



J2024-0026  
PSC2024-0002  
Revision #2  
Received 11/4/2024

City of Rochester  
Hills Planning &  
Economic  
Development

**Site Plan Review**

Reviewed for compliance with City Ordinance, Building and Fire Codes Conditions and mark-ups noted throughout plan set must be addressed prior to final approval

Department	Reviewer	Approved
Assessing	Assessing	Yes
Building	Jason Rhoades 248-841-2435 RhoadesJa@RochesterHills.org	Yes
Engineering - Utilities	Jason Boughton 248-841-2490 BoughtonJ@RochesterHills.org	Yes
Engineering Legal	Seth Bucholz 248-841-2491 bucholz@rochesterhills.org	YES Date: 11/12/2024
Fire	Capt. Ann Echols 248-841-2701 EcholsA@RochesterHills.org	Yes
Natural Resources	Matt Einheuser 248-841-2551 EinheuserM@RochesterHills.org	Yes
Planning	Chris McLeod 248-841-2572 mcleodc@RochesterHills.org	Yes
Traffic	Keith Depp 248-841-2503 DeppK@RochesterHills.org	Yes

- SP
- LIP
- TRP
- BP

Provide RCOC permit

Next Steps: Plans are ready for Planning Commission and City Council consideration. A meeting date will be coordinated with the applicant and their development team.



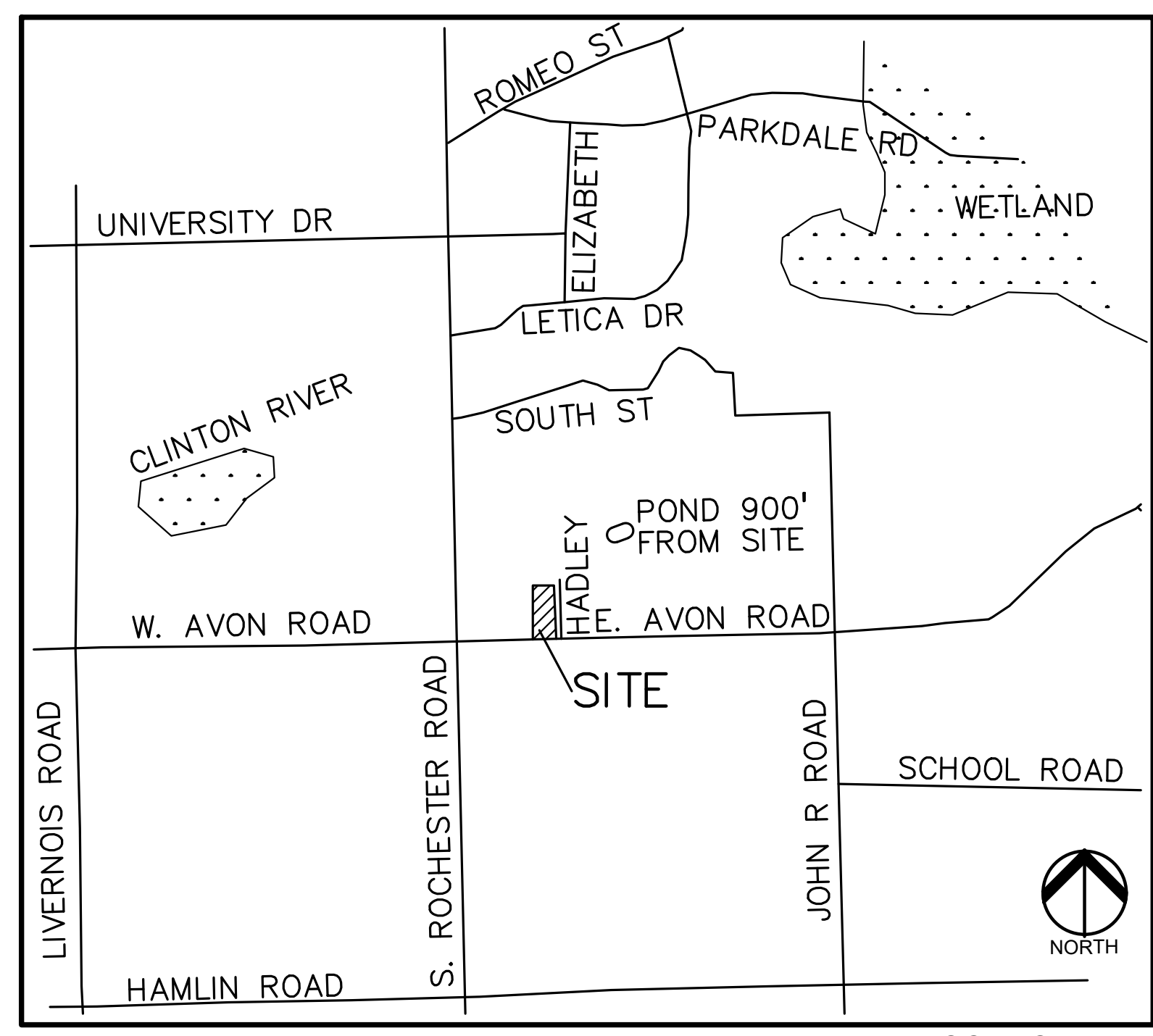
Maintenance. The owner, tenant, occupant or person responsible for any property which was the subject of an approved site plan shall maintain the property and the improvements thereon in accordance with the approved site plan or an approved amendment thereof. This responsibility shall include the duty to maintain in a condition substantially similar as approved, including the duty to replace, if necessary, all improvements such as, but not by way of limitation, all greenbelts, planting, walls, fences, paving, trash receptacles,

# PRELIMINARY SITE PLAN

# CAMBRIDGE KNOLL

## 165 & 185 E. AVON ROAD

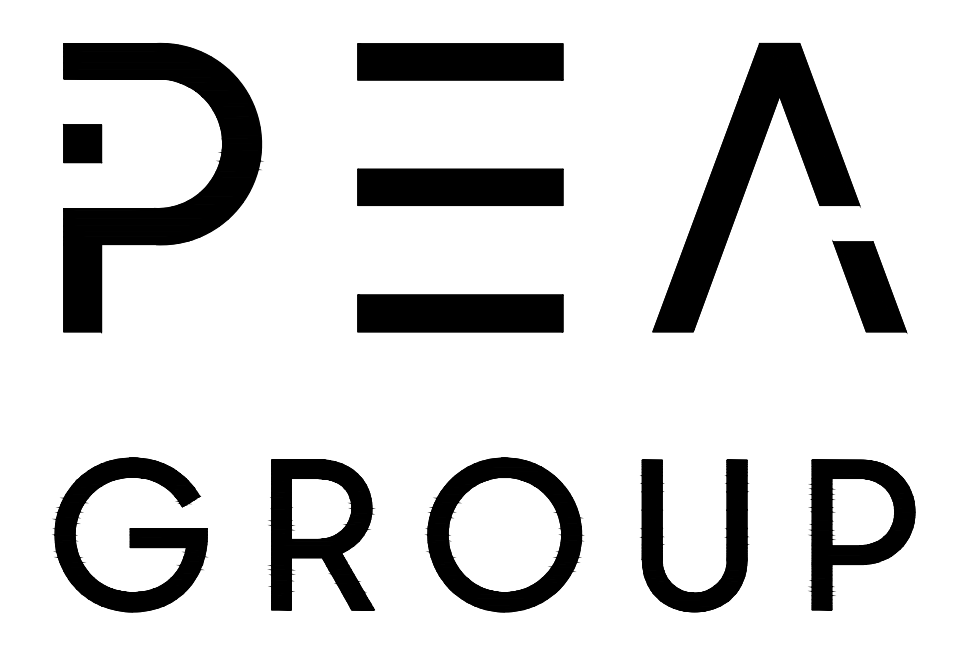
### CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN



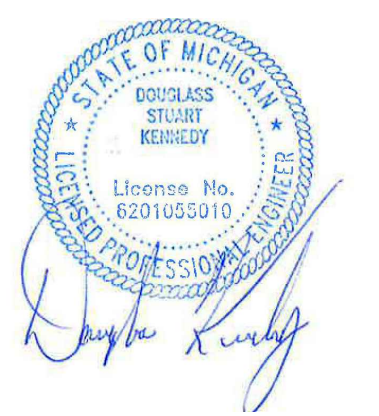
INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
C-1.0	TOPOGRAPHIC SURVEY
C-2.0	PRELIMINARY SITE PLAN
C-2.1	FIRE PROTECTION PLAN
C-3.0	PRELIMINARY GRADING PLAN
C-4.0	PRELIMINARY UTILITY PLAN
C-5.0	DRAINAGE PLAN
C-6.0	NOTES AND DETAILS
C-6.1	NOTES AND DETAILS
C-6.2	NOTES AND DETAILS

**DESIGN TEAM**

<p><b>OWNER/APPLICANT/DEVELOPER</b></p> <p>WOLVERINE BUILDING COMPANY 14955 TECHNOLOGY DRIVE SHELBY TOWNSHIP, MI 48315 CONTACT: MARK GASUALE PHONE: 586.421.5729 EMAIL: MARK@WOLVERINEBUILDINGCOMPANY.COM</p>	<p><b>CIVIL ENGINEER</b></p> <p>PEA GROUP 1849 POND RUN AUBURN HILLS, MI 48326 CONTACT: JOHN B. THOMPSON, PE PHONE: 844.813.2949 EMAIL: JTHOMPSON@PEAGROUP.COM</p>
<p><b>LANDSCAPE ARCHITECT</b></p> <p>NUNEZDESIGN 249 PARK STREET TROY, MI 48063 CONTACT: RALPH NUNEZ, PLA, CLARB, ASLA PHONE: 248.224.5933 EMAIL: RALPHNUNEZDESIGN@GMAIL.COM</p>	



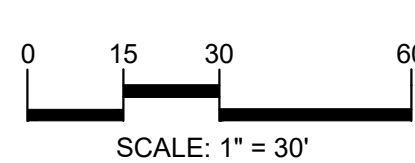
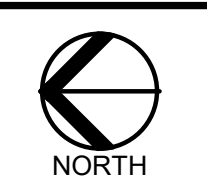
REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	8/19/2019
PER CITY REVIEW, DATED 9/4/2019	9/18/2019
PER CITY REVIEW, DATED 9/5/2019	1/24/2020
ROAD SHIFT	6/12/2020
PC FINAL SUBMITTAL	10/2/2020
ISSUE DATE	8/8/2024
PER CITY REVIEW, DATED 10/4/2024	10/25/2024



CITY FILE #19-033, SECTION #14

The applicant will need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to proceed with the construction plan review process.

PEA GROUP CAMBRIDGE KNOLL | PEA JOB NO. 2018-423 | PRELIMINARY SITE PLAN



**CAUTION!**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY AS REPRESENTED BY THE 811 SERVICE OR OTHER SURVEYORS OR MAPS. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT  
**WOLVERINE BUILDING COMPANY**  
 14955 TECHNOLOGY DRIVE  
 SHELBY TOWNSHIP, MICHIGAN

PROJECT TITLE  
**CAMBRIDGE KNOLL**  
 185 & 185 E. AVON ROAD  
 CITY OF ROCHESTER HILLS, MICHIGAN

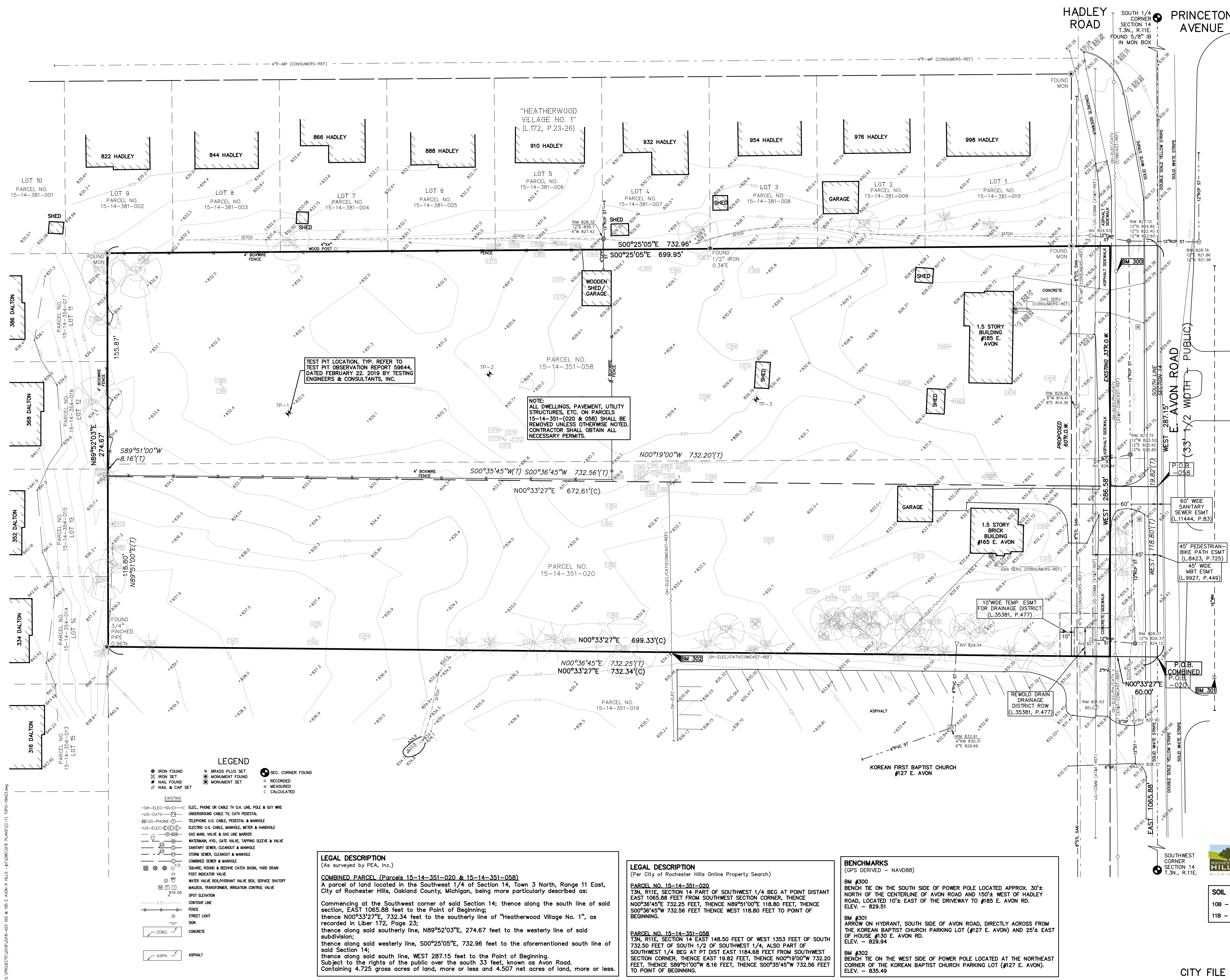
REVISIONS	
CITY REVIEW 10/4/24	10/25/24

ORIGINAL ISSUE DATE:  
 AUGUST 8, 2024

DRAWING TITLE  
**TOPOGRAPHIC SURVEY**

PEA JOB NO. 2018-423  
 P.M. JBT  
 DN. KP  
 DES. DSK  
 DRAWING NUMBER:

**C-1.0**



**LEGEND**

● IRON FOUND	⊗ BRASS PLUG SET	⊙ SEC. CORNER FOUND
⊗ IRON SET	⊙ MONUMENT FOUND	⊙ RECORDED
⊗ NAIL FOUND	⊙ MONUMENT SET	⊙ MEASURED
⊗ NAIL & CAP SET		⊙ CALCULATED

**EXISTING**

— OH-ELEC—V—C—	ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
— UG-CATV—	UNDERGROUND CABLE TV, CITY PEDESTAL
— UG-FC—PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
— UG-ELEC—E—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
— G—	GAS MAIN, VALVE & GAS LINE MARKER
— W—	WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE
— S—	SANITARY SEWER, CLEANOUT & MANHOLE
— ST—	STORM SEWER, CLEANOUT & MANHOLE
— C—	COMB'D SEWER & MANHOLE
— S—	SQUARE, ROUND & RECTANGULAR CATCH BASIN, YARD DRAIN
— P—	POST INDICATOR VALVE
— W—	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
— M—	MALBOX, TRANSFORMER, IRRIGATION CONTROL, VALVE
—	SPOT ELEVATION
— 0.70	CONTOUR LINE
—	FENCE
—	STREET LIGHT
—	SION
— CONC	CONCRETE
— ASPH	ASPHALT

**LEGAL DESCRIPTION**  
 (As surveyed by PEA, Inc.)  
**COMBINED PARCEL (Parcels 15-14-351-020 & 15-14-351-058)**  
 A parcel of land located in the Southwest 1/4 of Section 14, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, being more particularly described as:  
 Commencing at the Southwest corner of said Section 14; thence along the south line of said section, EAST 1065.88 feet to the Point of Beginning; thence N00°33'27"E, 732.34 feet to the southerly line of "Heatherwood Village No. 1", as recorded in Liber 172, Page 23; thence along said southerly line, N89°52'03"E, 274.67 feet to the westerly line of said subdivision; thence along said westerly line, S00°25'05"E, 732.96 feet to the aforementioned south line of said Section 14; thence along said south line, WEST 287.15 feet to the Point of Beginning. Subject to the rights of the public over the south 33 feet, known as Avon Road. Containing 4.725 gross acres of land, more or less and 4.507 net acres of land, more or less.

**LEGAL DESCRIPTION**  
 (Per City of Rochester Hills Online Property Search)  
**PARCEL NO. 15-14-351-020**  
 T3N, R11E, SECTION 14 PART OF SOUTHWEST 1/4 BEG AT POINT DISTANT EAST 1065.88 FEET FROM SOUTHWEST SECTION CORNER, THENCE N00°36'45"E 732.25 FEET, THENCE N89°51'00"E 118.80 FEET, THENCE S00°36'45"W 732.56 FEET THENCE WEST 118.80 FEET TO POINT OF BEGINNING.  
**PARCEL NO. 15-14-351-058**  
 T3N, R11E, SECTION 14 EAST 148.50 FEET OF WEST 1353 FEET OF SOUTH 732.50 FEET OF SOUTH 1/2 OF SOUTHWEST SECTION CORNER, THENCE EAST 19.82 FEET, THENCE N00°19'00"W 732.20 FEET, THENCE S89°51'00"W 8.16 FEET, THENCE S00°35'45"W 732.56 FEET TO POINT OF BEGINNING.

**BENCHMARKS**  
 (GPS DERIVED - NAVD83)  
**BM #300**  
 BENCH TIE ON THE SOUTH SIDE OF POWER POLE LOCATED APPROX. 30'± NORTH OF THE CENTERLINE OF AVON ROAD AND 150'± WEST OF HADLEY ROAD, LOCATED 10'± EAST OF THE DRIVEWAY TO #185 E. AVON RD. ELEV. - 829.51  
**BM #301**  
 ARROW ON HYDRANT, SOUTH SIDE OF AVON ROAD, DIRECTLY ACROSS FROM THE KOREAN BAPTIST CHURCH PARKING LOT (#127 E. AVON) AND 25'± EAST OF HOUSE #130 E. AVON RD. ELEV. - 829.94  
**BM #302**  
 BENCH TIE ON THE WEST SIDE OF POWER POLE LOCATED AT THE NORTHEAST CORNER OF THE KOREAN BAPTIST CHURCH PARKING LOT (#127 E. AVON). ELEV. - 835.49

**SOIL TYPE LEGEND:**  
 10B - MARLETTE SANDY LOAM, 1-6% SLOPES  
 11B - CAPAC SANDY LOAM, 0-4% SLOPES

**BENCHMARKS**  
(GPS DERIVED - NAVD88)

BM #300  
BENCH TIE ON THE SOUTH SIDE OF POWER POLE LOCATED APPROX. 30' NORTH OF THE CENTERLINE OF AVON ROAD AND 150' WEST OF HADLEY ROAD, LOCATED 10' EAST OF THE DRIVEWAY TO #185 E. AVON RD.  
ELEV. - 829.51

BM #301  
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ELEV. - 829.94

BM #02  
BENCH TIE ON THE WEST SIDE OF POWER POLE LOCATED AT THE NORTHEAST CORNER OF THE KOREAN BAPTIST CHURCH PARKING LOT (#127 E. AVON).  
ELEV. - 835.49

**LEGAL DESCRIPTION**  
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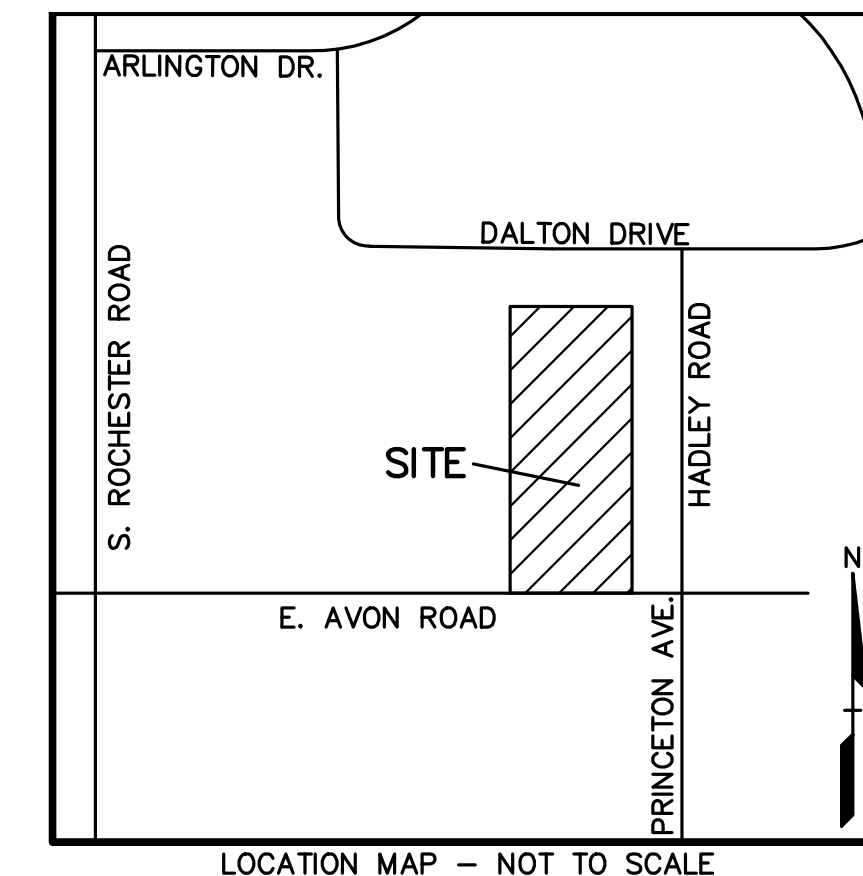
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PARCEL NO. 15-14-351-058  
T3N, R11E, SECTION 14 EAST 148.50 FEET OF WEST 1353 FEET OF SOUTH 732.50 FEET OF SOUTH 1/2 OF SOUTHWEST 1/4, ALSO PART OF SOUTHWEST 1/4 BEG AT PT DIST EAST 1184.68 FEET FROM SOUTHWEST SECTION CORNER, THENCE EAST 19.82 FEET, THENCE N00°19'00"W 732.20 FEET, THENCE S89°51'00"W 8.16 FEET, THENCE S00°35'45"W 732.56 FEET TO POINT OF BEGINNING.

