

# BRIGHTDAWN VILLAGE

## CONDOMINIUM

### CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN

# SITE PLAN

#### OWNER/CLIENT

GLORYCREST BURTON ROAD INC.  
2750 CARPENTER RD., SUITE 4  
ANN ARBOR, MI 48108  
ATTN: JOSEPH M. WEST

#### ENGINEER/SURVEYOR

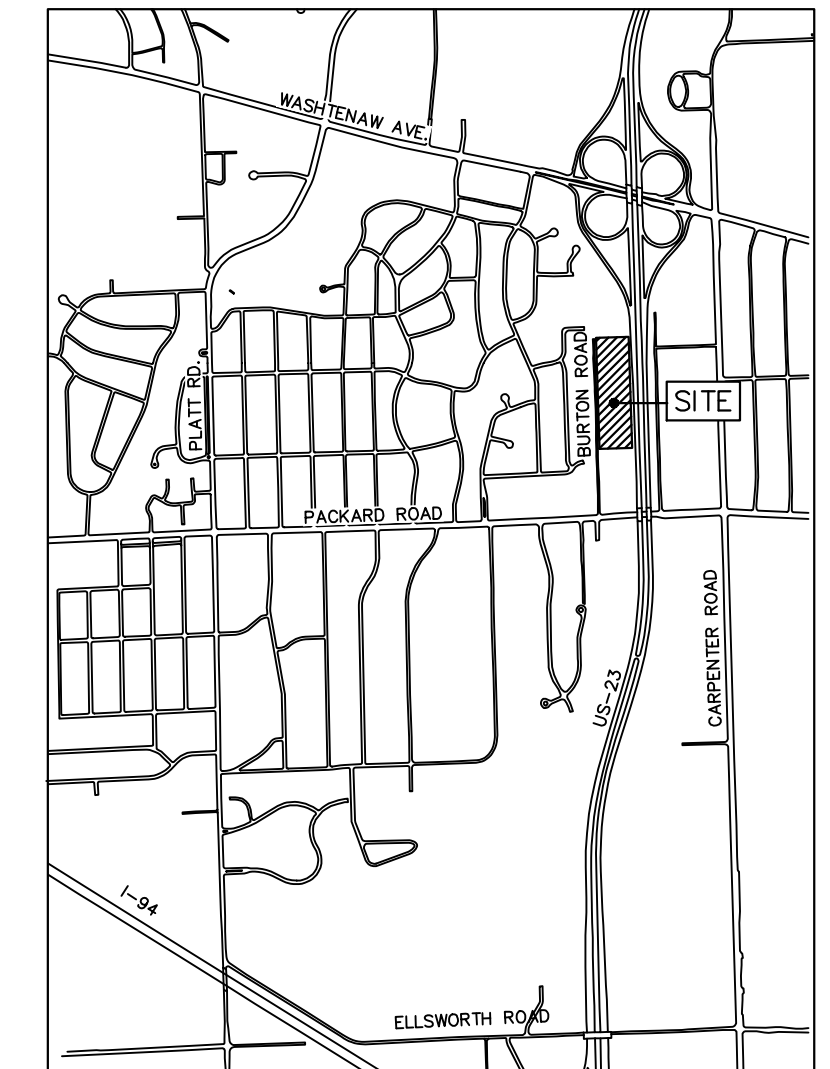
MIDWESTERN CONSULTING, LLC  
3815 PLAZA DRIVE  
ANN ARBOR, MI 48108  
ATTN: TOM COVERT  
PHONE: 734-995-0200

#### LANDSCAPE ARCHITECT

MIDWESTERN CONSULTING, LLC  
3815 PLAZA DRIVE  
ANN ARBOR, MI 48108  
ATTN: TINA FIX  
PHONE: 734-995-0200

#### ARCHITECT

THE ARCHITECT DESIGN GROUP, INC.  
2101 JACKSON AVE.  
ANN ARBOR, MI 48103  
ATTN: BOB OVERHISER  
PHONE: 734-995-4015



VICINITY SKETCH  
NO SCALE

### REQUIRED STATEMENTS

- i. General Project Information:**
- Glorycrest Burton Road Inc. owns the property at 2805 Burton Road, Ann Arbor, Michigan. The applicant is seeking site plan approval from City Council after review by the Planning Department and recommendation by the Planning Commission. The project proposes development of 120 multi-family condominium units, which number of units is permitted under its existing R4B zoning classification. The applicant is not requesting any variances or a landscape modification with the proposed development. The development includes a minor impact to an existing wetland to include a sidewalk along Burton Roadway requiring a wetland use permit and natural features buffer area disturbance approval.
- This submittal is a revision to a prior submittal for a conditional rezoning to R4D for a multi-family residential development with 160 dwelling units.
- Glorycrest Burton Road Inc. does not own or have an interest in any land contiguous to the site.
- ii. Development Program:**
- The proposed condominium project consists of the construction of four (4) new 4-story multi-family buildings for a total of approximately 238,800 square feet. The total number of residential units will be 120 units, at a rate of 15 dwelling units per acre as is permitted within the R4B zoning district. All units designed for wheelchair accessibility and could be converted to barrier free access. These home units will be a mix of two (2) bedroom and three (3) bedroom units, which will be "for sale, market rate" units. There will be underground vehicular parking spaces below the proposed buildings and surface vehicular parking spaces. There will be two (2) electric vehicle charging stations in each underground parking area and Class C bicycle parking spaces will be provided near the entrances of the buildings. See the Site Data Comparison Chart on the Cover sheet for specific quantities of each type of unit, bedrooms, vehicular and bicycle parking spaces.
  - The site will be accessed from Burton Road at two access points with fire access along the entrance side of each building. Solid waste enclosures will be conveniently located along the eastern property line and will include trash and recycling dumpsters.
  - Site improvements will include new parking lots and driveways with associated lighting, underground utilities, landscaping, underground stormwater management systems, solid waste management facilities, and site amenities. Construction of new improvements will impact (28) Landmark Trees and (10) woodland trees. Mitigation for these impacts and removals is proposed with new tree plantings. 1,212 square feet of wetland will be impacted with site improvements and will be mitigated on site adjacent to the existing wetland.
  - Amenities include: 62% open space, clubhouse amenities on the first floor of one of the residential buildings, children's playground, outdoor gathering space, dog run, community garden, and convenient access to Sylvan Park.
  - The existing improvements on the site have been removed and the property is currently vacant, but in the past has been used for illegal dumping of household refuse. Re-development of the site will prevent these uses from recurring in the future.
  - Construction will occur in a single phase, with site work starting in fall/winter of 2020 and concluding in winter/spring 2022. Existing utilities will be demolished during construction. Probable construction cost for the proposed site work, utilities, landscaping, and building construction (excluding property) is estimated to be \$32,000,000.
- iii. Community analysis:**
- Impact on public schools:
    - 120 accessible intergenerational housing units will be added to the tax base.
    - 26 school age children are anticipated per SEMCOG 2019 Population and household estimates of an average 2.27 people per household with 9.3% school-age children.
  - Relationship to neighboring uses:
    - The proposed development will be multi-family residential and is consistent with the current zoning of the property (R4B). The redevelopment will substantially improve the site, provide stormwater management for the site, and revitalize a blighted site. The Brightdown Village residents are likely to patronize the nearby commercial/retail establishments and restaurants. They also are likely to work in nearby employment centers. A conflicting land use buffer is required along the south property line to buffer the proposed higher density residential development from the lower density residential. Right-of-way screening is provided to screen on-site parking areas from Burton Road and US-23. No buffer is required adjacent to Sylvan Park to the north.
  - Impact of adjacent uses on proposed development:
    - The adjacent uses are similar residential, office, and commercial district uses that will have no negative impact on the proposed Brightdown Village development.
  - Impact on air and water quality and existing natural features:
    - There will be no anticipated negative impact to air quality.
    - The property is currently vacant with no stormwater detention facilities. The proposed stormwater management system improvements are designed to pre-treat, detain, and release the runoff into the public storm sewer at a controlled rate. Water quality controls will be implemented to ensure that runoff during construction is controlled and managed. Hydrology will be maintained to the existing wetland on the south end of the property from the on-site storm water release, and from the 46-acre watershed drainage to the east crossing under US-23, heading west.
    - There are no known endangered species habitats, floodplains, watercourses, or steep slopes on the site. There are numerous landmark trees and three woodland areas. Impacts to those features have been minimized with a compact site footprint and increased building height with underground parking areas. Only (28) landmark trees and (10) woodland trees will be removed. The two largest woodland areas are being preserved in the open space. Mitigation for the removals is proposed with new tree plantings. See the natural features analysis sheet for further description of the woodlands and remaining wooded areas.
    - The site also contains a wetland area on the south side of the site. The wetland will be protected with a 25-foot natural features non-disturbance buffer. Impacts to this buffer include construction of a stormwater detention outlet pipe and end section, and construction of a raised boardwalk that will cross at the wetland's narrowest point.

### SITE PLAN NOTES

- SITE PLAN NOTES**
- Standard Sidewalk Repair and Maintenance Note per Chapter 49, Section 4-58 of City of Ann Arbor Code. 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.
  - All sidewalks constructed in the public right-of-way shall meet requirements and guidelines as set forth in the ADA Standards for Accessible Design.
  - 100-year storm water detention is provided in underground chambers in multiple locations. One system will be located under the driveways and adjacent parking areas near Buildings 1 and 2. The other will be at the north end of the site, west of the dog run. Runoff from the buildings, exterior parking, driveways, sidewalks, and general open areas is directed to, and detained within the underground detention system. The northern system will also treat and detain a portion of the re-constructed Burton Road.
  - All roof drains are to run down through the building and are to connect to the storm detention systems.
  - The detention chambers are to outlet to the existing wetland, and to the existing storm sewer in Eli Road at the north end of the site through gravity storm sewer extensions.
  - The sanitary sewer leads will tap into the existing sanitary mains in Burton Road. System Planning is modeling proposed flows for the development.
  - The underground parking floor drains will drain by gravity to the existing sanitary sewer mains in Burton Road.
  - Domestic water and fire suppression water services are to tap into the proposed 12" water main. Booster pumps will be provided for domestic and fire water services if needed.
  - Dewatering operations during construction, if necessary, are to meet City requirements for sediment control and disposal.
  - There are no firewalls within the proposed buildings.
  - Two gated trash enclosures are located on the site for refuse and recycling containers. Pickup is estimated to be about 2 times per week for trash and 1 time per week for recycling. Garbage trucks will travel east from the south entrance off Burton Road, into the driveway/parking lot, turn left, then pull straight at the first (most southern) enclosure. Then trucks will travel north and pull straight into the second enclosure (north-most), perform a tee reverse maneuver, then pull forward to exit at Burton Road. Frequency of pickup will be adjusted as necessary.
  - The City of Ann Arbor has a single hauler for all commercial refuse collection in the City that began on July 1, 2009. It extends through June 30, 2021. Waste Management of Michigan, Inc. (WMM) will provide collection and container rental services for all commercial refuse collection services requested by the City. New improvements for public streets shall be designed to be in accordance with the City of Ann Arbor Green Street Policy.

### SITE DATA COMPARISON CHART

	Existing - R4B District		Previous submittal Conditional Rezoning to R4D		Allowed/ Required - R4B		Proposed	
<b>Zoning</b>								
Permitted Land Use	Vacant		Multi-family		Multi-family		Multi-family	
Site Area (gross/net)	351034	sf	351,034	sf	14000	sf	351,034	sf
	8.06	Acres	8.06	Acres	0.32	Acres Min.	8.06	Acres
Min. Lot Width	1,165	ft	1,165	ft	120	ft	1,165	ft
<b>Building</b>								
Number of Units	NA	Dwelling Units	160	Dwelling Units	120	Dwelling Units	120	Dwelling Units
Gross Lot Density	NA	DU/Acre	20	DU/Acre	15	DU/Acre	15	DU/Acre
Min. Lot Area per dwelling unit	NA	Acres	2,194	sf per DU	2,900	sf per DU	2,925	sf per DU
Number of Buildings	NA		4	Residential Buildings	NA		4	Residential Buildings
			58 one bedroom, 78 two bedroom,				90 Two Bedroom, 30 Three Bedroom	
			24 three bedroom = 286 bedrooms				= 270 Bedrooms	
			1	Clubhouse			Clubhouse amenities on 1st floor of one building	
Ground Floor Area	NA		50,388	sf			14,930	sf per building*
							120	sf tool shed
							59,840	sf total*
							*floor area does not include balconies or underground parking	
Maximum Lot Coverage	NA	%	14%		NA	%	17%	
Floor Area per building							59,720	sf per building
							120	sf tool shed
Total Floor Area	NA	sf	182,819	sf total	NA	sf	239,000	sf total
Maximum Floor Area Ratio	NA	%	52%	sf	NA	%	68%	
Maximum Height	NA	ft	47	ft maximum	35	ft - no underground parking	45	ft - with >35% underground parking
	NA	stories			45	ft - with >35% underground parking	45 ft / 4 stories	with underground parking
<b>Setbacks</b>								
Front	NA	ft	25	ft	15	ft minimum	15	ft min
					40	ft maximum		
<b>Side</b>								
	North	NA	198	ft (north)	12 ft plus 3 inches for each foot of height over 35 feet and 1.5 inches for each foot building length over 50 feet		12' + (3' x (45-35)) + (1.5" x (200-50)) = 33.25'	required to north 206 ft min. proposed
	South	NA	160	ft (south)	plus one foot for each foot of building height over 30 feet when abutting residentially zoned land		12' + (3' x (45-35)) + (1.5" x (200-50)) + (1" x (45-30)) = 48.25'	required to south 168 ft min. proposed
Rear	NA	ft	25	ft	30 ft plus 1.5 inches for each foot of building height over 35 feet and 1.5 inches for each foot of building width over 50 feet		30' + (1.5" x (45-35)) + (1.5" x (83.6-50)) = 35.45'	required 86 ft min. proposed
					plus one foot for each foot building height over 30 feet when abutting residentially zoned land (does not apply)			
Minnum Building Spacing	NA	ft	77	ft minimum	20	ft	74	ft minimum
Natural Features Setback	NA	ft	25	ft wetland setback	25	wetland setback	25	ft
<b>Open Space</b>								
Open Space	NA		63%		55%	Minimum	62%	
			5.10	Acres	4.43	Acres Minimum	5.03	Acres
Active Open Space	NA		993	sf per du	300	sf per du minimum	1,385	sf per du
			158,972	sf total	36,000	sf total minimum	166,172	sf
<b>Impervious surface coverage</b>								
	NA	%	44.8	%	NA	%	42.8	%
<b>Vehicular Parking</b>								
Multi-family dwelling units in residential district	NA		187	regular spaces	1.5	spaces per dwelling unit = 120*1.5 = 180 spaces required	92 regular underground	
			53	compact spaces			48 compact underground	
			12	barrier free spaces			114 regular surface	
			252	total spaces			8 barrier free surface	
							22 compact surface	
							284 total spaces (>1.05 per bedroom)	
							70 compact (25%)	
							2	EVC stations per building
							8	EVC stations total
<b>Bicycle Parking</b>								
Multi-family dwelling units in residential district	NA		16	Class A	1	space per 5 dwelling units (50% A, 50% C)	32	Class A provided
			16	Class C			8	Class C provided
			32	total	24	required (12A, 12C)	40	Total provided

## BRIGHTDAWN VILLAGE

JOB No. **17241A** DATE: 06/23/20

REVISIONS: SHEET 1 OF 27

REV. DATE: 7/24/20 CADD: TES

PER MUNICIPAL REVIEW: 9/03/20 ENG: TPH

PER MUNICIPAL REVIEW: PM: TJC

TECH: 17241CV.DWG

17241CV.DWG

**01**

**MIDWESTERN CONSULTING**

3815 Plaza Drive Ann Arbor, Michigan 48108  
(734) 995-0200 • www.midwesternconsulting.com

Land Development • Land Survey • Institutional • Municipal  
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**RELEASED FOR DATE**

