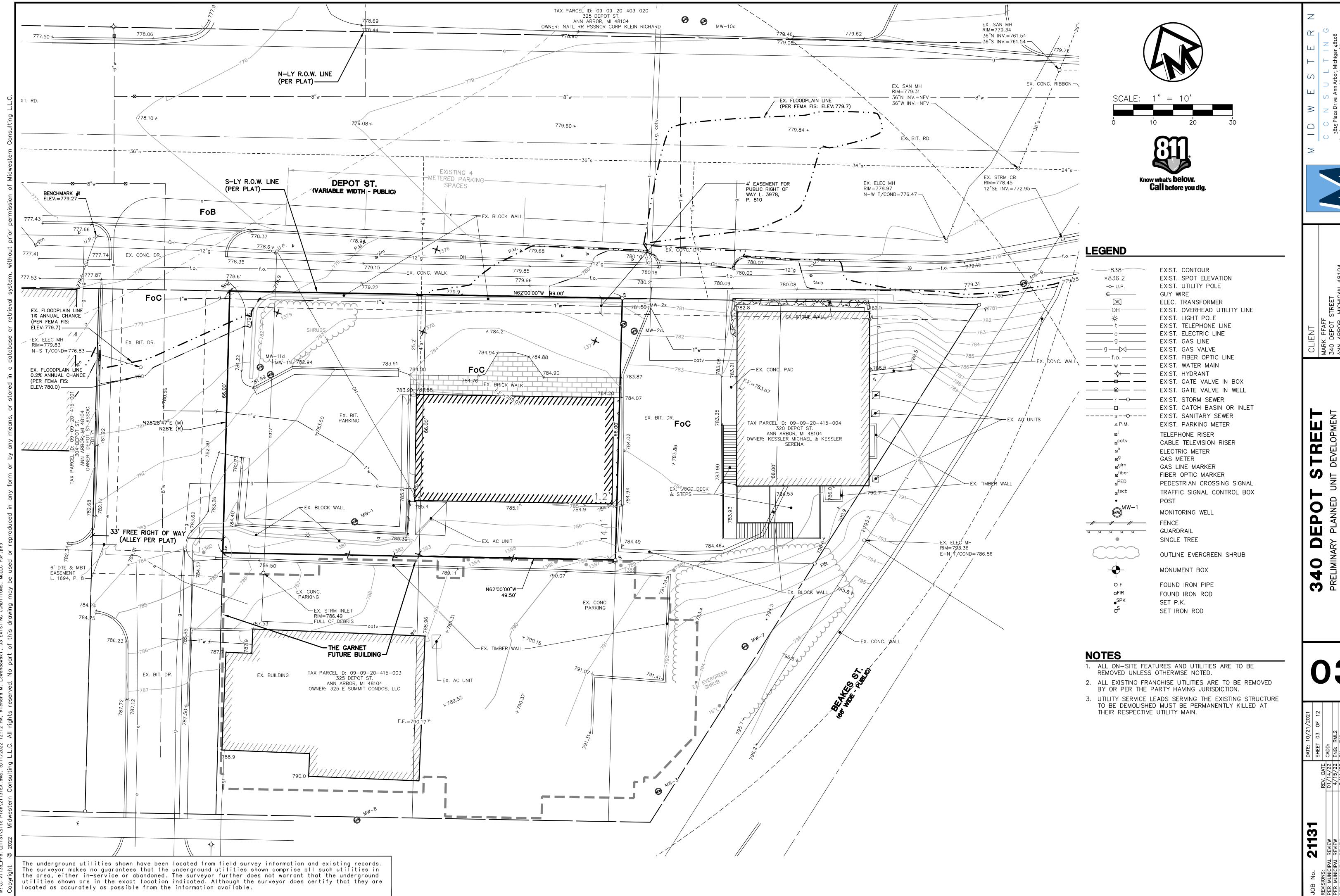
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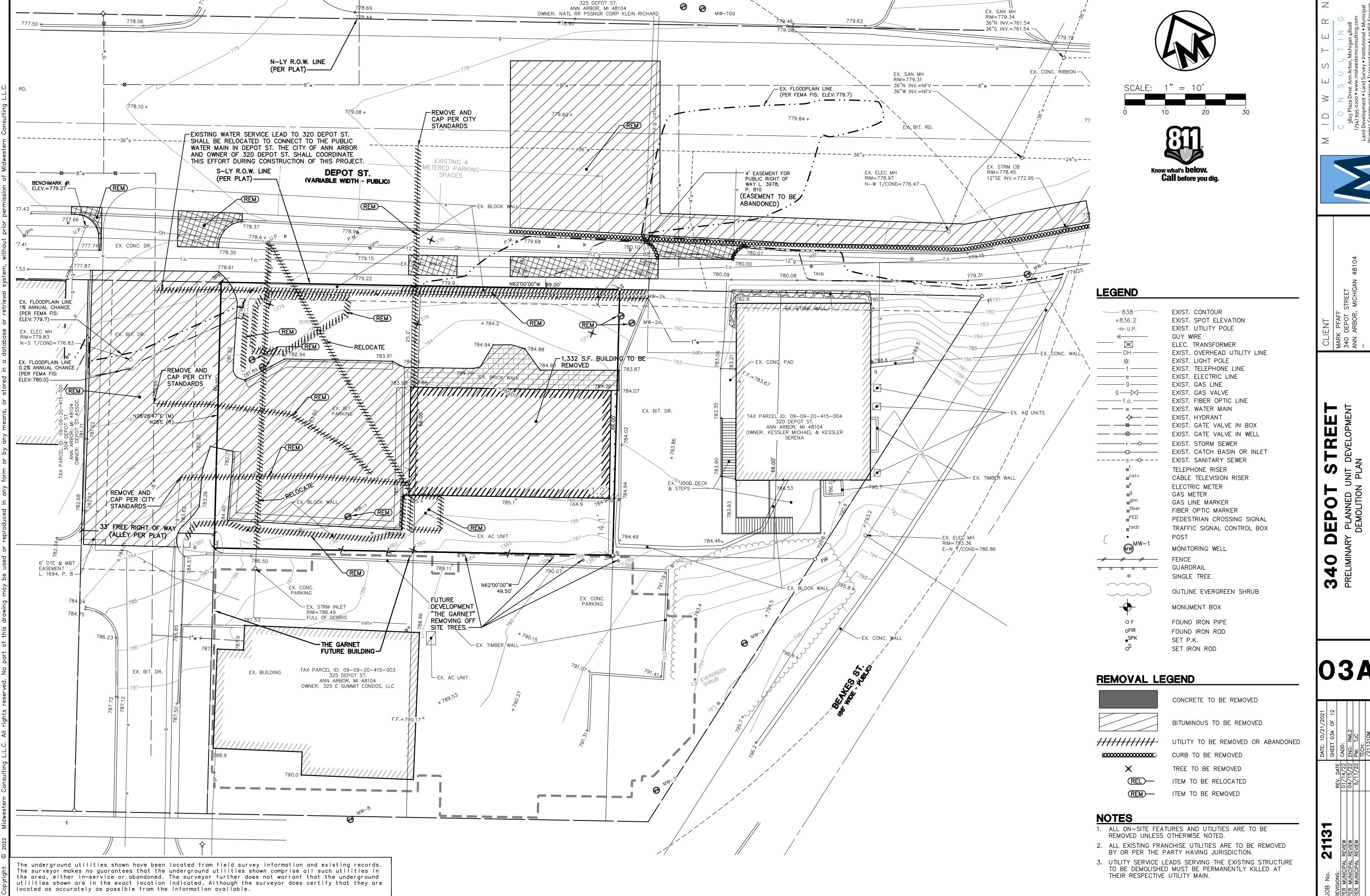
SURVEYORS CERTIFICATE

This is to certify that this map or plat and the survey on which it is based were made in