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**FLOODPLAIN NOTE:**  
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0392F, DATED SEPTEMBER 29, 2006.



**LEGEND**

EXISTING  
 -OH-ELEC-AV- C- ELEC. PHONE OR CABLE TV Q.H. LINE, POLE & DUTY WIRE  
 -UG-CATV- C- UNDERGROUND CABLE TV, CATV PEDESTAL  
 -UG-UG- C- UNDERGROUND U.G. CABLE, PEDESTAL & MANHOLE  
 -UG-ELEC- C- UNDERGROUND U.G. CABLE, MANHOLE, METER & HANDHOLE  
 -GAS- C- GAS MAIN, VALVE & GAS LINE MARKER  
 -WATER- C- WATER MAIN, HD. GAS VALVE, TAPPING SLAVE & VALVE  
 -SANITARY- C- SANITARY SEWER, CLEANOUT & MANHOLE  
 -STORM- C- STORM SEWER, CLEANOUT & MANHOLE  
 -COMB- C- COMBINED SEWER & MANHOLE  
 -SQUARE- C- SQUARE, ROUND & BEDDIE CATCH BASIN, YARD DRAIN  
 -POST- C- POST INDICATOR VALVE  
 -WATER- C- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF  
 -MBOX- C- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE  
 -SPOT- C- SPOT ELEVATION  
 -CONTOUR- C- CONTOUR LINE  
 -FENCE- C- FENCE  
 -STREET- C- STREET LIGHT  
 -SIGN- C- SIGN  
 -CONC- C- CONCRETE  
 -ASPH- C- ASPHALT

PROPOSED  
 -R- R RECORDED  
 -M- M MEASURED  
 -C- C CALCULATED

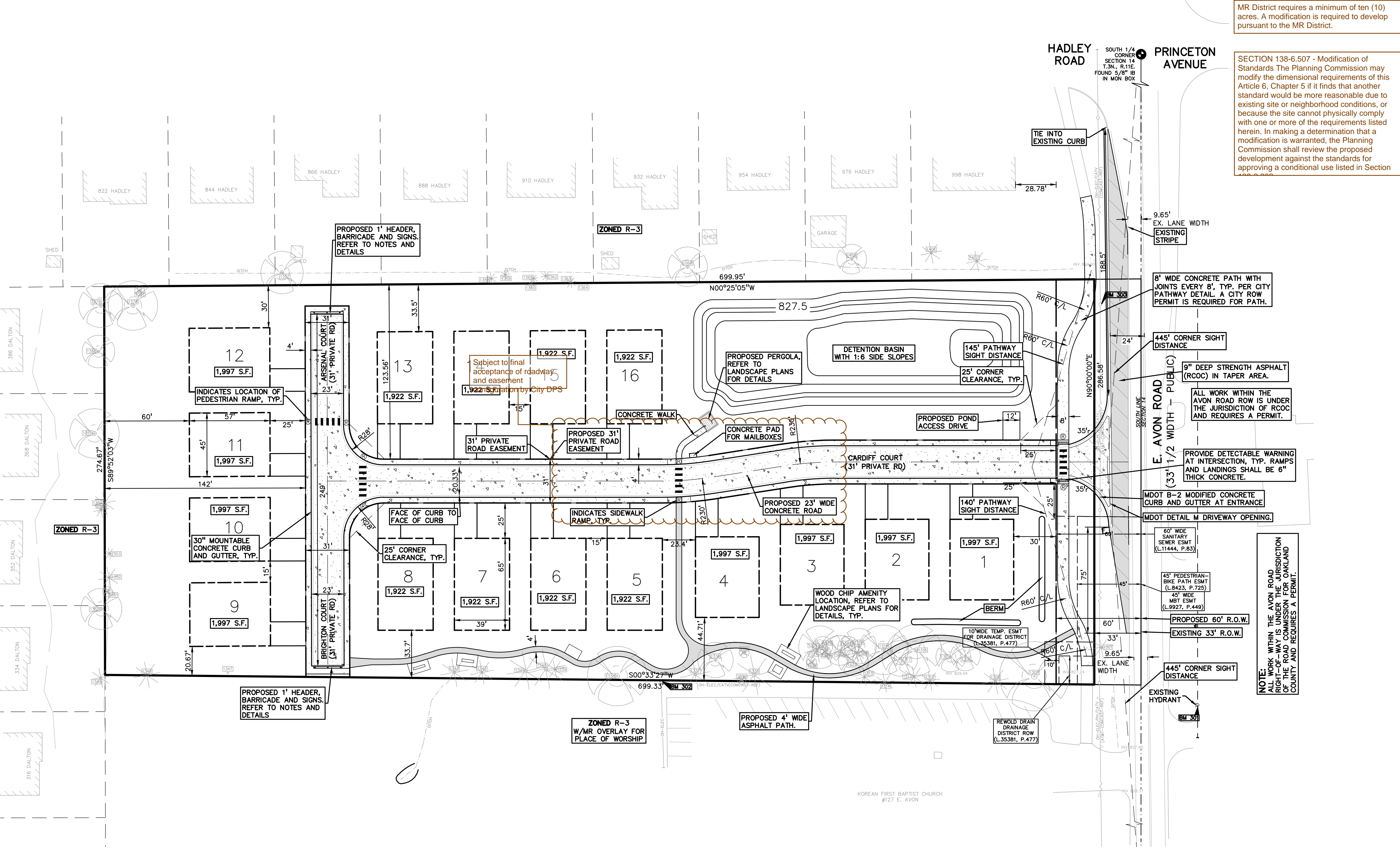
SEC. CORNER FOUND  
 R RECORDED  
 M MEASURED  
 C CALCULATED

REFERENCE DRAWINGS  
 WATER MAIN CITY OF ROCHESTER HILLS GIS MAP  
 SANITARY SEWER CITY OF ROCHESTER HILLS GIS MAP  
 STORM SEWER CITY OF ROCHESTER HILLS GIS MAP  
 ELECTRIC XXXXXXXXXXXX  
 TELEPHONE A187 MAP RECEIVED VIA EMAIL 02/07/19  
 SOUTH A187 MAP RECEIVED VIA EMAIL 02/07/19  
 GAS CONSUMERS ENERGY QUARTER SECTION MAP NO. 03-61-14-3, DATED 01/10/19  
 CATV CONSUMERS ENERGY QUARTER SECTION MAP NO. 03-61-14-3, DATED 01/10/19  
 FLOODPLAIN ZONE 'X' PER FLOOD INSURANCE RATE MAP NO. 26125C0392F, DATED 09/29/06  
 OTHER HEATHERWOOD VILLAGE NO. 1, PLAT RECORDED 04/10/1989

**PEA GROUP**  
t: 844.813.2949  
www.peagroup.com

STATE OF MICHIGAN  
 JAMES R. KELLY  
 LICENSE NO. 0201055010  
 PROFESSIONAL ENGINEER

0 20 40 80  
SCALE: 1" = 40'



**SITE DATA:**

LOCATION OF PROJECT:  
EAST OF S. ROCHESTER ROAD (NORTH SIDE OF EAST AVON ROAD, WEST OF HADLEY ROAD)

SIZE OF PROPERTY:  
4.72 GROSS ACRES; 4.33 NET ACRES

PROPOSED USE OF PROPERTY:  
SIXTEEN (16) DETACHED, SINGLE FAMILY HOMES

CURRENT ZONING:  
R-3, ONE-FAMILY RESIDENTIAL DISTRICT WITH MR MIXED RESIDENTIAL OVERLAY

SURROUNDING PROPERTY DETAILS:

DIRECTION	ZONING
NORTH	R-3, ONE-FAMILY RESIDENTIAL DISTRICT
EAST	R-3, ONE-FAMILY RESIDENTIAL DISTRICT WITH MR MIXED RES. OVERLAY
WEST	R-3, ONE-FAMILY RESIDENTIAL DISTRICT WITH MR MIXED RES. OVERLAY

REQUIRED AND PROVIDED LOT DIMENSIONS:

	REQUIRED:	PROVIDED:
FRONT (PERIMETER)	30 FOOT SETBACK	30 FOOT SETBACK
FRONT (INTERIOR)	20 FOOT SETBACK	25 FOOT SETBACK
REAR (PERIMETER)	60 FOOT SETBACK	60 FOOT SETBACK
REAR (INTERIOR)	35 FOOT SETBACK	N/A
SIDES (PERIMETER)	15 FOOT	20.67 FOOT
SIDES (INTERIOR)	15 FOOT	15 FOOT
DENSITY (# OF UNITS)	3.45 UNIT/ACRE=16 UNITS	3.38 UNIT/ACRE=16 UNITS
LOT AREA	NO MINIMUM	NO MINIMUM
MAXIMUM HEIGHT	30 FEET, 2.5 STORY	MAX 30' FEET, 2.5 STORY

**PROJECT AND SITE DESCRIPTION:**  
PROPOSED CONSTRUCTION OF 16-LOT UNIT DETACHED CONDOMINIUM PROJECT ON THE NORTH SIDE OF EAST AVON ROAD. ACCESS TO ALL UNITS WILL BE VIA PROPOSED ROAD OFF OF E. AVON ROAD. THE PROPOSED RESIDENTIAL USE IS PERMITTED BY-RIGHT IN THE R-3, ONE-FAMILY RESIDENTIAL DISTRICT WITH MR MIXED RESIDENTIAL OVERLAY.

**SITE ARRANGEMENT:**  
THE PROPOSED CONDOMINIUM CONSISTS OF 16 UNITS. ALL UNITS FRONT ON THE NEW PUBLIC STREET CONNECTION. THE LOTS ARE REGULAR IN SHAPE, ALLOW FOR ADEQUATE SETBACKS, AND PERMIT SUFFICIENT SPACE FOR THE HOMES.

**NATURAL RESOURCES:**  
THE SITE IS CURRENTLY COMPRISED OF TWO SINGLE FAMILY HOMES. SEE TREE PRESERVATION PLAN FOR EXISTING TREES TO BE SAVED.

**FLOODPLAIN:**  
ACCORDING TO FEMA FLOODPLAIN MAP THERE ARE NO IMPACTS TO THE PROPERTY.

**ACCESS AND CIRCULATION:**

**VEHICULAR ACCESS AND CIRCULATION:**  
VEHICULAR ACCESS TO ALL UNITS WILL BE VIA A NEW PRIVATE STREET OFF OF E. AVON ROAD. THE NEW ROAD WILL HAVE A THIRTY (30) FOOT WIDE ROAD EASEMENT AND TEE NEAR THE BACK OF THE SITE. THE TEE WILL SERVE AS A FIRE TRUCK TURNAROUND. THE TEE TO THE WEST PROVIDES A FUTURE CONNECTION IF/WHEN FUTURE LOTS ARE DEVELOPED. AN ACCESS DRIVE TO THE STORMWATER DETENTION BASIN IS PROVIDED.

**PEDESTRIAN ACCESS AND CIRCULATION:**  
A 4-FOOT WIDE SIDEWALK IS PROVIDED AT BOTH SIDES OF THE NEW ROAD AND AN 8-FOOT WIDE SIDEWALK IS PROVIDED ALONG E. AVON ROAD.

**UTILITIES:**  
UTILITIES ARE PLACED WITHIN EASEMENTS APPROVED AS TO SIZE AND LOCATION BY THE CITY ENGINEER.

**ALL SITES ARE SERVED BY PUBLIC WATER, SANITARY SEWER, STORM WATER AND DETENTION SYSTEMS CONSTRUCTED TO CITY STANDARDS, AT THE EXPENSE OF THE DEVELOPER. EASEMENTS OVER THESE SYSTEMS SHALL BE CONVEYED AND RECORDED BEFORE OCCUPANCY PERMITS ARE ISSUED FOR DWELLING UNITS.**

- ROOF NOTES:**
- REMOVE OR RELOCATE ALL FIXED OBJECTS PRIOR TO EXCAVATION. FIXED OBJECTS SHALL BE NO NEARER THAN 5 FEET FROM BACK OF CURB, OR 12 FEET FROM LANE LINE. COORDINATE RELOCATIONS WITH UTILITY COMPANIES AS REQUIRED.
  - PEDESTRIAN FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA GUIDELINES.
  - EXCAVATIONS WITHIN A 1:1 INFLUENCE OF THE ROADWAY WILL REQUIRE MDOT CLASS II BACKFILL COMPACTED TO 95% MAXIMUM DENSITY.

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

CAUTION!  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT  
**WOLVERINE BUILDING COMPANY**  
14955 TECHNOLOGY DRIVE  
SHELBY TOWNSHIP, MICHIGAN

PROJECT TITLE  
**CAMBRIDGE KNOLL**  
165 & 185 E. AVON ROAD  
CITY OF ROCHESTER HILLS, MICHIGAN

REVISIONS

NO.	DESCRIPTION	DATE
1	CITY REVIEW 10/4/24	10/25/24

ORIGINAL ISSUE DATE:  
AUGUST 8, 2024

DRAWING TITLE  
**PRELIMINARY SITE PLAN**

PEA JOB NO. 2018-423  
P.M. JBT  
DN. KP  
DES. DSK

DRAWING NUMBER:  
**C-2.0**

S:\PROJECTS\2018\2018-423-165 & 185 E. AVON R. HILLS - WOLVERINE PLANS(C-2) SITE-18463.dwg

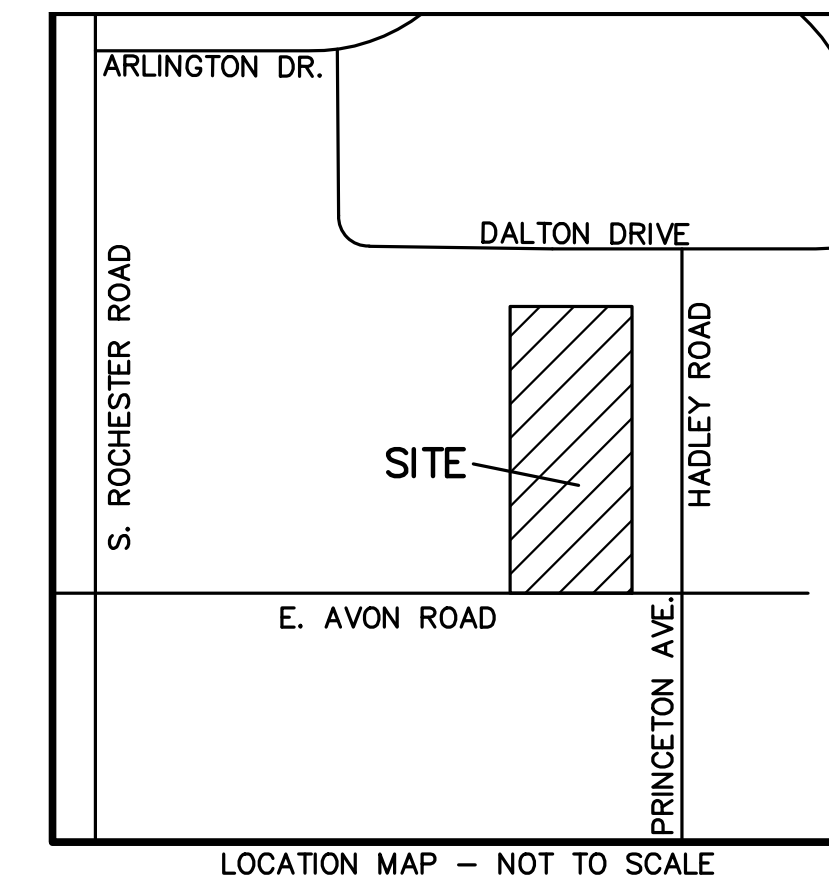
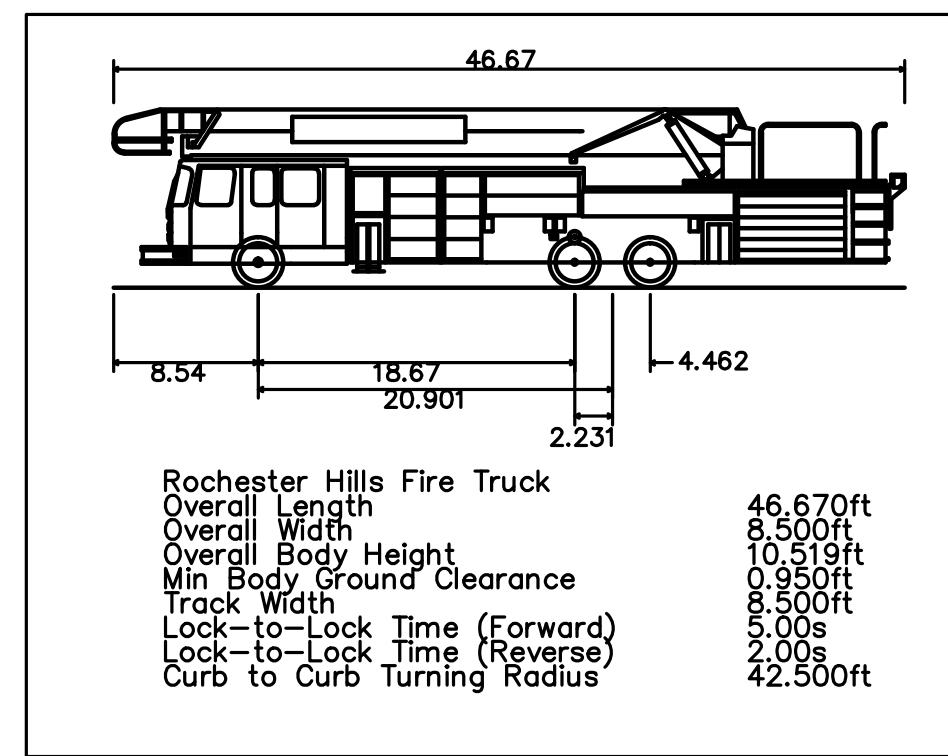
**BENCHMARKS**  
(GPS DERIVED - NAVD88)

BM #300  
BENCH TIE ON THE SOUTH SIDE OF POWER POLE LOCATED APPROX. 30'± NORTH OF THE CENTERLINE OF AVON ROAD AND 150'± WEST OF HADLEY ROAD, LOCATED 10'± EAST OF THE DRIVEWAY TO #185 E. AVON RD.  
ELEV. - 829.51

BM #301  
ARROW ON HYDRANT, SOUTH SIDE OF AVON ROAD, DIRECTLY ACROSS FROM THE KOREAN BAPTIST CHURCH PARKING LOT (#127 E. AVON) AND 25'± EAST OF HOUSE #150 E. AVON RD.  
ELEV. - 829.94

BM #02  
BENCH TIE ON THE WEST SIDE OF POWER POLE LOCATED AT THE NORTHEAST CORNER OF THE KOREAN BAPTIST CHURCH PARKING LOT (#127 E. AVON).  
ELEV. - 829.49

- FIRE DEPARTMENT NOTES:**
1. FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE", AND SHALL CONFORM TO THE MUTCD. (FIRE PREVENTION ORDINANCE, CHAP. 58, SEC 505)
  2. CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2006 CHAPTER 14. (FIRE PREVENTION ORDINANCE, CHAP. 58, SEC 505)
  3. OPEN BURNING IS NOT PERMITTED INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES. (FIRE PREVENTION ORDINANCE, CHAP. 58, SEC 307.6.2 & 307.6.2.3)
  4. ON STREET PARKING WILL NOT BE PERMITTED IN THIS DEVELOPMENT DUE TO THE ROAD WIDTH AND DESIGN OF THE TURNAROUND AS PART OF THE ROADWAY. THE FIRE DEPARTMENT DOES NOT INITIALLY REQUIRE FIRE LANE SIGNS. THE FIRE DEPARTMENT WILL MONITOR AND COULD POSSIBLY REQUIRE FIRE LANE SIGNS IN THE FUTURE IF THERE ARE COMPLAINTS OR ACCESS ISSUES.
  5. ALL DWELLINGS ARE SINGLE FAMILY WOOD FRAME HOMES. THE SQUARE FOOTAGE OF THE HOUSES ARE PROVIDED ON THE PLAN BELOW.
  6. WIDTH OF PROPOSED DRIVE IS 20.33 FEET (FACE OF CURB TO FACE OF CURB); EXCEEDS THE 20 FOOT MINIMUM
  7. FIRE APPARATUS ACCESS ROADS SHOULD BE DESIGNED TO SUPPORT THE LOAD OF A FIRE APPARATUS (75,000 POUNDS) AND BE SURFACED TO PROVIDE ALL WEATHER DRIVING CAPABILITIES.
  8. FLOW TEST IS REQUIRED TO EVALUATE CAPABILITIES OF THE WATER SUPPLY. THIS CAN BE OBTAINED BY CONTACTING THE ROCHESTER HILLS ENGINEERING DEPARTMENT AT 248.656.4640



**LEGEND**

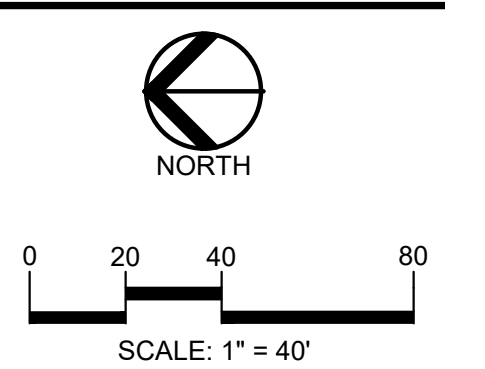
**EXISTING**

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- ELEC. PHONE OR CABLE TV OH. LINE, POLE & CITY WIRE
- UNDERGROUND CABLE TV, CATH. PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD. DATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MALBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- STREET LIGHT
- SIEN
- CONCRETE
- ASPHL