SITE PLAN SUBMITTAL 06/23/20

REVISED SITE PLAN SUBMITTAL 07/24/20

REVISED SITE PLAN SUBMITTAL 09/03/20

THEODORE P. HIRSCH  
P.E. # 65179

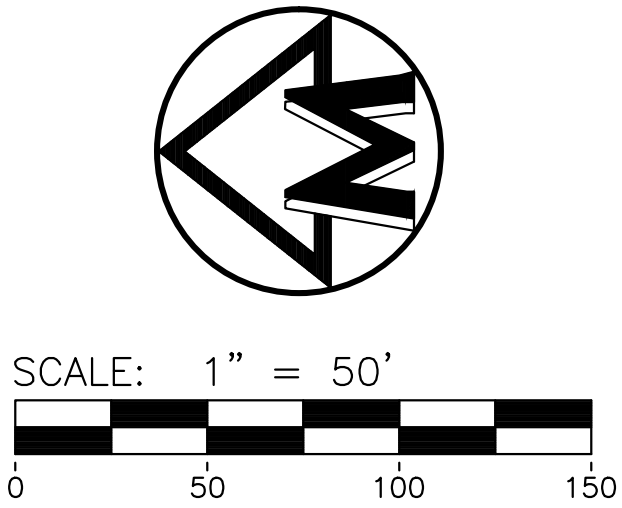
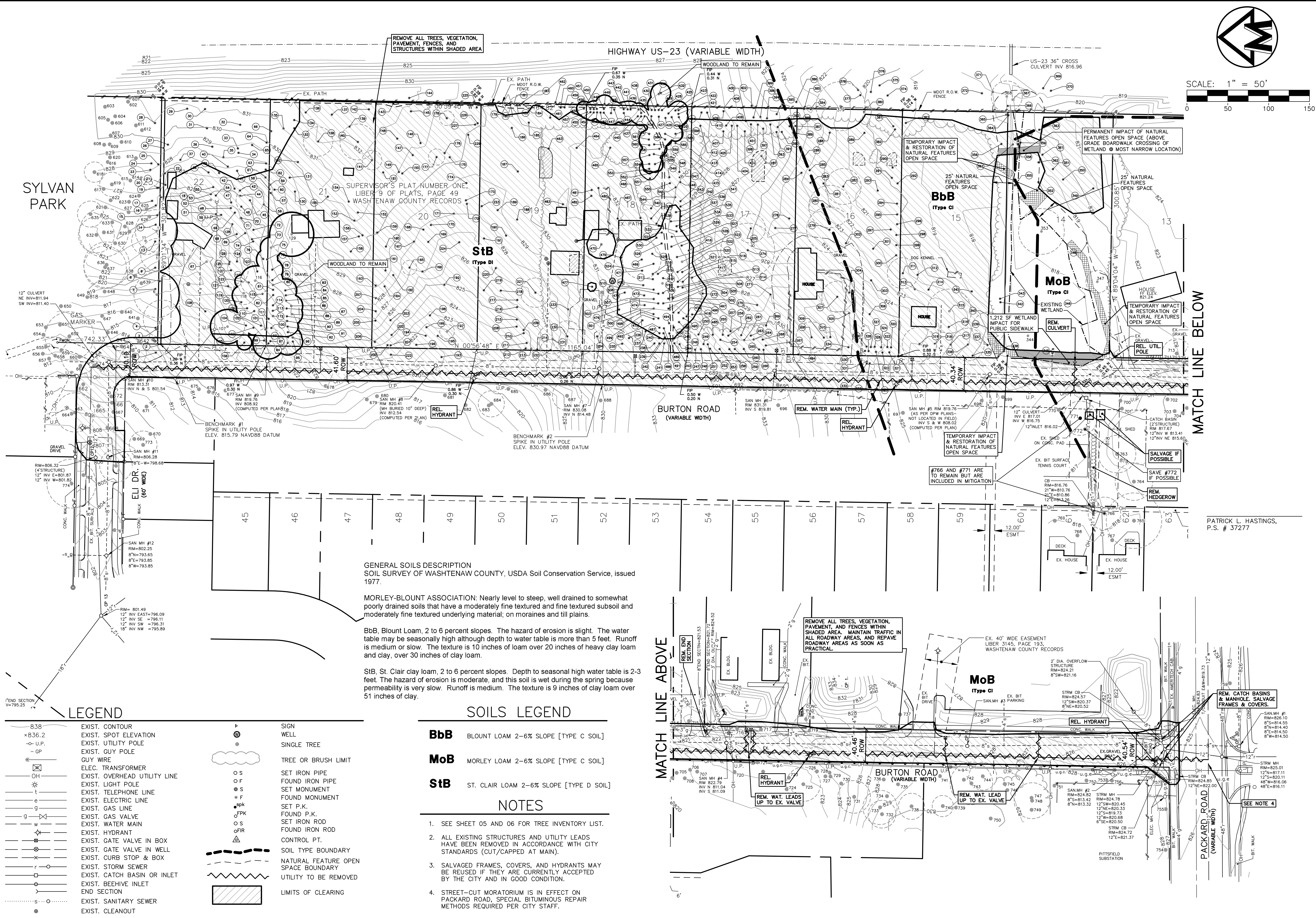
M:\Civ\132\_Pro\17241\Site Plan\17241CV.dwg, 9/2/2020 11:16 AM, Tyler E. Smith, Nons Copyright © 2015, Midwestern Consulting L.L.C. All rights reserved. No part of this drawing may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior permission of Midwestern Consulting L.L.C.







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SYLVAN PARK

MATCH LINE BELOW

MATCH LINE ABOVE

**LEGEND**

838	EXIST. CONTOUR	P	SIGN
x836.2	EXIST. SPOT ELEVATION	○	WELL
-U.P.	EXIST. UTILITY POLE	●	SINGLE TREE
-GP	EXIST. GUY POLE	○	TREE OR BRUSH LIMIT
-	EXIST. WIRE	○ S	SET IRON PIPE
⊠	ELEC. TRANSFORMER	○ F	FOUND IRON PIPE
OH	EXIST. OVERHEAD UTILITY LINE	○ S	SET MONUMENT
*	EXIST. LIGHT POLE	○ F	FOUND MONUMENT
t	EXIST. TELEPHONE LINE	○ S	SET P.K.
e	EXIST. ELECTRIC LINE	○ F	FOUND P.K.
g	EXIST. GAS LINE	○ S	SET IRON ROD
w	EXIST. GAS VALVE	○ F	FOUND IRON ROD
v	EXIST. WATER MAIN	○ S	CONTROL PT.
h	EXIST. HYDRANT	○ F	SOIL TYPE BOUNDARY
⊠	EXIST. GATE VALVE IN BOX	○ S	NATURAL FEATURE OPEN SPACE BOUNDARY
⊠	EXIST. GATE VALVE IN WELL	○ F	UTILITY TO BE REMOVED
x	EXIST. CURB STOP & BOX	○ S	LIMITS OF CLEARING
r	EXIST. STORM SEWER	○ F	
⊠	EXIST. CATCH BASIN OR INLET	○ S	
⊠	EXIST. BEEHIVE INLET	○ F	
○	END SECTION	○ S	
○	EXIST. SANITARY SEWER	○ F	
○	EXIST. CLEANOUT	○ S	

**SOILS LEGEND**

- BbB** BLOUNT LOAM 2-6% SLOPE [TYPE C SOIL]
- MoB** MORLEY LOAM 2-6% SLOPE [TYPE C SOIL]
- StB** ST. CLAIR LOAM 2-6% SLOPE [TYPE D SOIL]

**NOTES**

1. SEE SHEET 05 AND 06 FOR TREE INVENTORY LIST.
2. ALL EXISTING STRUCTURES AND UTILITY LEADS HAVE BEEN REMOVED IN ACCORDANCE WITH CITY STANDARDS (CUT/CAPPED AT MAIN).
3. SALVAGED FRAMES, COVERS, AND HYDRANTS MAY BE REUSED IF THEY ARE CURRENTLY ACCEPTED BY THE CITY AND IN GOOD CONDITION.
4. STREET-CUT MORATORIUM IS IN EFFECT ON PACKARD ROAD, SPECIAL BITUMINOUS REPAIR METHODS REQUIRED PER CITY STAFF.

GENERAL SOILS DESCRIPTION  
 SOIL SURVEY OF WASHTENAW COUNTY, USDA Soil Conservation Service, issued 1977.

MORLEY-BLOUNT ASSOCIATION: Nearly level to steep, well drained to somewhat poorly drained soils that have a moderately fine textured and fine textured subsoil and moderately fine textured underlying material; on moraines and till plains.

BbB, Blount Loam, 2 to 6 percent slopes. The hazard of erosion is slight. The water table may be seasonally high although depth to water table is more than 5 feet. Runoff is medium or slow. The texture is 10 inches of loam over 20 inches of heavy clay loam and clay, over 30 inches of clay loam.

StB, St. Clair clay loam, 2 to 6 percent slopes. Depth to seasonal high water table is 2-3 feet. The hazard of erosion is moderate, and this soil is wet during the spring because permeability is very slow. Runoff is medium. The texture is 9 inches of clay loam over 51 inches of clay.

PATRICK L. HASTINGS,  
 P.S. # 37277

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 3815 Plaza Drive Ann Arbor, Michigan 48108  
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**BRIGHTDAWN VILLAGE**  
 SITE PLAN  
 EXISTING CONDITIONS & REMOVALS

**03**

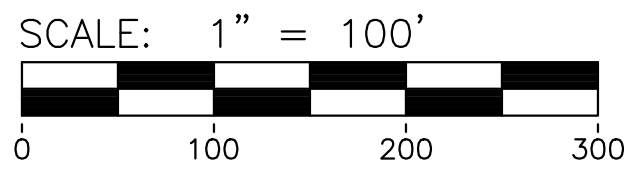
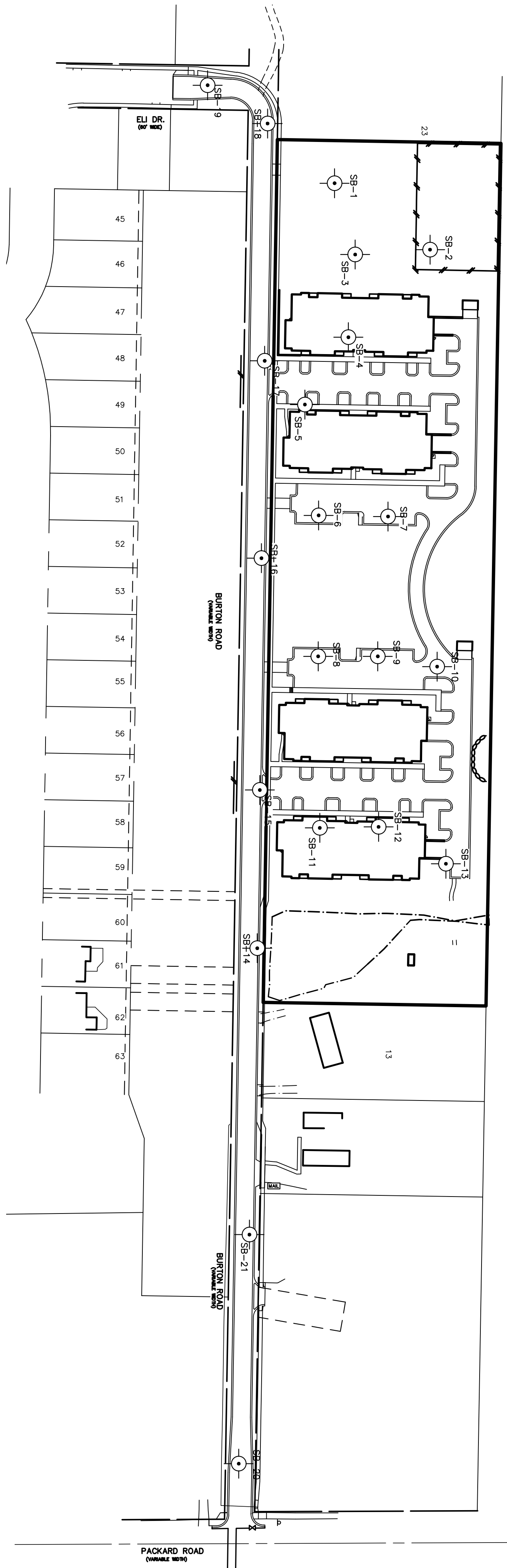
DATE: 06/23/20	REV. DATE: 7/24/20
SHEET 3 OF 27	ADD:
PER MUNICIPAL REVIEW	ENG. T.P.H.
	PM: T.H.C.
	TECH: T.H.C.
	DRAWN BY: T.H.C.

CLIENT: GLORYCREST BURTON ROAD INC., 2750 CARPENTER ROAD, SUITE 4 ANN ARBOR, MI 48108  
 JOSEPH M. WEST

JOB No. 17241A  
 REVISIONS:



MA:\CIVIL\3D\_Plan\17241\Site Plan\17241E02.dwg, 9/3/2020 11:17 AM, Tyler E. Smith, 04 SOIL BORING LOGS & LOCATION MAP, MCLLC PDF, p.3  
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HIGHWAY US-24 (VARIABLE WIDTH)

SOIL BORING LOCATIONS

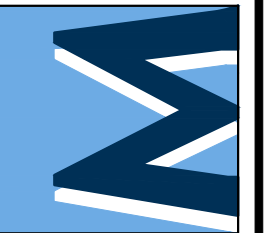
<p><b>Boring B-1</b> SURF. ELEV = 819.0 Topsail - 0" Silty Fine Sand Silty Clay Silty Clay WATER LEVEL OBSERVATION While Drilling: 6.0' At Completion: Dry</p>	<p><b>Boring B-2</b> SURF. ELEV = 828.0 Topsail - 10" Silty Fine to Medium Sand Silty Clay Silty Fine to Medium Sand Silty Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: Dry At Completion: Dry</p>	<p><b>Boring B-3</b> SURF. ELEV = 827.5 Topsail - 12" Silty Fine to Coarse Sand Silty Clay WATER LEVEL OBSERVATION While Drilling: 20.0' At Completion: 22.0'</p>	<p><b>Boring B-4</b> SURF. ELEV = 829.5 Topsail - 0" Silty Clay Fine to Coarse Sand and Gravel WATER LEVEL OBSERVATION While Drilling: 18.5' At Completion: 18.5'</p>	<p><b>Boring B-5</b> SURF. ELEV = 823.5 Topsail - 0" Silty Clay Fine to Coarse Sand Silty Clay WATER LEVEL OBSERVATION While Drilling: 13.0' At Completion: 13.0'</p>	<p><b>Boring B-6</b> SURF. ELEV = 829.5 Topsail - 12" Silty Clay Silty Clay Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: 18.0' At Completion: 18.0'</p>	<p><b>Boring B-7</b> SURF. ELEV = 831.0 Topsail - 10" Silty Clay Silty Clay Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: 21.0' At Completion: 21.0'</p>	<p><b>Boring B-8</b> SURF. ELEV = 829.0 Topsail - 12" Silty Clay Silty Fine to Medium Sand Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: 18.0' At Completion: 18.0'</p>	<p><b>Boring B-9</b> SURF. ELEV = 826.5 Topsail - 12" Silty Clay Silty Fine to Medium Sand Fine to Coarse Sand and Gravel WATER LEVEL OBSERVATION While Drilling: 17.0' At Completion: 16.0'</p>	<p><b>Boring B-10</b> SURF. ELEV = 827.5 Topsail - 12" Silty Clay Silty Fine to Medium Sand Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: 18.0' At Completion: 18.5'</p>	<p><b>Boring B-11</b> SURF. ELEV = 822.5 Topsail - 12" Silty Clay Silty Fine to Coarse Sand Fine to Coarse Sand and Gravel WATER LEVEL OBSERVATION While Drilling: 12.5' At Completion: 11.5'</p>	<p><b>Boring B-12</b> SURF. ELEV = 820.0 Topsail Silty Clay Fine to Medium Sand Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: 8.0' At Completion: 7.5'</p>	<p><b>Boring B-13</b> SURF. ELEV = 818.5 Topsail - 24" Silty Clay Fine to Coarse Sand Fine to Coarse Sand and Gravel WATER LEVEL OBSERVATION While Drilling: 8.0' At Completion: 7.5'</p>	<p><b>Boring B-14</b> SURF. ELEV = 818.0 8" Sand &amp; Gravel Fill Clayey Topsail - 18" Silty Clay Sandy Clay Silty Fine to Medium Sand Fine to Coarse Sand and Gravel WATER LEVEL OBSERVATION While Drilling: 8.0' At Completion: 8.0'</p>	<p><b>Boring B-15</b> SURF. ELEV = 826.0 8" Sand &amp; Gravel Fill Silty Clay Silty Fine Sand Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: 13.0' At Completion: 13.0'</p>	<p><b>Boring B-16</b> SURF. ELEV = 831.0 8" Sand &amp; Gravel Fill Silty Clay Silty Fine Sand Fine to Coarse Sand WATER LEVEL OBSERVATION While Drilling: Dry At Completion: Dry</p>	<p><b>Boring B-17</b> SURF. ELEV = 821.5 8" Sand &amp; Gravel Fill Fine Sandy Silty Silty Clay WATER LEVEL OBSERVATION While Drilling: 9.0' At Completion: Dry</p>	<p><b>Boring B-18</b> SURF. ELEV = 814.0 Silty Clay Fill Silty Clay WATER LEVEL OBSERVATION While Drilling: Dry At Completion: Dry</p>	<p><b>Boring B-19</b> SURF. ELEV = 808.5 Silty Clay Fill Silty Clay WATER LEVEL OBSERVATION While Drilling: Dry At Completion: Dry</p>	<p><b>Boring B-20</b> SURF. ELEV = 825.5 Sand and Gravel Aggregate Silty Fine to Medium Sand Fill Silty Fine to Coarse Sand Fine to Coarse Sand and Gravel WATER LEVEL OBSERVATION While Drilling: 8.5' At Completion: 8.0'</p>	<p><b>Boring B-21</b> SURF. ELEV = 826.0 Sand and Gravel Aggregate Silty Clay WATER LEVEL OBSERVATION While Drilling: 13.0' At Completion: 13.0'</p>
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GEOTECHNICAL INVESTIGATION PROVIDED AS OF JULY 2007 BY:

TES CONSULTANTS, P.C.  
 23943 INDUSTRIAL PARK DRIVE  
 FARMINGTON HILLS, MICHIGAN 48335

PHONE: (248) 615-3000  
 FAX: (248) 615-3512

**MIDWESTERN CONSULTING**  
 3845 Plaza Drive Ann Arbor, Michigan 48108  
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**BRIGHTDAWN VILLAGE**  
 SITE PLAN  
 SOIL BORING LOGS & LOCATION MAP

**04**

JOB No. <b>17241A</b>	DATE: 06/23/20	REV. DATE: 7/23/20	ENG. TPH
PER. MUNICIPAL REVIEW	SHEET 4 OF 27	TECH: TJC	17241E02.dwg