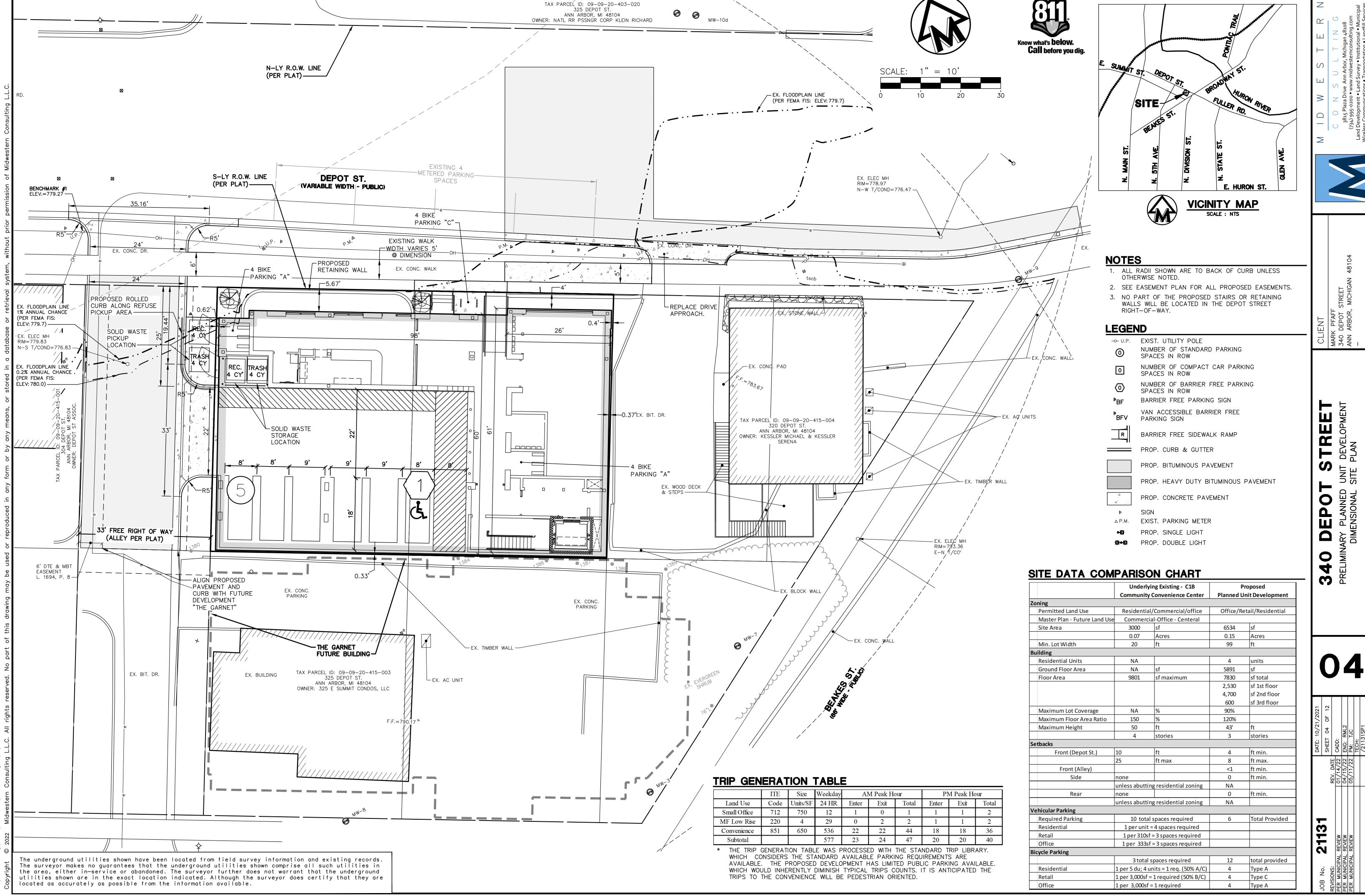
Date: October 21, 2021

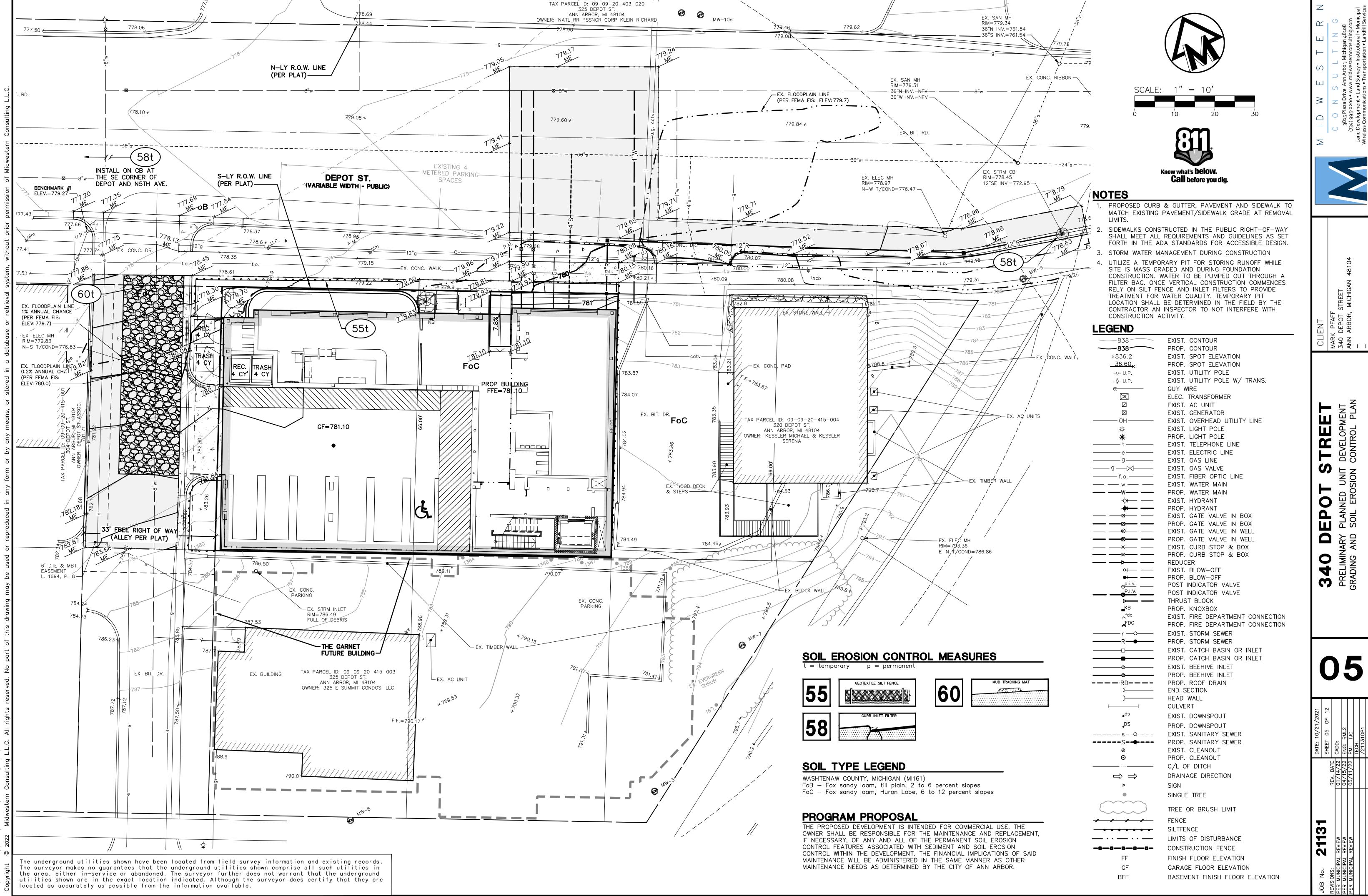


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TAX PARCEL ID: 09-09-20-403-020





MAINTENANCE TASK AND SCHEDULE MAINTENANCE TASK AND SCHEDULE DURING CONSTRUCTION (by Contractor) **ESTIMATED COST** SCHEDULE: nspect for sediment accumulation Weekly and after every 1 storm event Removal of sediment accumulation As needed and prior to turnover spect for floatable and debris Quarterly and after every 1" storm event Cleaning of floatable and debris Quarterly, as needed, and at turnover Make adjustments or replacements as determined , As needed y pre-turnover inspection Total Construction Phase Cost Estimate 6,300 \* "As Needed" means when sediment has accumulated to one foot depth.