**PROPOSED**

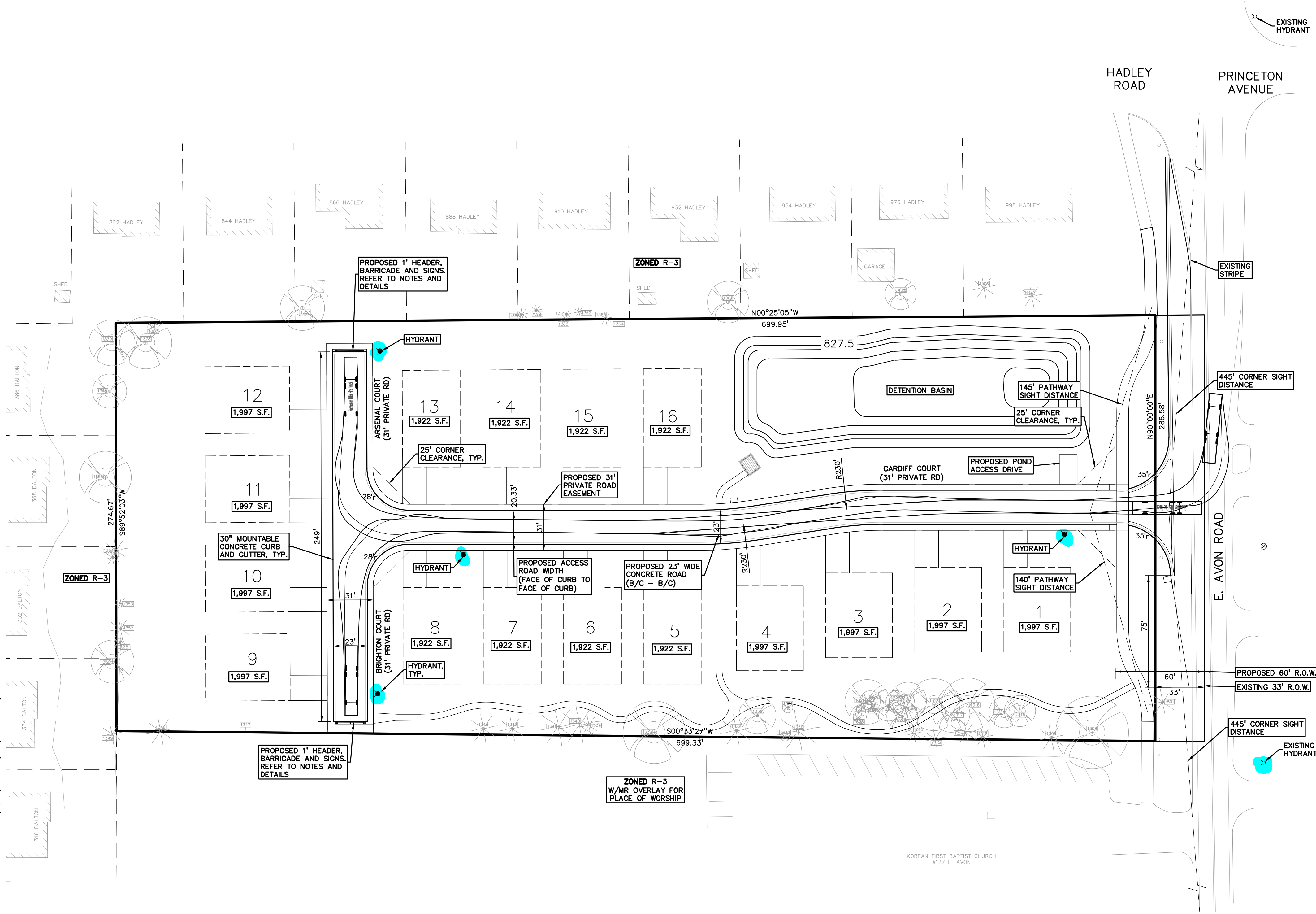
- SEC. CORNER FOUND
- RECORDED
- MEASURED
- CALCULATED
- STD. HEAVY DUTY DUTY
- STD. HEAVY R.O.W. DUTY ONLY

**PEA GROUP**  
t: 844.813.2949  
www.peagroup.com



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

**CAUTION!**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR IS BEING RESPONSIBLE FOR VERIFYING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT  
**WOLVERINE BUILDING COMPANY**  
14955 TECHNOLOGY DRIVE  
SHELBY TOWNSHIP, MICHIGAN

PROJECT TITLE  
**CAMBRIDGE KNOLL**  
185 & 185 E. AVON ROAD  
CITY OF ROCHESTER HILLS, MICHIGAN

REVISIONS

CITY REVIEW 10/4/24	10/25/24
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ORIGINAL ISSUE DATE:  
AUGUST 8, 2024

DRAWING TITLE  
**FIRE PROTECTION PLAN**

PEA JOB NO.	2018-423
P.M.	JBT
DN.	KP
DES.	DSK
DRAWING NUMBER:	

J2024-0026  
P3-2024-0002  
Revision #2  
City of Rochester Hills  
Planning & Economic Development

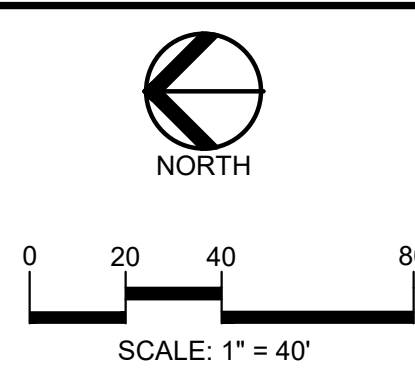
Received 11/4/2024

CITY FILE #19-033, SECTION #14

**C-2.1**

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**CAUTION!!**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT  
**WOLVERINE BUILDING COMPANY**  
 14955 TECHNOLOGY DRIVE  
 SHELBY TOWNSHIP, MICHIGAN

PROJECT TITLE  
**CAMBRIDGE KNOLL**  
 165 & 185 E. AVON ROAD  
 CITY OF ROCHESTER HILLS, MICHIGAN

REVISIONS  
 CITY REVIEW 10/4/24 10/25/24

ORIGINAL ISSUE DATE:  
 AUGUST 8, 2024  
 DRAWING TITLE  
**PRELIMINARY UTILITY PLAN**

PEA JOB NO. 2018-423  
 P.M. JBT  
 DN. KP  
 DES. DSK  
 DRAWING NUMBER:

**C-4.0**

**LEGEND**

● IRON FOUND	⊗ BRASS PLUG SET	⊕ SEC. CORNER FOUND
⊗ IRON SET	⊗ MONUMENT FOUND	⊕ RECORDED
⊗ NAIL FOUND	⊗ MONUMENT SET	⊕ MEASURED
⊗ NAIL & CAP SET		⊕ CALCULATED

**EXISTING**

- OH-ELEC-W-○- ELEC. PHONE OR CABLE TV O.H. LINE, POLE & OUT WIRE
- UG-CATV-○- UNDERGROUND CABLE TV, CATV PEDESTAL
- UG-PHONS-○- TELEPHONE U.G. CABLE, FEEDER & MANHOLE
- UG-ELEC-○- ELEC. U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT

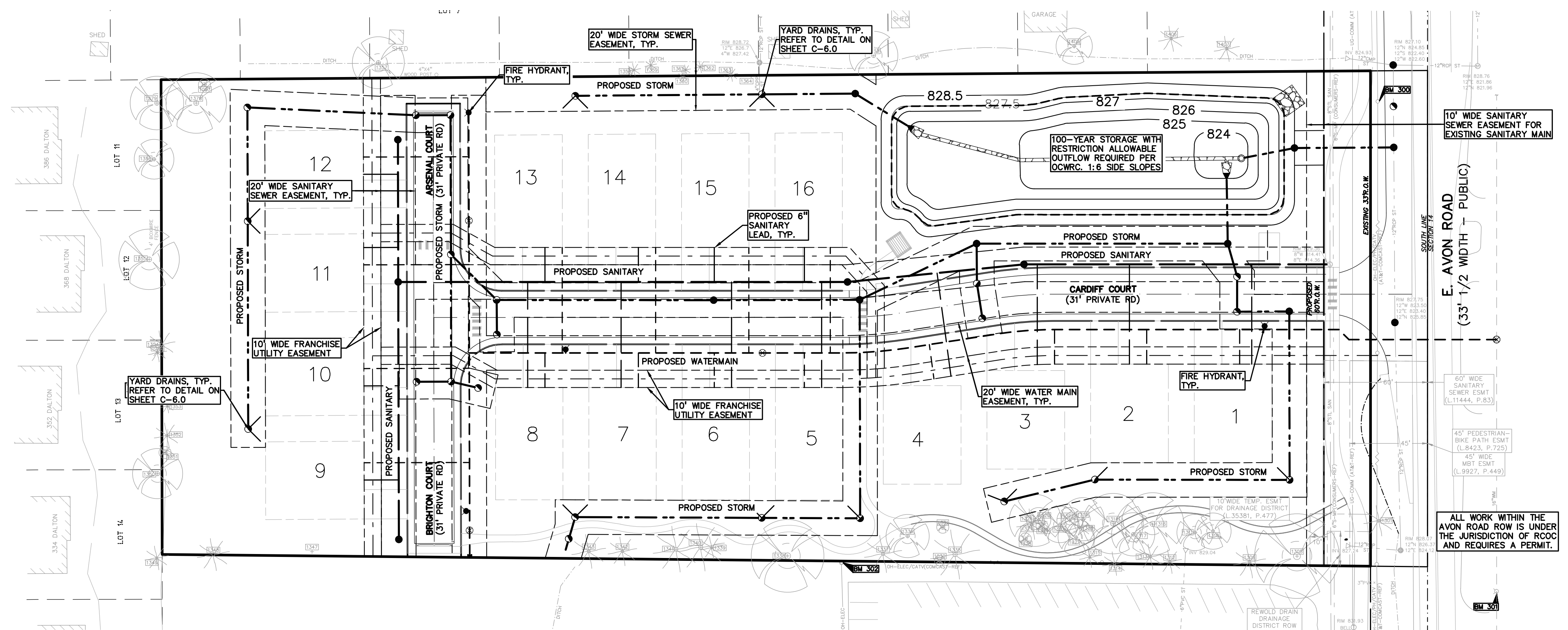
**PROPOSED**

- STD. HEAVY DUTY
- STD. HEAVY R.O.W. ONLY

**PUBLIC UTILITY EASEMENTS:**  
 ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 20' WIDE EASEMENT.

**PREMIUM TRENCH BACKFILL NOTE:**  
 ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) & ALL UTILITY CROSSINGS, SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

- GENERAL UTILITY NOTES:**
1. ALL UTILITY LINES, STRUCTURES AND TRENCHES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF ROCHESTER HILLS STANDARDS AND REQUIREMENTS.
  2. NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL THE NEW WATER MAIN PASSES ALL PRESSURE AND BACTERIOLOGICAL TESTS.
  3. ALL WATER LEADS 2" AND SMALLER SHALL BE TYPE 'K' COPPER.
  4. ALL WATER MAINS SHALL BE PROVIDED WITH 6 FEET MINIMUM COVER.
  5. ALL STORM LEADS SHALL BE P.V.C. SOLID WALL PIPE, SCHEDULE 40 UNLESS OTHERWISE NOTED. ALL 12" DIAMETER STORM SEWER AND LARGER SHALL BE REINFORCED CONCRETE (RCP) CL-IV, UNLESS OTHERWISE NOTED.
  6. ALL 8" SANITARY SEWER LEADS SHALL BE P.V.C. SOLID WALL PIPE, SDR 23.5 W/ RUBBER GASKET JOINTS.
  7. BOXES ARE TO BE PROVIDED FOR ALL CLEANOUTS. THE BOXES SHALL BE E.J.I.W. # 1565 OR APPROVED EQUAL.
  8. ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER LEAD SYSTEM ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY.
  9. A SOIL EROSION PERMIT WILL BE REQUIRED FROM THE CITY OF ROCHESTER HILLS.
  10. ALL ELECTRIC, TELEPHONE AND CABLE TV SERVICES WILL BE UNDERGROUND.
  11. UTILITY EASEMENTS SHALL BE THE FOLLOWING WIDTHS  
 STORM EASEMENTS: 20'  
 SANITARY EASEMENTS: 20'  
 WATER MAIN EASEMENTS: 20'  
 FRANCHISE UTILITY EASEMENTS: 10'



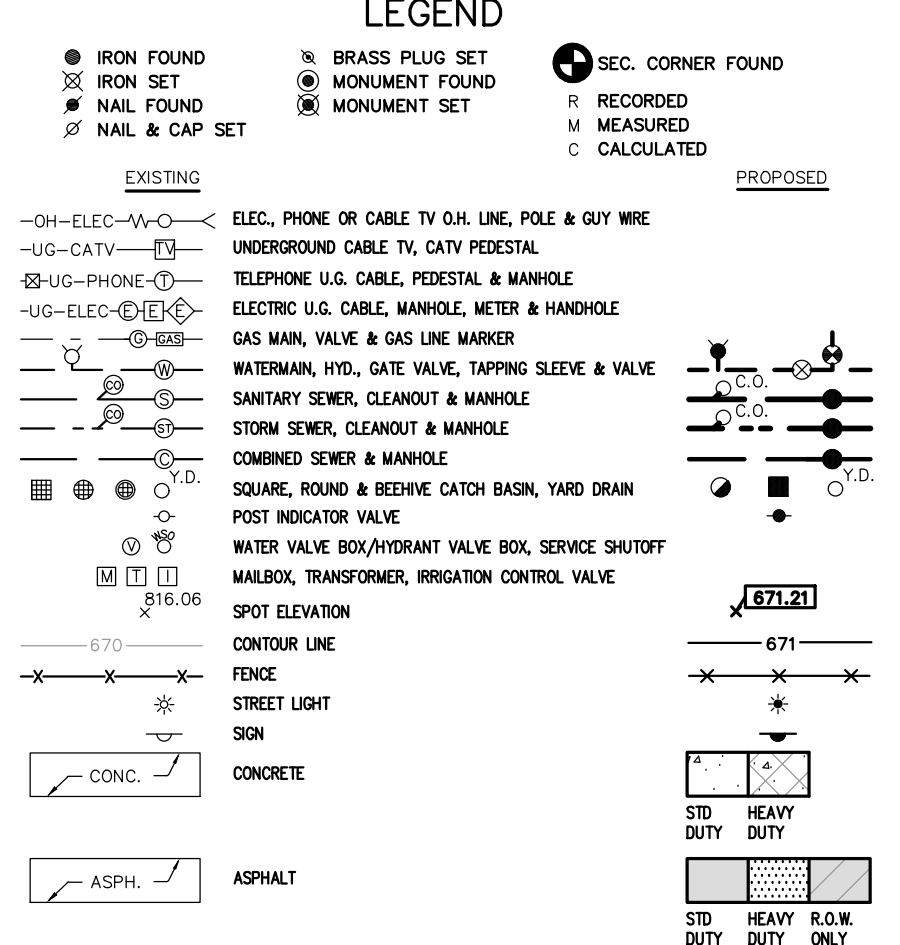
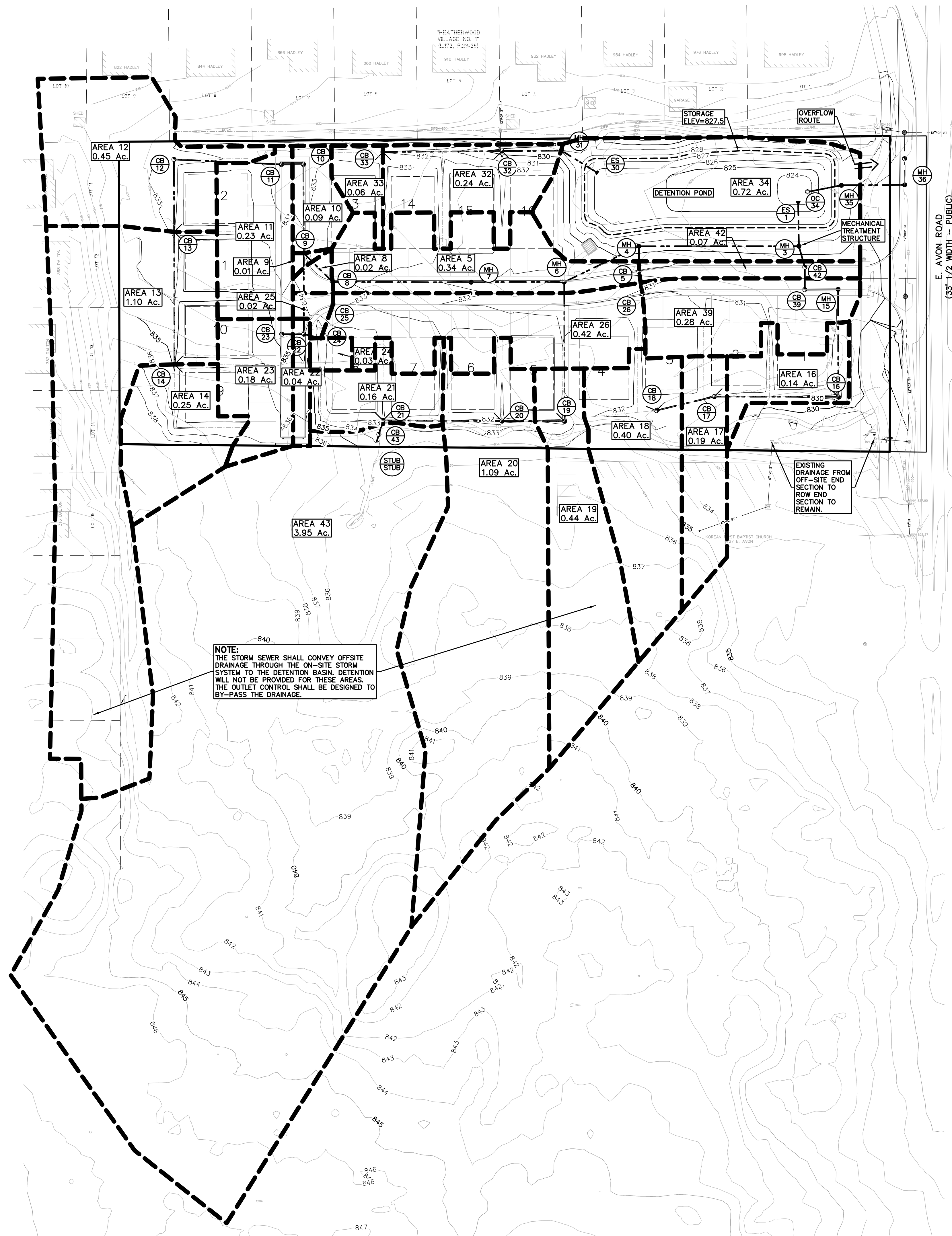
**WATER MAIN BASIS OF DESIGN:**  
 (Unit Factors Based on Oakland County Unit Assignment Factors)

<b>SINGLE FAMILY RESIDENTIAL</b>	
Estimated No. of Dwellings	16
Unit Factor	1 per dwelling
REU	16.0
Population (P) (2.44 PEOPLE/EDU)	39.0 People
<b>TOTAL</b>	<b>REU 16.0</b>
	<b>39 People</b>
Average Flow (150 GPCPD)	5,856 G.P.D.
	0.009 C.F.S.
	0.006 M.G.D.
Design Max. Flow = (2*avg)	11712.00 G.P.D.
	0.018 C.F.S.
	0.012 M.G.D.

**PROPOSED SANITARY SEWER BASIS OF DESIGN:**  
 (Unit Factors Based on Oakland County Unit Assignment Factors)

<b>SINGLE FAMILY RESIDENTIAL</b>	
Estimated No. of Dwellings	16
Unit Factor	1 per dwelling
REU	16.0
Population (P) (2.44 PEOPLE/EDU)	39.0 People
<b>TOTAL</b>	<b>REU 16.0</b>
	<b>39 People</b>
Average Flow (100 GPCPD)	3,904 G.P.D.
	0.006 C.F.S.
	0.039
P (1000s)	4.34
Peaking Factor (PF)	4.34
PF = (18+sqrt(P))/(4+sqrt(P))	
Peak Flow (G.D.P.)	16,925 G.P.D.
Peak Flow (C.F.S.)	0.026 C.F.S.
6" Pipe Capacity Provided =	0.73 C.F.S.

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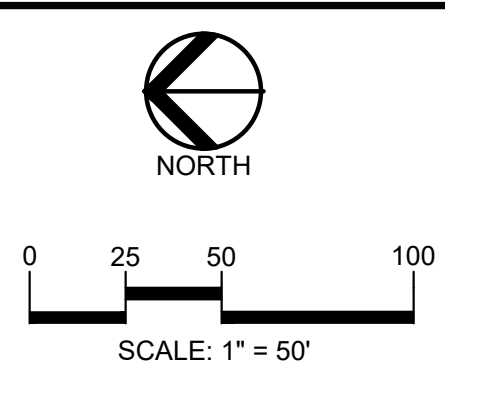
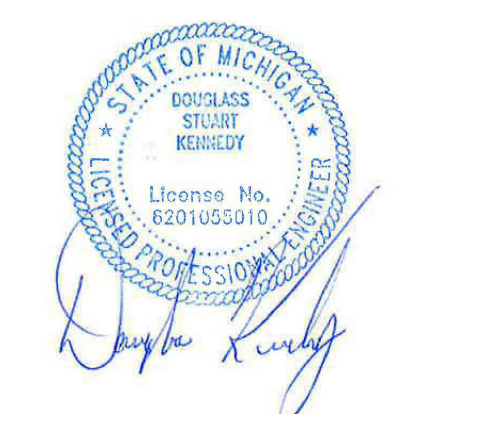
**DETENTION CALCULATIONS:**

Proposed	Area	C	Value
Natural Greenspace area:	0.00 acre	C = 0.30	
Select NCRS Soil type:	D		
Improved Greenspace area:	2.65 acre	C = 0.30	
Select NCRS Soil type:	D		
Wooded Area:	0.00 acre	C = 0.30	
Select NCRS Soil type:	D		
Impervious Area:	1.68 acre	C = 0.95	
Greenbelt Area:	2.65 acre	C = 0.30	
Total Area (A):	4.33 acre		
Weighted Coefficient of Runoff (C):	0.55		
Rainfall Intensity			
Flood Control Time of Concentration, T <sub>c</sub> =	15.0 minutes		

Parameter	Value
<b>Rainfall Intensity</b>	10/28/2024 (Details V2/02)
Time of Concentration (T <sub>c</sub> )	15.00 min
Since T <sub>c</sub> <= 15 min, I <sub>t</sub> = 2.0 in/hr	
I <sub>t</sub> = 30.2 / ((T + 9.17) <sup>0.81</sup> )	2.00 in/hr
I <sub>10</sub> = 50.12 / ((T + 9.17) <sup>0.81</sup> )	3.80 in/hr
I <sub>100</sub> = 83.3 / ((T + 9.17) <sup>0.81</sup> )	6.31 in/hr
<b>CPVC: Channel Protection Volume Control Volume</b>	
V <sub>cpvc</sub> = (4719)CA	11,238 cf
<b>CPRC: Channel Protection Rate Control Volume: Extended Detention</b>	
V <sub>ed</sub> = (6897)CA	16,425 cf
<b>CPRC Allowable Outlet Rate</b>	
Forebay Volume = (545)CA	1,298 cf
Forebay Release Rate: Q <sub>VF</sub> = VF/(48"60"60)	0.01 cfs
<b>100-Year Allowable Outlet Rate</b>	
Q <sub>VR</sub> = Q <sub>a</sub>	
Q <sub>VR</sub> =	0.80 cfs/ac
Receiving System Restricted Flow Rate Q <sub>VRR</sub> =	0.36 cfs/ac
<b>100-Year Peak Allowable Discharge</b>	
Area, A =	4.33 ac
Q <sub>100P</sub> = Q <sub>VRR</sub> (A)	1.56 cfs
<b>100-Year Runoff Volume</b>	
V <sub>100R</sub> = (18,985)CA	45,213 cf
<b>100-Year Peak Inflow</b>	
Q <sub>100IN</sub> = C <sub>I</sub> (I <sub>100</sub> )A	15.03 cfs
<b>Storage Curve Factor (Vs/V<sub>i</sub>)</b>	
R = 0.206-0.15 x ln(Q <sub>100P</sub> /Q <sub>100IN</sub> )	0.546
<b>100-Year Storage Volume</b>	
V <sub>s</sub> = R(V <sub>100R</sub> )	24,686 cf
No infiltration will be provided, so no CPVC deduction is taken.	
V <sub>100D</sub> = V <sub>s</sub>	24,686 cf
<b>V<sub>100D</sub> must be larger or equal to V<sub>ED</sub>:</b>	
Is V <sub>100D</sub> >= V <sub>ED</sub> ?	Yes
V <sub>100D</sub> =	24,686 cf

Detention Basin	Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
CPVC Storage Elevation:	826.46			16,425 cf
Detention Storage Elevation:	827.13			24,686 cf
823.40	0	0	0	
824.00	763	229	229	
825.00	5,217	2,990	3,219	
826.00	10,275	7,746	10,965	
827.00	13,497	11,886	22,851	
827.50	15,228	7,181	30,032	
Bottom Elevation of Pond:			823.40	

**INFILTRATION NOTE:**  
INFILTRATION WILL NOT BE IMPLEMENTED INTO THE STORMWATER DETENTION CALCULATIONS. AN INFILTRATION TEST WAS CONDUCTED TEC, INC. AND THE INFILTRATION RATE IS BELOW THE THRESHOLD TO SUPPLY ON-SITE INFILTRATION. A COPY OF THE REPORT WILL BE PROVIDED DURING THE CONSTRUCTION PLAN PHASE.