TREE LIST

LEGEND

Tag #	REM	Type	Trunks	Size	Comp DBH	Common Name	Scientific Name	INV/LM/W	Health	
1	R	D	3	11	10	17	BASSWOOD	TILIA AMERICANA		
2	R	D	2	11	8	13	BASSWOOD	TILIA AMERICANA		
3		D	1	19			ASH - GREEN	FRAXINUS PENNSYLVANICA	DEAD	
4		D	1	11			BASSWOOD	TILIA AMERICANA		
5		D	1	23			BURR OAK	QUERCUS MACROCARPA	LM	
6		D	3	28	12	12	BASSWOOD	TILIA AMERICANA	LM	
7		D	1	7			IRON WOOD	OSTRYA VIRGINIANA		
8		D	1	9			BASSWOOD	TILIA AMERICANA		
9		D	1	17			BLACK WALNUT	JUGLANS NIGRA		
10		D	1	20			BLACK WALNUT	JUGLANS NIGRA	LM	
11		D	1	17			RED OAK	QUERCUS RUBRA	LM	
12		D	1	26			BASSWOOD	TILIA AMERICANA	LM	
13		D	1	7			SHAGBARK HICKORY	CARYA OVATA		
14		D	1	15			BLACK CHERRY	PRUNUS SEROTINA		
15		D	1	12			SHAGBARK HICKORY	CARYA OVATA		
16		D	1	17			BLACK CHERRY	PRUNUS SEROTINA		
17		D	1	11			BASSWOOD	TILIA AMERICANA		
18	CRZ	D	1	12			RED OAK	QUERCUS RUBRA		
19		D	2	15	12	19	BLACK CHERRY	PRUNUS SEROTINA	LM DEAD	
20		D	1	9			SHAGBARK HICKORY	CARYA OVATA		
21		D	1	7			RED OAK	QUERCUS RUBRA		
22		D	1	9			WHITE OAK	QUERCUS ALBA		
23		D	1	13			BLACK CHERRY	PRUNUS SEROTINA		
24		D	1	10			ASH - GREEN	FRAXINUS PENNSYLVANICA	DEAD	
25		D	1	12			BLACK WALNUT	JUGLANS NIGRA		
26		D	1	14			BLACK CHERRY	PRUNUS SEROTINA		
27		D	1	10			AMERICAN ELM	ULMUS AMERICANA		
28		D	1	13			BLACK CHERRY	PRUNUS SEROTINA		
29		D	1	13			BLACK CHERRY	PRUNUS SEROTINA		
30		D	3	10	7	5	13	BLACK CHERRY	PRUNUS SEROTINA	
31		D	2	7	7	5	5	BLACK CHERRY	PRUNUS SEROTINA	
32		D	1	10			BLACK CHERRY	PRUNUS SEROTINA		
33		D	1	10			BLACK CHERRY	PRUNUS SEROTINA		
34		D	1	10			BUCKTHORN	RHAMNUS CATHARTICA	INV	
35		D	1	13			BLACK CHERRY	PRUNUS SEROTINA		
36		D	1	8			AMERICAN ELM	ULMUS AMERICANA		
37		C	1	17			WHITE PINE	PINUS STROBUS		
38	R	D	2	9	9	13	BLACK CHERRY	PRUNUS SEROTINA	DEAD	
39	R	D	2	10	10	14	BLACK CHERRY	PRUNUS SEROTINA	DEAD	
40		D	1	11			BLACK CHERRY	PRUNUS SEROTINA		
41		D	1	6			BLACK WALNUT	JUGLANS NIGRA		
42	R	D	1	9			BLACK CHERRY	PRUNUS SEROTINA		
43	R	D	1	9			AMERICAN ELM	ULMUS AMERICANA		
44	R	D	1	20			BLACK CHERRY	PRUNUS SEROTINA	LM 14	
45	R	D	1	17			RED OAK	QUERCUS RUBRA	LM 18	
46	R	D	1	6			AMERICAN ELM	ULMUS AMERICANA		
47	R	D	1	8			AMERICAN ELM	ULMUS AMERICANA	DEAD	
48	R	D	1	9			AMERICAN ELM	ULMUS AMERICANA		
49	R	D	3	12	10	6	17	BLACK CHERRY	PRUNUS SEROTINA	
50	R	D	1	9			AMERICAN ELM	ULMUS AMERICANA	DEAD	
51	R	D	1	10			AMERICAN ELM	ULMUS AMERICANA	DEAD	
52	R	D	1	19			BLACK CHERRY	PRUNUS SEROTINA	DEAD	
53	R	D	1	19			AMERICAN ELM	ULMUS AMERICANA	DEAD	
54	R	D	2	8	4	9	BLACK CHERRY	PRUNUS SEROTINA		
55	R	D	1	9			AMERICAN ELM	ULMUS AMERICANA	DEAD	
56	R	D	1	15			BLACK CHERRY	PRUNUS SEROTINA		
57	R	D	1	7			ASH - GREEN	FRAXINUS PENNSYLVANICA	DEAD	
58	R	D	1	11			AMERICAN ELM	ULMUS AMERICANA		
59	R	D	1	11			ASH - GREEN	FRAXINUS PENNSYLVANICA	DEAD	
60	R	D	1	9			WHITE MULBERRY	MORUS ALBA	INV	
61	R	D	1	10			ASH - GREEN	FRAXINUS PENNSYLVANICA	DEAD	
62	R	D	1	8			ASH - GREEN	FRAXINUS PENNSYLVANICA	DEAD	
63		D	1	12			BLACK CHERRY	PRUNUS SEROTINA		
64		D	2	9	9	12	SILVER MAPLE	ACER SACCHARINUM		
65		D	1	8			SILVER MAPLE	ACER SACCHARINUM		
66		D	1	10			BLACK CHERRY	PRUNUS SEROTINA		
67	R	D	1	13			WHITE MULBERRY	MORUS ALBA	INV	
68	R	D	1	13			BLACK CHERRY	PRUNUS SEROTINA		
69	R	D	1	8			AMERICAN ELM	ULMUS AMERICANA		
70	R	D	1	8			ASH - GREEN	FRAXINUS PENNSYLVANICA	DEAD	
71	R	D	1	7			BLACK CHERRY	PRUNUS SEROTINA		
72	R	D	2	13	11	17	BLACK CHERRY	PRUNUS SEROTINA	DEAD	
73	R	D	1	11			AMERICAN ELM	ULMUS AMERICANA		
74	R	D	2	7	6	9	AMERICAN ELM	ULMUS AMERICANA	DEAD	
75		C	1	13			RED PINE	PINUS RESINOSA	W	
76		D	1	8			AMERICAN ELM	ULMUS AMERICANA	W	
77		D	2	13	11	17	BLACK CHERRY	PRUNUS SEROTINA	W	
78		C	1	13			RED PINE	PINUS RESINOSA	W	
79		C	1	13			RED PINE	PINUS RESINOSA	W	
80		C	1	11			RED PINE	PINUS RESINOSA	W	
81		C	1	12			RED PINE	PINUS RESINOSA	W	
82		C	1	11			RED PINE	PINUS RESINOSA	W	
83		C	1	14			RED PINE	PINUS RESINOSA	W	
84		C	1	12			RED PINE	PINUS RESINOSA	W	
85		C	1	13			RED PINE	PINUS RESINOSA	W	
86		C	1	14			RED PINE	PINUS RESINOSA	W	
87		C	1	8			RED PINE	PINUS RESINOSA	W	
88		C	1	13			RED PINE	PINUS RESINOSA	W	
89		C	1	12			RED PINE	PINUS RESINOSA	W	
90		C	1	7			RED PINE	PINUS RESINOSA	W	
91		C	1	13			RED PINE	PINUS RESINOSA	W	
92		C	1	10			RED PINE	PINUS RESINOSA	W	
93	R	C	1	10			RED PINE	PINUS RESINOSA	W	
94	R	C	1	15			RED PINE	PINUS RESINOSA	W	
95	R	C	1	12			RED PINE	PINUS RESINOSA	W	
96	R	C	1	11			RED PINE	PINUS RESINOSA	W	
97	R	D	1	9			BLACK CHERRY	PRUNUS SEROTINA		
98	R	D	1	19			BASSWOOD	TILIA AMERICANA	LM/W 20	
99	R	D	1	8			BLACK CHERRY	PRUNUS SEROTINA	W	
100		D	1	13			BASSWOOD	TILIA AMERICANA	W	
101		D	1	10			BASSWOOD	TILIA AMERICANA	W	
102		D	1	9			BASSWOOD	TILIA AMERICANA	W	
103		D	1	9			COTTONWOOD	POPULUS DELTOIDES	W	
104		D	1	7			BLACK WALNUT	JUGLANS NIGRA	W	
105		D	1	7			BLACK CHERRY	PRUNUS SEROTINA	W	
106	R	D	1	9			BLACK CHERRY	PRUNUS SEROTINA	W	
107		D	1	21			BLACK WALNUT	JUGLANS NIGRA	LM/W 21	
108	R	C	1	9			WHITE PINE	PINUS STROBUS	W	
109		D	1	13			BLACK CHERRY	PRUNUS SEROTINA	W	
110		D	1	7			BLACK CHERRY	PRUNUS SEROTINA	W	
111		D	1	10			BASSWOOD	TILIA AMERICANA	W	
112		C	1	11			RED PINE	PINUS RESINOSA	W	
113		C	1	14			RED PINE	PINUS RESINOSA	W	
114		C	1	11			RED PINE	PINUS RESINOSA	W	
115		D	1	11			AMERICAN ELM	ULMUS AMERICANA	W	
116		D	1	18			BLACK CHERRY	PRUNUS SEROTINA	LM/W	

Tag #	REM	Type	Trunks	Size	Comp DBH	Common Name	Scientific Name	INV/LM/W	Health
117		D	1	12			AMERICAN ELM	ULMUS AMERICANA	W
118		D	2	14	13	22	BLACK CHERRY	PRUNUS SEROTINA	LM
119		D	2	12	12	17	BLACK CHERRY	PRUNUS SEROTINA	W
120		D	1	8			AMERICAN ELM	ULMUS AMERICANA	W
121	R	D	1	8			BLACK CHERRY	PRUNUS SEROTINA	W
122		D	1	8			AMERICAN ELM	ULMUS AMERICANA	W
123		D	1	7			BLACK CHERRY	PRUNUS SEROTINA	W
124	R	D	1	11			AMERICAN ELM	ULMUS AMERICANA	DEAD
125	R	D	1	10			APPLE	MALUS PUMILA	
126	R	D	1	7			BLACK CHERRY	PRUNUS SEROTINA	
127	R	D	1	21			BLACK CHERRY	PRUNUS SEROTINA	LM DEAD
128	R	D	1	7			AMERICAN ELM	ULMUS AMERICANA	
129		D	1	27			SILVER MAPLE	ACER SACCHARINUM	LM/W
130		D	1	18			WHITE MULBERRY	MORUS ALBA	INV
131	R	D	2	13	11	17	WHITE MULBERRY	MORUS ALBA	INV
132	R	D	1	16			PEAR	PYRUS COMMUNIS	LM DEAD
133	R	D	1	7			BLACK CHERRY	PRUNUS SEROTINA	
134		D	1	6			BLACK CHERRY	PRUNUS SEROTINA	
135		D	1	9			AMERICAN ELM	ULMUS AMERICANA	
136	R	D	3	7	5	10	APPLE	MALUS PUMILA	
137	R	D	1	6			BLACK CHERRY	PRUNUS SEROTINA	
138	R	D	1	18			PEAR	PYRUS COMMUNIS	LM 15
139	R	D	1	17			BLACK CHERRY	PRUNUS SEROTINA	
140	R	D	2	17	15	22	APPLE	MALUS PUMILA	LM 15
141	R	D	1	12			PEAR	PYRUS COMMUNIS	LM 18
142	R	D	1	6			BLACK CHERRY	PRUNUS SEROTINA	
143	R	D	1	6			BLACK CHERRY	PRUNUS SEROTINA	
144		D	1	10			BLACK CHERRY	PRUNUS SEROTINA	
145	R	C	1	7			RED CEDAR	JUNIPERUS VIRGINIANA	
146	R	D	1	13			APPLE	MALUS PUMILA	DEAD
147	R	C	1	6			RED CEDAR	JUNIPERUS VIRGINIANA	
148	R	D	1	15			APPLE	MALUS PUMILA	
149	R	D	1	7			WHITE MULBERRY	MORUS ALBA	INV
150	R	D	1	9			WHITE MULBERRY	MORUS ALBA	INV
151	R	D	2	12	8		WHITE MULBERRY	MORUS ALBA	INV
152	R	D	1	17			SILVER MAPLE	ACER SACCHARINUM	
153	R	D	2	12	9		SILVER MAPLE	ACER SACCHARINUM	DEAD
154	R	D	1	8			SILVER MAPLE	ACER SACCHARINUM	DEAD
155	R	D	1	15			SILVER MAPLE	ACER SACCHARINUM	
156	R	D	1	13			BLACK CHERRY	PRUNUS SEROTINA	
157	R	D	1	21			SILVER MAPLE	ACER SACCHARINUM	DEAD
158	R	D	1	17			SILVER MAPLE	ACER SACCHARINUM	DEAD
159	R	D	1	6			SILVER MAPLE	ACER SACCHARINUM	
160	R	D	1	9			BLACK CHERRY	PRUNUS SEROTINA	
161	R	D	1	8			BLACK CHERRY	PRUNUS SEROTINA	
162	R	D	1	11			BLACK CHERRY	PRUNUS SEROTINA	
163	R	C	1	17			RED PINE	PINUS RESINOSA	
164	R	D	1	8			APPLE	MALUS PUMILA	
165	R	C	1	9			RED CEDAR	JUNIPERUS VIRGINIANA	LM 21
166	R	D	1	9			AMERICAN ELM	ULMUS AMERICANA	DEAD
167	R	D	1	7			AMERICAN ELM	ULMUS AMERICANA	DEAD
168	R	D	1	8			AMERICAN ELM	ULMUS AMERICANA	
169	R	D	2	7	4		APPLE	MALUS PUMILA	
170	R	C	1	7			RED CEDAR	JUNIPERUS VIRGINIANA	
171	R	C	1	7			RED CEDAR	JUNIPERUS VIRGINIANA	
172	R	C	1	7			SCOTCH PINE	PINUS SYLVESTRIS	INV
173	R	C	1	10			SCOTCH PINE	PINUS SYLVESTRIS	INV
174	R	C	1	7			SCOTCH PINE	PINUS SYLVESTRIS	INV
175	R	C	1	7			RED CEDAR	JUNIPERUS VIRGINIANA	
176	R	C	1	9			RED CEDAR	JUNIPERUS VIRGINIANA	LM 21
177	R	C	1	10			RED CEDAR	JUNIPERUS VIRGINIANA	LM 21
178	R	C	1	9					