MAINTENANCE TASK AND SCHEDULE AFTER CONSTRUCTION (by Owner)	Outlet Control Structures	Green Roof	COMPONENTS:			
TASKS:			SCHEDULE:	ESTIMATED COST:		
Inspect for sediment accumulation	х	X	Yearly and after every 1" storm event	\$ 150	]	
Removal of sediment accumulation	X	X	As needed	\$ 800		
Inspect for floatable and debris	X	X	Yearly and after every 1" storm event	\$ 100	1	
Cleaning of floatable and debris	X	X	As needed	\$ 200	1	
Soil Test, Weed, Fertilize, Displaced Soil, Drain Inspecting, Pest Control, Irrigation		X	Yearly and monthly	\$ 2,500	1	
	•		Tota	I Annual Cost Estimate	\$	3,7

## CONSTRUCTION SEQUENCE (FALL 2022 - SPRING 2023)

- 1. SESC PRE-GRADING MEETING • IDENTIFY CONSTRUCTION LIMITS.
- 2. INVENTORY SITE:
- IDENTIFY CONSTRUCTION LIMITS. • INSTALL SILT FENCING.
- INSTALL INLET FILTERS ON EXISTING INLET STRUCTURES.
- DEFINE THE SITE ACCESS AND INSTALL MUD TRACKING MATS AS
- DEFINE THE CONSTRUCTION STORAGE AREAS WITHIN THE GRADING LIMITS AS DEFINED ON THE PLANS.
- 3. CLEAR AND GRUB SITE, DEMOLITION AND REMOVALS:
- MAINTAIN EXISTING CONTROLS. • REMOVE BUILDING AND CLEAR THE SITE.
- TREE AND STUMP REMOVAL
- STRUCTURE AND UTILITY REMOVALS. • CONNECT 320 DEPOT STREET WATER SERVICE LEAD
- 5. MASS GRADING AND UTILITY CONSTRUCTION:
- MAINTAIN EXISTING CONTROLS.
- MASS GRADE THE SITE. • UTILIZE A TEMPORARY PIT FOR STORING RUNOFF WHILE SITE IS MASS GRADED. WATER TO BE PUMPED OUT THROUGH A FILTER BAG. ONCE VERTICAL CONSTRUCTION COMMENCES RELY ON SILT FENCE AND INLET FILTERS TO PROVIDE TREATMENT FOR WATER QUALITY.
- CONNECT WATER AND SANITARY SERVICE LEADS.
- TEMPORARY SEED AND MULCH DISTURBED AREAS IF PRACTICAL. • CONSTRUCT AND/OR MAINTAIN FIRE DEPARTMENT ACCESS TO FLAMMABLE MATERIALS. EXISTING SUPPORTING HYDRANTS SHALL BE OPERATIONAL PRIOR TO ISSUANCE OF INDIVIDUAL BUILDING PERMITS.
- 8. PAVE ALLEY AND DEPOT STREET: MAINTAIN EXISTING CONTROLS. • REPLACE ASPHALT PAVEMENT IN DISTURBED AREAS OF DEPOT
- 7. BUILDING FOUNDATION CONSTRUCTION: MAINTAIN EXISTING CONTROLS.

STREET AND PUBLIC ALLEY.

- INSTALL EARTH RETENTION SYSTEMS (IF NECESSARY).
- EXCAVATE FOR BUILDING FOUNDATIONS. • UTILIZE A TEMPORARY PIT FOR STORING RUNOFF WHILE FOUNDATION IS CONSTRUCTED. WATER TO BE PUMPED OUT THROUGH A FILTER BAG. ONCE VERTICAL CONSTRUCTION COMMENCES RELY ON SILT FENCE AND INLET FILTERS TO
- PROVIDE TREATMENT FOR WATER QUALITY. • CONSTRUCT BUILDING FOUNDATIONS.

- 9. PAVE DRIVEWAY AND PARKING LOT: MAINTAIN EXISTING CONTROLS.
- CONSTRUCT CONCRETE PAVEMENT FOR ON-SITE DRIVEWAY AND PARKING LOT.
- 10. FINE GRADE AND BUILDING CONSTRUCTION:
- MAINTAIN EXISTING CONTROLS.
- CONSTRUCT BUILDING.
- INSTALL GREEN ROOF
- FINE GRADE THE SITE AND CONSTRUCT ALL NEW HARDSCAPE. • SEED AND MULCH (SEED AND MAT SLOPES GREATER THAN 3:1)
- DISTURBED AREAS BEHIND CURB WITHIN 5 DAYS OF ESTABLISHING FINAL GRADES.
- PLANT TREES, SHRUBS AND LANDSCAPE ITEMS PRIOR TO ISSUANCE OF THE CERTIFICATES OF OCCUPANCY.
- 11. CLEAN-UP SITE:

UNFORESEEN CIRCUMSTANCES.

- SEED AND MULCH OR SOD AREAS THAT HAVE NOT TAKEN.
- MAINTAIN EXISTING CONTROLS.
- 12. FOLLOW-UP AFTER THE SITE IS STABILIZED: REMOVE SILT FENCE
- REMOVE CATCH BASIN FILTERS OR SILT SACKS. REMOVE SILT FROM THE STORM SEWER SYSTEM.
- 13. FINALIZE BUILDING CONSTRUCTION:
- MAINTAIN PERMANENT SOIL EROSION CONTROL MEASURES.

NOTE: THE CONSTRUCTION SEQUENCE AND SCHEDULE IS PRELIMINARY AND SUBJECT TO ADJUSTMENT IN RESPONSE TO FORCES BEYOND OUR CONTROL. THESE MAY INCLUDE WEATHER, MATERIAL AVAILABILITY, LABOR UNREST, POLITICAL AND REGULATORY DELAYS, OR OTHER

- 1. ALL SOIL EROSION CONTROL MEASURES SHALL COMPLY WITH THE CURRENT CITY OF ANN ARBOR ORDINANCES, WASHTENAW COUNTY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND STATE OF MICHIGAN "SOIL EROSION AND SEDIMENTATION CONTROL ACT" (ACT #347).
- 2. PRIOR TO COMMENCING EARTHMOVING OPERATIONS, THE GRADING AND TEMPORARY GRAVEL FILTER(S) SHOWN ON THE PLANS.
- 3. ANY LAWN AREA WHICH WILL HAVE A SLOPE STEEPER THAN 6:1 (6 FT. MEASURED HORIZONTALLY AND 1 FT. MEASURED VERTICALLY) SHALL BE SODDED AND PEGGED OR SEEDED AND MULCHED USING A SOIL EROSION CONTROL FABRIC OR BLANKET. HYDROSEEDING MAY BE USED IN LIEU OF SEED AND MULCH OR SOD WHERE SLOPES ARE FLATTER THAN 6:1.
- 4. THE ACTUAL LOCATION OF THE MUD TRACKING MATS AND THE GRAVEL FILTERS MAY BE ADJUSTED BY THE CONTRACTOR TO MATCH CONTRACTOR'S OPERATIONS AND FIELD CONDITIONS BUT ONLY IF APPROVED BY THE ENGINEER.
- 5. ALL DISTURBED AREAS, EVEN WHERE FUTURE PAVEMENT AND BUILDINGS ARE PROPOSED, ARE TO BE REVEGETATED PER COUNTY STANDARDS FOR TEMPORARY SEEDING.
- 6. ESTIMATED EARTHWORK FOR THIS PROJECT IS 500 CY CUT AND 200 CY FILL. THIS IS AN ESTIMATE ONLY AND IS NOT TO BE USED FOR
- 7. THE ESTIMATED COST OF PROTECTING ALL EXPOSED SURFACES FROM TOPSOIL AND SEEDING)

## SOIL EROSION MAINTENANCE REQUIREMENTS

- SILT AND SEDIMENT SHALL BE REMOVED TO ORIGINAL GRADE.
- 2. ALL TEMPORARY GRAVEL FILTERS SHOULD BE ADJUSTED AS TO LOCATION PER ACTUAL FIELD CONDITIONS. THE REMOVAL OF TRAPPED SEDIMENT AND THE CLEANOUT OR REPLACEMENT OF CLOGGED STONE MAY BE NECESSARY AFTER EACH STORM EVENT DURING THE PROJECT.
- FENCE, AND TEMPORARY GRAVEL FILTERS BE REMOVED. ALSO, ALL STORM SEWERS MUST BE CLEANED OF ALL SEDIMENT.

SOIL EROSION CONSTRUCTION NOTES

CONTRACTOR SHALL INSTALL THE MUD TRACKING MAT, THE SILT FENCE

CONSTRUCTION OR ESTIMATING PURPOSES.