**CAUTION!**  
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**CLIENT**  
**WOLVERINE BUILDING COMPANY**  
14955 TECHNOLOGY DRIVE  
SHELBY TOWNSHIP, MICHIGAN

**PROJECT TITLE**  
**CAMBRIDGE KNOLL**  
165 & 185 E. AVON ROAD  
CITY OF ROCHESTER HILLS, MICHIGAN

**REVISIONS**  
CITY REVIEW 10/4/24 10/25/24

**ORIGINAL ISSUE DATE:**  
AUGUST 8, 2024

**DRAWING TITLE**  
**DRAINAGE PLAN**

**PEA JOB NO.** 2018-423  
**P.M.** JBT  
**DN.** KP  
**DES.** DSK  
**DRAWING NUMBER:**

**C-5.0**



J2024-0026  
PSC2024-0002  
Revision #2

Received 11/4/2024  
City of Rochester Hills  
Planning & Economic Development

**CITY FILE #19-033, SECTION #14**

**GENERAL NOTES:**

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS, RCOC, M.D.O.T.
2. THE CONTRACTOR MUST CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
3. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL ROCHESTER HILLS INSPECTION FEES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE PERIODS OF CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO THE JOB.
5. THE CONTRACTOR SHALL NOTIFY MISS DIG (811) AND REPRESENTATIVES OF OTHER UTILITIES IN THE VICINITY OF THE WORK A MINIMUM OF 72 HOURS PRIOR TO START OF CONSTRUCTION (EXCLUDING WEEKENDS AND HOLIDAYS) FOR LOCATION AND STAKING OF ON-SITE UTILITY LINES. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
6. CONTRACTOR TO VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
7. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
8. MANHOLE, CATCH BASIN, GATE VALVES AND HYDRANT FINISH GRADES MUST BE CLOSELY CHECKED AND APPROVED BY THE ENGINEER BEFORE THE CONTRACTOR'S WORK IS CONSIDERED COMPLETE.
9. CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ANY TREES, BRUSH, STUMPS, TRASH OR OTHER UNWANTED DEBRIS AT THE OWNERS DIRECTION, INCLUDING OLD BUILDING FOUNDATIONS AND FLOORS. BURNING OF TRASH, STUMPS OR OTHER DEBRIS SHALL NOT BE PERMITTED.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, CITY AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
11. ALL EXCAVATIONS SHALL BE SLOPED, SHORED OR BRACED IN ACCORDANCE WITH MI-OSHA REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AN ADEQUATELY CONSTRUCTED AND BRACED SHORING SYSTEM FOR EMPLOYEES WORKING IN AN EXCAVATION THAT MAY EXPOSE EMPLOYEES TO THE DANGER OF MOVING GROUND.

**PAVING NOTES:**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS AND M.D.O.T.
2. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
3. ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON-SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
4. THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR HEAVING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEORGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
5. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL SECTIONS OR BELOW SUBGRADE IN CUT SECTIONS, WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
6. SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED WITH SAND OR OTHER SIMILAR APPROVED MATERIAL. BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT (PER ASTM D-1557) UNLESS OTHERWISE SPECIFIED.
7. BACKFILL UNDER PAVED AREAS SHALL BE AS SPECIFIED ON DETAILS.
8. ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.
9. FINAL PAVEMENT ELEVATIONS SHOULD BE SO DESIGNED TO PROVIDE POSITIVE SURFACE DRAINAGE. A MINIMUM SURFACE SLOPE OF 1.0 PERCENT IS RECOMMENDED.
10. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.

**GENERAL UTILITY NOTES:**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS AND M.D.O.T.
2. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
3. WHENEVER EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.
4. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. CONTRACTOR TO FIELD VERIFY UTILITIES.
5. THE CONTRACTOR MUST COORDINATE TO ENSURE ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED FOR THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, IRRIGATION, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT AND LANDSCAPING.
6. REFER TO CITY OF ROCHESTER HILLS STANDARD DETAILS FOR PIPE BEDDING DETAILS.
7. REFER TO CITY OF ROCHESTER HILLS STANDARD DETAIL SHEETS FOR ADDITIONAL INFORMATION.