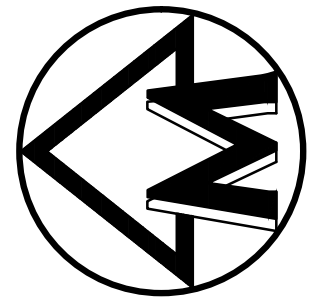


TREE LIST

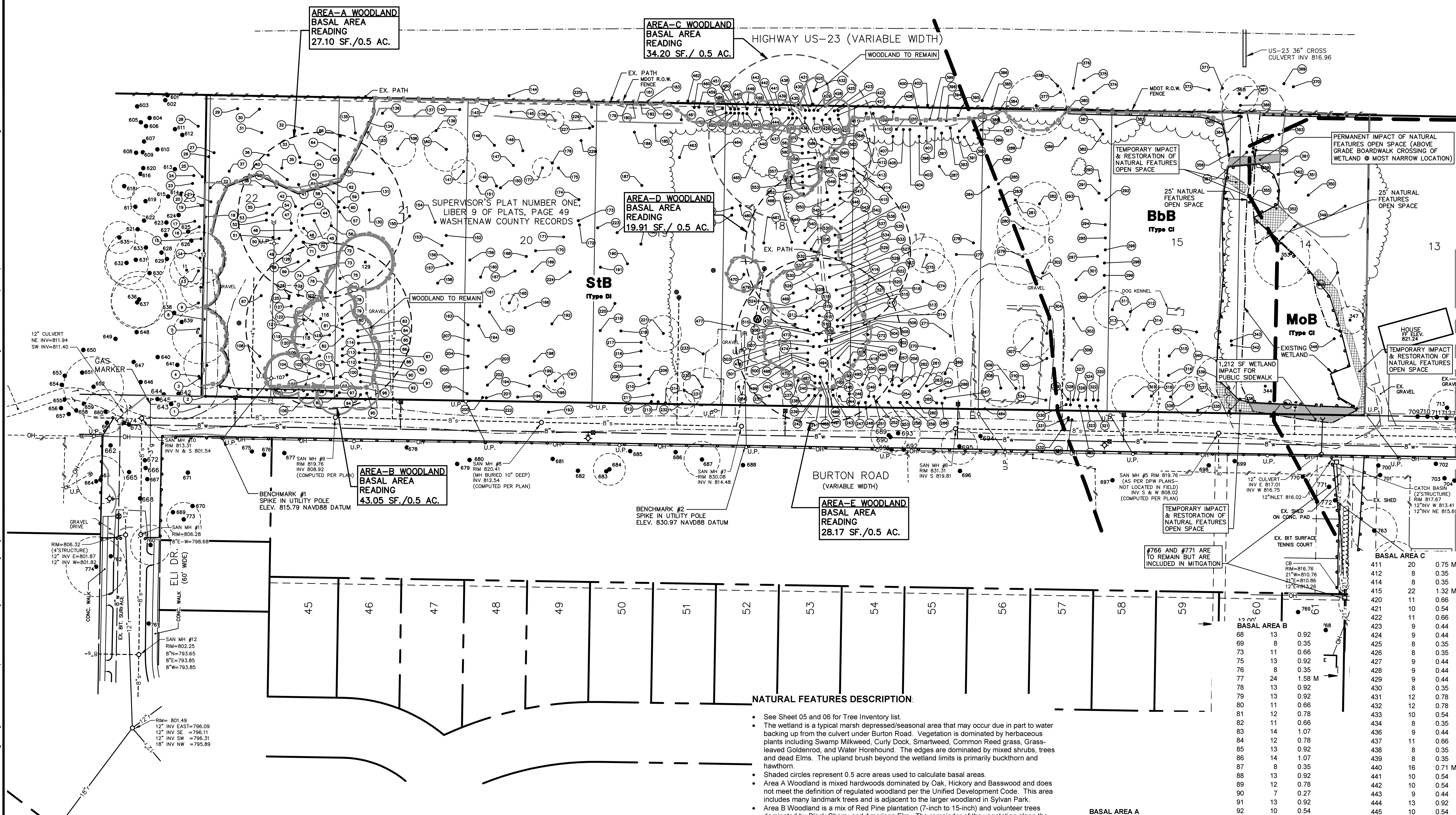
Tag #	REM	Type	Trunks	Size	Comp. DBH	Common Name	Scientific Name	INV/ LM/W	Health	
352	D	D	1	8		BLACK CHERRY	PRUNUS SEROTINA			
353	D	D	1	28		COTTONWOOD	POPULUS DELTOIDES			
355	D	D	1	6		BOXELDER	ACER NEGUNDO			
356	D	D	1	7		BOXELDER	ACER NEGUNDO			
357	D	D	1	20		COTTONWOOD	POPULUS DELTOIDES			
358	D	D	1	12		AMERICAN ELM	ULMUS AMERICANA			
359	D	D	1	7		AMERICAN ELM	ULMUS AMERICANA			
360	D	D	1	10		AMERICAN ELM	ULMUS AMERICANA			
361	D	D	1	6		BLACK CHERRY	PRUNUS SEROTINA			
362	D	D	1	6		BLACK CHERRY	PRUNUS SEROTINA			
363	D	D	2	11	10	BLACK CHERRY	PRUNUS SEROTINA			
364	D	D	1	9		SILVER MAPLE	ACER SACCHARINUM			
365	D	D	1	16		AMERICAN ELM	ULMUS AMERICANA			
366	D	D	1	21		COTTONWOOD	POPULUS DELTOIDES			
367	D	D	1	24		COTTONWOOD	POPULUS DELTOIDES		DEAD	
368	D	D	1	19		COTTONWOOD	POPULUS DELTOIDES			
369	D	D	1	10		COTTONWOOD	POPULUS DELTOIDES			
370	D	D	1	11		COTTONWOOD	POPULUS DELTOIDES			
371	D	D	1	8		BOXELDER	ACER NEGUNDO			
372	D	D	1	8		BLACK WALNUT	JUGLANS NIGRA			
373	C	D	1	23		NORWAY SPRUCE	PICEA ABIES	LM		
374	D	D	1	11		BLACK WALNUT	JUGLANS NIGRA			
375	D	D	1	10		BLACK WALNUT	JUGLANS NIGRA			
376	D	D	1	7		BLACK WALNUT	JUGLANS NIGRA			
377	D	D	1	6		ASH - GREEN	FRAXINUS PENNSYLVANICA			
378	D	D	1	8		BLACK WALNUT	JUGLANS NIGRA			
379	D	D	1	30		BLACK WALNUT	JUGLANS NIGRA	LM		
380	R	D	1	15		BLACK CHERRY	PRUNUS SEROTINA		DEAD	
381	R	D	1	16		SIBERIAN ELM	ULMUS PUMILA	INV		
382	R	D	1	13		AMERICAN ELM	ULMUS AMERICANA			
383	R	D	1	9		SIBERIAN ELM	ULMUS PUMILA	INV		
384	D	D	2	11	8	BLACK CHERRY	PRUNUS SEROTINA			
385	D	D	1	9		BLACK CHERRY	PRUNUS SEROTINA		DEAD	
386	D	D	1	8		BLACK WALNUT	JUGLANS NIGRA			
387	R	C	1	7		WHITE PINE	PINUS STROBUS		DEAD	
388	R	C	1	7		WHITE PINE	PINUS STROBUS		DEAD	
389	R	C	1	8		WHITE PINE	PINUS STROBUS		DEAD	
390	R	C	1	10		WHITE PINE	PINUS STROBUS		DEAD	
391	R	C	1	8		WHITE PINE	PINUS STROBUS		DEAD	
392	R	D	1	14		BLACK CHERRY	PRUNUS SEROTINA			
393	R	C	1	11		WHITE PINE	PINUS STROBUS			
394	R	D	1	10		BLACK CHERRY	PRUNUS SEROTINA			
395	R	D	2	10	9	BLACK CHERRY	PRUNUS SEROTINA		DEAD	
396	R	C	1	9		RED PINE	PINUS RESINOSA			
397	R	D	1	13		BLACK CHERRY	PRUNUS SEROTINA			
398	R	D	1	9		BLACK CHERRY	PRUNUS SEROTINA			
399	R	D	1	12		RED PINE	PINUS RESINOSA			
400	R	D	2	8	8	BLACK CHERRY	PRUNUS SEROTINA			
401	R	D	1	8		BLACK CHERRY	PRUNUS SEROTINA			
402	R	D	2	14	10	17	BLACK CHERRY	PRUNUS SEROTINA		
403	R	C	1	17		WHITE PINE	PINUS STROBUS			
404	R	C	1	7		WHITE PINE	PINUS STROBUS			
405	R	C	1	16		WHITE PINE	PINUS STROBUS			
406	R	C	1	14		WHITE PINE	PINUS STROBUS			
407	R	C	1	16		WHITE PINE	PINUS STROBUS			
408	D	D	3	10	8	15	BLACK CHERRY	PRUNUS SEROTINA		
409	C	D	1	7		RED PINE	PINUS RESINOSA			
410	CRZ	D	2	12	8	14	BLACK CHERRY	PRUNUS SEROTINA		
411	D	D	3	8	6	11	BLACK CHERRY	PRUNUS SEROTINA		
412	R	C	1	8		SCOTCH PINE	PINUS SYLVESTRIS	INV		
413	R	D	1	25		BLACK CHERRY	PRUNUS SEROTINA	LM	14	
414	R	D	1	8		BLACK CHERRY	PRUNUS SEROTINA			
415	R	D	2	12	10	15	BLACK CHERRY	PRUNUS SEROTINA		
416	D	D	2	13	12	17	BLACK CHERRY	PRUNUS SEROTINA		
417	D	D	1	16		BLACK CHERRY	PRUNUS SEROTINA			
418	R	D	2	12	9	15	BLACK CHERRY	PRUNUS SEROTINA		DEAD
419	D	D	1	10		BLACK CHERRY	PRUNUS SEROTINA			
420	C	D	1	11		RED PINE	PINUS RESINOSA	W		
421	C	D	1	10		RED PINE	PINUS RESINOSA	W		
422	C	D	1	11		RED PINE	PINUS RESINOSA	W		
423	C	D	1	9		RED PINE	PINUS RESINOSA	W		
424	C	D	1	9		RED PINE	PINUS RESINOSA	W		
425	C	D	1	8		RED PINE	PINUS RESINOSA	W		
426	C	D	1	8		RED PINE	PINUS RESINOSA	W		
427	C	D	1	9		RED PINE	PINUS RESINOSA	W		
428	C	D	1	9		RED PINE	PINUS RESINOSA	W		
429	C	D	1	9		RED PINE	PINUS RESINOSA	W		
430	C	D	1	8		RED PINE	PINUS RESINOSA	W		
431	D	D	1	12		BLACK CHERRY	PRUNUS SEROTINA			
432	D	D	1	12		BLACK WALNUT	JUGLANS NIGRA			
433	D	D	1	10		AMERICAN ELM	ULMUS AMERICANA			
434	C	D	1	8		RED PINE	PINUS RESINOSA	W		
435	C	D	1	9		RED PINE	PINUS RESINOSA	W	DEAD	
436	C	D	1	9		RED PINE	PINUS RESINOSA	W		
437	C	D	1	11		RED PINE	PINUS RESINOSA	W		
438	C	D	1	8		RED PINE	PINUS RESINOSA	W		
439	C	D	1	8		RED PINE	PINUS RESINOSA	W		
440	C	D	2	9	7	11	RED PINE	PINUS RESINOSA	W	
441	C	D	1	10		RED PINE	PINUS RESINOSA	W		
442	C	D	1	10		RED PINE	PINUS RESINOSA	W		
443	C	D	1	9		RED PINE	PINUS RESINOSA	W		
444	C	D	1	13		RED PINE	PINUS RESINOSA	W		
445	C	D	1	10		RED PINE	PINUS RESINOSA	W		
446	C	D	1	14		RED PINE	PINUS RESINOSA	W		
447	C	D	1	12		RED PINE	PINUS RESINOSA	W		
448	D	D	1	9		RED PINE	PINUS RESINOSA	W		
449	D	D	1	11		BLACK CHERRY	PRUNUS SEROTINA			
450	C	D	1	8		RED PINE	PINUS RESINOSA	W		
451	C	D	1	10		RED PINE	PINUS RESINOSA	W		
452	C	D	1	9		RED PINE	PINUS RESINOSA	W		
453	C	D	1	8		RED PINE	PINUS RESINOSA	W		
454	C	D	1	8		RED PINE	PINUS RESINOSA	W		
455	C	D	1	10		RED PINE	PINUS RESINOSA	W		
456	C	D	1	8		RED PINE	PINUS RESINOSA	W		
457	C	D	1	8		RED PINE	PINUS RESINOSA	W		
458	C	D	1	9		RED PINE	PINUS RESINOSA	W		
459	CRZ	C	1	16		RED PINE	PINUS RESINOSA	W		
460	C	D	1	12		RED PINE	PINUS RESINOSA	W		
461	R	D	3	7	6	2	AMERICAN ELM	ULMUS AMERICANA		
462	D	D	1	12		AMERICAN ELM	ULMUS AMERICANA			
463	R	D	2	9	7		APPLE	MALUS PUMILA		
464	R	D	2	13	10	17	APPLE	MALUS PUMILA		
465	R	D	2	16	12	20	WHITE MULBERRY	MORUS ALBA	INV	
466	D	D	1	14		BLACK CHERRY	PRUNUS SEROTINA			
467	R	D	1	15		BLACK WALNUT	JUGLANS NIGRA		DEAD	
468	R	D	1	20		BLACK WALNUT	JUGLANS NIGRA	LM	14	

Tag #	REM	Type	Trunks	Size	Comp. DBH	Common Name	Scientific Name	INV/ LM/W	Health		
469	D	D	3	14	14	13	24	SILVER MAPLE	ACER SACCHARINUM	LM	18
470	D	D	1	17				PEAR	PYRUS COMMUNIS	LM	20
471	D	D	3	11	9	9	17	SILVER MAPLE	ACER SACCHARINUM		
472	C	D	1	9				NORWAY SPRUCE	PICEA ABIES		
473	C	D	1	12				NORWAY SPRUCE	PICEA ABIES		
474	C	D	1	14				NORWAY SPRUCE	PICEA ABIES		
475	C	D	1	11				RED PINE	PINUS RESINOSA		
476	C	D	2	12	7	14		NORWAY SPRUCE	PICEA ABIES		
477	D	D	1	8				COTTONWOOD	POPULUS DELTOIDES		
478	D	D	1	10				RED BUD	CERCIS CANADENSIS	LM	21
479	R	D	1	2				FLOWERING DOGWOOD			
480	R	D	2	8	7			COTTONWOOD	POPULUS DELTOIDES		
481	R	D	1	13				COTTONWOOD	POPULUS DELTOIDES		
482	R	D	2	8	5			COTTONWOOD	POPULUS DELTOIDES		
483	R	D	1	14				BLACK WALNUT	JUGLANS NIGRA		
484	R	D	1	13				BLACK CHERRY	PRUNUS SEROTINA		
485	R	C	1	11				RED PINE	PINUS RESINOSA		DEAD
487	R	C	1	9				RED PINE	PINUS RESINOSA		DEAD
488	C	D	1	8				RED PINE	PINUS RESINOSA		
489	C	D	1	7				RED PINE	PINUS RESINOSA		
490	C	D	1	8				RED PINE	PINUS RESINOSA		
491	C	D	1	7				RED PINE	PINUS RESINOSA		
492	R	C	1	10				RED PINE	PINUS RESINOSA		DEAD
493	C	D	1	8				RED PINE	PINUS RESINOSA		
494	C	D	1	8				RED PINE	PINUS RESINOSA		
495	C	D	1	9				RED PINE	PINUS RESINOSA		
496	C	D	1	8				RED PINE	PINUS RESINOSA		
497	C	D	1	8				RED PINE	PINUS RESINOSA		
498	R	C	1	9				RED PINE	PINUS RESINOSA		DEAD
499	R	C	1	10				RED PINE	PINUS RESINOSA		DEAD
500	R	C	1	9				RED PINE	PINUS RESINOSA		DEAD
501	R	C	1	8				RED PINE	PINUS RESINOSA		DEAD
502	C	D	1	8				RED PINE	PINUS RESINOSA		
503	R	C	1	9				RED PINE	PINUS RESINOSA		DEAD
504	R	C	1	8				RED PINE	PINUS RESINOSA		
505	C	D	1	9				RED PINE	PINUS RESINOSA		
506	C	D	1	8				RED PINE	PINUS RESINOSA		
507	R	C	1	10				RED PINE	PINUS RESINOSA		DEAD
508	R	C	1	8				RED PINE	PINUS RESINOSA		DEAD
509	C	D	1	9				RED PINE	PINUS RESINOSA		
510	R	C	1	11				RED PINE	PINUS RESINOSA		DEAD
511	R	C	1	11				RED PINE	PINUS RESINOSA		DEAD
512	C	D	1	8				RED PINE	PINUS RESINOSA		
513	C	D	1	9				RED PINE	PINUS RESINOSA		
514	C	D	1	9				RED PINE	PINUS RESINOSA		
515	C	D	1	9				RED PINE	PINUS RESINOSA		
516	C	D	1	8				RED PINE	PINUS RESINOSA		
517	C	D	1	8				RED PINE	PINUS RESINOSA		
518	R	C	1	10				RED PINE	PINUS RESINOSA		DEAD
519	R	C	1	8				RED PINE	PINUS RESINOSA		DEAD
520	C	D	1	8				RED PINE	PINUS RESINOSA		
521	C	D	1	8				RED PINE	PINUS RESINOSA		
522	R	C	1	8				RED PINE	PINUS RESINOSA		DEAD
523	R	C	1	8				RED PINE	PINUS RESINOSA		DEAD
524	R	C	1	8				RED PINE	PINUS RESINOSA		DEAD</





SCALE: 1" = 50'  
0 50 100 150



AREA-A WOODLAND  
BASAL AREA  
READING  
27.10 SF./0.5 AC.

AREA-C WOODLAND  
BASAL AREA  
READING  
34.20 SF./0.5 AC.

AREA-D WOODLAND  
BASAL AREA  
READING  
19.91 SF./0.5 AC.

AREA-B WOODLAND  
BASAL AREA  
READING  
43.05 SF./0.5 AC.

AREA-E WOODLAND  
BASAL AREA  
READING  
28.17 SF./0.5 AC.

NATURAL FEATURES DESCRIPTION:

- See Sheet 05 and 06 for Tree Inventory list.
- The wetland is a typical marsh depressed/seasonal area that may occur due in part to water backing up from the culvert under Burton Road. Vegetation is dominated by herbaceous plants including Swamp Milkweed, Curly Dock, Smartweed, Common Reed grass, Grass-leaved Goldenrod, and Water Horehound. The edges are dominated by mixed shrubs, trees and dead Elms. The upland brush beyond the wetland limits is primarily buckthorn and Hawthorn.
- Shaded circles represent 0.5 acre areas used to calculate basal areas.
- Area A Woodland is mixed hardwoods dominated by Oak, Hickory and Basswood and does not meet the definition of regulated woodland per the Unified Development Code. This area includes many landmark trees and is adjacent to the larger woodland in Sylvan Park.
- Area B Woodland is a mix of Red Pine plantation (7-inch to 15-inch) and volunteer trees dominated by Black Cherry and American Elm. The remainder of the vegetation along the east property line is a mix of mature Red Cedar, Walnut, Hickory, and understory shrubs, including many invasive species.
- Area C wooded area is primarily a mix of mature Red Cedar, Walnut, Hickory, Black Cherry, American Elm, and understory shrubs, including many invasive species. It is dense, wide, and thick, and provides effective screening of the development from the properties to the south. Areas D and E do not meet the definition of a regulated woodland per the Unified Development Code.

NATURAL FEATURES STATEMENT OF IMPACTS:

- Woodlands and Landmark Trees: Trees and woodland to be removed are identified on the Existing Conditions and Removals Plan and in the Tree Inventory List. Refer to the Natural Features Analysis Plan and Alternative Analysis Plan for identified impacts with the proposed layout. Refer to Tree Inventory List 2 (Sheet 06) for a tree impact summary and required mitigation calculations.
- Wetland: Wetland impacts are limited to 1,212 square feet for the construction of public sidewalk along Burton Road. Refer to the Existing Conditions and Removals Plan and Alternative Analysis Plan for impact locations. A wetland mitigation plan has been provided.
- Natural Features Open Space: Permanent impact to the natural features open space is proposed for the installation of a boardwalk to the community garden south of the wetland. Temporary impact to natural features open space is proposed for the installation of the detention outlet and grading associated with the boardwalk and public sidewalk installation. Temporary impact areas will be restored and stabilized with native vegetation. Refer to the Existing Conditions and Removals Plan and Alternative Analysis Plan for impact locations.

NATURAL FEATURES PROTECTION PLAN:

- Refer to the Soil Erosion Control Plan for protection measures to be installed.

NATURAL FEATURES ALTERNATIVE ANALYSIS:

- Refer to the Alternative Analysis Plan for three alternatives that have previously been reviewed by the City for the site. The alternative analysis summary chart provides a comparison of impacts for the three alternatives and the proposed layout.