EROSION SHOULD CONSTRUCTION CEASE IS \$1,500. (RESPREAD 3"

1. ALL STRAW BALE AND/OR SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. IF AT ANY TIME THE DEPTH OF SILT AND SEDIMENT COMES TO WITHIN 6" OF THE TOP OF ANY STRAW BALE OR WITHIN 12" OF THE TOP OF ANY SILT FENCE, ALL

3. ONLY UPON STABILIZATION OF ALL DISTURBED AREAS MAY THE SILT

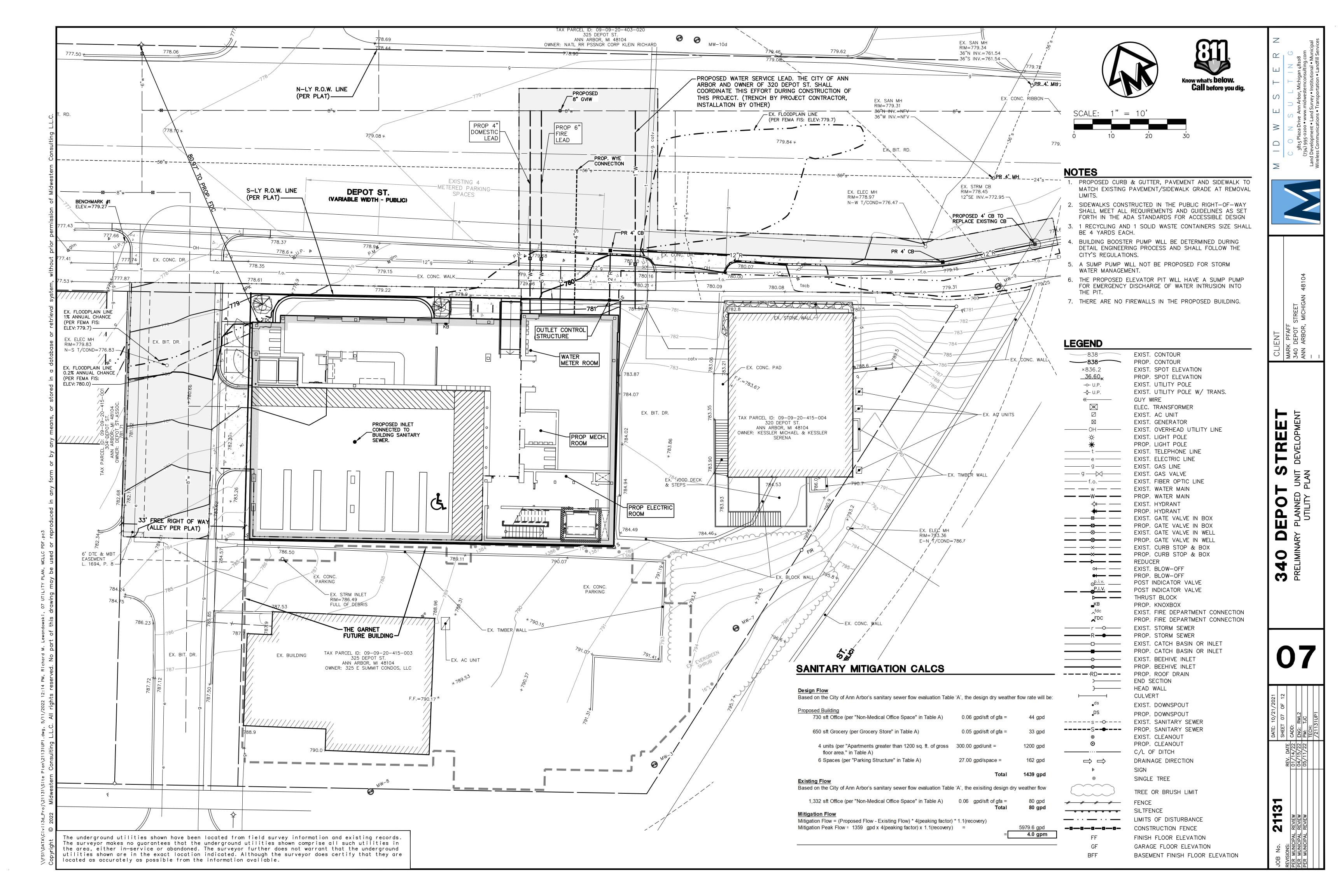
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## **DETENTION CALCULATIONS**

### 340 Depot Street **Stormwater Detention Calculations** Midwestern Consulting - Project No. 20034 10/20/2021

**Underground Detention Chambers** 

W1 - Determining Post-Development Cover Types, Areas, Curve Numbers, and Runoff Coefficients

Total Site Area (Property Limits) Tributary Area (Area draining to the underground chambers) Area Excluding "Self-Crediting" BMPs\* \* Used for remainder of calculations below

Rational Method Variables

(for first flush)

Cover Type	Soil Type	Area (sft)	Area (ac)	Runoff Coeff. (C)	(C) (Area)
Roof/Bldg.		3,891	0.09	0.95	0.08
Green Roof		2,000	0.05	0.40	0.02
Total		5,891	0.14	0.76	0.10

0.15 ac

0.14 ac

0.14 ac

Total - Sum(C)(Area) 0.10 ac 0.14 ac 0.76 Weighted C - (Sum(C)(Area))/(Area Total)

W2 - First Flush Runoff Calculations (Vff) A. Vff = 1" x 1'/12" x 43560 sft/ac x A x C

375 cft 0.01 ac-ft

W8 - Time of Concentration (Tc-hrs)

A. Assume 15-minute minimum time of concentration 0.25 hr

Site Summary of Detention

Stormwater Management Summary Total Calculated Detention Volume

375 cft

W14 - Storage-Elevation Data

Green Roof Storage

Footprint Area	Vol. % per	Design Area	Depth	Volume Provided
(sft)	footprint area	(sft)	(ft)	(cft)
2,000	100%	2,000	0.20	403

Green Roof Water Holding Capacity Analysis

Depth of Engineered Growing Medium (D) in.	6	Growing Medium Moisture Storage (Wmedia) = C% * D	2.27
Max. Water Holding Capacity (W%) Per ASTM E2397 Test of LiveRoof growing medium by Penn. State Univ.	47.8%	Moisture held by plants (Wplants) Per Penn State Univ. tests of sedum	0.40
Max Water Capacity depth = (D) * (W%)	2.87	Initial moisture (Winitial) Assumed initial system moisture when irrigation is used	0.25
Wilt Point (WP%) Assumed value from literature	10.0%		
Max. Available Capacity of Growing Medium to Hold Water Capacity (C%) = (W%) - (Wilt Point)	37.8%	System Total Storage Depth The estimated depth of moisture that can be stored before media is fully saturated. Total Depth = Wmedia + Wplants - Winitial	2.42

Total Provided Detention 403 cft

Surplus storage volume provided (Total Provided Detention - Total Detention Required)

Maximum Discharge (0.15 cfs/acre max. allowed)

Max Head to Lowest Holes (Hmax) = Top/weir - Orifice = 774.55 - 773.55 = QA (Allowable 100-year release rate)= 0.15 cfs/acre = 0.15 cfs \* 0.14 ac = Reg Area (A) = QA / 0.62 / sqrt(2\*g\*Hmax) =0.02/0.62/(2\*32.2\*1)^0.5= 0.004 sft Orifice Diameter, Proposed 0.750 in

0.0031 sft Orifice Area Number Required for 24 hr drainage = Aff / Orifice Area = 0.004 sft / 0.0031 sft = 1.33 holes Number of Holes to Use 1 holes

Area of (1) - 0.75 inch Orific Aff 0.0031 sft Actual Flow (Qmax) = 0.62 \* A \* sqrt(2\*g\*Hmax) = 0.62 \* 0.0031 \*sqrt(2\*32.2\*1) = 0.015 cfs

## **NOTES**

P.O. Box 533

Spring Lake, MI 49456

(800) 875-1392

www.liveroof.com

- 1. PROPOSED CURB & GUTTER, PAVEMENT AND SIDEWALK TO MATCH EXISTING PAVEMENT/SIDEWALK GRADE AT REMOVAL LIMITS.
- 2. SIDEWALKS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY SHALL MEET ALL REQUIREMENTS AND GUIDELINES AS SET FORTH IN THE ADA STANDARDS FOR ACCESSIBLE DESIGN.