**STORM SEWER NOTES:**

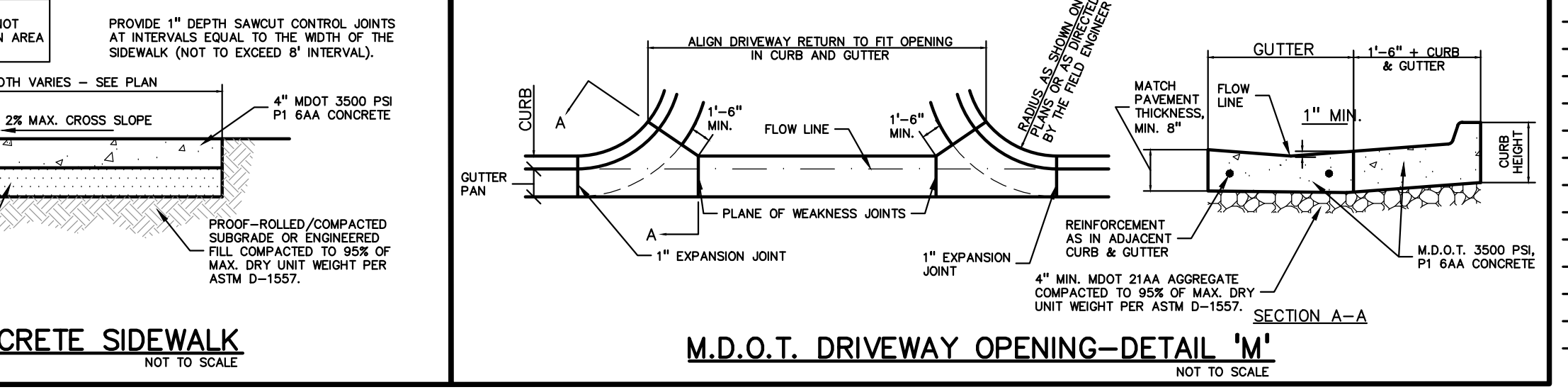
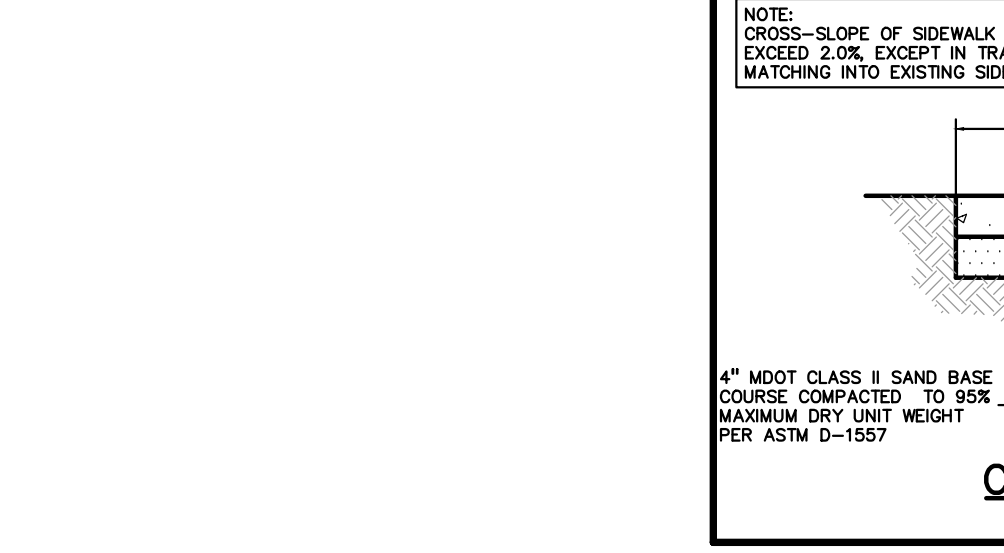
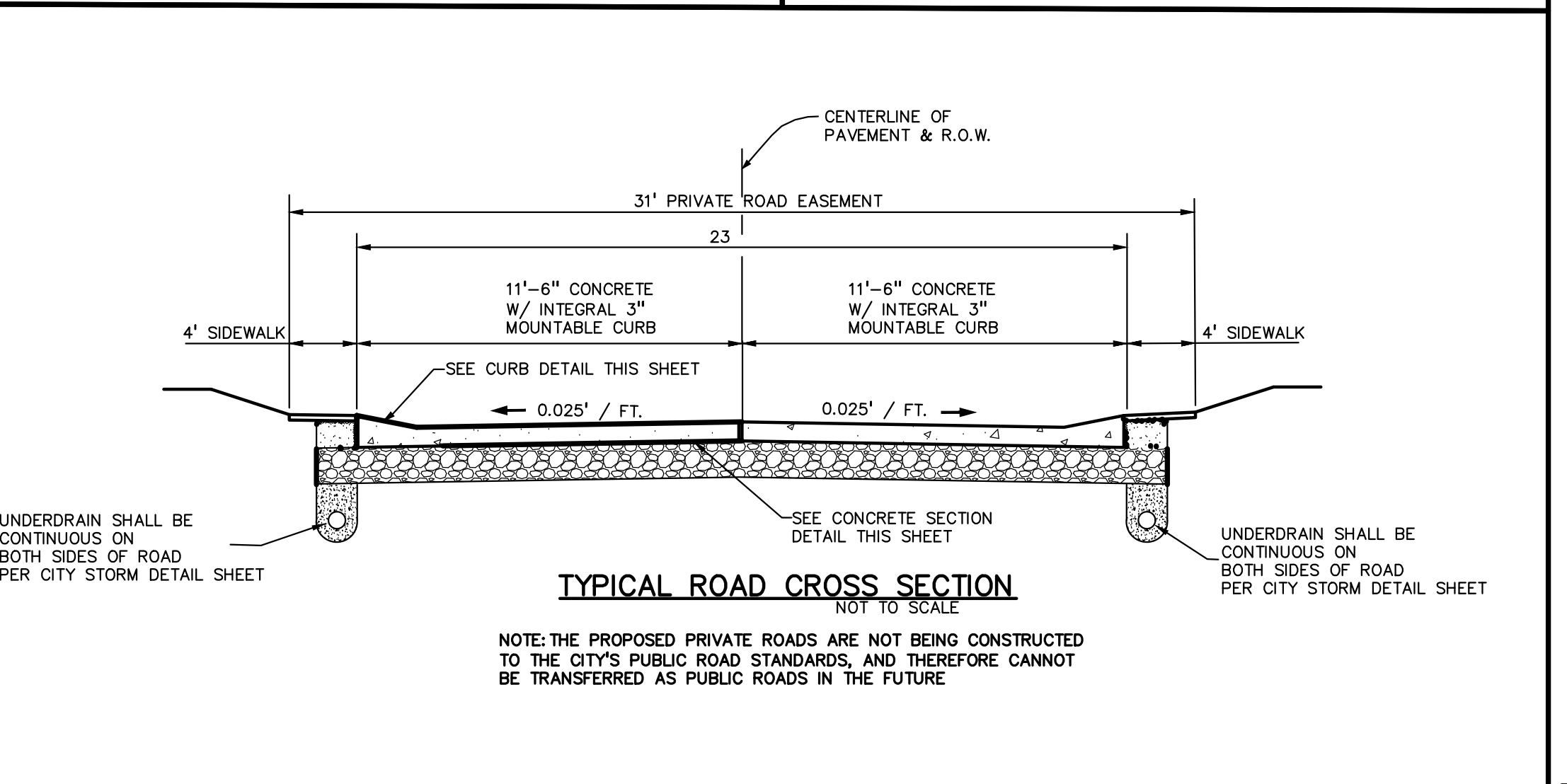
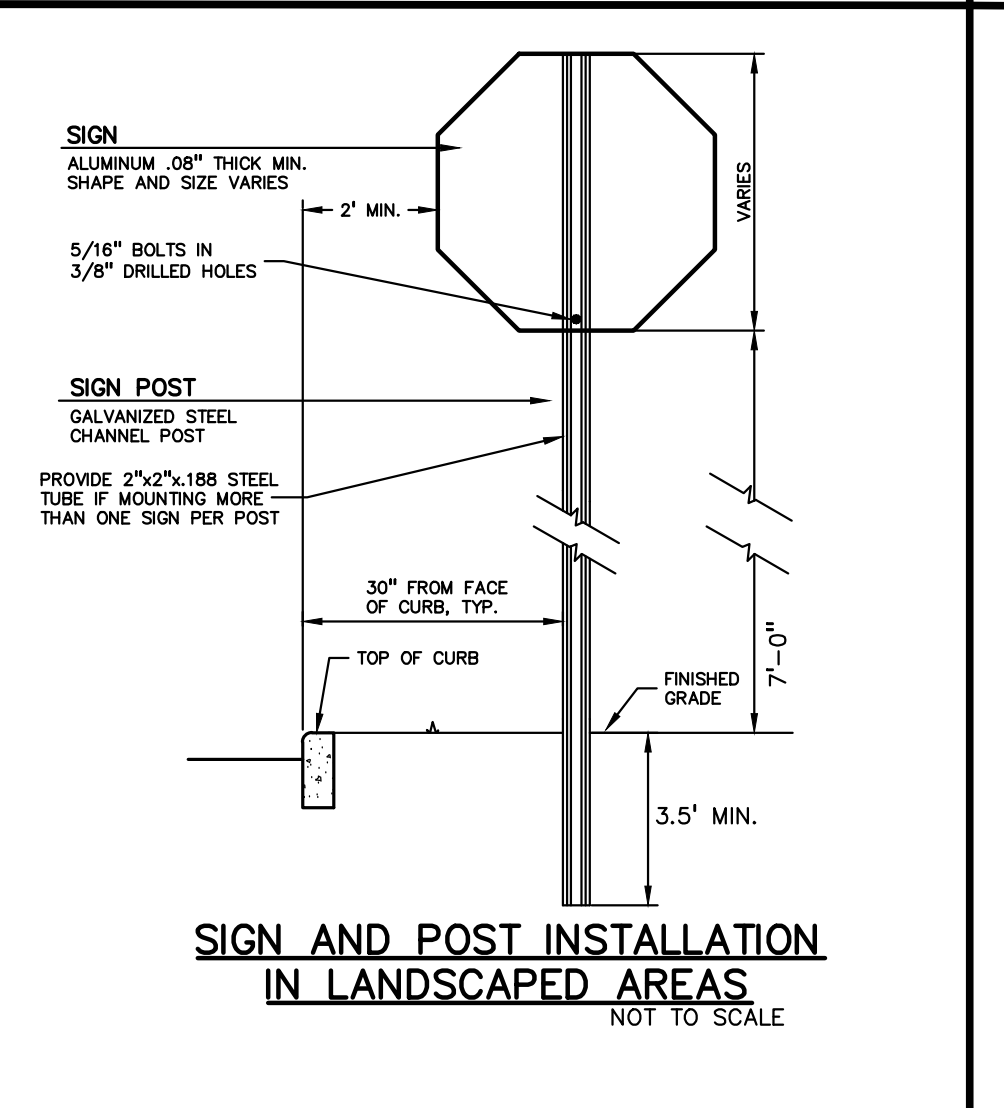
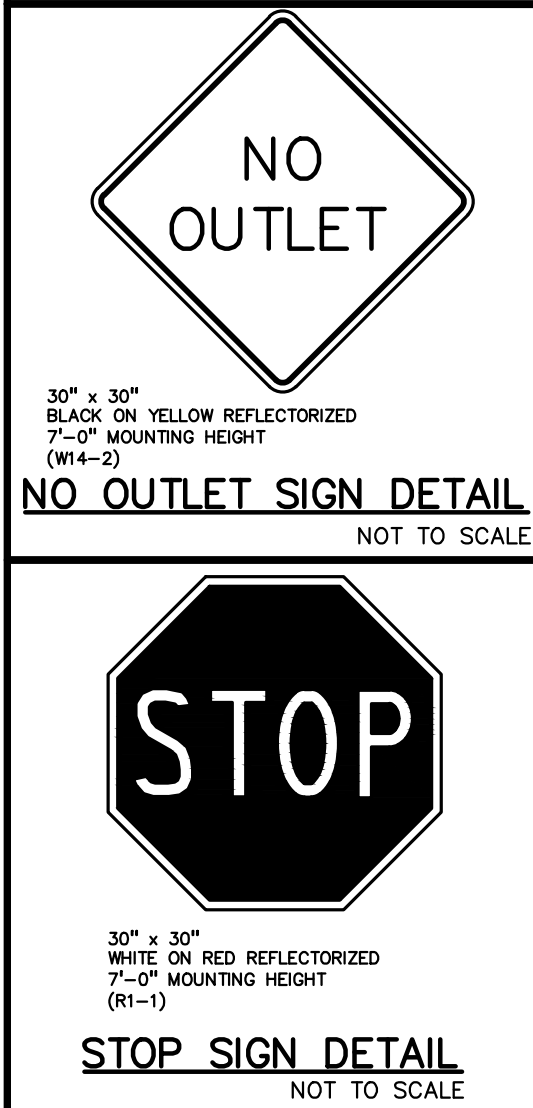
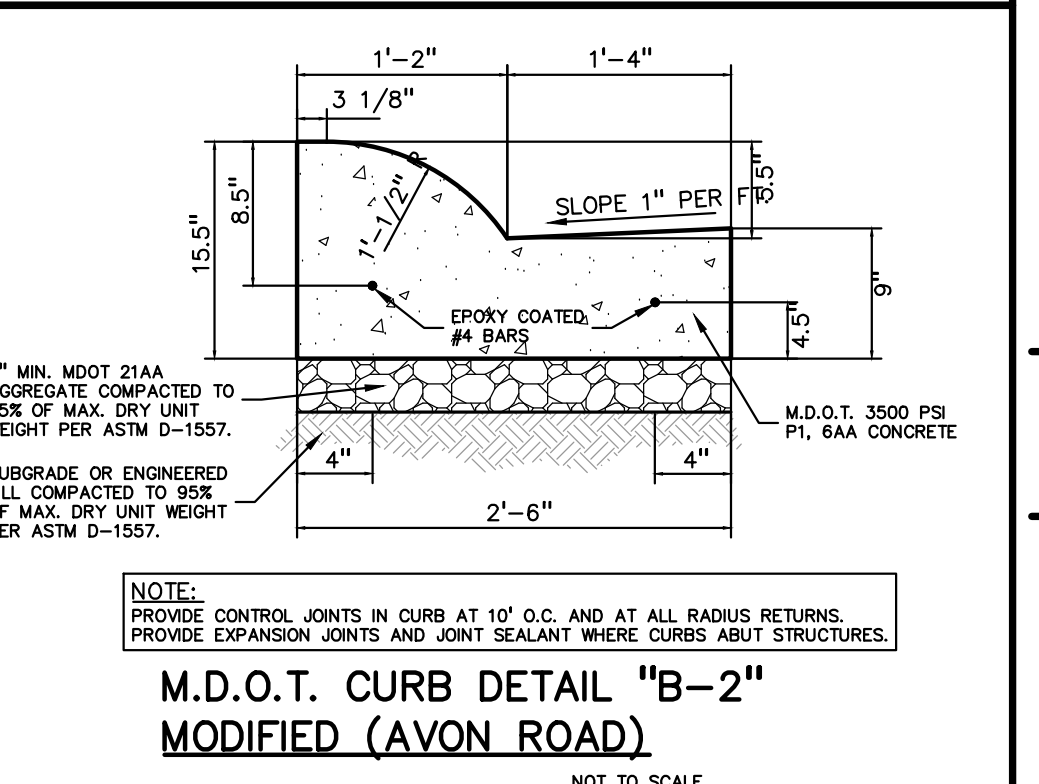
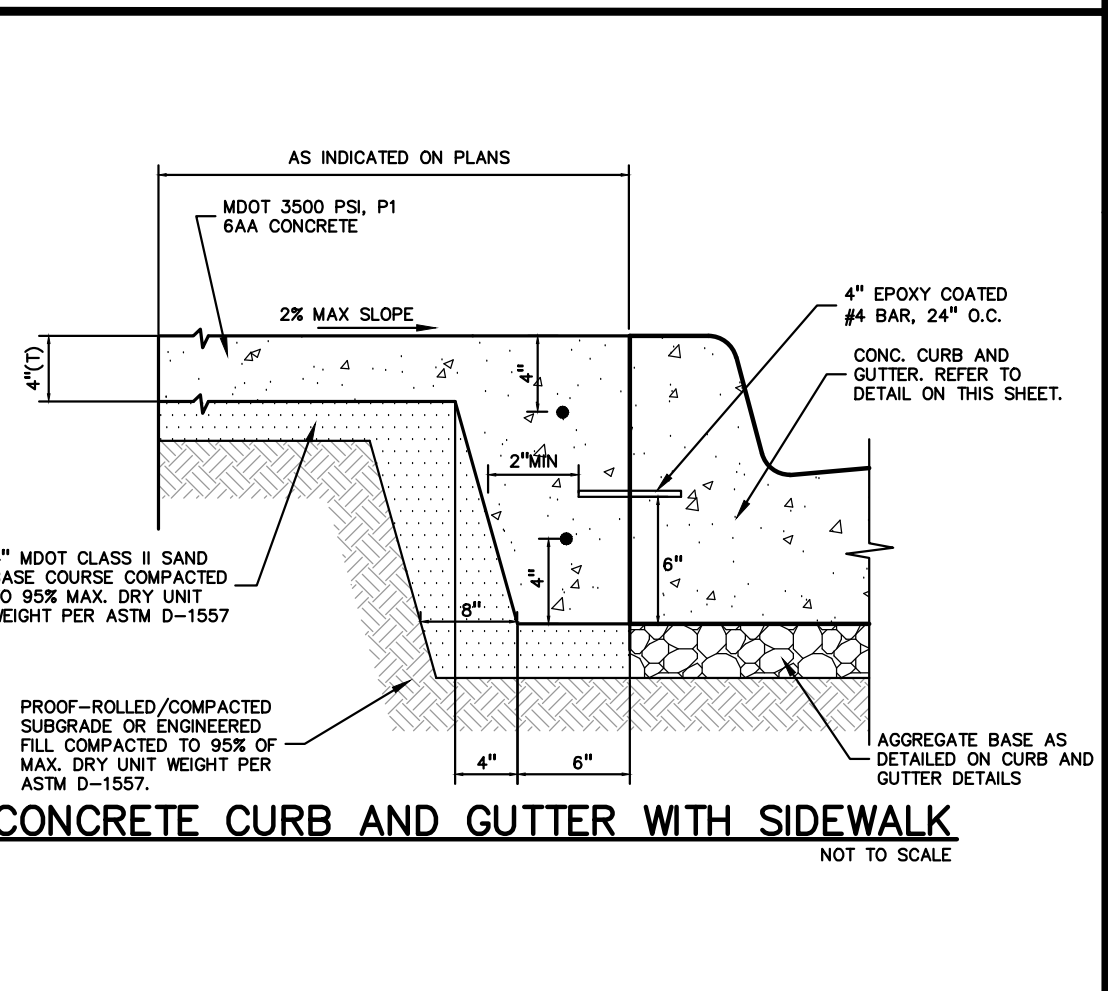
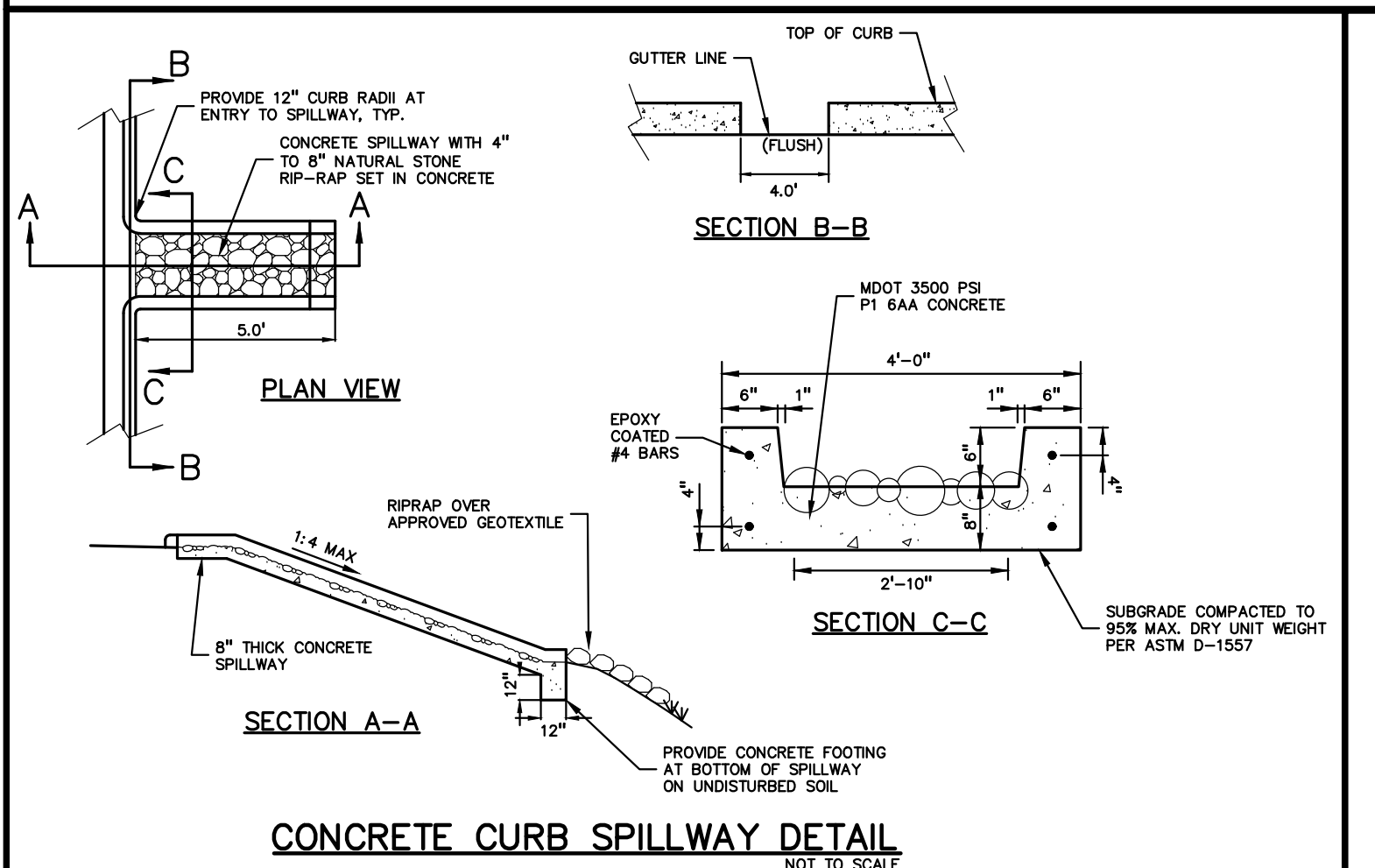
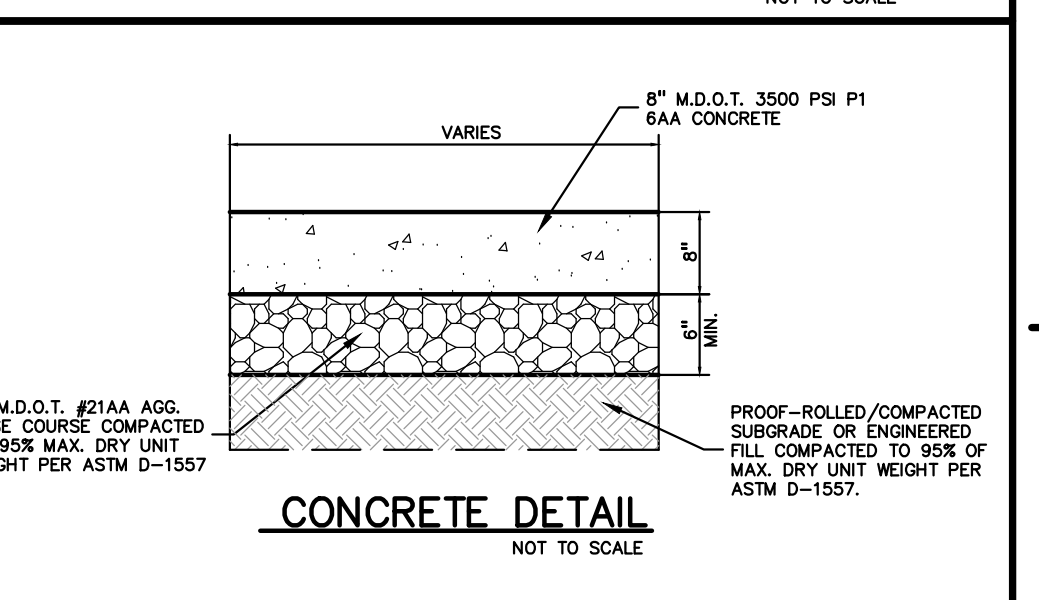
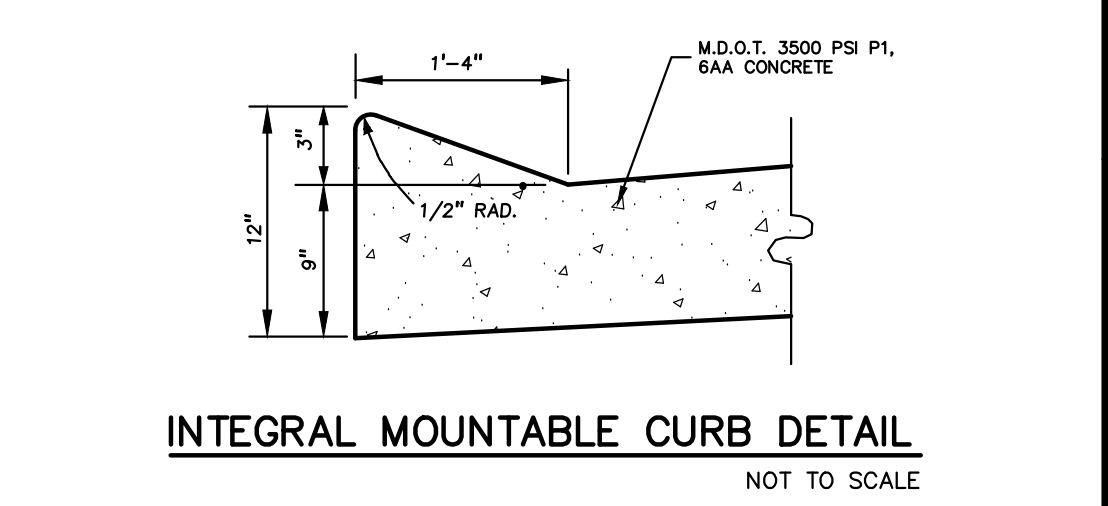
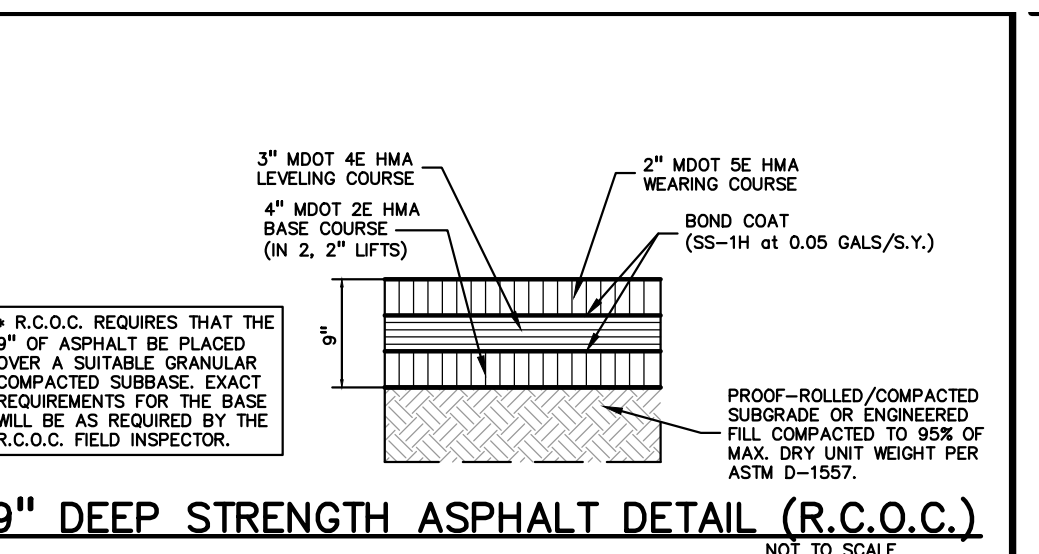
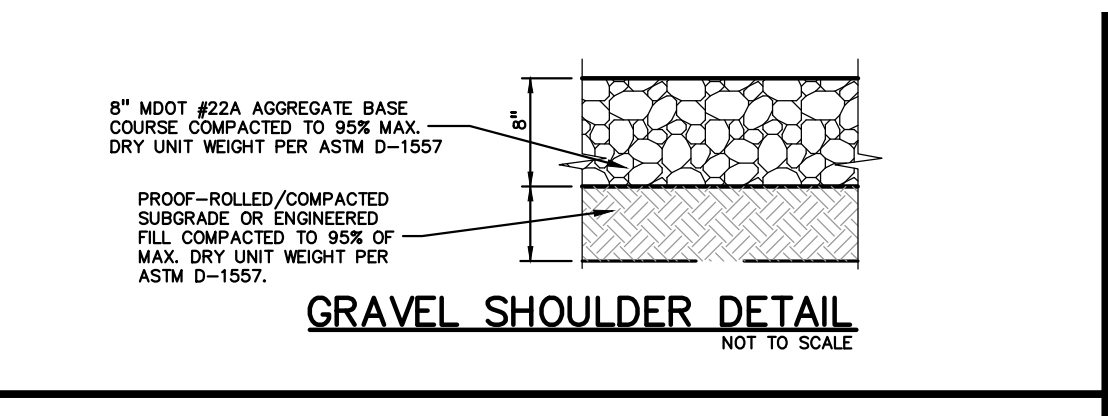
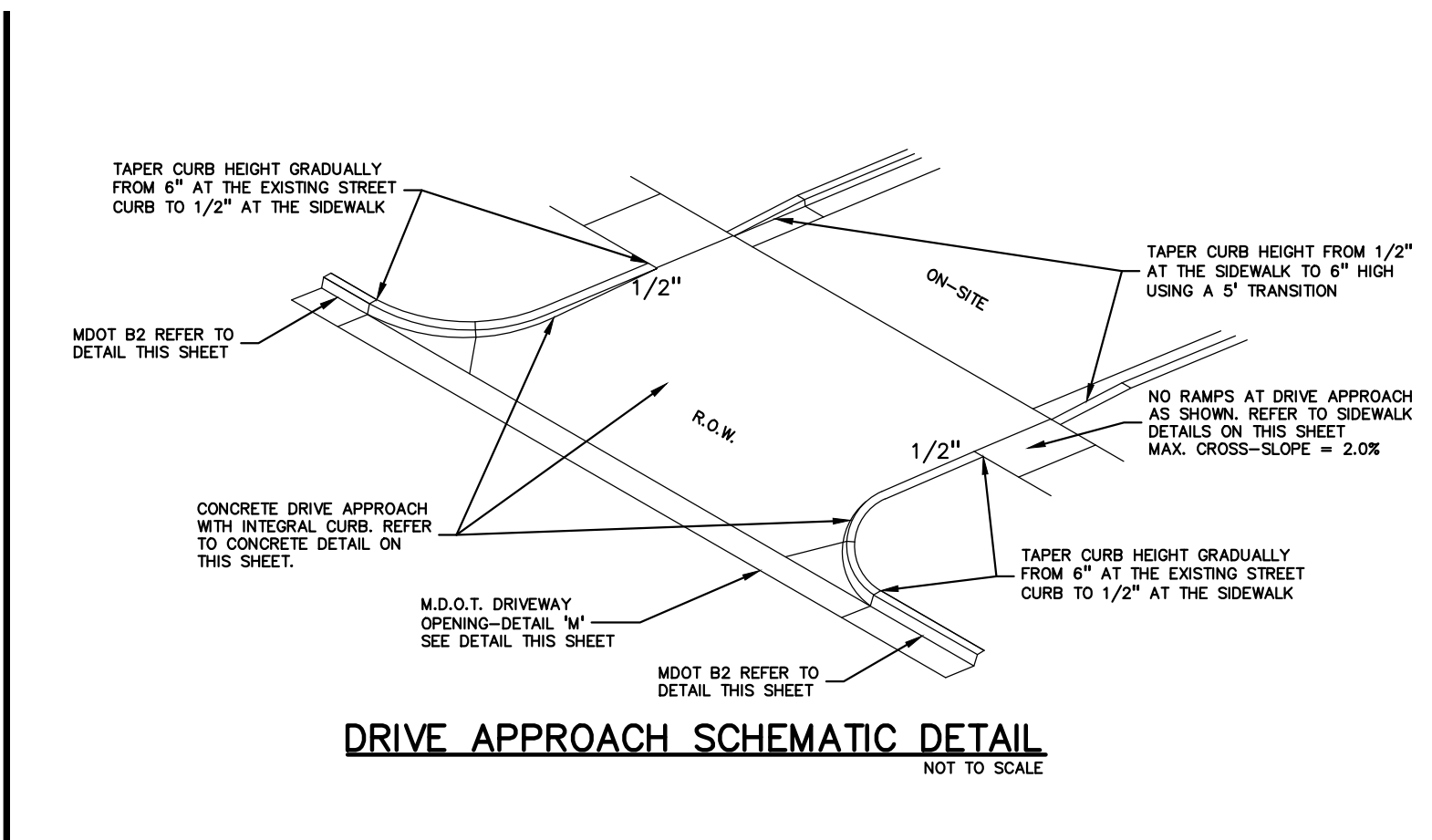
1. ALL STORM SEWER 12" AND LARGER SHALL BE RCP CLASS IV UNLESS OTHERWISE NOTED. REFER TO CITY STANDARD DETAILS SHEETS FOR STANDARD BEDDING DETAILS.
2. JOINTS FOR ALL STORM SEWER 12" AND LARGER SHALL BE MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C-443)
3. ALL STORM SEWER LEADS SHALL BE CONSTRUCTED OF PVC SCHEDULE 40 PIPE AT 1.00% MINIMUM SLOPE WITH GLUED JOINTS, UNLESS OTHERWISE NOTED.

**WATER MAIN NOTES:**

1. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 6' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5°) DEGREE BENDS, PROPERLY ANCHORED.
2. ALL TEES, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.
3. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL TESTING IS SATISFACTORILY COMPLETED.
4. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATERMAIN AND ANY SANITARY SEWER OR STRUCTURE.
5. ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 54 WITH POLYETHYLENE WRAP.

**SANITARY SEWER NOTES:**

1. DOWNSPOUTS, WEEP TILE, FOOTING DRAINS OR ANY CONDUIT THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.
2. ALL SANITARY LEADS SHALL BE CONSTRUCTED OF PVC SDR 23.5 AT 1.00% MINIMUM SLOPE.
3. ALL SANITARY SEWER SHALL BE CONSTRUCTED OF PVC TRUSS PIPE WITH A MINIMUM DIAMETER OF 8" PER CITY REQUIREMENTS.
4. JOINTS FOR P.V.C. SOLID WALL PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS SPECIFIED IN A.S.T.M. DESIGNATION D-3212.



**CAUTION!**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY AN ESTIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT  
**WOLVERINE BUILDING COMPANY**  
14955 TECHNOLOGY DRIVE  
SHELBY TOWNSHIP, MICHIGAN

PROJECT TITLE  
**CAMBRIDGE KNOLL**  
165 & 185 E. AVON ROAD  
CITY OF ROCHESTER HILLS, MICHIGAN

REVISIONS

CITY REVIEW	DATE
10/4/24	10/25/24

ORIGINAL ISSUE DATE:  
AUGUST 8, 2024

DRAWING TITLE  
**NOTES AND DETAILS**

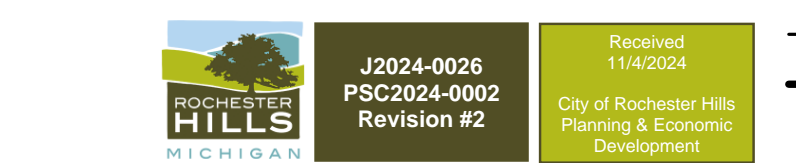
PEA JOB NO. 2018-423

P.M. JBT

DN. JBT

DES. DSK

DRAWING NUMBER:



CITY FILE #19-033, SECTION #14

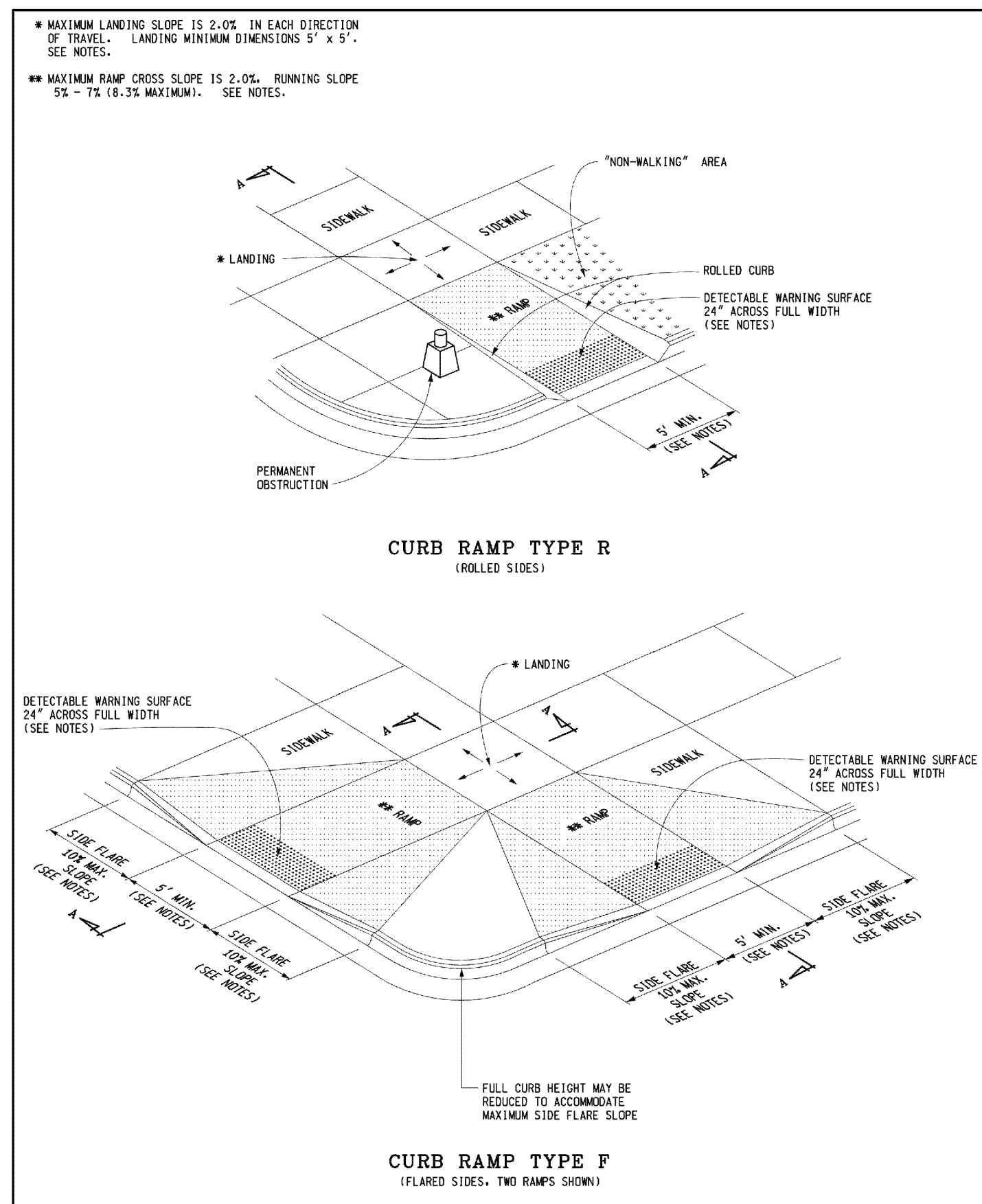
**C-6.0**

S:\PROJECTS\2018\2018-423\_165 & 185 E. AVON R. HILLS - 34\DWG\SITE PLANS(C-6) DETAIL-18422.dwg





**CAUTION!**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



DEPARTMENT DIRECTOR  
Paul C. Appala

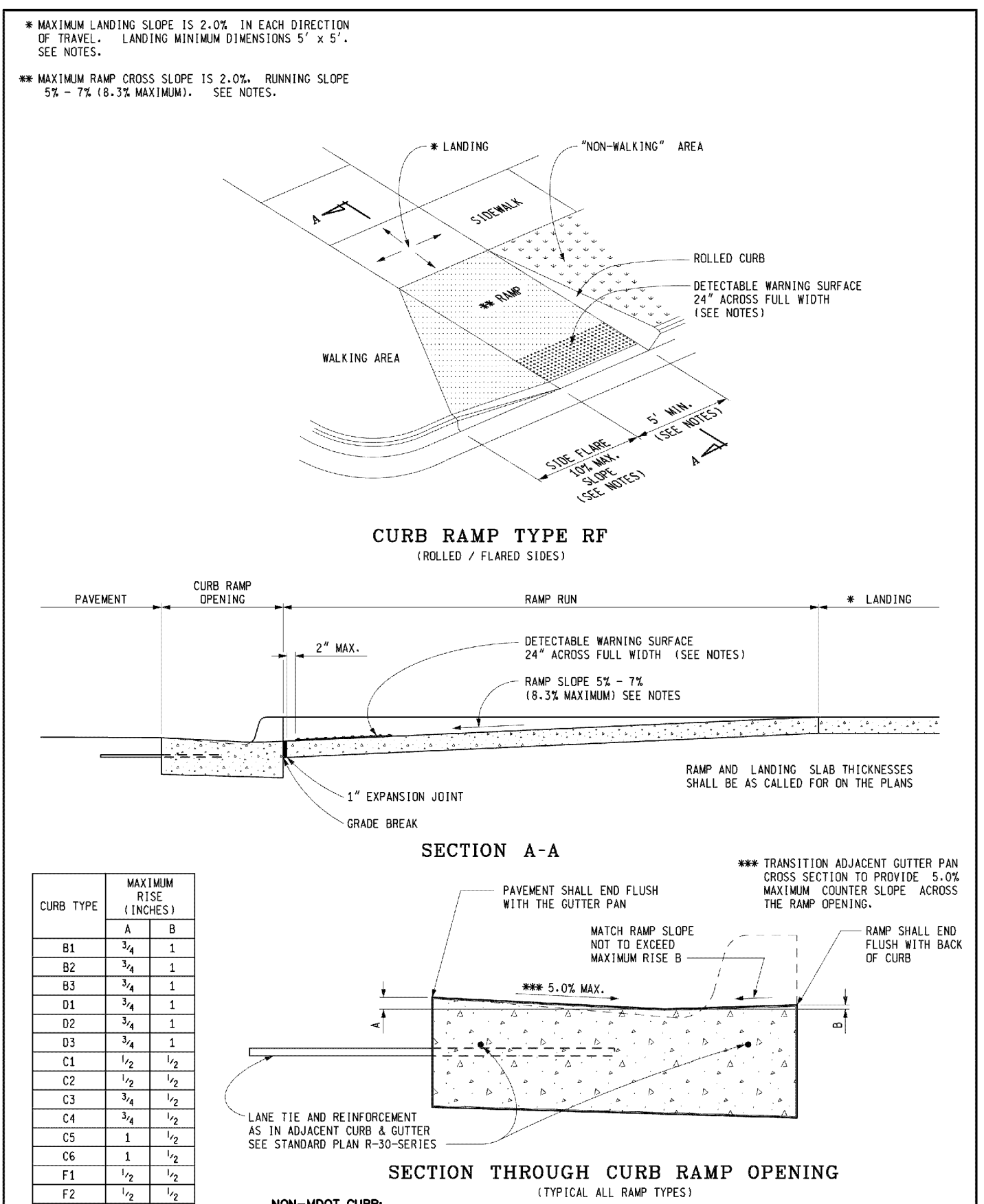
PREPARED BY: **DESIGN DIVISION**  
DRAWN BY: **B.L.L.**  
CHECKED BY: **B.K.L.E.**

APPROVED BY: **DIRECTOR, BUREAU OF FIELD SERVICES**  
DATE: 04/14/2021 12:33 PM

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**CURB RAMP AND DETECTABLE WARNING DETAILS**

4-7-2002 5-8-2020 R-28-J SHEET 1 OF 7

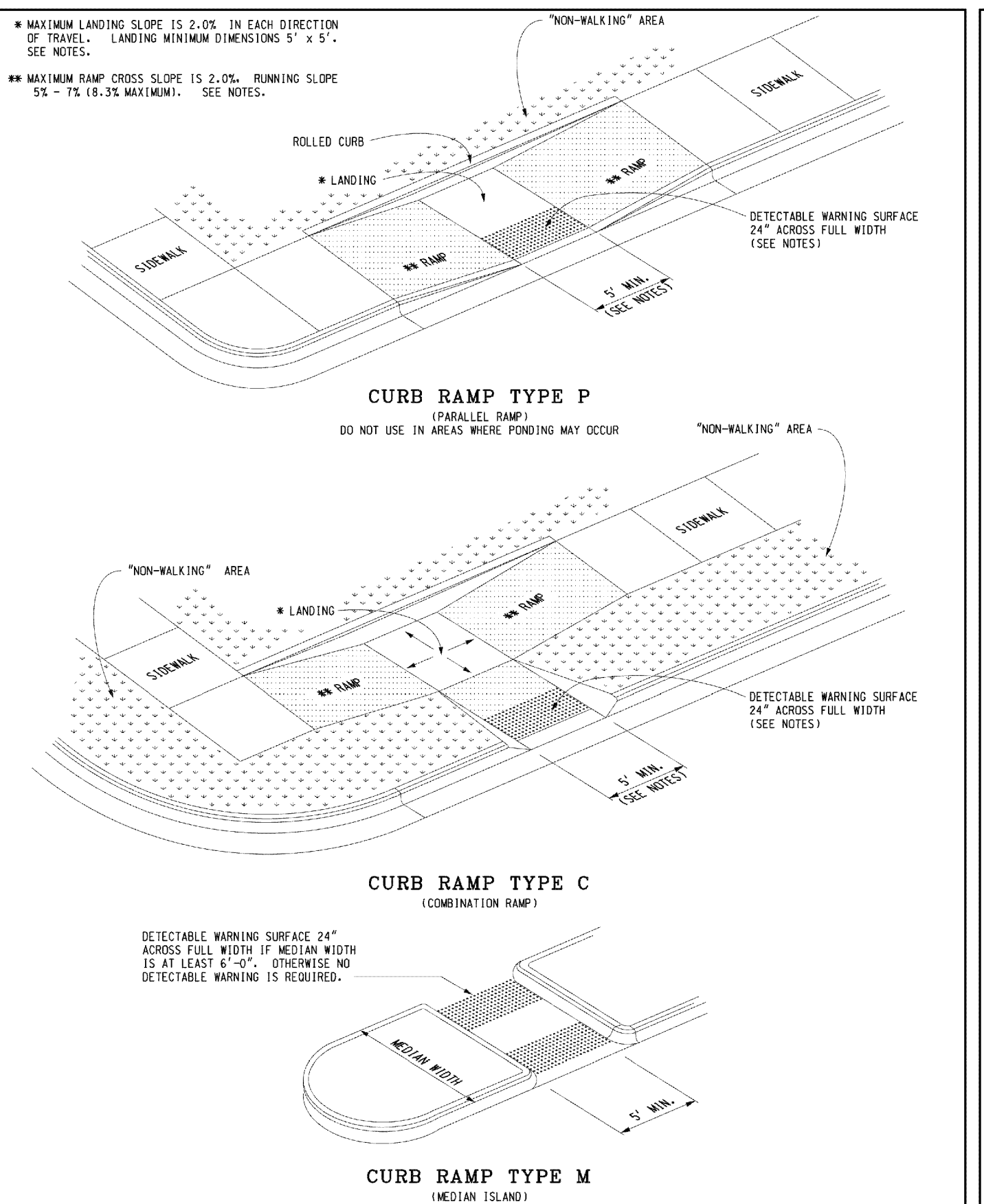


MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**CURB RAMP AND DETECTABLE WARNING DETAILS**

4-7-2002 5-8-2020 R-28-J SHEET 2 OF 7

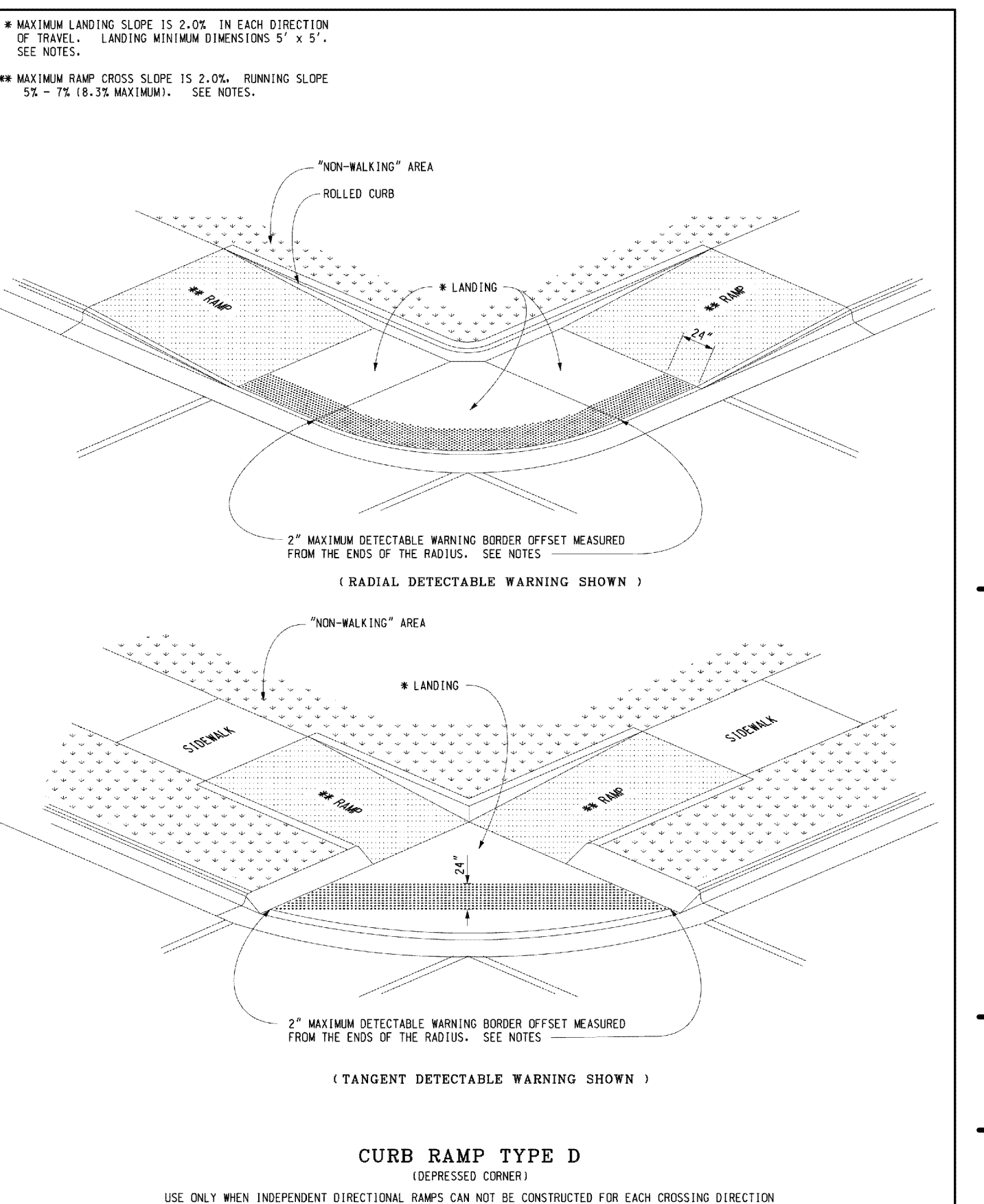
CURB TYPE	MAXIMUM RISE (INCHES)	
	A	B
B1	3/4	1
B2	3/4	1
B3	3/4	1
D1	3/4	1
D2	3/4	1
D3	3/4	1
C1	1/2	1/2
C2	1/2	1/2
C3	3/4	1/2
C4	3/4	1/2
C5	1	1/2
C6	1	1/2
F1	1/2	1/2
F2	1/2	1/2
F3	3/4	1/2
F4	3/4	1/2
F5	1	1/2
F6	1	1/2



MICHIGAN DEPARTMENT OF TRANSPORTATION  
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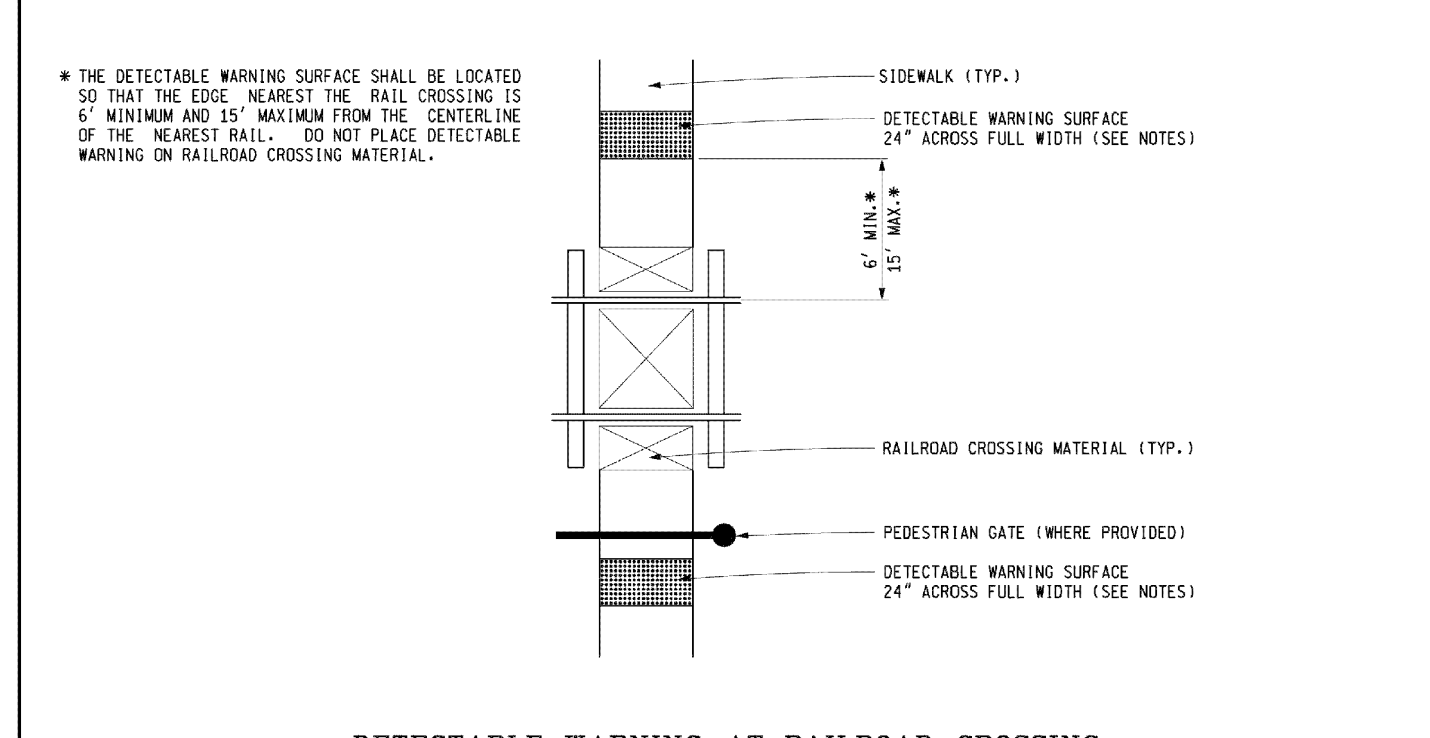
4-7-2002 5-8-2020 R-28-J SHEET 3 OF 7