BASAL AREA A		
33	10	0.54
34	10	0.54
35	13	0.92
36	8	0.35
39	20	1.08 M
42	9	0.44
41	6	0.2
42	9	0.44
43	9	0.44
45	17	1.58 M
46	6	0.2
48	9	0.44
49	28	1.52 M
54	12	0.35 M
58	11	0.66
59	9	0.44
60	12	0.78
63	12	0.78
64	18	0.88 M
65	8	0.35
66	10	0.54
68	13	0.92
69	8	0.35
73	11	0.66
75	13	0.92
76	8	0.35
77	24	1.58 M
128	7	0.27
129	27	3.97
130	18	1.76
131	24	3.14
SUM	396	27.1

BASAL AREA B		
68	13	0.92
69	8	0.35
73	11	0.66
75	13	0.92
76	8	0.35
77	24	1.58 M
78	13	0.92
79	13	0.92
80	11	0.66
81	12	0.78
82	11	0.66
83	14	1.07
84	12	0.78
85	13	0.92
86	14	1.07
87	8	0.35
88	13	0.92
89	12	0.78
90	7	0.27
91	13	0.92
92	10	0.54
93	10	0.54
94	15	1.23
95	12	0.78
96	11	0.66
97	9	0.44
98	19	1.97
99	8	0.35
100	13	0.92
101	10	0.54
102	9	0.44
103	9	0.44
104	7	0.27
105	7	0.27
106	9	0.44
107	21	2.4
108	9	0.44
109	13	0.92
110	7	0.27
111	10	0.54
115	11	0.66
116	18	1.76
117	12	0.78
118	27	1.99 M
119	24	1.56 M
120	8	0.35
121	8	0.35
122	8	0.35
123	7	0.27
125	10	0.54
126	7	0.27
129	27	3.97
SUM	628	43.05

BASAL AREA C		
411	20	0.75 M
412	8	0.35
414	8	0.35
415	22	1.32 M
420	11	0.66
421	10	0.54
422	11	0.66
423	9	0.44
424	9	0.44
425	8	0.35
426	8	0.35
427	9	0.44
428	9	0.44
429	9	0.44
430	8	0.35
431	12	0.78
432	12	0.78
433	10	0.54
434	8	0.35
436	9	0.44
437	11	0.66
438	8	0.35
439	8	0.35
440	16	0.71 M
441	10	0.54
442	10	0.54
443	9	0.44
444	13	0.92
445	10	0.54
446	14	1.07
447	12	0.78
448	9	0.44
449	11	0.66
450	8	0.35
451	10	0.54
452	9	0.44
453	8	0.35
454	8	0.35
455	10	0.54
456	8	0.35
457	8	0.35
458	9	0.44
464	23	1.46 M
465	28	2.17 M
468	8	0.35
469	8	0.35
471	29	1.54 M
472	9	0.44
473	12	0.78
474	14	1.07
475	11	0.66
476	19	1.05 M
478	10	0.54
485	11	0.66
488	8	0.35
489	7	0.27
490	8	0.35
491	7	0.27
493	8	0.35
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496	9	0.44
497	8	0.35
502	8	0.35
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505	9	0.44
506	8	0.35
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512	8	0.35
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515	9	0.44
516	8	0.35
517	8	0.35
520	8	0.35
521	8	0.35
523	8	0.35
526	9	0.44
529	9	0.44
531	8	0.35
SUM	633	34.2

BASAL AREA D		
415	22	1.32 M
416	25	1.7 M
417	16	1.39
467	15	1.23
469	41	3.06 M
471	29	1.54 M
472	9	0.44
512	8	0.35
513	9	0.44
514	9	0.44
515	9	0.44
516	8	0.35
517	8	0.35
520	8	0.35
521	8	0.35
523	8	0.35
526	9	0.44
529	9	0.44
531	8	0.35
532	8	0.35
540	9	0.44
544	8	0.35
545	8	0.35
549	10	0.54
550	9	0.44
552	8	0.35
553	12	0.78
554	9	0.44
555	10	0.54
SUM	349	19.91

BASAL AREA E		
235	11	0.66
236	15	0.62 M
241	12	0.78
242	6	0.2
243	11	0.66
244	7	0.27
245	6	0.2
247	9	0.44
248	10	0.54
249	9	0.44
272	7	0.27
416	25	1.7 M
417	16	1.39
418	10	0.54
419	41	3.06 M
421	29	1.54 M
422	9	0.44
423	12	0.78
424	14	1.07
425	11	0.66
426	19	1.05 M
427	10	0.54
428	11	0.66
429	8	0.35
430	7	0.27
431	8	0.35
432	9	0.44
433	8	0.35
434	8	0.35
435	9	0.44
436	8	0.35
437	8	0.35
438	9	0.44
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579	8	0.35
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581	8	0.35
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584	8	0.35
585		



M:\Civ\132\_Proj\17241\Site Plan\17241.dwg, 9/3/2020 11:18 AM, Tyler E. Smith, None  
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**NATURAL FEATURES ALTERNATIVE ANALYSIS:**

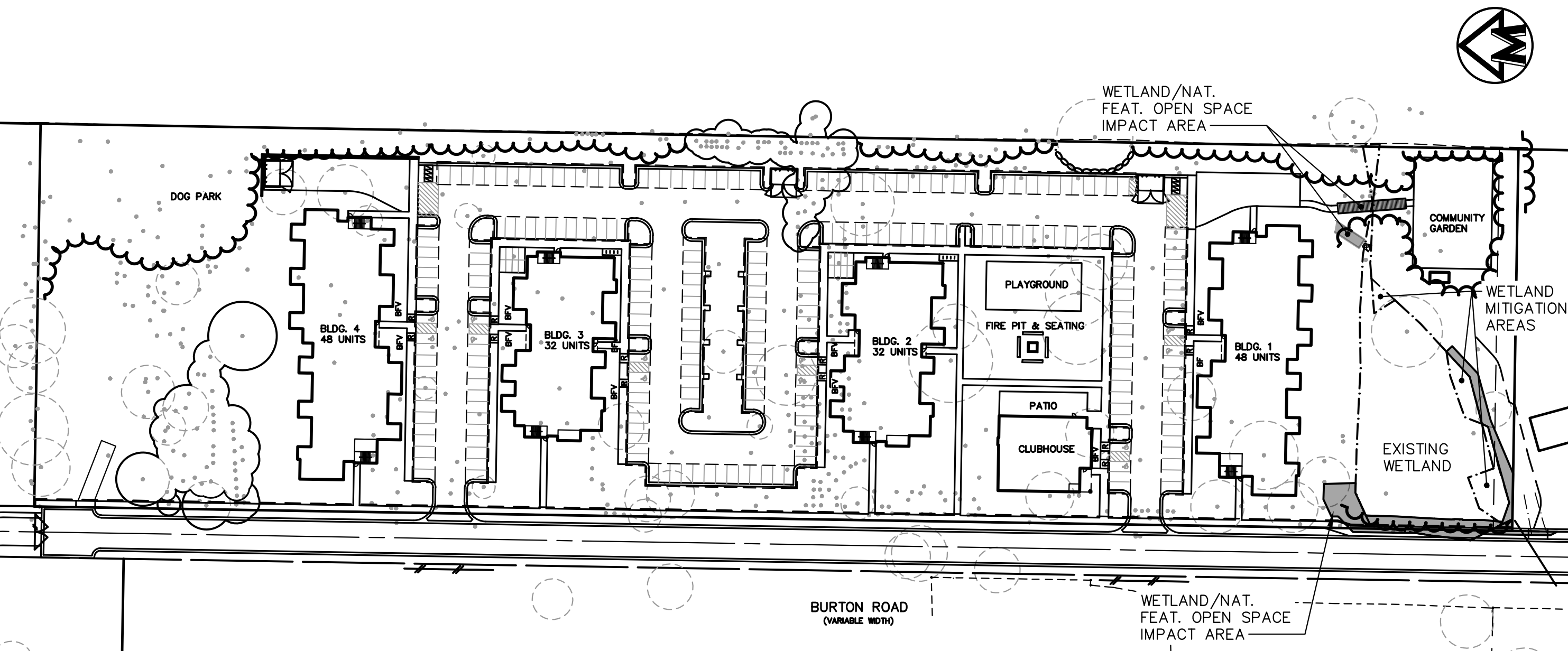
Proposed impacts to the wetland are necessary for each alternative for the Burton Road improvements and the construction of the public sidewalk that provides pedestrian connectivity from the site to Packard Road and to Sylvan Park. The existing wetland is immediately adjacent to the existing road. There are no road improvement alternatives to avoid wetland impacts.

The natural features open space impact for the pedestrian path and the boardwalk are located at the most narrow portion of the wetland, therefore minimizing impacts to the open space and minimizing the length of the boardwalk. Temporary natural features open space impacts are required for the installation of the detention outlet. Due to the elevation of the underground detention, the outlet must be located at an elevation within the natural features open space to ensure positive drainage out of the detention.

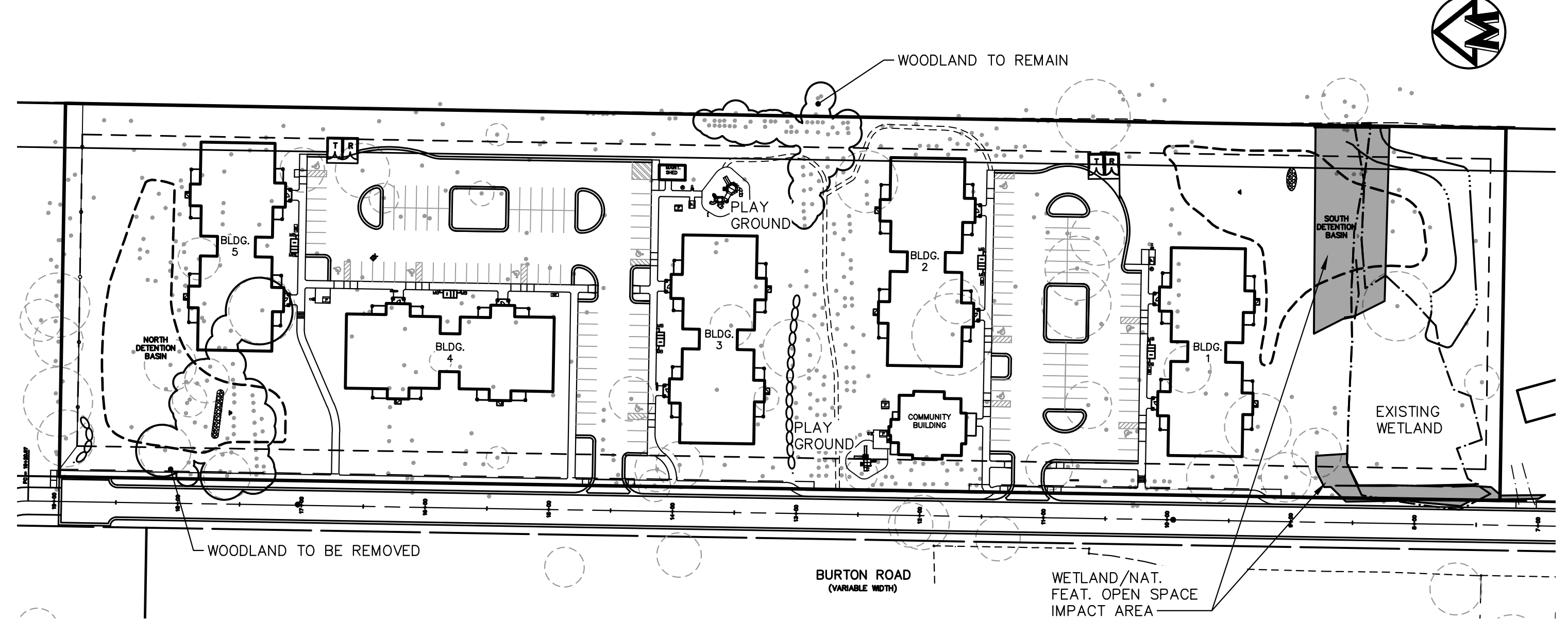
Woodland and landmark tree impacts were limited to the greatest extent feasible while attaining desired level of residential density and site amenities. Underground detention instead of surface detention on the north end of the property allowed for the preservation of the woodland at the north end of the site.

**ALTERNATIVES ANALYSIS SUMMARY**

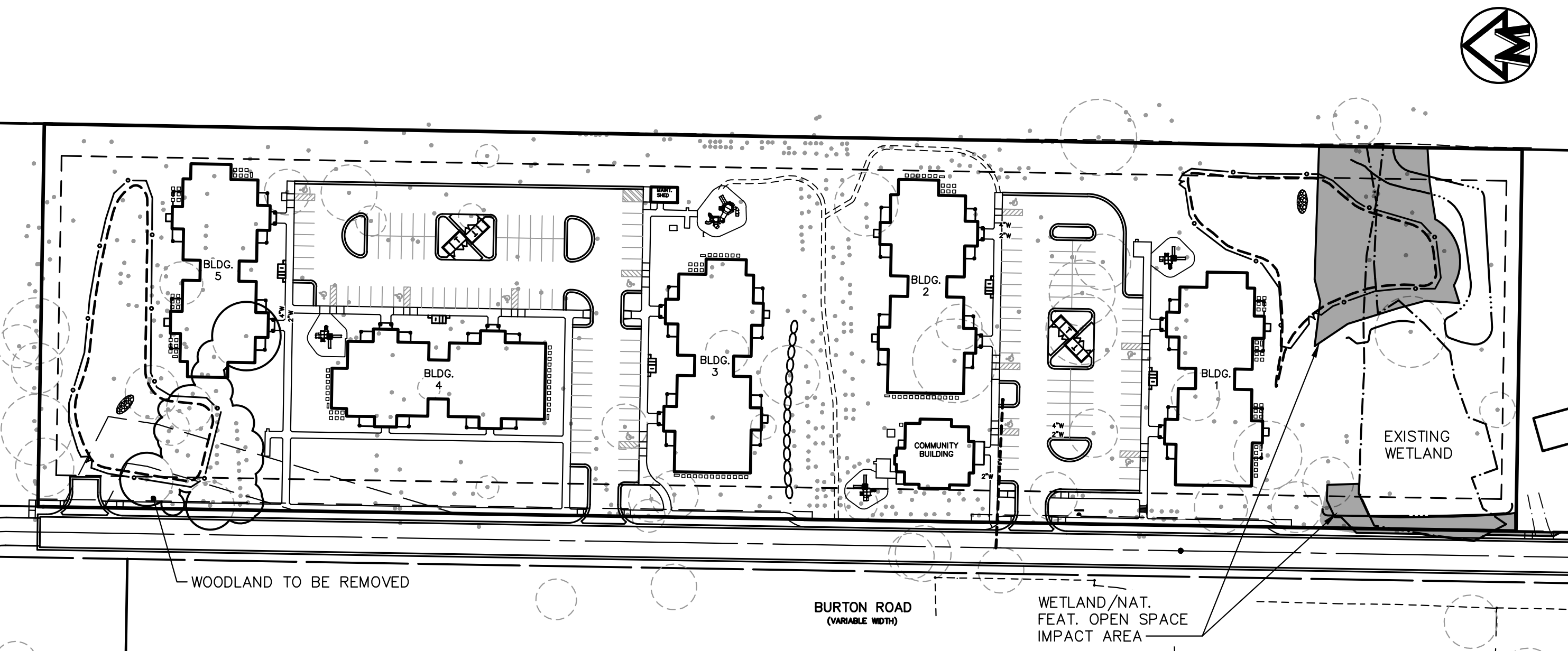
	Proposed Site Plan	Previously Denied Brightdown Village Plan (w/ conditions)	Previously Approved 80-Unit Site Plan	Previously Approved 120-Unit Site Plan
Zoning	R4B - Multi-Family Residential	R4D - Multi-Family Residential	R4B - Multi-Family Residential	R4B - Multi-Family Residential
Building Coverage	59,840 s.f.	50,390 s.f.	53,763 s.f.	50,995 s.f.
Building Square Footage	239,000 s.f.	182,819 s.f.	104,051 s.f.	139,269 sf
Limits of Disturbance	265,300 s.f.	305,761 s.f.	309,203 s.f.	305,328 s.f.
Parking Spaces	284	252	145	185
Underground Parking	Yes	No	No	No
Units	120	160	80	120
Height	45' Max.; 4 stories	47' max.; 4 stories	33' max.; 2 stories	46' max.; 3 stories
Fire Safety	Greatest Access	Moderate Access	Less Access	Least Access
Landmarks Removed	26	29	14	14
Woodland Trees Removed	10	21	46	46
Detention	Below Ground	Below Ground	Above Ground	Above Ground
Impervious Surfaces	Moderate Amount	Greatest Amount	Least Amount	Moderate Amount
Affordable Housing	No	Yes	No	No
Wetland / Natural Features	Least Amount	Minimal Amount	Greatest Amount	Greatest Amount
Open Space Impacts				



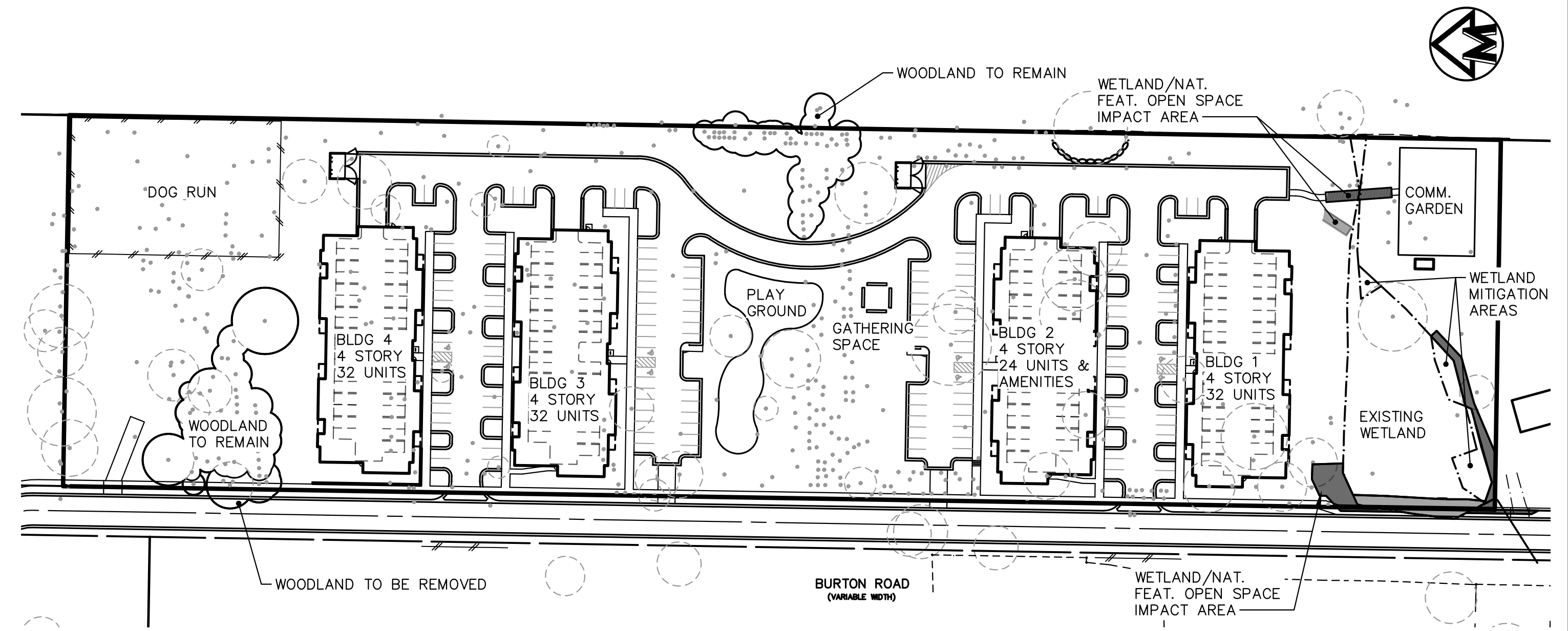
BRIGHTDOWN VILLAGE PLAN  
160 UNITS



PREVIOUSLY APPROVED PLAN  
80 UNITS



PREVIOUSLY APPROVED PLAN  
120 UNITS



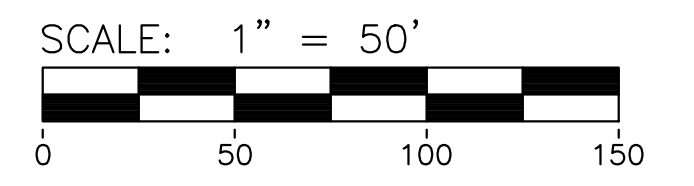
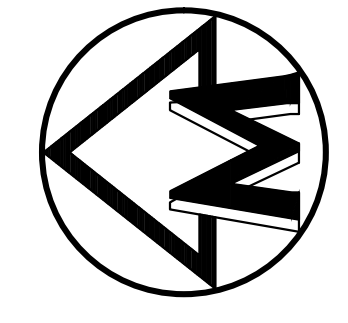
PROPOSED PLAN  
120 UNITS