## STORMWATER MANAGEMENT NARRATIVE

THE EXISTING SITE HAS NO STORM WATER MANAGEMENT SYSTEM. CURRENTLY STORM WATER RUNS OFF THE SITE WITHOUT TREATMENT AND NO STORAGE IS PROVIDED. THE PROPOSED SITE WILL IMPROVE THE EXISTING CONDITIONS BY IMPLEMENTATION OF BEST MANAGEMENT PRACTICES AND STORAGE VOLUME FOR THE REQUIRED DETENTION.

THE SITE CONTAINS LESS THAN 10,000 SF OF IMPERVIOUS SURFACE. CITY CODE REQUIRES SITES WITH LESS THAN 10,000 SF. OF IMPERVIOUS SURFACE TO PROVIDE STORM WATER MANAGEMENT FOR THE FIRST FLUSH VOLUME OF RUNOFF.

THE PROPOSED STORM WATER MANAGEMENT SYSTEM CONSISTS OF GREEN ROOF AND OUTLET CONTROL STRUCTURE.

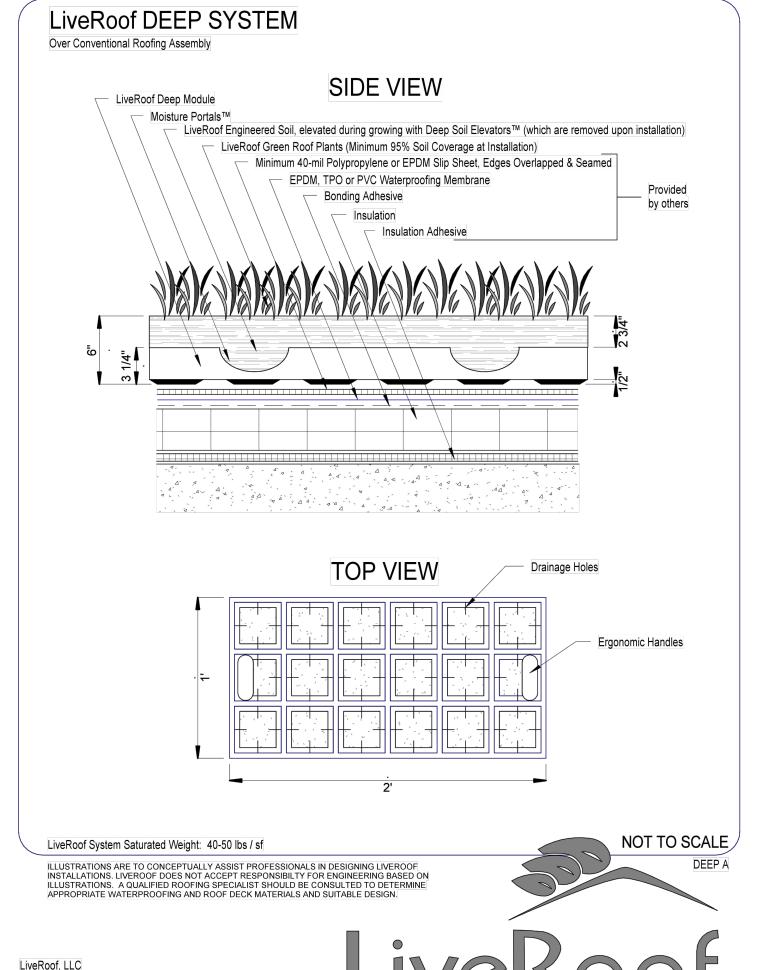
THE REQUIRED FIRST FLUSH STORM WATER VOLUME WILL BE DETENTION WITHIN A PROPOSED 2000 SF. GREEN ROOF; SEE ARCHITECTURAL ROOF PLAN SHEET FOR LAYOUT.

A PROPOSED OUTLET CONTROL STRUCTURE WILL CONTROL THE RELEASE RATE OF THE STORM WATER INTO A PROPOSED STORM SEWER EXTENSION TO THE EXISTING CITY STORM SEWER IN DEPOT STREET. EMERGENCY DISCHARGE WILL FLOW OVER A WEIR WALL IN THE OUTLET CONTROL STRUCTURE AND BYPASS THE CONTROLLED RELEASE ORIFICES.

## GREEN ROOF MAINTENANCE SCHEDULE

TASK	FREQUENCY	TIMING
PERFORM SOIL TEST	ANNUAL	MARCH
WEED	2/MONTH	APRIL-OCTOBER
FERTILIZE*	ANNUAL	APRIL
CHECK FOR DISPLACED SOIL	L MONTHLY	APRIL-OCTOBER
INSPECT DRAINS	2/MONTH	APRIL-OCTOBER
PEST CONTROL	MONTHLY	APRIL-OCTOBER
IRRIGATION	AS NEEDED	APRIL-OCTOBER

\*APPLICATIONS OF FERTILIZER SHALL BE FERTILIZER WITH NO PHOSPHORUS.



**Call** before you dig. OUTLET CONTROL STRUCTURE DRAINAGE AREA 1 0.14 AC. 5.891-SF **LEGEND** - EACH SIDE OF FLOW CONTROL EXIST. STORM SEWER WALL CAULKED W/ POLYURETHANE ELASTOMERIC SEALANT PROP. STORM SEWER EXIST. CATCH BASIN OR INLET PROP. CATCH BASIN OR INLET GROUTED CONNECTION, PROP. ROOF DRAIN - OPENINGS AS REQ'D EXIST. CLEANOUT PROP. CLEANOUT PROP. DRAINAGE AREA BOUNDARY PROP. DRAINAGE AREA LABEL 1. MANHOLE SECTIONS TO BE MANUFACTURED TO ASTM C-478 SPECIFICATIONS AND IN ACCORDANCE WITH NORTHERN CONCRETE PIPE, INC. (800 222 9918).

REINFORCING SHOWN FOR SCHEMATIC ONLY.
CONTRACTOR TO SEAL BETWEEN PRECAST WALL & BASE W/BUTYL ROPE. <sup>1</sup> 7" X 1" KEYWAY (2) INLET & OUTLET PIPES SIZE VARIES. NUMBER, SIZE AND ELEVATION OF HOLES IN THE FLOW RESTRICTOR WALL SHALL BE IN ACCORDANCE WITH THE GOVERNING SEAL JOINT WITH BED OF MORTAR 73.8" ─ TOP/WEIR @ 744.55 INFLOW - OUTLET ORIFICE EL. 743.55 -(1)-3/4" DIA. HOLE @ 743.55 - BOTTOM OF STRUCTURE/SUMP ELEVATION: 741.55 BOLT WELDED WIRE MESH— TO WALL OVER ORIFICES OUTLET CONTROL STRUCTURE DETAIL 1/2" x 1/2" MESH, 0.047" DIA. NO SCALE