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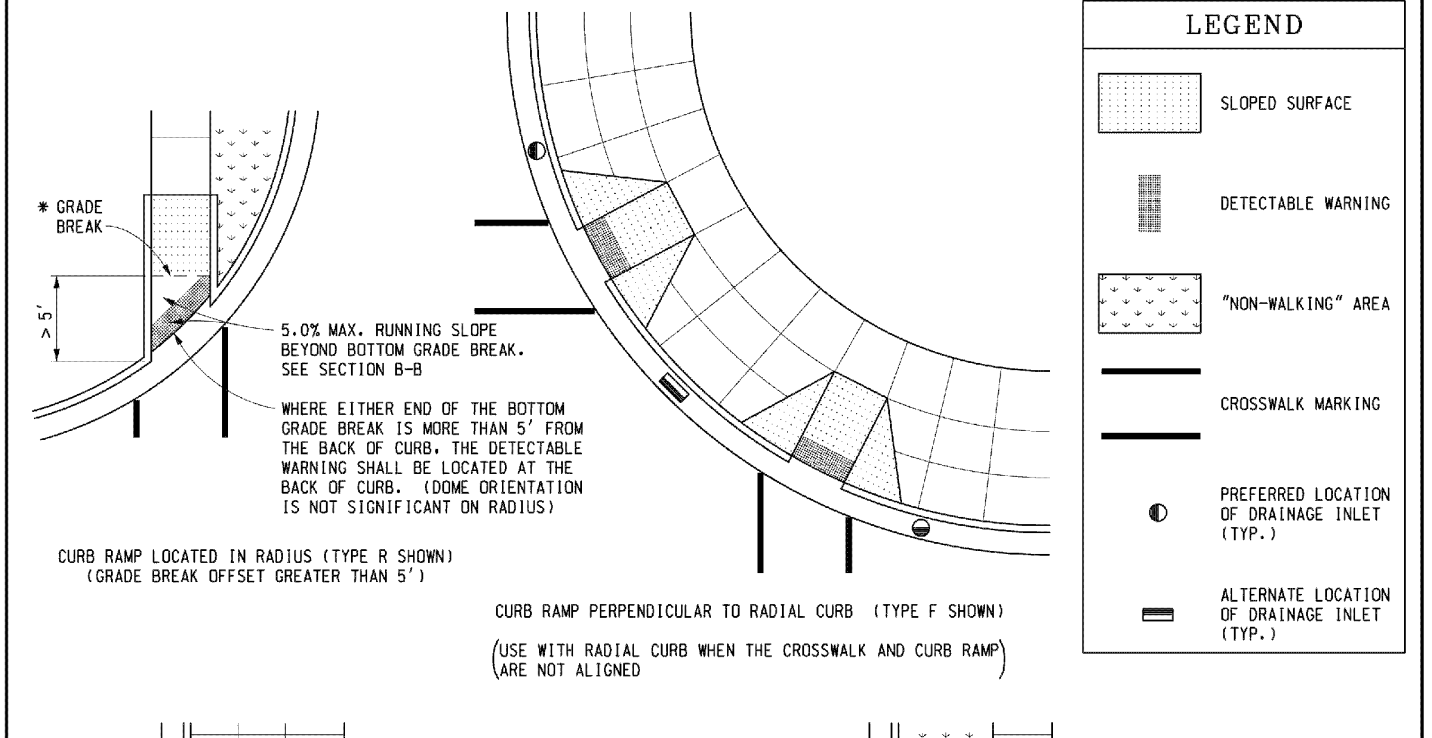
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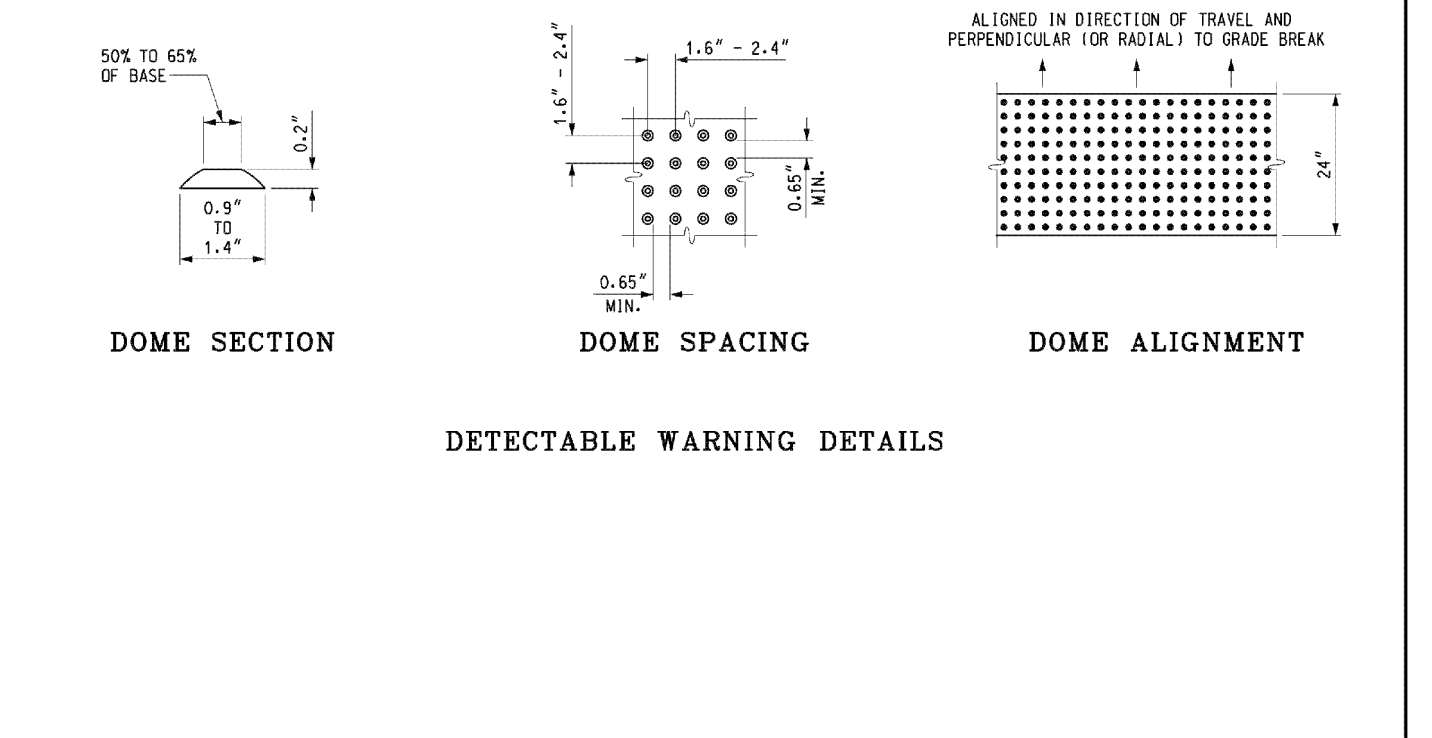
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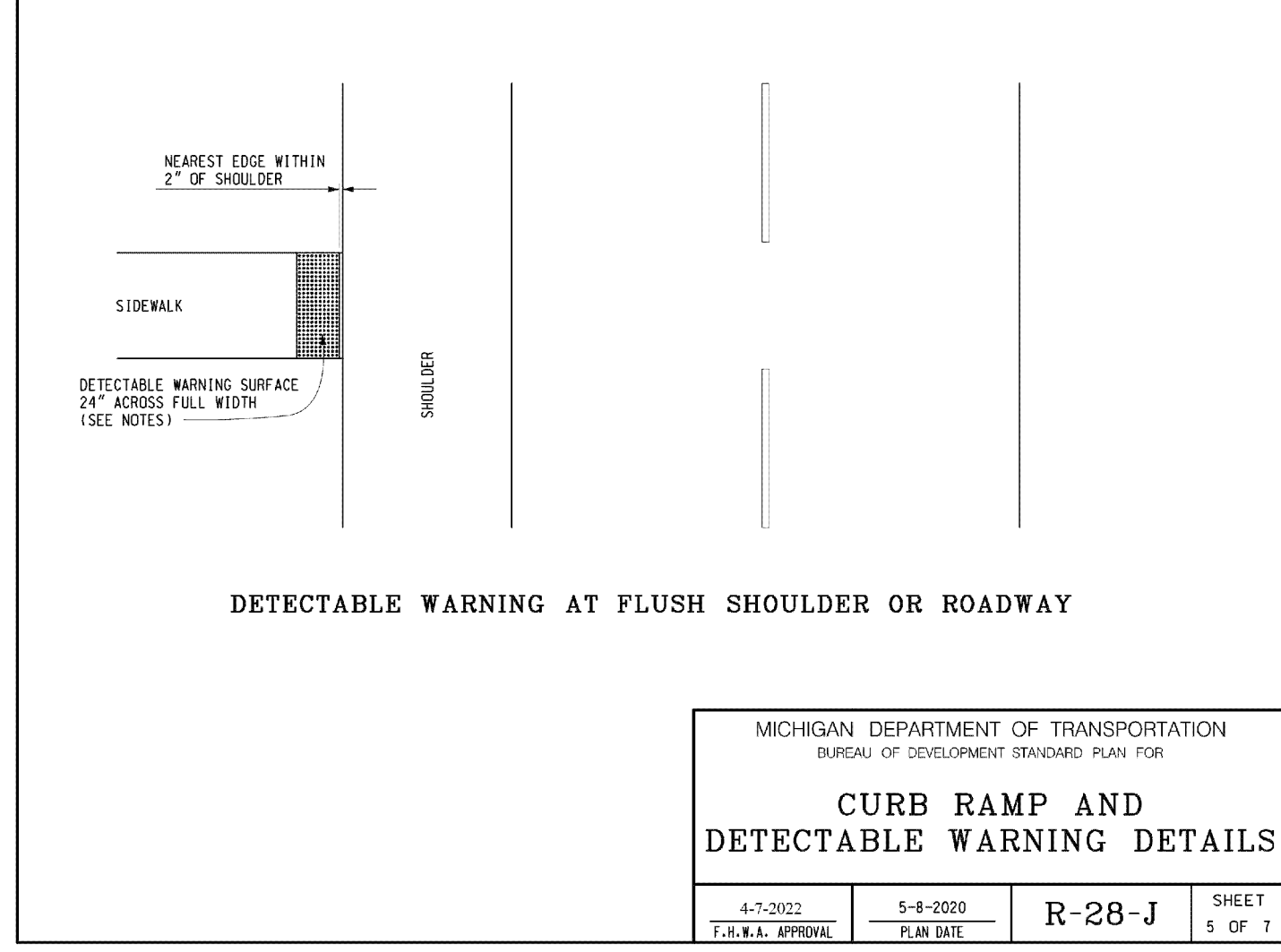
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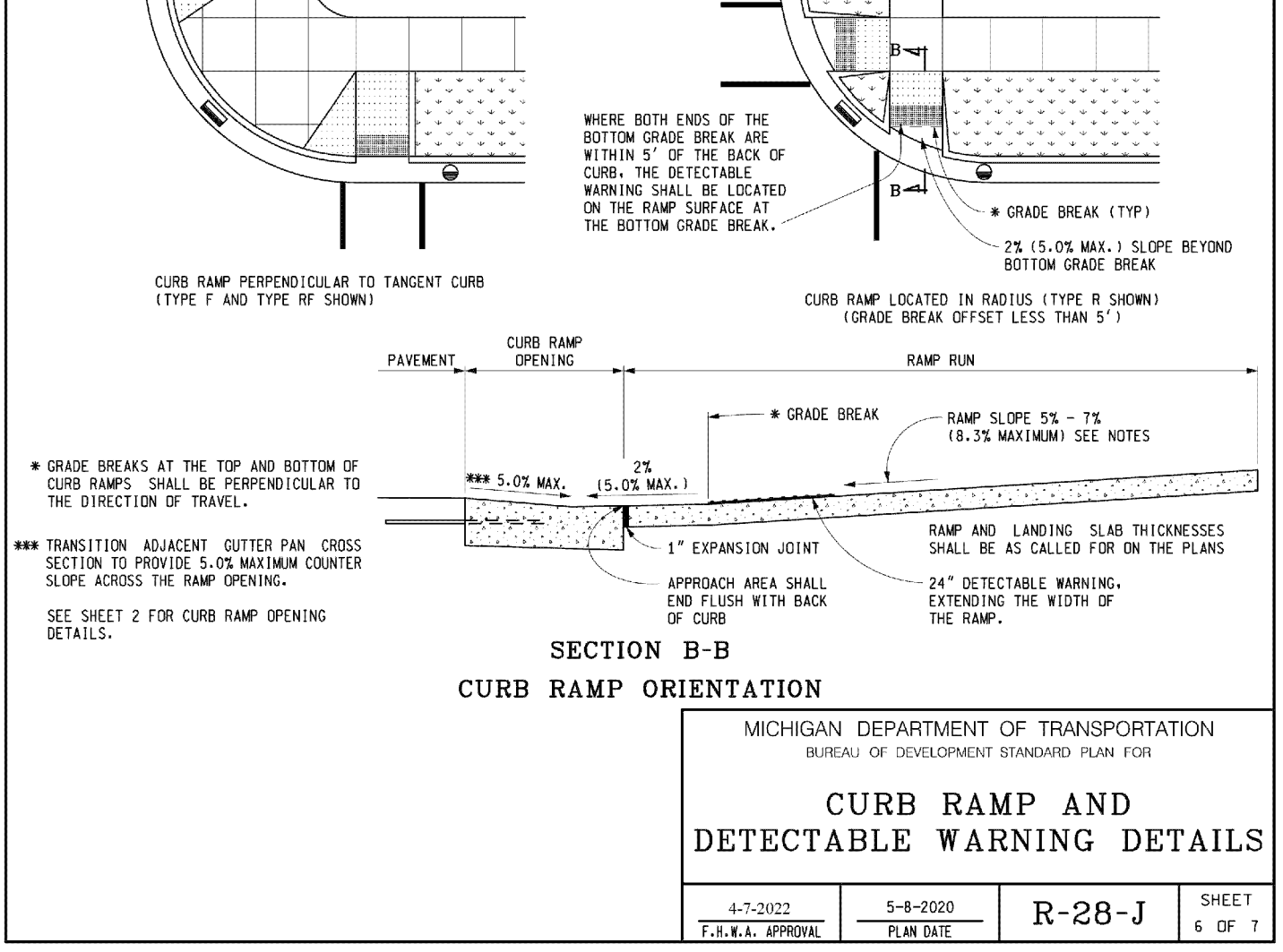
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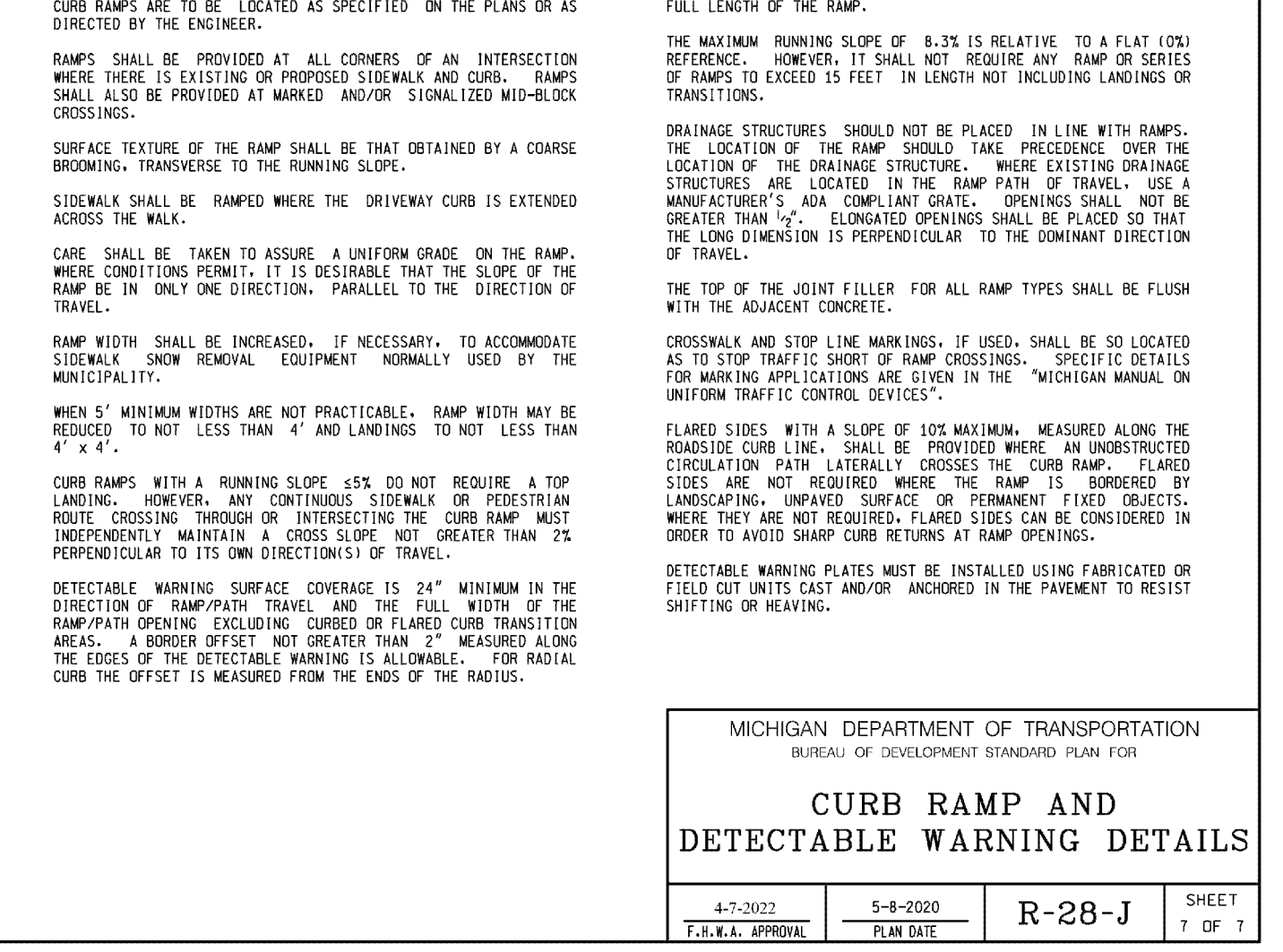
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4-7-2002 5-8-2020 R-28-J SHEET 6 OF 7



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4-7-2002 5-8-2020 R-28-J SHEET 7 OF 7

CLIENT  
**WOLVERINE BUILDING COMPANY**  
14955 TECHNOLOGY DRIVE  
SHELBY TOWNSHIP, MICHIGAN

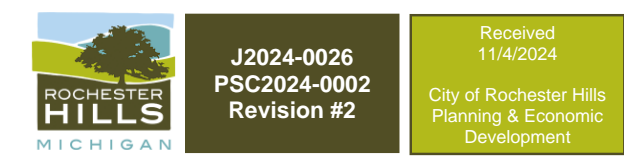
PROJECT TITLE  
**CAMBRIDGE KNOLL**  
165 & 185 E. AVON ROAD  
CITY OF ROCHESTER HILLS, MICHIGAN

REVISIONS	DATE
CITY REVIEW 10/4/24	10/25/24

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AUGUST 8, 2024

DRAWING TITLE  
**NOTES AND DETAILS**

PEA JOB NO.	2018-423
P.M.	JB
D.N.	KP
DES.	DSK
DRAWING NUMBER:	





# CAMBRIDGE KNOLL

## LANDSCAPE PLANS

4.72 ACRE DEVELOPMENT  
Rochester Hills, Oakland County, Michigan

SECTION 14  
TOWN 3 NORTH, RANGE 11 EAST

### Site Data

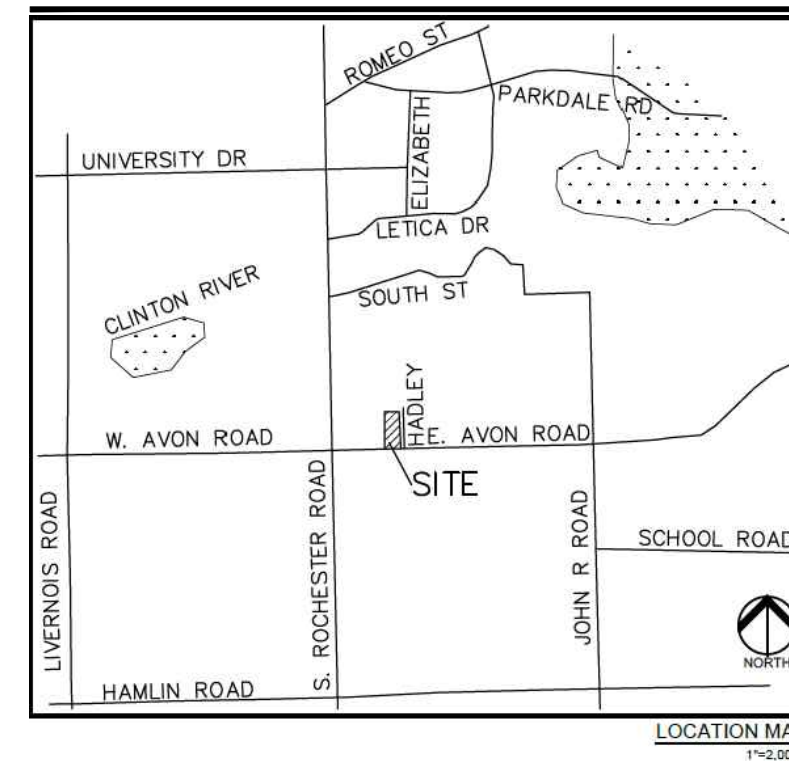
THE CURRENT ZONING CLASSIFICATION IS R-3 WITH MR MIXED RESIDENTIAL OVERLAY  
GROSS AREA 4.72 AC.

DENSITY: AREA = 4.72 AC  
UNITS - 16 SINGLE FAMILY DETACHED CONDOMINIUMS  
COVERAGE - 3.38 UNIT/ACRE = 16 UNITS

SETBACKS: FRONT: 30' FROM PROPERTY LINE  
SIDE: 15' FROM PROPERTY LINE  
REAR: 60' FROM PROPERTY LINE

SIDEWALK PROVIDED  
ROADS ARE TO BE PRIVATE

### LOCATION MAP



### LEGAL DESCRIPTION

(Per City of Rochester Hills Online Property Search)

PARCEL NO. 15-14-351-020

T3N R11E, SECTION 14 PART OF SOUTHWEST 1/4 BEG AT POINT DISTANT EAST 1065.88 FEET FROM SOUTHWEST SECTION CORNER, THENCE N00°36'45"E 732.25 FEET, THENCE N89°51'00"E 118.80 FEET, THENCE S00°36'45"W 732.56 FEET THENCE WEST 118.80 FEET TO THE POINT OF BEGINNING.

PARCEL NO. 15-14-351-058

T3N, R11E, SECTION 14 EAST 148.50 FEET OF WEST 1353 FEET OF SOUTH 732.50 FEET OF SOUTH 1/2 OF SOUTHWEST 1/4. ALSO PART OF SOUTHWEST 1/4 BEG AT PT DIST EAST 1184.68 FEET FROM SOUTHWEST SECTION CORNER, THENCE EAST 19.82 FEET, THENCE N00°19'00"W 732.20 FEET, THENCE S89°51'00"W 8.16 FEET, THENCE S00°35'45"W 732.56 FEET TO POINT OF BEGINNING.

(As surveyed by PEA, Inc.)

COMBINED PARCEL (Parcels 15-14-351-020 & 15-14-351-058)

A parcel of land located in the Southwest 1/4 of Section 14, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, being more particularly described as:

Commencing at the Southwest corner of said Section 14; thence along the south line of said section, EAST 1065.88 feet to the Point of Beginning;

thence N00°33'27"E, 732.34 feet to the southerly line of "Heatherwood Village No. 1", as recorded in Liber 172, Page 23;

thence along said southerly line, N89°52'03"E, 274.67 feet to the westerly line of said subdivision;

thence along said westerly line, S00°25'05"E, 732.96 feet to the aforementioned south line of said Section 14;

thence along said south line, WEST 287.15 feet to the Point of Beginning.

Subject to the rights of the public over the south 33 feet, known as Avon Road.

Containing 4.725 gross acres of land, more or less and 4.507 net acres of land, more or less

### NOTES

### SHEET INDEX

#### GENERAL

Cover

#### ENGINEERING SHEET INDEX

C-1.0	DIMENSION PLAN
C-2.0	TOPOGRAPHIC SURVEY
C-3.0	DEMOLITION PLAN
C-4.0	ROAD PROFILE
C-5.1	GRADING PLAN
C-5.2	GRADING DETAIL SHEET
C-6.0	SOIL EROSION CONTROL PLAN
C-7.0	SANITARY SEWER PLAN & PROFILE
C-7.1	WATER MAIN PLAN & PROFILE
C-8.1	STORM SEWER PLAN
C-8.2	STORM SEWER PROFILES
C-8.3	DETENTION CALCULATION SHEET
C-9.0	DRAINAGE AREA PLAN
C-10.1	NOTES & DETAILS
C-10.2	MDOT RAMP DETAIL
C-10.3	ROCHESTER HILLS STANDARD DETAILS
C-10.3	SOIL BORING SHEET
C-11.0	CITY OF ROCHESTER HILLS SANITARY SEWER DETAILS (2 SHEETS)
	CITY OF ROCHESTER HILLS STORM SEWER DETAILS (1 SHEET)
	CITY OF ROCHESTER HILLS WATER MAIN DETAILS (3 SHEETS)

#### LANDSCAPE SHEET INDEX

G-1.0	Cover
T-1.0	EXISTING TREE SURVEY
T-1.1	TREE IMPACT ANALYSIS
LA-1.0	LANDSCAPE CONCEPT PLAN
LA-1.1	LANDSCAPE PLANTING PLAN
LA-1.1A	REPLACEMENT TREE CREDIT PLAN
LA-1.2	PATHWAY SIGHTLINE, CLEAR ZONE & PLANTING SETBACKS
LA-1.3	SEEDING PLAN
LA-1.4	PARKETTE CONCEPT
LA-1.5	AMENITIES
LA-2.0	LANDSCAPE PLANTING DETAILS & NOTES
IR-1.0	IRRIGATION PLAN
IR-1.1	IRRIGATION DETAILS

### PROJECT TEAM

#### CLIENT / APPLICANT

M2J1, LLC.  
JIM POLYZOIS  
14955 Technology Dr.  
SHELBY TWP, MICHIGAN 48315  
PHONE: (586) 421-5729

#### PROJECT LANDSCAPE ARCHITECT/PLANNER

NÚÑEZDESIGN, INC.  
RALPH L. NÚÑEZ, RLA, CLARB, ASLA  
30645 Woodgate Drive  
SOUTHFIELD, MICHIGAN 48076  
PHONE: (248) 224-5933

#### CIVIL ENGINEER

PEA GROUP  
JOHN B. THOMPSON, PE  
2430 ROCHESTER COURT, STE. 100  
TROY, MICHIGAN 48063-1872  
PHONE: (844) 813-2949  
EMAIL: JTHOMPSON@PEAGROUP.COM

### ISSUED FOR

LANDSCAPE PLANS

### CITY REFERENCE NUMBER

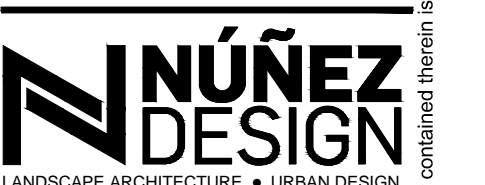
City File: #19-033



CAMBRIDGE KNOLL  
AVON RD.  
ROCHESTER HILLS, MI  
PART OF THE SW 1/4 OF SECTION 14,  
T03N, R11E  
PLAN SUBMITTED FOR SITE PLAN REVIEW - NOT FOR CONSTRUCTION.