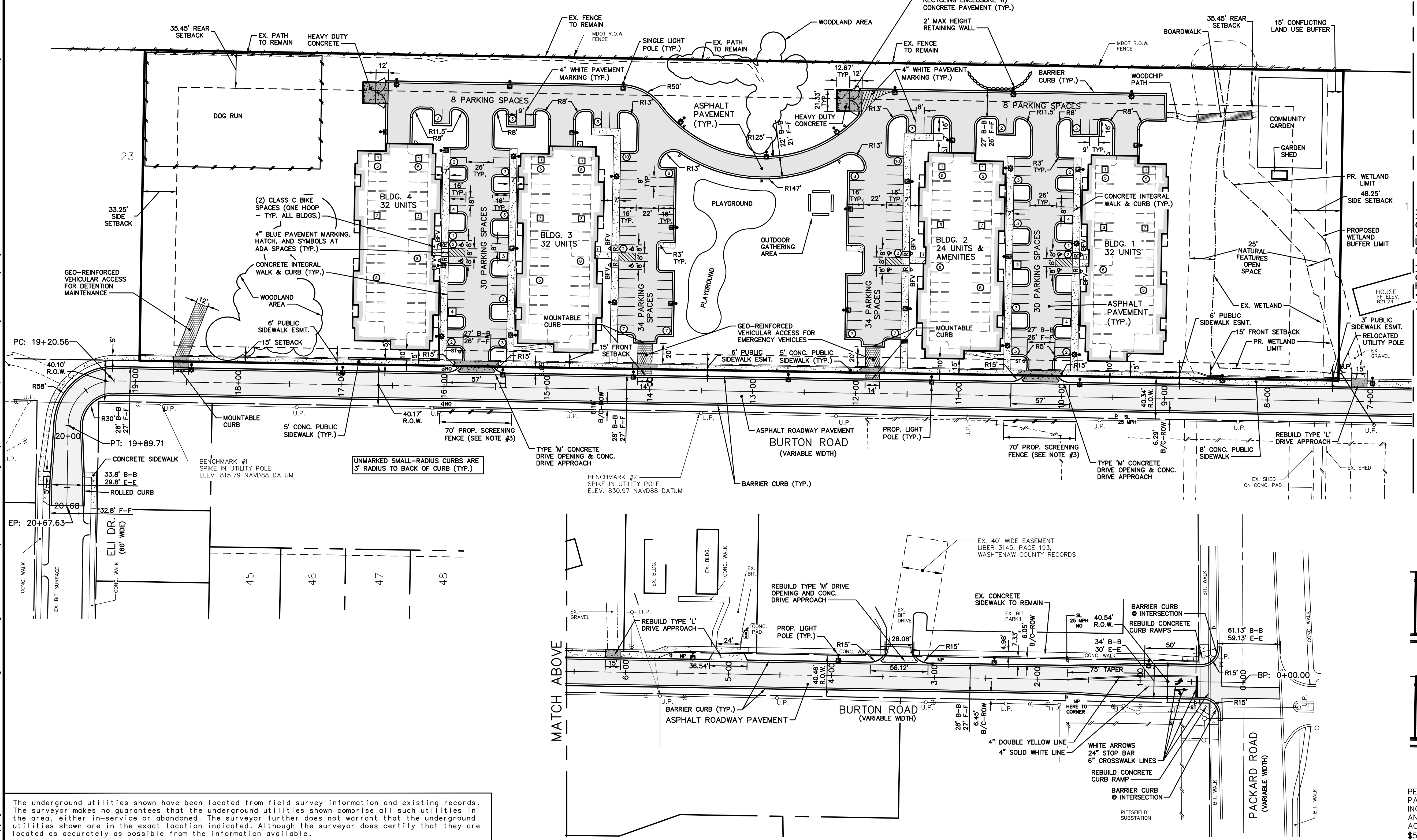
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### LEGEND

	NUMBER OF STANDARD PARKING SPACES IN ROW		SPEED LIMIT SIGN		PROP. DOUBLE LIGHT
	NUMBER OF COMPACT CAR PARKING SPACES IN ROW		STOP SIGN		PROP. VEHICLE CHARGING STATION
	NUMBER OF BARRIER FREE PARKING SPACES IN ROW		NO PARKING SIGN		PROP. BITUMINOUS PAVEMENT
	SIGN		FIRE & EMERGENCY USE ONLY SIGN		PROP. CONCRETE SURFACE
	BARRIER FREE PARKING SIGN		BARRIER FREE SIDEWALK RAMP		PROP. HEAVY DUTY CONCRETE
	VAN ACCESSIBLE BARRIER FREE PARKING SIGN		PROP. CURB & GUTTER		PROP. GRASS PAVE DRIVE
	NO OUTLET SIGN		PROP. SINGLE LIGHT		PROP. WOODCHIP SURFACE



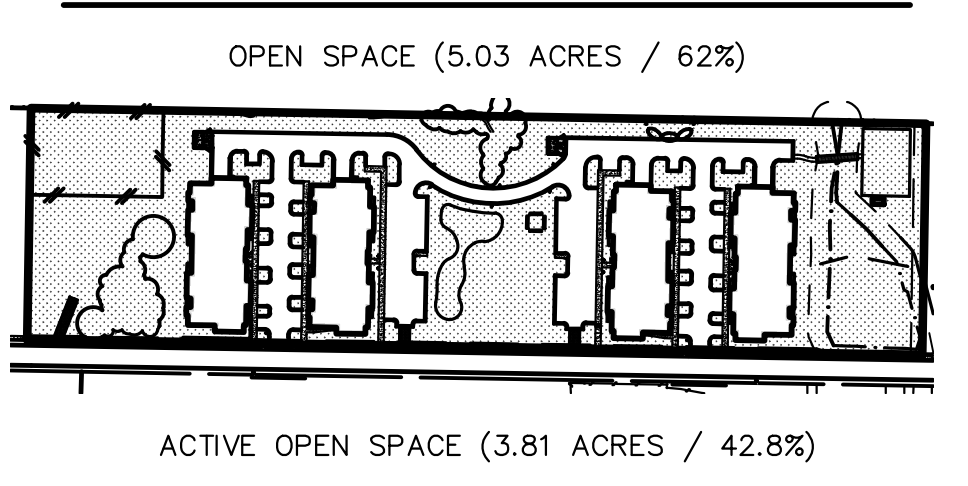
### HIGHWAY US-23 (VARIABLE WIDTH)



### NOTES

- THE CITY OF ANN ARBOR OR ITS AUTHORIZED AGENT, DTE ENERGY, WILL BE THE MAINTAINING AUTHORITY OF THE PROPOSED STREETLIGHTING.
- ALL ELEMENTS OF THE NORTH DETENTION MAINTENANCE ACCESS DRIVE, INCLUDING:
  - MOUNTABLE CURB
  - ADJACENT SIDEWALK
  - GEO-REINFORCED PATHWAY
 SHALL BE THE PERPETUAL RESPONSIBILITY OF THE PROPERTY OWNER.
- THE PROPOSED 70' SCREEN FENCES ON THE WEST SIDE OF BURTON ROAD WILL BE CONSTRUCTED ONLY UPON RECEIVING DOCUMENTED PERMISSION, IN A TIME CONSISTENT WITH THE TIMING OF SITE PLAN APPROVAL AND WITHOUT ADDITIONAL CONDITIONS, FROM THE OWNER OF THE PROPERTY ON WHICH THEY WOULD BE CONSTRUCTED.
  - THESE FENCES SHALL NOT EXCEED FOUR (4) FEET IN HEIGHT OR 50% OPACITY.
  - THESE FENCES WILL BE CONSTRUCTED ON PRIVATE PROPERTY AND MUST COMPLY WITH ALL APPLICABLE CITY CODES AND ORDINANCES.
- STANDARD SIDEWALK REPAIR AND MAINTENANCE NOTE PER CHAPTER 49, SECTION 4:58 OF CITY OF ANN ARBOR CODE. 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. SIDEWALKS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY AND/OR PUBLIC PATHS SHALL MEET ALL REQUIREMENTS AND GUIDELINES AS SET FORTH IN THE ADA STANDARDS FOR ACCESSIBLE DESIGN.

### OPEN SPACE



### PARKS CONTRIBUTION

PER THE CITY OF ANN ARBOR DEVELOPER CONTRIBUTIONS FOR PARKS AND OPEN SPACE GUIDANCE, THE DEVELOPMENT WILL INCLUDE A CONTRIBUTION IN LIEU OF LAND TO THE CITY OF ANN ARBOR PARKS AND RECREATION AT A RATE OF 0.0125 ACRES PER RESIDENTIAL UNIT. 120 UNITS X 0.0125 ACRES X \$50,000/ACRE = \$75,000.00

**BRIGHTDAWN VILLAGE**  
 SITE PLAN  
 DIMENSIONAL SITE PLAN

**09**

JOB No.	17241A
DATE	06/23/20
SHEET	9 OF 27
REV. DATE	7/24/20
PER MUNICIPAL REVIEW	9/03/20
PER MUNICIPAL REVIEW	
ENG. TYP.	
PK. TYP.	
TECH. TYP.	
DATE	9/21/20
BY	

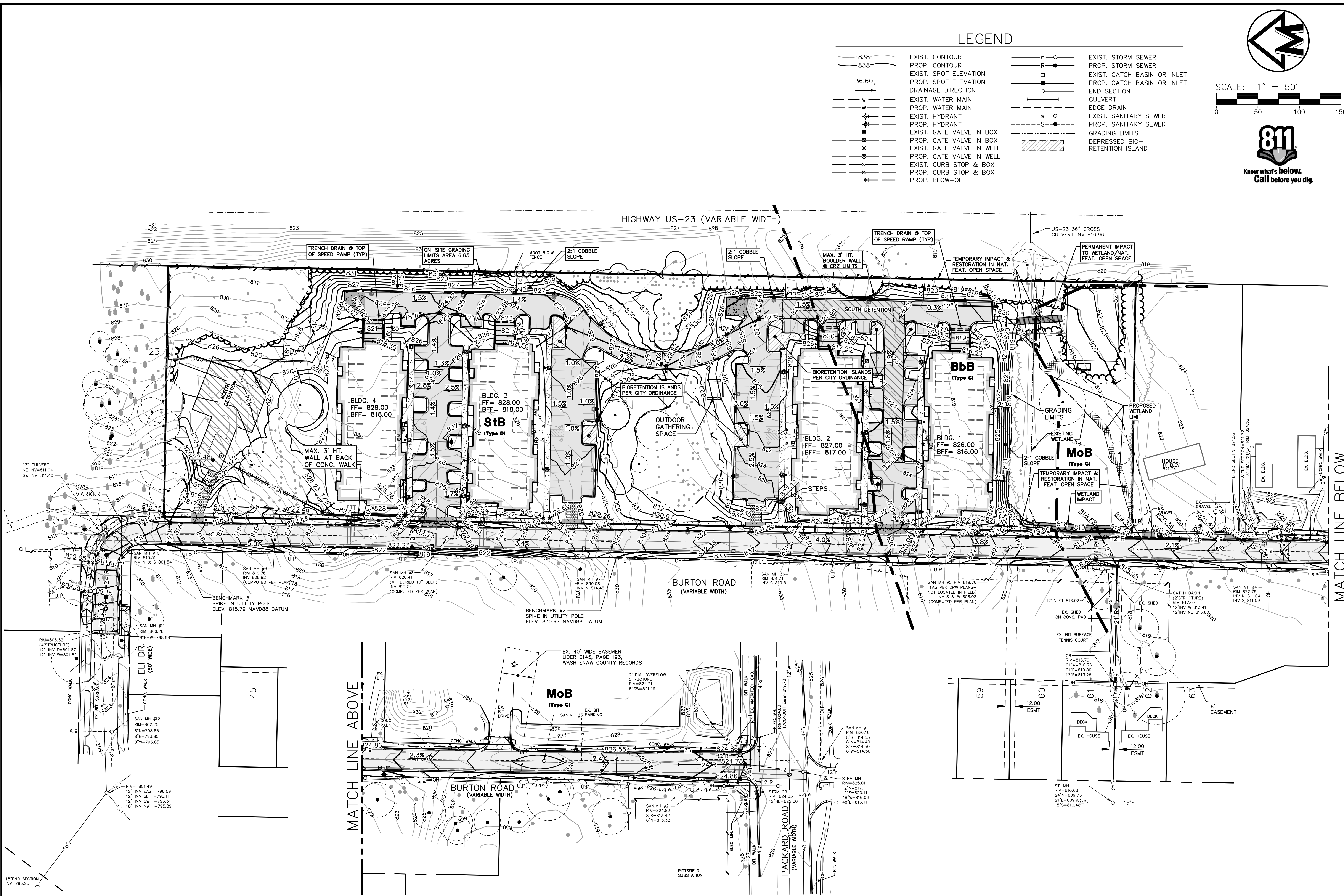
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 GLORYCREST BURTON ROAD INC.  
 2750 CARPENTER ROAD, SUITE 4  
 ANN ARBOR, MI 48108  
 JOSEPH M. WEST



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**BRIGHTDAWN VILLAGE**  
 SITE PLAN  
 GRADING PLAN

**10**

DATE: 06/23/20  
 SHEET 10 OF 27  
 REV. DATE: 7/23/20  
 CADD: PER MUNICIPAL REVIEW  
 ENG. T.P.H.  
 P.M. T.J.C.  
 TECH. J.S.P.  
 17241 (CP.dwg)

**JOB No. 17241A**

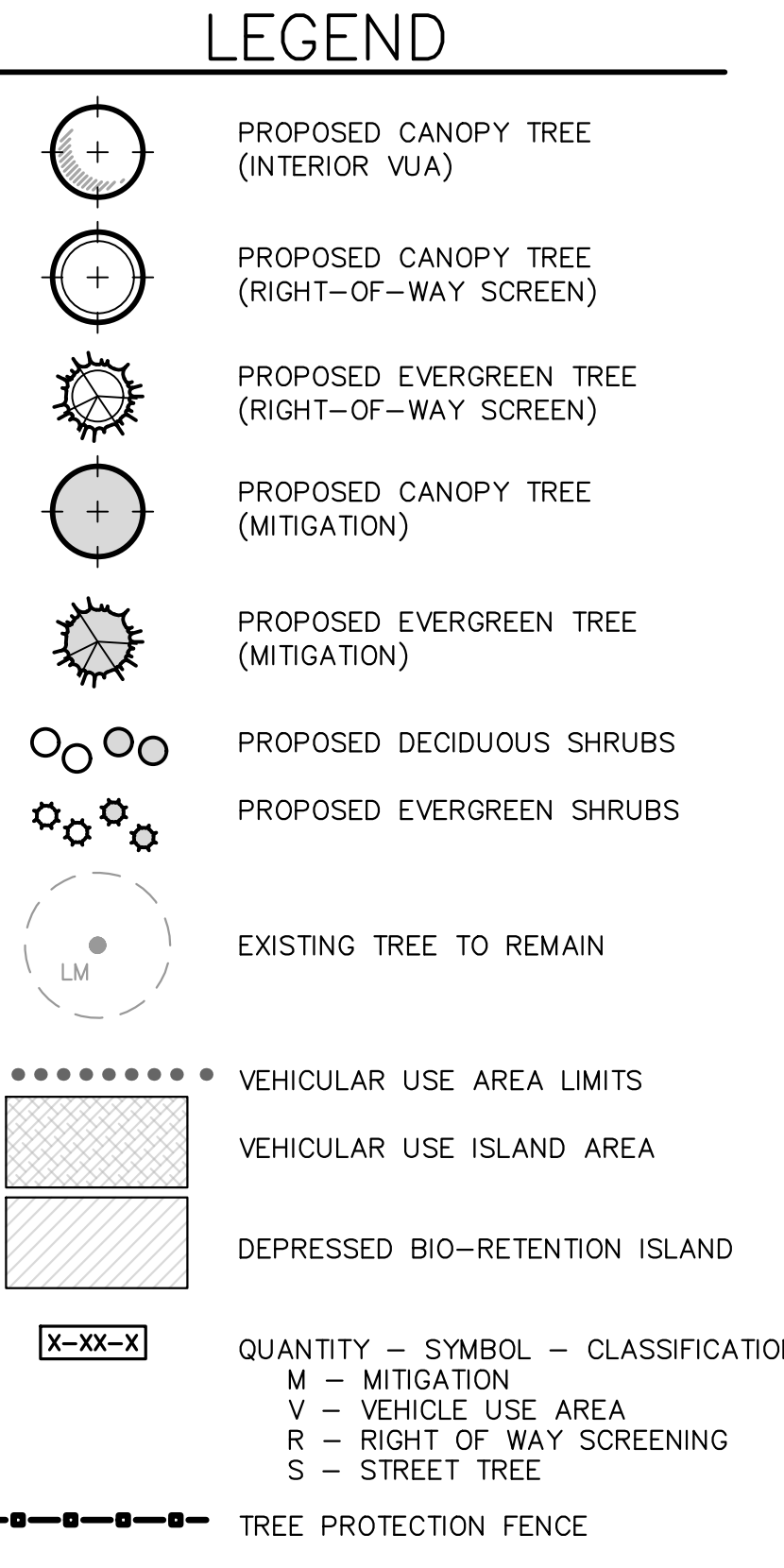
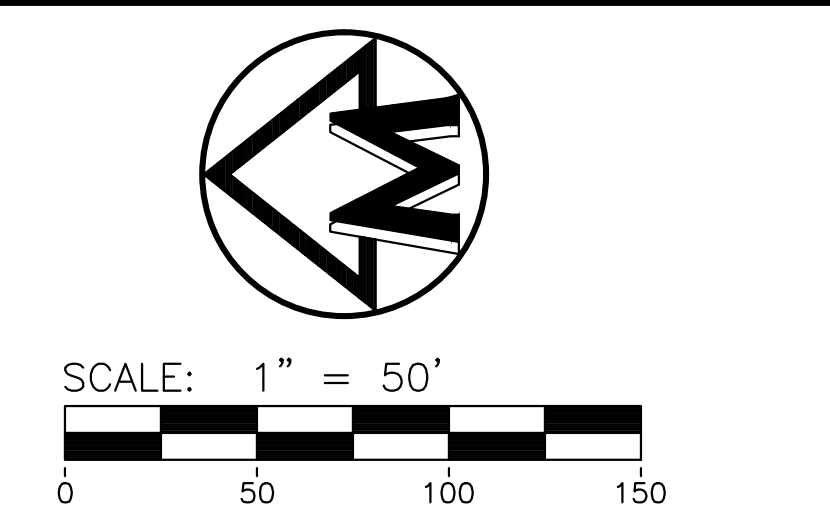
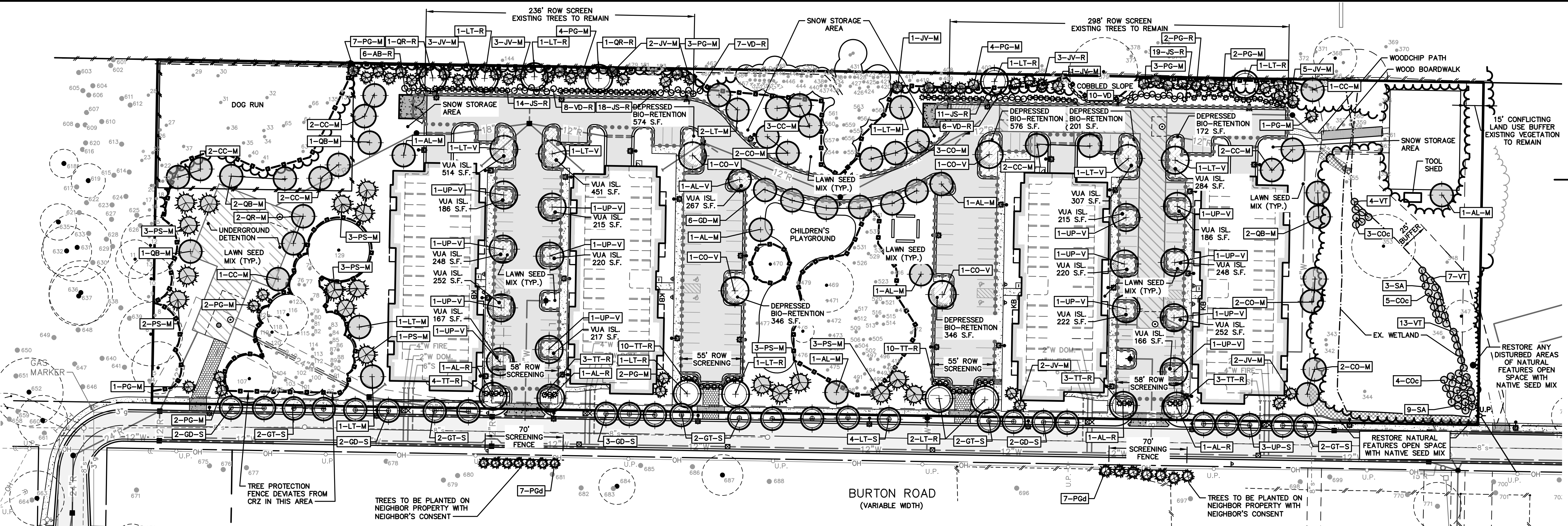
The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground 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.