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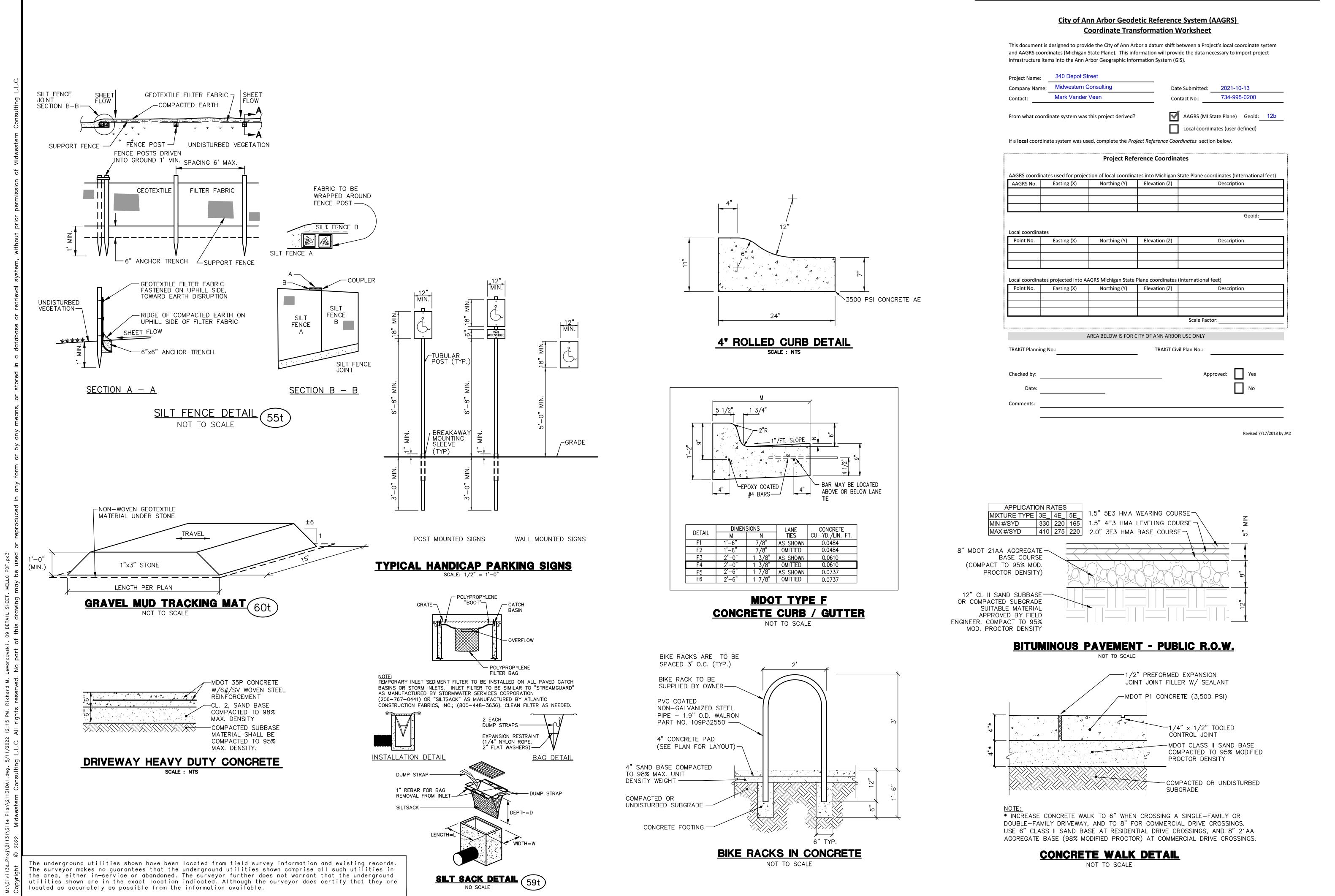
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**AAGRS WORKSHEET** 

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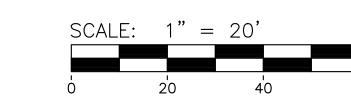
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NUMBER OF STANDARD PARKING

NUMBER OF COMPACT CAR PARKING

NUMBER OF BARRIER FREE PARKING

BARRIER FREE PARKING SIGN

VAN ACCESSIBLE BARRIER FREE

PROP. ROLLED CURB & GUTTER

SIGN

## **SOLID WASTE NOTES**

- 1. SOLID WASTE GENERATED BY THE PROPOSED BUILDING IS TO BE SERVED BY (1) 4 CY BIN FOR TRASH AND (1) 4 CY BIN FOR RECYCLING. BINS SHALL BE STORED WITHIN THE BUILDING AT THE DESIGNATED STORAGE AREA. BINS WILL THEN BE ROLLED OUT TO THE COLLECTION AREA, THEN CAN BE ROLLED DOWN OVER THE ROLLED CURB TO PREPARE FOR PICKUP.
- 2. REFUSE CONTAINER GATE PINS MUST BE PROVIDED IN OPEN AND
- 3. SOLID WASTE IS ANTICIPATED TO BE PICKED UP 1 TIME PER WEEK.
- 4. BASED ON PAST EXPERIENCE IT IS ESTIMATED THAT (1) -4 CY DUMPSTER CAN SERVE ROUGHLY 20 BEDROOMS IF PICKED UP ONCE PER WEEK IN A MULTI-FAMILY DEVELOPMENT. WITH THE 5 PROPOSED BEDROOMS AND LIMITED SOLID WASTE GENERATION OF THE OFFICE AND RETAIL USES, (1) -4 CY BIN FOR TRASH AND (1) -4 CY BIN FOR RECYCLING WILL BE ADEQUATE FOR THE DEVELOPMENT IF PICKED UP ONCE PER WEEK.

## FIRE PROTECTION NOTES

- 1. WATER SERVICE TO HAVE SEPARATE DOMESTIC & FIRE SUPPRESSION
- 3. IF EMERGENCY RESPONDER RADIO COVERAGE IS NEEDED IT SHALL
- 4. EXISTING HYDRANTS ALONG DEPOT STREET AND E. SUMMIT STREET TO REMAIN IN SERVICE THROUGHOUT DEMOLITION AND CONSTRUCTION
- NOT TO INTERFERE WITH FIRE/EMERGENCY SITE ACCESS.
- 6. STORAGE OF COMBUSTIBLE MATERIALS ON SITE SHALL NOT BE



SPACES IN ROW

SPACES IN ROW

SPACES IN ROW

PARKING SIGN

BARRIER FREE SIDEWALK RAMP

PROP. CURB & GUTTER

PROP. BITUMINOUS PAVEMENT

PROP. CONCRETE PAVEMENT

PROP. HEAVY DUTY CONCRETE

PROP. SINGLE LIGHT

PROP. DOUBLE LIGHT

CLOSED POSITION.

- 2. THERE ARE NO FIREWALLS IN THE PROPOSED BUILDING.
- MEET REQUIREMENTS AS SPECIFIED IN THE 2015 IFC SECTION 510.
- PHASES.
- 5. STORAGE AREAS FOR CONSTRUCTION MATERIALS MUST BE SO AS
- PLACED WITHOUT REVIEW AND APPROVAL FROM FIRE MARSHAL.
- 7. DURING DETAILED ENGINEERING, THE SITE ADDRESS LOCATION WILL BE COORDINATED WITH THE FIRE DEPARTMENT TO ENSURE IT IS CLEARLY LABELED AND VISIBLE WHEN APPROACHING THE BUILDING.