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### NATURAL FEATURES OPEN SPACE SEED MIX

**Low-Profile Prairie** SOURCE: CARDNO NATIVE PLANT NURSERY  
 This prairie seed mix provides a wide range of shorter prairie grass, sedge, and wildflower species. Most species will grow to 4 feet or less, making this an ideal mix for areas where taller forbs and grasses are not appropriate. Once established, this wildflower community displays a variety of colors, blooming from early spring to fall, creating a diverse habitat for birds, butterflies, moths, and other pollinators. This seed mix is suitable for medium-to-dry sites. This seed mix includes at least 5 of 6 native permanent grass and sedge species and 29 of 34 native forb species. Apply at 38.67 PLS pounds per acre.

Botanical Name	Common Name	PLS QTY/Acre
<b>Permanent Grasses/Sedges</b>		
<i>Bouteloua curtipendula</i>	Side Oats Grass	16.00
<i>Carex spp.</i>	Prairie Sedge Mix	4.00
<i>Plymar canadensis</i>	Canada Wild Rye	32.00
<i>Koeleria gracillima</i>	Joint Grass	1.00
<i>Panicum virgatum</i>	Switch Grass	1.00
<i>Schizanthus scoparium</i>	Little Bluestem	36.00
	<b>Total</b>	<b>90.00</b>
<b>Temporary Cover</b>		
<i>Avena sativa</i>	Common Oat	360.00
<i>Lolium multiflorum</i>	Annual Rye	100.00
	<b>Total</b>	<b>460.00</b>
<b>Forbs</b>		
<i>Amaranthus canescens</i>	Lead Plant	0.50
<i>Achillea millefolium</i>	Thimbleweed	0.50
<i>Aster multiflorus</i>	Common Milkweed	2.00
<i>Aster ruber</i>	Butterfly Weed	2.00
<i>Rapistrum alba</i>	White Wild Yarrow	2.00
<i>Chamaecrista fasciculata</i>	Partridge Pea	12.00
<i>Coreopsis lanceolata</i>	Sand Coreopsis	5.00
<i>Coreopsis palmata</i>	Prairie Coreopsis	1.00
<i>Oxalis corniculata</i>	White Prairie Clover	1.50
<i>Dalmanella purpurea</i>	Purple Prairie Clover	1.50
<i>Desmodium illinoense</i>	Illinois Sensitive Plant	3.00
<i>Schizanthus purpurea</i>	Black Leaved Purple Crowfoot	3.00
<i>Eryngium yuccifolium</i>	Rattlesnake Master	3.00
<i>Lespedeza capitata</i>	Round Head Bush Clover	2.00
<i>Liatris aspera</i>	Rough Blazing Star	0.50
<i>Lupinus albus</i>	Wild Lupine	0.50
<i>Morone arvensis</i>	Wild Bergamot	0.75
<i>Diphysa rigida</i>	Stiff Goldenrod	1.00
<i>Parthenocissis vitacea</i>	Wild Quinine	1.00
<i>Parthenocissis vitacea</i>	Fragrant Beard Tongue	0.50
<i>Parthenocissis vitacea</i>	Hairy Beard Tongue	0.50
<i>Pycnanthemum virginicum</i>	Common Mountain Mint	1.00
<i>Rudbeckia hirta</i>	Black Eyed Susan	5.00
<i>Rudbeckia subtomentosa</i>	Sweet Black Eyed Susan	1.00
<i>Silphium laciniatum</i>	Parrot's Beak	1.00
<i>Solidago speciosa</i>	Showy Goldenrod	0.50
<i>Symphoricarpos angustifolia</i>	Heath Aster	0.25
<i>Symphoricarpos angustifolia</i>	Smooth Blue Aster	1.00
<i>Symphoricarpos angustifolia</i>	New England Aster	0.50
<i>Tradescantia virginiana</i>	Common Spiderwort	0.75
<i>Verbena stricta</i>	Hairy Verbena	1.00
<i>Hemiteles spp.</i>	Ironweed Mite	1.75
<i>Veronica virginiana</i>	Culver's Root	0.25
	<b>Total</b>	<b>68.75</b>

### WETLAND \ BIORETENTION ISLAND SEED MIX

**Stormwater** SOURCE: CARDNO NATIVE PLANT NURSERY  
 A wetland seed mix for saturated soils in a detention pond or for seeding a saturated basin. This mix will tolerate highly fluctuating water levels and poor water quality associated with urban stormwater wetlands and ponds. For detention basins that experience long, dry periods, use the Economy Prairie seed mix in the upper third to half of the basin area in combination with this mix. This seed mix includes at least 10 of 12 native permanent grass and sedge species and 12 of 16 native forb species. Apply at 32.81 PLS pounds per acre.

Botanical Name	Common Name	PLS QTY/Acre
<b>Permanent Grasses/Sedges</b>		
<i>Bouteloua curtipendula</i>	Side Oats Grass	16.00
<i>Carex spp.</i>	Prairie Sedge Mix	4.00
<i>Plymar canadensis</i>	Canada Wild Rye	32.00
<i>Koeleria gracillima</i>	Joint Grass	1.00
<i>Panicum virgatum</i>	Switch Grass	1.00
<i>Schizanthus scoparium</i>	Little Bluestem	36.00
	<b>Total</b>	<b>90.00</b>
<b>Temporary Cover</b>		
<i>Avena sativa</i>	Common Oat	360.00
<i>Lolium multiflorum</i>	Annual Rye	100.00
	<b>Total</b>	<b>460.00</b>
<b>Forbs</b>		
<i>Amaranthus canescens</i>	Lead Plant	0.50
<i>Achillea millefolium</i>	Thimbleweed	0.50
<i>Aster multiflorus</i>	Common Milkweed	2.00
<i>Aster ruber</i>	Butterfly Weed	2.00
<i>Rapistrum alba</i>	White Wild Yarrow	2.00
<i>Chamaecrista fasciculata</i>	Partridge Pea	12.00
<i>Coreopsis lanceolata</i>	Sand Coreopsis	5.00
<i>Coreopsis palmata</i>	Prairie Coreopsis	1.00
<i>Oxalis corniculata</i>	White Prairie Clover	1.50
<i>Dalmanella purpurea</i>	Purple Prairie Clover	1.50
<i>Desmodium illinoense</i>	Illinois Sensitive Plant	3.00
<i>Schizanthus purpurea</i>	Black Leaved Purple Crowfoot	3.00
<i>Eryngium yuccifolium</i>	Rattlesnake Master	3.00
<i>Lespedeza capitata</i>	Round Head Bush Clover	2.00
<i>Liatris aspera</i>	Rough Blazing Star	0.50
<i>Lupinus albus</i>	Wild Lupine	0.50
<i>Morone arvensis</i>	Wild Bergamot	0.75
<i>Diphysa rigida</i>	Stiff Goldenrod	1.00
<i>Parthenocissis vitacea</i>	Wild Quinine	1.00
<i>Parthenocissis vitacea</i>	Fragrant Beard Tongue	0.50
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<i>Symphoricarpos angustifolia</i>	Heath Aster	0.25
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<i>Symphoricarpos angustifolia</i>	New England Aster	0.50
<i>Tradescantia virginiana</i>	Common Spiderwort	0.75
<i>Verbena stricta</i>	Hairy Verbena	1.00
<i>Hemiteles spp.</i>	Ironweed Mite	1.75
<i>Veronica virginiana</i>	Culver's Root	0.25
	<b>Total</b>	<b>68.75</b>

ALL AREAS SEEDING WITH WETLAND/STORMWATER SEED MIX (INCLUDING ALL BIORETENTION ISLANDS) SHALL BE STABILIZED WITH STRAW MULCH BLANKETS.

### PLANT SCHEDULE

Total	Mitigation	V.U.A.	R.O.W.	Street Trees	Off-Site	Wetland Mitigation	Symbol	Scientific Name	Common Name	Size	Root	Remarks
<b>Deciduous Trees</b>												
11	6	1	4				AL	<i>Amelanchier laevis</i>	Allegheny Serviceberry	2-2.5" cal	BB	Single Stem
15	15						CC	<i>Carpinus caroliniana</i>	American Hornbeam	2-2.5" cal	BB	
13	9	4					CO	<i>Cornus occidentalis</i>	Northern Hackberry	2-2.5" cal	BB	
10	6			10			GT	<i>Gleditsia triacanthos f. inermis 'Skycole'</i>	Skyline Honeylocust	2-2.5" cal	BB	
15	6			9			GD	<i>Gymnocladus dioica</i>	Kentucky Coffeetree	2-2.5" cal	BB	Male only for Street Trees
21	5	4	8	4			LT	<i>Liriodendron tulipifera</i>	Tulip Tree	2-2.5" cal	BB	
6	6						QB	<i>Quercus bicolor</i>	Swamp White Oak	2-2.5" cal	BB	
4	2			2			QR	<i>Quercus rubra</i>	Northern Red Oak	2-2.5" cal	BB	
17		14		3			UP	<i>Ulmus americana 'Princeton'</i>	Princeton Elm	2-2.5" cal	BB	
112	49	23	14	26		0	Total					
<b>Evergreen Trees</b>												
22	19		3				JV	<i>Juniperus virginiana</i>	Eastern Red Cedar	7-8" ht.	BB	Unsheared
33	31		2				PG	<i>Picea glauca</i>	White Spruce	7-8" ht.	BB	Unsheared
14				14			PGd	<i>Picea glauca 'densata'</i>	Black Hills Spruce	7-8" ht.	BB	Unsheared
18	18						PS	<i>Pinus strobus</i>	White Pine	7-8" ht.	BB	Unsheared
87	68	0	5	0		0	Total					
<b>Shrubs</b>												
6		6					AB	<i>Aronia arbutifolia 'Brilliantissima'</i>	Red Chokeberry	#5	Cont	
12					12		COC	<i>Cephalanthus occidentalis</i>	Button Bush	#5	Cont	
71		71					JS	<i>Juniperus x 'Sea Green'</i>	Sea Green Juniper	24-30" ht.	Cont	
12					12		SA	<i>Spiraea alba</i>	Meadowsweet	#5	Cont	
33		33					TT	<i>Taxus x 'Tauntonii'</i>	Taunton Yew	24-30" ht.	BB	
33		33					VD	<i>Viburnum dentatum 'Chicago Lustre'</i>	Chicago Lustre Arrowwood Viburnum	#5	Cont	
24					24		VT	<i>Viburnum trilobum</i>	Highbush Cranberry	#5	Cont	
191	0	0	143	0	0	48	Total					

NOTE: C.L.U.B plant materials are comprised of existing evergreen and deciduous vegetation along the south property line that will remain undisturbed.

### LANDSCAPE NOTES

- For any plant quantity discrepancies between the plan view and the plant schedules, the plant schedule shall take precedence.
- Plant materials shall be selected and installed in accordance with standards established by City of Ann Arbor.
- Water outlets shall be provided within 150 feet of all required plantings.
- 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.
- Restore disturbed areas with a minimum of four (4) inches of topsoil and then seed/fertilize/mulch.
- All disturbed areas not to be seeded with seed mixes identified on the Landscape Plan 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% Pennine Perennial Ryegrass  
 20% Scalds Hard Fescue  
 Seed shall be applied at a rate of five pounds (5 lbs) per 1,000 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.
- Areas identified on the Landscape Plan with seed mixes shall be seeded with specified seed mixes from Cardno, or equivalent as approved by landscape architect. Temporary cover crop shall be included with all seed mixes. Seeding rates and installation techniques shall be confirmed with supplier.
- All seeded areas with slopes less than 1:4 (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 1:4 shall be seeded and biodegradable erosion control blanket North American Green SC150, or equivalent, shall be applied with biodegradable stakes.
- 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.
- Native seeding areas shall be seeded after May 1, (when soil is free of frost and in workable condition), but before June 15 or after October 1, but before November 30 (or prior to ground freezing) or as approved by Landscape Architect or guaranteed by the supplier. If seeding is performed outside planting window, contractor shall perform regularly scheduled watering for installed seed and as needed based on weather conditions to ensure germination and establishment of seed.
- All planting beds are to receive four (4) inches of shredded hardwood bark mulch.
- All trees to be located a minimum of 10 feet from public utilities.
- 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.
- 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.
- 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.
- Proposed trees will be planted a minimum of 15 feet apart.
- 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 Loam 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 pH.  
 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 texture.  
 e. Weight of Slow-Release Fertilizer per 1,000 Sq. Ft.: Amend with fertilizer only on recommendation of soil test to adjust soil fertility.
- Native seeding installation shall be performed by a qualified contractor with documented experience of successful established native seeding. Seed shall be installed per manufacturer's specification via hand broadcast.
- Snow cannot be pushed onto interior islands unless they are designated on the plan for snow storage. Bio-retention islands can be used for snow storage.
- During the establishment period for the installed deciduous mitigation trees (1-2 years as to be determined by certified arborist):  
 a. The trunk of young trees shall be wrapped in late autumn and wrap shall be removed in early spring.  
 b. Burlap screening or wrapping shall be installed on the southwest and windward sides from late autumn to early spring.  
 c. Trees shall be watered in spring and autumn and during dry conditions at a frequency determined by certified arborist.  
 d. Mulching around trees shall be maintained at a depth of 2 to 3 inches.
- All species deviations from the approved Landscape Plan must be approved ahead of time by the City of Ann Arbor.