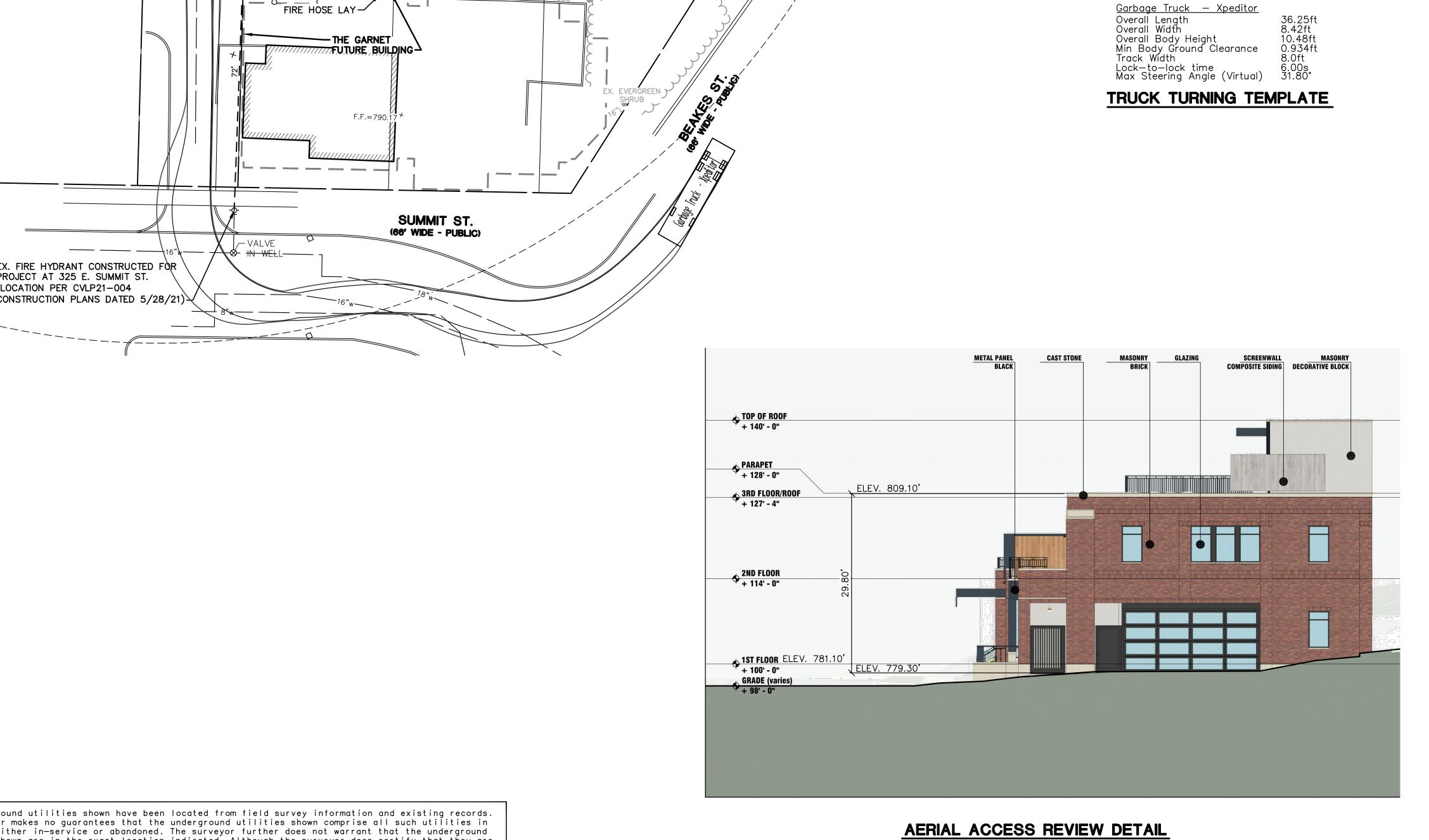
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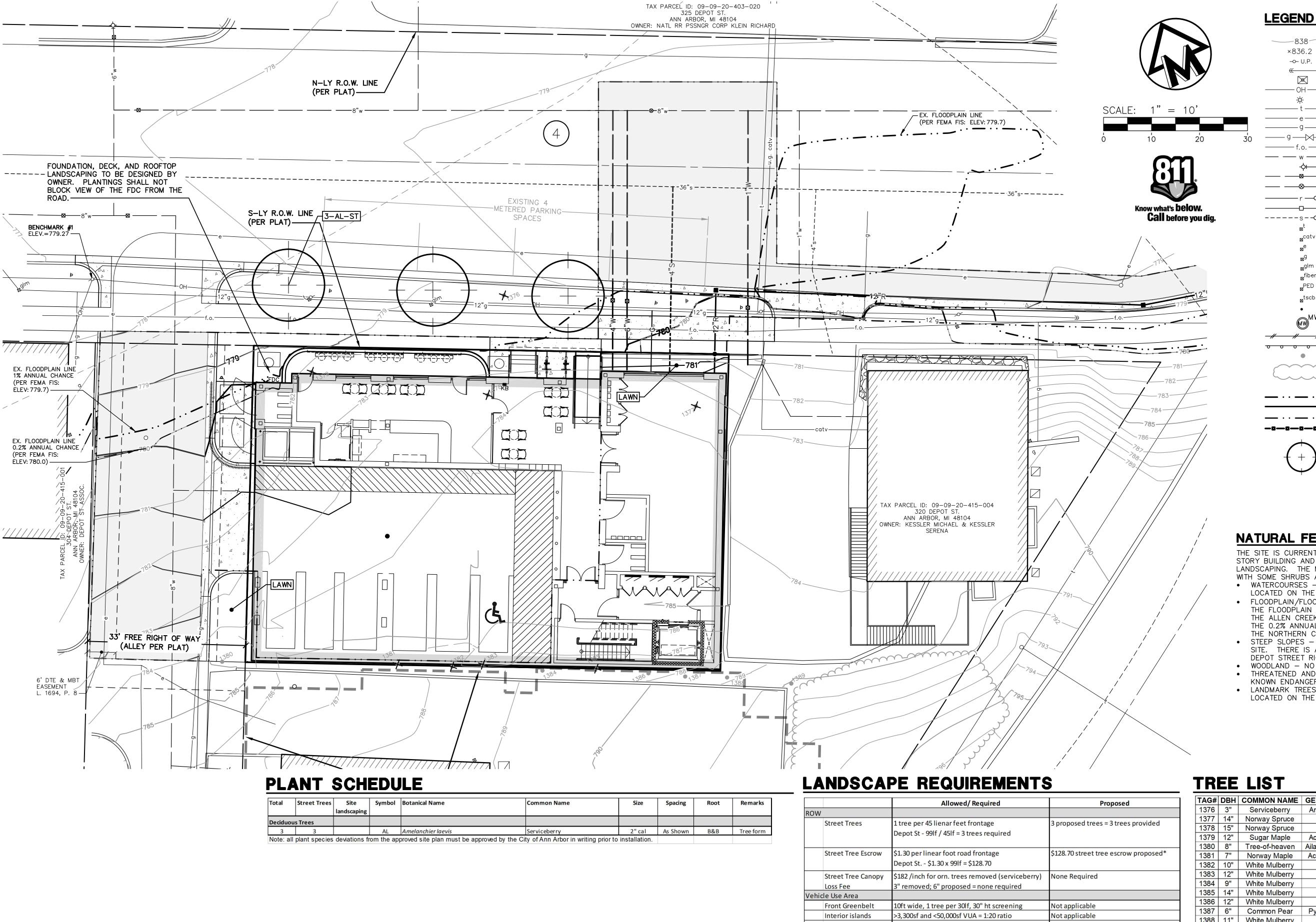
, Way

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8.83 17.25 4.167



	Allowed/ Required	Proposed
ROW		
Street Trees	1 tree per 45 lienar feet frontage	3 proposed trees = 3 trees provided
	Depot St - 99lf / 45lf = 3 trees required	
Street Tree Escrow	\$1.30 per linear foot road frontage	\$128.70 street tree escrow proposed*
	Depot St \$1.30 x 99If = \$128.70	
Street Tree Canopy	\$182 /inch for orn. trees removed (serviceberry)	None Required
Loss Fee	3" removed; 6" proposed = none required	
Vehicle Use Area		
Front Greenbelt	10ft wide, 1 tree per 30lf, 30" ht screening	Not applicable
Interior islands	>3,300sf and <50,000sf VUA = 1:20 ratio	Not applicable
Interior island trees	1 tree per 250sf of required island	Not applicable
Street trees (internal)		
	1 tree per 30lf	Not Applicable
Outdoor refuse		
	screening wall, trash and recycling dumpsters	Not applicable - trash to be stored within
	each	building and rolled out for pickup
Conflicting Land Use buffer		
	15 ft wide, 1 tree per 15 ft with 50% evergreen, 4ft	None proposed with Planned Unit
	screening - East - 66lf / 15 = 5 trees required;	Development
	South - 97If/15If = 7 trees required	
Tree Mitigation		
	50% removed DBH - LM/woodland	Not applicable

\*Street tree escrow will be provided prior to issuing building permits and will be refunded after City staff inspection shows long term survival of the proposed street trees.

<u>I K</u>	<u> </u>	<u>LIST</u>						
TAG#	DBH	COMMON NAME	GENUS/SPECIES	STEMS	LM	INV	NOTES	REMOVAL
1376	3"	Serviceberry	Amelanchier sp.				ROW	X
1377	14"	Norway Spruce	Picea abies					X
1378	15"	Norway Spruce	Picea abies					X
1379	12"	Sugar Maple	Acer saccharum					X
1380	8"	Tree-of-heaven	Ailanthus altissima	triple		X		
1381	7"	Norway Maple	Acer platanoides			X		X
1382	10"	White Mulberry	Morus alba			Χ		Х
1383	12"	White Mulberry	Morus alba			X		Х
1384	9"	White Mulberry	Morus alba	twin		Χ		BY OTHERS
1385	14"	White Mulberry	Morus alba			Χ		Х
1386	12"	White Mulberry	Morus alba			Χ		BY OTHERS
1387	6"	Common Pear	Pyrus communis					BY OTHERS
1388	11"	White Mulberry	Morus alba			Χ		BY OTHERS
1389	7"	White Mulberry	Morus alba			Χ		

EXIST. CONTOUR

EXIST. SPOT ELEVATION EXIST. UTILITY POLE

GUY WIRE ELEC. TRANSFORMER EXIST. OVERHEAD UTILITY LINE EXIST. LIGHT POLE EXIST. TELEPHONE LINE

EXIST. ELECTRIC LINE EXIST. GAS LINE EXIST. GAS VALVE EXIST. FIBER OPTIC LINE EXIST. WATER MAIN

EXIST. HYDRANT EXIST. GATE VALVE IN BOX EXIST. GATE VALVE IN WELL EXIST. STORM SEWER EXIST. CATCH BASIN OR INLET

----s--O---- EXIST. SANITARY SEWER TELEPHONE RISER CABLE TELEVISION RISER ELECTRIC METER GAS METER GAS LINE MARKER FIBER OPTIC MARKER PEDESTRIAN CROSSING SIGNAL

TRAFFIC SIGNAL CONTROL BOX

MONITORING WELL FENCE \_//\_// GUARDRAIL

SINGLE TREE OUTLINE EVERGREEN SHRUB

1% ANNUAL CHANCE FLOODPLAIN 0.2% ANNUAL CHANCE FLOODPLAIN — · · — · · — LIMITS OF DISTURBANCE TREE PROTECTION FENCE

-->- U.P.

PROPOSED CANOPY TREE (STREET TREE)

NATURAL FEATURES SUMMARY

THE SITE IS CURRENTLY DEVELOPED WITH AN EXISTING SINGLE STORY BUILDING AND ASSOCIATED PARKING AND LANDSCAPING. THE MAJORITY OF THE LANDSCAPING IS LAWN WITH SOME SHRUBS AND PERENNIALS.

• WATERCOURSES - THERE ARE NO WATERCOURSES

LOCATED ON THE SITE. FLOODPLAIN/FLOODWAY — THE SITE IS LOCATED WITHIN THE FLOODPLAIN MANAGEMENT OVERLAY ZONING DISTRICT. THE ALLEN CREEK 1% ANNUAL CHANCE FLOODPLAIN AND THE 0.2% ANNUAL CHANCE FLOODPLAIN EXTEND ONTO

THE NORTHERN CORNERS OF THE SITE. STEEP SLOPES - NO KNOWN IMPACTS EXIST ON THE SITE. THERE IS AN EXISTING RETAINING WALL ALONG THE DEPOT STREET RIGHT-OF-WAY.

 WOODLAND - NO WOODLANDS EXIST ON THE SITE. THREATENED AND ENDANGERED SPECIES — THERE IS NO KNOWN ENDANGERED SPECIES HABITAT ON THE SITE.

• LANDMARK TREES - THERE ARE NO LANDMARK TREES LOCATED ON THE SITE.

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340 PRELIMIN NATURAL

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- 1. For any plant quantity discrepancies between the plan view and the plant schedules, the plant schedule shall take precedence.
- 2. Plant materials shall be selected and installed in accordance with standards established by the City of Ann
- 3. Water outlets shall be provided within 150 feet of all required plantings.
- 4. All diseased, damaged or dead material shown on the site plan as proposed plantings shall be replaced by
- the end of the following growing season. 5. Restore disturbed areas with a minimum of four (4) inches of topsoil and then seed/fertilize/mulch.
- 6. All disturbed areas no specified as planting beds shall be lawn areas. Fertilizer for the initial installation of lawns shall provide not less than one (1) pound of actual nitrogen per 1,000 sq ft of lawn area and shall
- contain not less than two percent (2%) potassium and four percent (4%) phosphoric acid. Lawn (turfgrass) seed mix shall consist of: 15% Rugby Kentucky Bluegrass
- 10% Park Kentucky Bluegrass
- 40% Ruby Creeping Red Fescue
- 15% Pennifine Perennial Ryegrass 20% Scaldis Hard Fescue
- Seed shall be applied at a rate of five pounds (5 lbs) per 1000 sq ft. Mulch within 24 hours with two (2) tons of straw per acre, or 71 bales of excelsior mulch per acre. Anchor straw mulch with spray coating of adhesive material applied at the rate of 150 gals. / acre.
- After the first growing season, only fertilizers that contain NO phosphorus shall be used on the site. 8. All seeded areas with slopes less than 1:3 (one vertical foot for every 3 horizontal feet) shall be mulched with straw mulch at the rate of two (2) bales per 1,000 square feet. All seeded areas with slopes greater
- than 1:3 shall be seeded and biodegradable erosion control blanket North American Green SC150, or equivalent, shall be applied with biodegradable stakes. 9. Deciduous plants shall be planted between March 1 and May 15 and from October 1 until the prepared soil
- becomes frozen. Evergreen plants shall be planted between March 1 and June 1 and from August 15 to September 15.
- 10. All planting beds are to receive four (4) inches of shredded hardwood bark mulch.
- 11. All trees to be located a minimum of 10 feet from public utilities. 12. All single trunk, deciduous trees shall have a straight and a symmetrical crown with a central leader. One
- sided trees or those with thin or open crowns shall not be accepted.
- 13. All evergreen trees shall be branched fully to the ground, symmetrical in shape and have not been sheared in the last three (3) growing seasons.
- 14. All compacted subgrade soils in proposed landscape areas shall be tilled to a minimum 12-inch depth prior to placement of topsoil, geotextile fabric, or other planting media as specified. 15. Proposed trees will be planted a minimum of 15 feet apart.
- 16. Planting Soil: Existing, in-place or stockpiled topsoil. Supplement with imported topsoil as needed. Verify suitability of existing surface soil to produce viable planting soil. Remove stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth. Mix surface soil with the following soil
- amendments to produce planting soil: a. Ratio of Loose Compost to Topsoil by Volume: 1:4.
- b. Weight of Lime per 1000 Sq. Ft.: Amend with lime only on recommendation of soil test to adjust soil
- c. Weight of Sulfur or Aluminum Sulfate per 1,000 Sq. Ft.: Amend with sulfur or aluminum sulfate only on recommendation of soil test to adjust soil pH. d. Volume of Sand: Amend with sand only on recommendation of Landscape Architect to adjust soil
- e. Weight of Slow-Release Fertilizer per 1,000 Sq. Ft.: Amend with fertilizer only on recommendation of
- soil test to adjust soil fertility.

- 1. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease.
- 2. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
- 3. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.
- 4. Contractor shall warranty all plant material and trees to remain alive and be in healthy, vigorous and like new condition for the specified period from installation to Substantial Completion. The entire Landscaping Project, including but not limited to: plants (perennials), trees, shrubs, mulches, shrubs, etc are to be under Warranty for One Year after Substantial Completion date of the Project. At the end of the specified One Year Warranty period the Owner's Representative will inspect plant material for compliance. Contractor shall replace, in accordance with the drawings and specifications, all plants, trees, shrubs, etc or as determined by the Owner's Representative, are in an unhealthy or unsightly condition. Warranty shall not include damage or loss of plants, trees, and shrubs caused by fires, floods, freezing rains, lightning storms, or winds over 75 miles per hour, acts of vandalism or negligence on the part of the owner, or any other incident beyond landscape contractor's control.
- 5. Watering: The contractor shall keep seed moist for optimum plant growth (1" of total water per week, including rainfall) until the grass and/or flowers are four (4) inches high typical.
- 6. Protection from traffic and erosion in newly seeded areas is the responsibility of the contractor. Safety fences and/or silt fence with appropriate signage may be used at the contractor's expense until the grasses and flowers are fully established.
- 7. Erosion shall be repaired by the contractor.
- 8. Turf installations shall meet the following criteria as determined by Owner: a. Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass has
- been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.
- b. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.
- c. Use specified materials to reestablish turf that does not comply with requirements and continue maintenance until turf is satisfactory.



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**34** PRELI

SHEET 12 OF 12 CADD: ENG: RMLZ PM: TJC TECH:	/011	TECH:	1/22   PM:	15/22   ENG:	t/22 CADD:	DAIL		
	011211		TJC	ENG: RML2			T 12	
15								
							12	

- CENTER ROOTBALL IN PLANTING HOLE. LEAVE BOTTOM OF PLANTING HOLE FIRM. DO NOT AMEND SOIL UNLESS PLANTING IN SEVERELY DISTURBED SOIL OR BUILDING RUBBLE, USE SHOVELS AND WATER TO SETTLE SOIL AND REMOVE AIR POCKETS REV. NO. DR.BY CH. BY DATE PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR TREE PLANTING DETAIL

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