### LANDSCAPE REQUIREMENTS

	Required	Proposed
<b>Right-of-way screening</b>	10ft when VUA viewed from ROW 1 tree per 30ft; continuous hedge/screen 30inches in ht Burton Road North - 58ft = 2 trees, 55ft = 2 trees, and shrubs for both Burton Road South - 58ft = 2 trees, 55ft = 2 trees, and shrubs for both US-23 North - 4 trees to remain, 4 trees proposed, shrubs proposed US-23 South - 3 trees to remain, 7 trees proposed	Burton Road North - 4 trees and shrubs proposed Burton Road South - 4 trees and shrubs proposed US-23 North - 4 trees to remain, 4 trees proposed, shrubs proposed US-23 South - 3 trees to remain, 7 trees proposed
<b>Vehicle Use Area</b>		
Interior islands	1:15sf ratio for island, 64,410sf / 15 = 4,294sf island	7,255sf proposed
Bio-retention island	if >750sf island; 50% bioretention 4,294sf / 2 = 2,147sf bioretention island	~2,217sf proposed
Interior island trees	1 tree per island; 1 tree per 250sf island;	21 trees provided
Snow pile storage	identify locations on plan	identified on landscape plan
<b>Street Trees</b>		
Street tree escrow	1 tree per 45f ROW = 1,165 / 45 = 26 trees required	26 trees provided
Street tree escrow	\$1.30 per linear foot frontage 1,165f x \$1.30 = \$1,514.50	\$1,514.50 to City Tree Fund prior to issuing building permits.*
<b>Conflicting Land Use Buffer</b>	when adjacent to public park and R4 adjacent to residential purposes	15ft wide; 1 tree per 15f, 50% evergreen; continuous screening 4ft high North line to park, South line to high
<b>Tree Mitigation</b>	50% DBH of Woodland and LM removed 585 inches removed x 0.5 = 292.5 inches 292.5 inches / 2.5 = 117 trees required	117 trees provided on site
<b>Outdoor refuse</b>		screening wall around dumpsters
<b>Private streets and shared driveways</b>	Not applicable	Not applicable

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SHEET 12 OF 27

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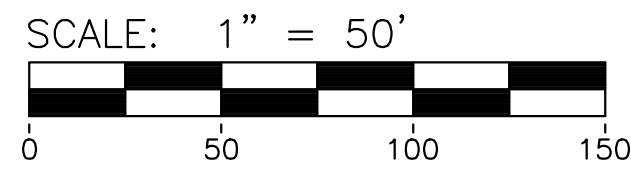
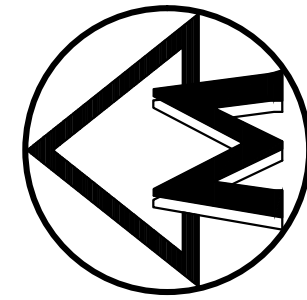
BRIGHTDAWN VILLAGE

SITE PLAN

LANDSCAPE PLAN

12

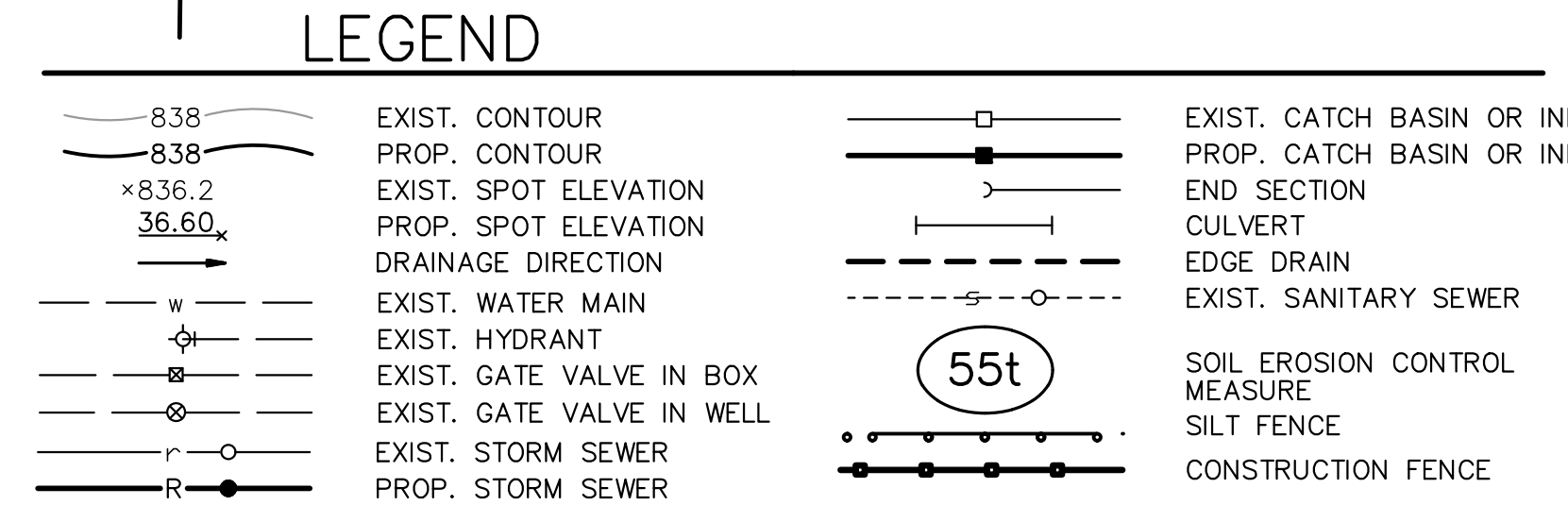
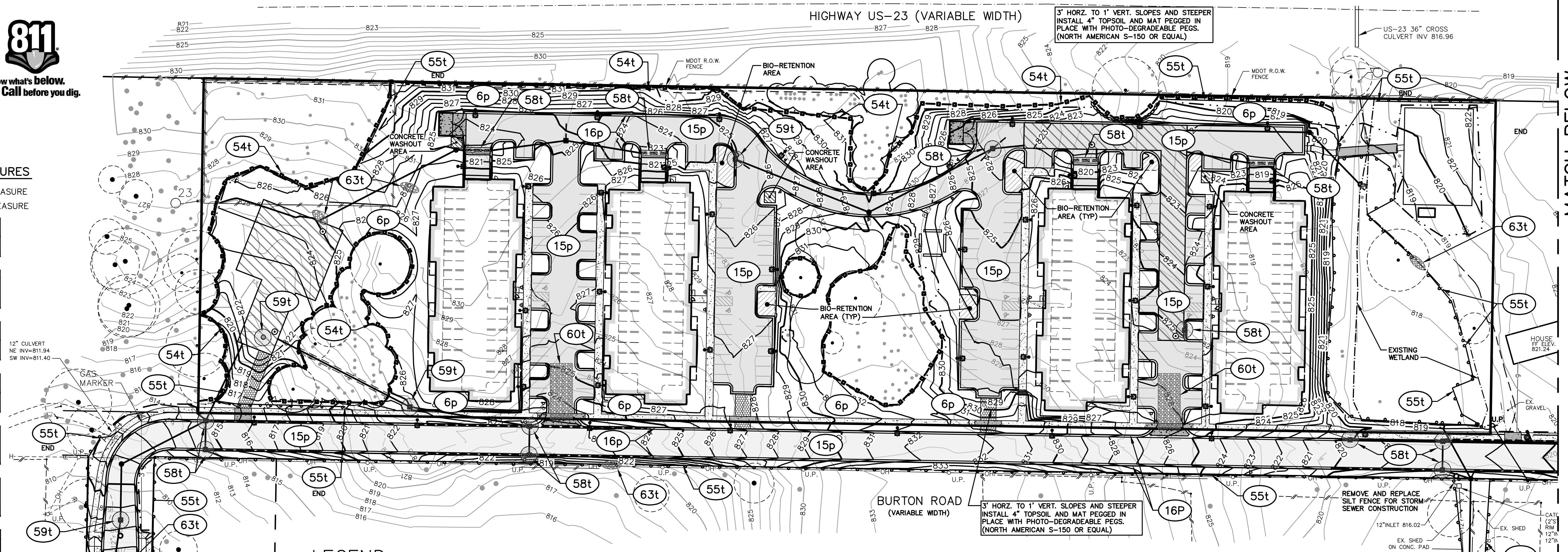




**SOIL EROSION CONTROL MEASURES**

t - INDICATES TEMPORARY CONTROL MEASURE  
p - INDICATES PERMANENT CONTROL MEASURE

- 6** SEEDING WITH MULCH AND/OR MATTING
- 13** RIPRAP, RUBBLE, CASCADS
- 15** PAVING
- 16** CURB & GUTTER
- 54** CONSTRUCTION FENCE OR SNOW FENCE
- 55** GEOTEXTILE SILT FENCE
- 58** CURB INLET FILTER
- 59** C.B. INLET FILTER
- 60** MUD TRACKING MAT
- 63** SILT FENCE WITH STONE FILTER



- SESC NOTES:**
- ALL INLETS AND CATCH BASINS WILL HAVE SEDIMENT FILTERS INSTALLED AFTER THEIR CONSTRUCTION AND THESE FILTERS WILL BE MAINTAINED UNTIL ALL STREETS ARE PAVED AND ALL DISTURBED AREAS ARE STABILIZED.
  - ALL UNPAVED DISTURBED AREAS IN BACK OF CURB LINES WILL BE TOPSOILED, SEEDED AND MULCHED. SLOPES GREATER THAN 3:1 WILL BE SEEDED AND MATTED, WITHIN 5 DAYS OF ESTABLISHING THE FINAL GRADES.
  - CONTRACTOR WILL MAINTAIN ALL NECESSARY SOIL EROSION CONTROL DEVICES UNTIL SOIL STABILIZATION HAS OCCURRED.
  - APPROPRIATE EMERGENCY ACCESS WILL BE PROVIDED AND DOCUMENTED PRIOR TO CONSTRUCTION.
  - INTERNAL AND EXTERNAL STREETS SHALL BE CLEANED OF ANY TRACKED MUD IMMEDIATELY FOLLOWING EACH MUD-TRACKING OCCURRENCE.
  - ESTIMATED COST TO STABILIZE SITE SHOULD CONSTRUCTION CEASE: \$20,000
  - ESTIMATED SOIL MOVEMENTS ON SITE: 10,000 C.Y. CUT; 14,000 C.Y. FILL
  - NPDES/NOC PERMIT REQUIRED FOR PROJECT. INSPECTIONS TO BE PERFORMED BY CERTIFIED MDEQ STORM WATER OPERATOR. REPORTS TO REMAIN ON SITE AND TO BE CONDUCTED ONCE A WEEK AND IMMEDIATELY FOLLOWING EACH PRECIPITATION EVENT.
  - PERMANENT SOIL EROSION CONTROLS ARE REQUIRED TO BE INSTALLED WITHIN FIVE (5) DAYS AFTER FINAL GRADING.
  - DEWATERING OPERATIONS DURING CONSTRUCTION, IF NECESSARY, MUST PROVIDE SEDIMENT CONTROL AND MUST DISCHARGE TO THE STORM SEWER IN THE DETENTION BASIN.
  - FINAL LOCATIONS AND DIMENSIONS OF THE CONCRETE WASHOUT AREAS ARE TO BE DETERMINED BY THE CONTRACTOR SUBJECT TO CITY APPROVAL.

- Construction Sequence Spring of 2021 thru Fall of 2023*
- SESC Pre-Grading Meeting**
  - Inventory Site:**
    - Identify construction limits.
    - Install wetland protection fence.
    - Brush the site.
    - Install construction fencing.
    - Define the site access and install mud tracking mats as needed.
    - Define the construction storage areas within the grading limits as defined on the plans.
  - Clear and Grub Site, Demolition and Removals:**
    - Maintain existing controls.
    - Install site fence.
    - Install stone filters.
    - Tree and Stump removal.
    - Structure and Utility removals.
  - Construct Detention Systems:**
    - Maintain existing controls.
    - Construct the storm sewer for the north and south detention outlets.
    - Construct the north and south detention chambers and outlets (see manufacturer's installation notes for specific instructions). The detention systems shall be as-built verified prior to the issuance of a building permit. Removal of accumulated sediment will be required prior to the issuance of certificates of occupancy.
    - Install inlet filters on inlets into the detention basins after they have been backfilled.
  - Mass Grading and Utility Construction:**
    - Maintain existing controls.
    - Mass grade the site.
    - Construct public and private utilities in Burton Road and on-site.
    - Install sediment filters on completed catch basins and inlets.
    - Temporary seed and mulch disturbed areas if practical.
    - Construct and maintain fire department access to flammable materials. Supporting hydrants shall be installed and operational prior to issuance of individual building permits.
  - Base Course Construction:**
    - The sand subbase and aggregate base course for the parking lots and Burton Road shall be installed prior to the issuance of foundation permits for the buildings.
    - Pour concrete curb and gutter along Burton Road and on-site.
    - Construct mud tracking mats per plans.
    - Maintain existing controls.
  - Building Foundation Construction:**
    - Maintain existing controls.
    - Install earth retention systems.
    - Excavate for building foundations/parking garages.
    - Construct building foundations.
  - Pave Burton Road - Phase I:**
    - Maintain existing controls.
    - Place leveling course of HMA on Burton Road, which shall be done prior to the issuance of the building permits beyond foundations.
  - Pave Driveways and Parking Lots:**
    - Maintain existing controls.
    - Place leveling course of HMA on parking lots and main drive areas. Parking lot paving (first course) must occur prior to issuance of building permits beyond foundations.
    - Seed and mulch (seed and mat slopes greater than 3:1) disturbed areas behind curb within 5 days of establishing final grades.
  - Fine Grade and Building Construction:**
    - Maintain existing controls.
    - Construct Buildings.
    - Fine grade the site.
    - Remove accumulated sediment from the detention systems.
    - 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.
    - Install permanent fencing.
  - Pave Burton Road - Phase II:**
    - Maintain existing controls.
    - Place wearing course of HMA on Burton Road, which shall be done after the construction of the buildings.
  - Clean-Up Site:**
    - Seed and mulch or sod areas that have not taken.
    - Maintain existing controls.
  - Follow-Up After the Site is Stabilized:**
    - Remove silt fence and stone filters.
    - Remove catch basin filters or silt sacks.
    - Remove silt from the storm sewer system.
    - Final removal of sediment from the detention systems, if needed.
  - Finalize Building Construction:**
    - Maintain permanent soil erosion control measures
    - Remove construction fencing

**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 unforeseen circumstances.

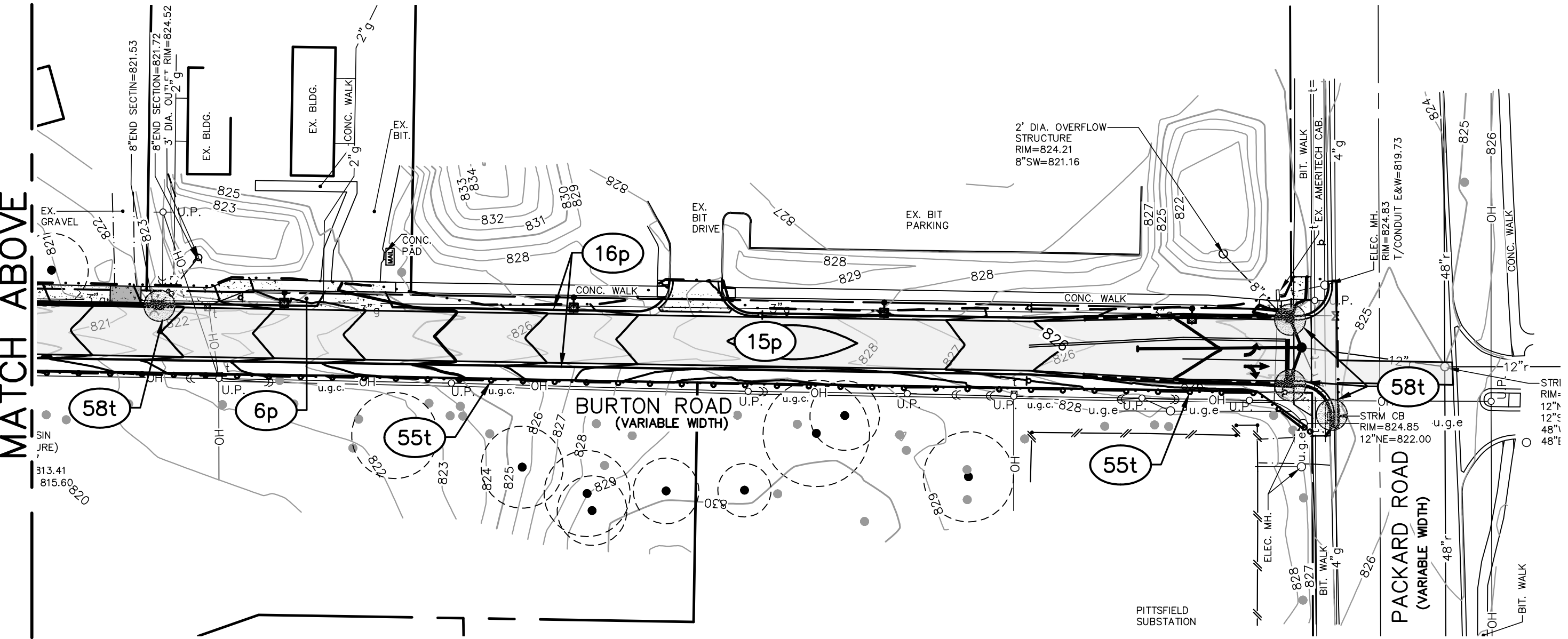
**MAINTENANCE TASK AND SCHEDULE AFTER CONSTRUCTION**  
(by Apartment Management Firm)

TASKS:	SCHEDULE:	ESTIMATED COST:
Inspect for sediment accumulation	Yearly and after every 1" storm event	\$ 200
Removal of sediment accumulation	As needed	\$ 1,200
Inspect for floatable and debris	Yearly and after every 1" storm event	\$ 100
Cleaning of floatable and debris	As needed	\$ 200
Inspect for erosion	Yearly	\$ 200
Establish permanent vegetation on eroded slopes	As needed	\$ 300
Replacement of stone filters and rip-rap	As needed	\$ 8,000
<b>Total Annual Cost Estimate</b>		<b>\$ 10,200</b>

**MAINTENANCE TASK AND SCHEDULE DURING CONSTRUCTION**  
(by Contractor)

TASKS:	SCHEDULE:	ESTIMATED COST:
Inspect for sediment accumulation	Weekly and after every 1" storm event	\$ 1,000
Removal of sediment accumulation	As needed and prior to turnover	\$ 4,000
Inspect for floatable and debris	Quarterly and after every 1" storm event	\$ 500
Cleaning of floatable and debris	Quarterly as needed, and at turnover	\$ 1,500
Inspect for erosion	Weekly	\$ 1,000
Establish permanent vegetation on eroded slopes	As needed and prior to turnover	\$ 5,000
Replacement of gravel filters	As needed	\$ 6,000
Make adjustments or replacements as determined by pre-turnover inspection	As needed	\$ 5,000
<b>Total Construction Phase Cost Estimate</b>		<b>\$ 24,000</b>

**NOTE: NO CHEMICALS ARE ALLOWED IN STORMWATER FEATURES OR BUFFER ZONES, WITH THE FOLLOWING EXCEPTION: INVASIVE SPECIES MAY BE TREATED WITH CHEMICALS BY A CERTIFIED APPLICATOR.**



**PROGRAM PROPOSAL**

THE OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPLACEMENT, IF NECESSARY, OF ANY AND ALL OF THE PERMANENT SOIL EROSION CONTROL FEATURES FOR THE DEVELOPMENT. THE FINANCIAL IMPLICATION OF SAID MAINTENANCE WILL BE THE RESPONSIBILITY OF THE OWNER. TEMPORARY SOIL EROSION CONTROL MEASURES AND FINANCIAL IMPLICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL PERMANENT RESTORATION HAS OCCURRED.

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.

**MIDWESTERN CONSULTING**  
3815 Plaza Drive Ann Arbor, Michigan 48108  
(734) 995-0200 • www.midwesternconsulting.com  
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GLORYCREST BURTON ROAD INC.  
2750 CARPENTER ROAD, SUITE 4  
ANN ARBOR, MI 48108  
JOSEPH M. WEST

**BRIGHTDAWN VILLAGE**  
SITE PLAN  
SOIL EROSION CONTROL PLAN

**13**

DATE: 06/23/20  
SHEET 13 OF 27  
REV. DATE: 7/24/20  
ENG. T.P.H.  
P.M. T.C.  
TECH. J.S.E.  
P.L.S.

JOB No. **17241A**  
REVISIONS:  
PER MUNICIPAL REVIEW

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