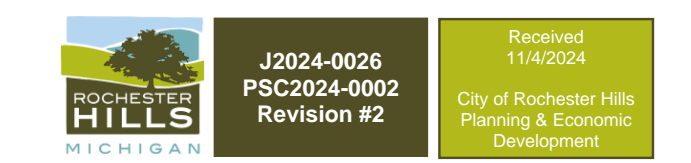
Cambridge Knoll, Inc  
Jim Polyzois  
14955 Technology Drive,  
Shelby Twp., MI 48315  
Phone: (586) 421-5729

Date:	8/1/2019
Date/Revisions:	Submitted for Preliminary Review
9/2/2019	Submitted for Preliminary Review
1/6/2020	PC Submittal - Revision
10/2/2020	PC Final Submittal
12/7/2020	Final CC Approval
2/11/2022	Final Landscape Plans
6/3/2024	Preliminary & Final Submittal
9/26/2024	Review Comments Submittal
10/28/2024	Review Comments Submittal



LANDSCAPE ARCHITECTURE • URBAN DESIGN  
30645 Woodgate Drive  
Southfield, MI 48076  
P: 248.224.5933  
nunezdesigninc@gmail.com

Designed/Drawn: RN / JN  
Checked/Approved: JN / JBN  
Job #: N-01-50  
N-01-50 LA Amenities.dwg



COVER

SHEET: G-1.0  
CITY FILE: #19-033  
SECTION #14

**NATURAL FEATURES:**

- MEASURES WERE TAKEN TO PRESERVE EXISTING FEATURES ON SITE AND MINIMIZE ENVIRONMENTAL IMPACTS, ESPECIALLY WITH REGARD TO MAINTAINING AS MANY TREES AS POSSIBLE ALONG THE NORTH AND WEST BORDERS OF THE SITE.
- THE SITE IS SUBJECT TO THE CITY'S TREE CONSERVATION ORDINANCE. TREES GREATER THAN 6" CALIPER THAT WILL BE REMOVED MUST BE REPLACED WITH ONE CREDIT. SPECIMEN TREES AS DESIGNATED BY THE CITIES PRESERVATION ORDINANCE WITH 24 INCHES DBH OR GREATER, WILL BE REPLACED AT 50% DBH IF REMOVED OR PROVIDE ONE TREE CREDIT (ONE 2" TREE) IF PRESERVED.
- A MINIMUM OF 40% OF REGULATED TREES MUST BE PRESERVED FOR ALL TYPES OF DEVELOPMENTS.
- TREES WITHIN THE BUILDING ENVELOPE ARE ASSUMED TO BE REMOVED AND THEREFORE ARE NOT INCLUDED WITHIN THE 40% PRESERVATION REQUIREMENT. THESE TREES MUST BE REPLACED OR PAID INTO THE CITY TREE FUND.
- TREE REPLACE COST INTO THE CITY TREE FUND IS \$334.00 PER REPLACEMENT CREDIT.
- ALL REMAINING REGULATED TREES SHALL BE PROTECTED FROM DAMAGE WITH PROTECTIVE FENCING DURING CONSTRUCTION AND THERE SHALL BE NO CONSTRUCTION OR DEVELOPMENT ACTIVITY WITHIN THEIR DRIPLINE.
- THE SITE DOES NOT CONTAIN REGULATED WETLANDS.
- THE SITE DOES NOT CONTAIN A REGULATED NATURAL FEATURES.
- SOIL TYPES ON SITE:  
6bgk Marlette sandy loam, 1 to 6 percent slopes  
6bgp Capac sandy loam, 0 to 4 percent slopes
- THE SITE DOES NOT CONTAIN ANY REGULATED STEEP SLOPES. REVIEW ENGINEERING TOPOGRAPHY SURVEY.

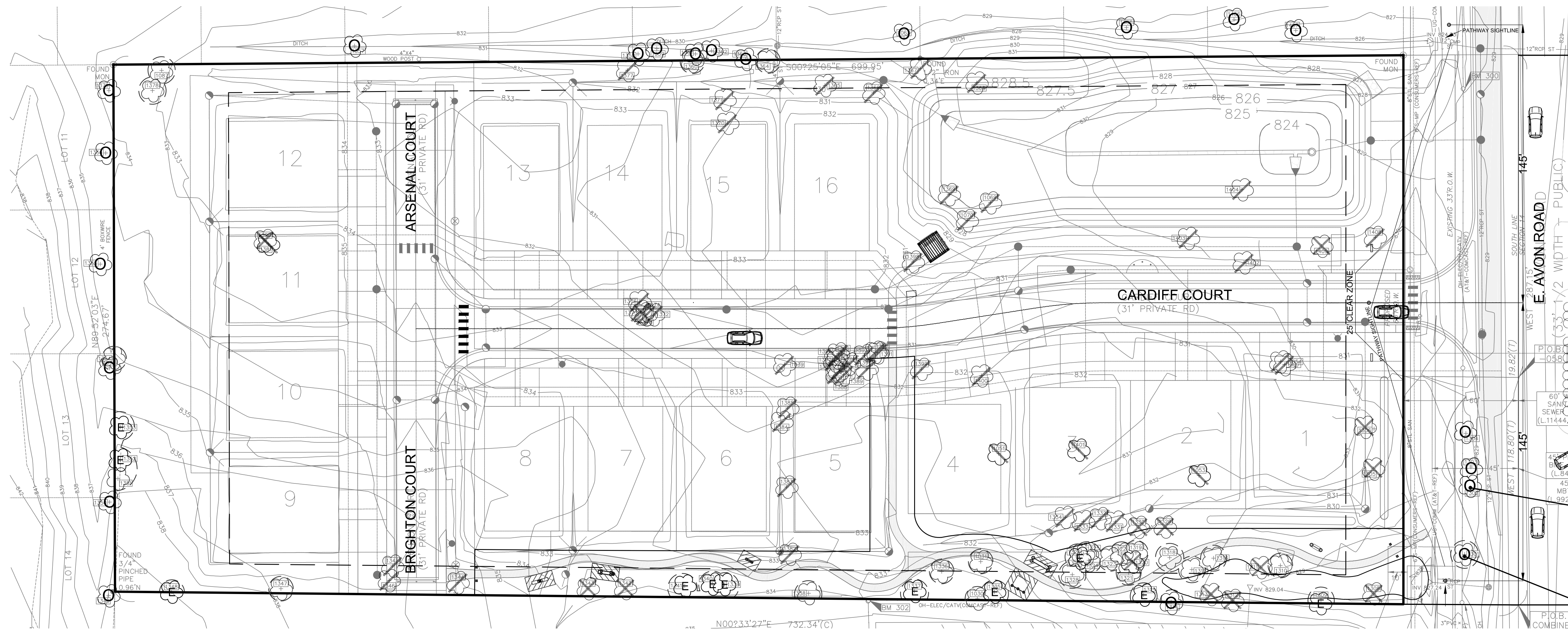
**TREE ANALYSIS:**

<b>TOTAL TREES TAGGED</b>	120
DEAD/DISEASED TREES (EXEMPT)	-15
OFFSITE TAGGED TREES (EXEMPT)	-21
<b>REGULATED TREES ON SITE (49 regulated + 35 specimen trees)</b>	<b>84</b>
REGULATED TREES WITHIN BUILDING ENVELOPE	-4
<b>TREES WITHIN PRESERVATION PERCENTAGE AREA</b>	<b>80</b>
PRESERVATION MINIMUM OF 40% (80 x 40%)	<b>32 TREES REQUIRED</b>
<b>PRESERVED REGULATED TREES</b>	<b>16 TREES PROVIDED</b>
<b>PRESERVED SPECIMEN TREES</b>	<b>18 TREES PROVIDED</b>
<b>TOTAL TREES PRESERVED</b>	<b>34 TREES PROVIDED</b>
<b>REGULATED TREES REMOVED</b>	<b>33 TREES REQUIRED</b>
17 SPECIMEN TREES REMOVED (50% DBH = 220.5" / 2" tree = 110.25 trees replaced)	111 TREES REQUIRED
<b>TOTAL REPLACEMENT TREES REQUIRED (33 + 111)</b>	<b>144 TREES REQUIRED</b>
CREDITS PROVIDED FOR SPECIMEN TREES	-18 TREES CREDITS
TREE REPLACEMENTS PROVIDED ON PLAN	-59 TREES PROVIDED
<b>TOTAL REPLACEMENT CREDITS DUE</b>	<b>67 TREES REQUIRED</b>
<b>AMOUNT TO BE PAID INTO CITY'S TREE FUND 67 X \$334)</b>	<b>\$22,378</b>

**TREE FUND**

IF REQUIRED TREES CANNOT BE PLANTED DUE TO INFRASTRUCTURE CONFLICTS, A PAYMENT IN LIEU OF MAY BE MADE TO THE CITY'S TREE FUND AT A RATE OF \$334 PER TREE.

NOTE: TREE PROTECTION FENCING IS REQUIRED. REFER TO DETAIL 6 ON SHEET LA-2.0



NOTE: PRESERVED TREES ARE COUNTED AS FULFILLING BUFFER REQUIREMENTS

**TREE SURVEY LEGEND:**

- REGULATED TREE
- EXEMPT TREE - DEAD OR DISEASED REMOVED
- EXEMPT TREE OFFSITE TREE
- DECIDUOUS TREE - SAVED TREE PROTECTION FENCING
- EVERGREEN TREE - SAVED TREE PROTECTION FENCING
- REGULATED TREE REMOVED FROM PRESERVATION PERCENTAGE AREA & TREE CREDIT REPLACEMENT REQUIRED
- REGULATED TREE REMOVED FROM BUILDING ENVELOPE & TREE CREDIT REPLACEMENT REQUIRED

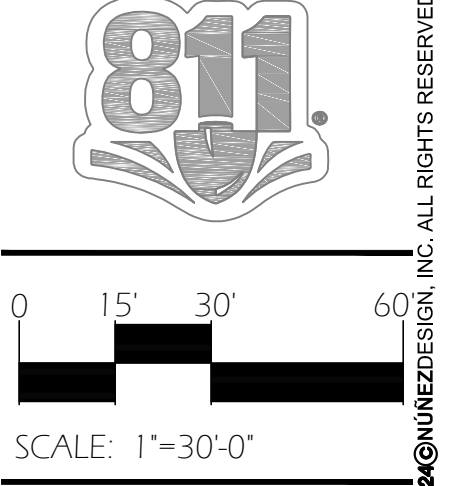


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30645 Woodgate Drive  
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P: 248.224.5933  
nunezdesigninc@gmail.com  
Designed/Drawn: RN / JN  
Checked/Approved: JN / JN  
Job #: N-01-20  
N-01-20 LA Submittal.dwg



NOTE: Existing R.O.W. Trees No. 1302, 1303, 1304 to be removed per RCOC review dated 9/5/19 for roadway improvements.

NOTE: Existing Tree No. 1301 to have lower branches pruned to provide a minimum of 7' clearance to improve visibility due to their location within the pathway sightline and 25' corner clearance of the proposed private road.



# LANDSCAPE BUFFER STANDARDS

AVON ROAD - FRONTAGE = [A]  
SOUTH PROPERTY BOUNDARY: R.O.W. LANDSCAPING - 287 LF  
1 deciduous / 35 LF, 1 ornamental / 60 LF

	REQUIRED	EXISTING	PROPOSED
Deciduous Shade Trees	287 / 35 = 8.2	9	0
Ornamental Trees	287 / 60 = 4.8	5	0

EAST PROPERTY BOUNDARY: TYPE 'B' BUFFER - 700 LF = [E]  
2 deciduous / 100 LF, 2 evergreen / 100 LF, 1.5 ornamental / 100 LF, 4 shrubs / 100 LF

	REQUIRED	EXISTING	PROPOSED
Deciduous Shade Trees	7 x 2 = 14	14	1
Evergreen Trees	7 x 2 = 14	14	5
Ornamental Trees	7 x 1.5 = 10.5	11	11
Shrubs	7 x 4 = 28	28	28

NORTH PROPERTY BOUNDARY: TYPE 'B' BUFFER - 275 LF = [N]  
2 deciduous / 100 LF, 2 evergreen / 100 LF, 1.5 ornamental / 100 LF, 4 shrubs / 100 LF

	REQUIRED	EXISTING	PROPOSED
Deciduous Shade Trees	2.75 x 2 = 5.5	6	3
Evergreen Trees	2.75 x 2 = 5.5	6	2
Ornamental Trees	2.75 x 1.5 = 4.1	5	x
Shrubs	2.75 x 4 = 11	11	x

WEST PROPERTY BOUNDARY: TYPE 'B' BUFFER - 700 LF = [W]  
2 deciduous / 100 LF, 2 evergreen / 100 LF, 1.5 ornamental / 100 LF, 4 shrubs / 100 LF

	REQUIRED	EXISTING	PROPOSED
Deciduous Shade Trees	7.00 x 2 = 14	14	15
Evergreen Trees	7.00 x 2 = 14	14	9
Ornamental Trees	7.00 x 1.5 = 11	11	x
Shrubs	7.00 x 4 = 28	28	x

## TREE VERIFICATION

	Required	Existing Trees	Proposed On Plan	Totals (Existing + Proposed)
Total Deciduous	68	18	+ 48	66
Total Evergreen	40	11	+ 37	48
Total Ornamental	32	-	+ 32	32
Total Shrubs	91	-	+ 106	106

## LANDSCAPE BUFFER PLANTINGS REQUIRED:

TOTAL TREES: 68 Deciduous Trees + 40 Evergreen Trees = 108 Trees REQUIRED  
TOTAL TREES: 66 Deciduous Trees + 48 Evergreen Trees = 114 Trees PROVIDED

TOTAL ORNAMENTAL TREES: 32 Ornamental Trees REQUIRED = 32 Trees PROVIDED  
TOTAL SHRUBS: 91 Shrubs REQUIRED = 106 Shrubs PROVIDED

## STORMWATER DETENTION BUFFER: TYPE 'A' BUFFER - 600 LF = [D]

1.5 deciduous / 100 LF, 1 evergreen / 100 LF, 4 shrubs / 100 LF

	REQUIRED	EXISTING	PROPOSED
Deciduous Shade Trees	6 x 1.5 = 9	9	x
Evergreen Trees	6 x 1 = 6	6	x
Shrubs	6 x 4 = 24	24	x

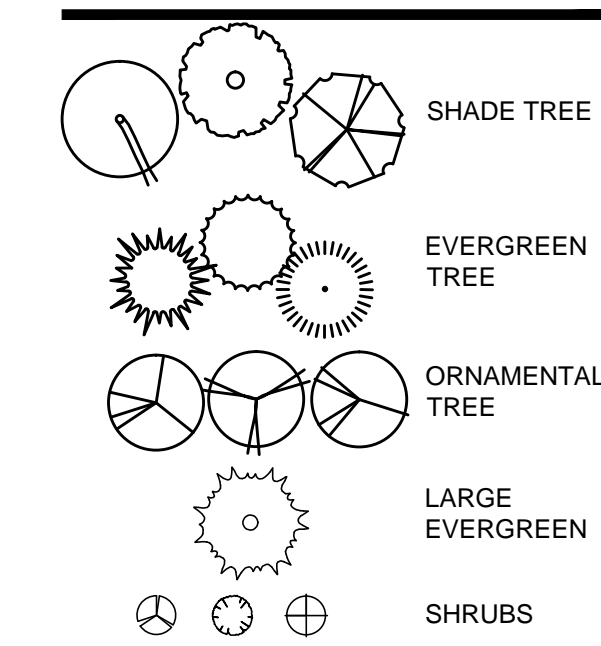
## UNIT STREET TREES ALONG PRIVATE DRIVE :

16 UNITS X 1 DECIDUOUS SHADE TREE = 16 PROPOSED

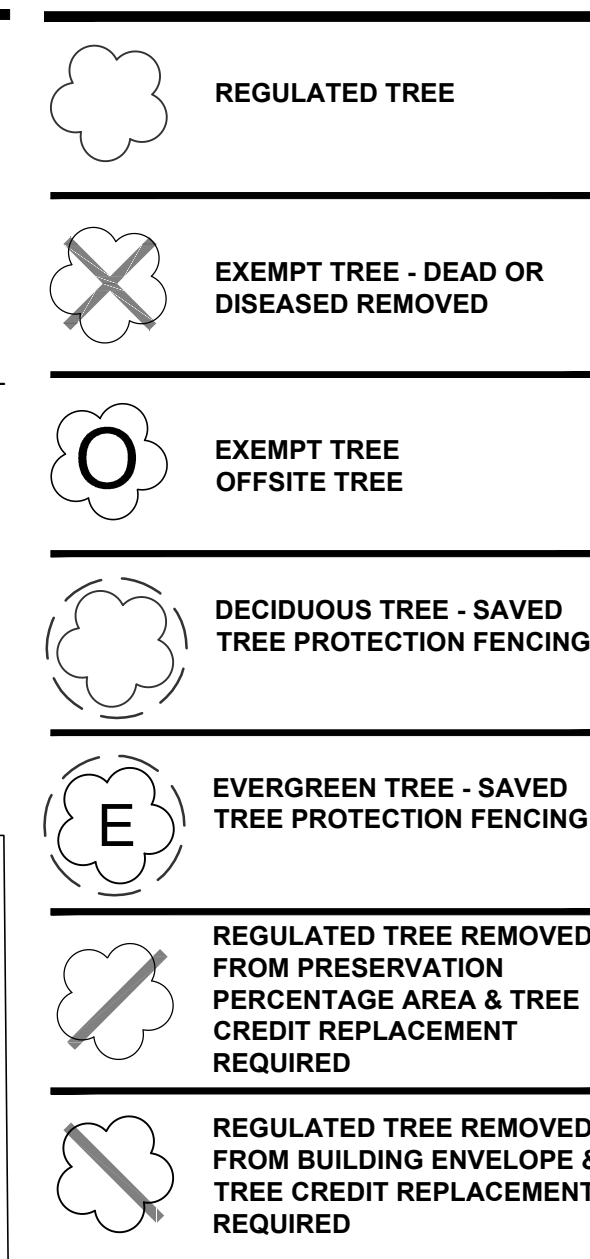
PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT ALL LANDSCAPE PLANTINGS.  
PROBABLE COST OF THE LANDSCAPE MATERIAL IS INCLUDED ON THE PLANS FOR FINAL APPROVAL. Refer to Sheet LA-1.1  
AN AUTOMATIC IRRIGATION SYSTEM WILL IS INCLUDED FOR ALL LANDSCAPE AREAS AS REQUIRED BY CITY OF ROCHESTER HILLS  
ALL LAWN AND PLANT BED AREAS TO BE IRRIGATED BETWEEN THE HOURS OF 12 AM AND 5 AM ONLY  
IRRIGATION OVSERSPRAY SHALL NOT BROADCAST ONTO THE CITY PATHWAY

- CITY OF ROCHESTER HILLS MAINTENANCE NOTES 138-12.109**
- LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
  - PRUNING SHALL BE MINIMAL AT TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
  - ALL DEAD, DAMAGED, OR DISEASED PLANT MATERIAL SHALL BE REMOVED IMMEDIATELY AND REPLACED WITHIN (6) SIX MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICH EVER COMES FIRST. THE PLANTING SEASON FOR THE DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE. THE CITY MAY NOTIFY PROPERTY OWNERS OF THE NEED TO REPLACE DEAD, DAMAGED, OR DISEASED MATERIAL.
  - THE APPROVED LANDSCAPE PLAN SHALL BE CONSIDERED A PERMANENT RECORD AND INTEGRAL PART OF THE SITE PLAN APPROVAL. UNLESS OTHERWISE APPROVED, ANY REVISIONS OR REMOVAL OF PLANT MATERIALS, OR NON-COMPLIANCE WITH THE MAINTENANCE REQUIREMENTS OF SECTION 138-12.109 WILL PLACE THE PARCEL IN NON-COMFORMITY WITH THE APPROVED LANDSCAPE PLAN AND BE A VIOLATION OF THE ORDINANCE.
  - IF PROTECTED TREES ARE DAMAGED, A FINE SHALL BE ISSUED ON AN INCH BY INCH BASIS AT A MONETARY RATE AS DEFINED BY THE FORESTRY DEPARTMENT.

## TREE SYMBOL LEGEND:

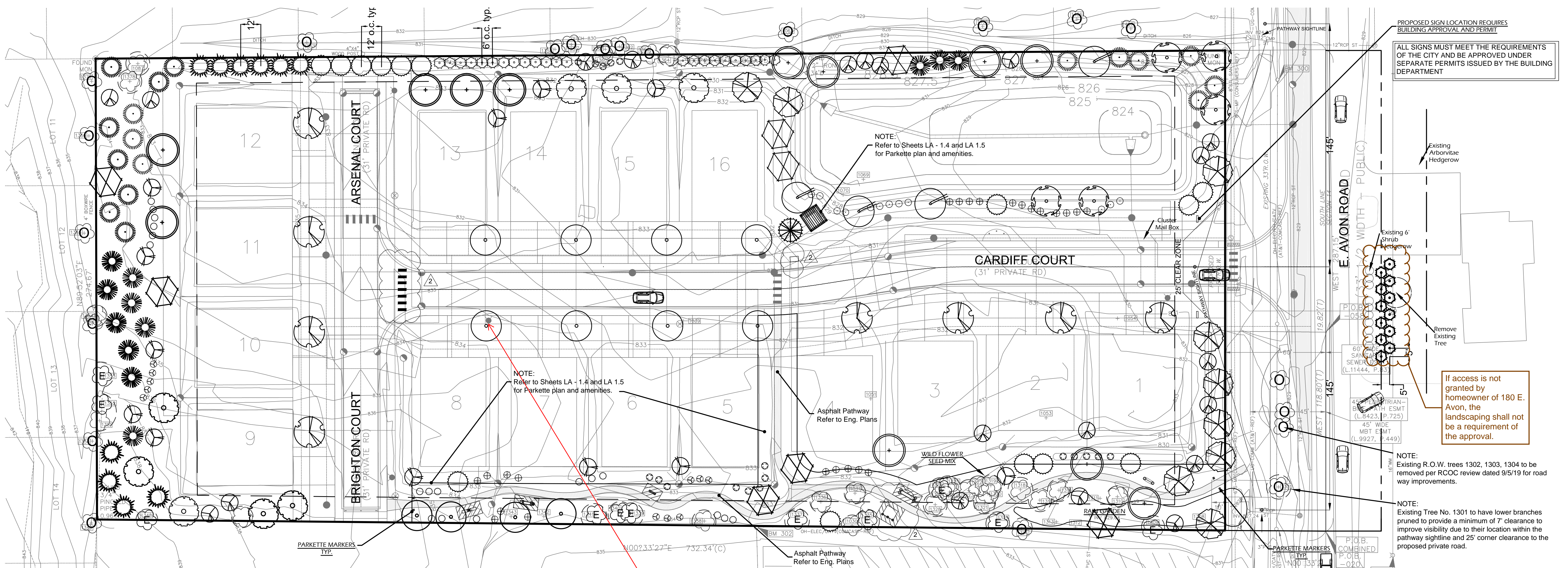


## TREE SURVEY LEGEND:



## TRAFFIC NOTES:

- IF PROPOSED ROADS ARE BUILT AS PRIVATE ROADS AND DO NOT MEET PUBLIC ROAD STANDARDS THEN THEY WILL NOT BE TRANSFERABLE TO THE CITY FOR MAINTENANCE / OWNERSHIP RESPONSIBILITIES.
- A CITY RIGHT OF WAY PERMIT IS REQUIRED FOR WORK WITHIN E. AVON ROAD.
- CITY SHALL FURNISH AND PLACE ALL PERMANENT R.O.W. STREET SIGNS WITH MONIES PAID BY DEVELOPER.



## PLANT MATERIAL REQUIREMENTS:

	REQUIRED
Deciduous Shade Trees	3 CALIPER INCHES*
Evergreen Trees	10 FEET HEIGHT AND 5 FEET SPREAD
Ornamental Trees	2 CALIPER INCHES* OR 6 FEET OVERALL HEIGHT
Shrubs	30 INCHES IN HEIGHT, 24 INCHES IN SPREAD WHEN USED FOR SCREENING OR BUFFERING PURPOSES, 3 GALLON CONTAINED SIZE WHEN USED FOR OTHER PURPOSES
Groundcovers	SHALL BE FROM FLATS

## OPEN SPACE REQUIRED:

	REQUIRED	PROVIDED
ACTIVE OPEN SPACE = 5%		
OF GROSS SITE AREA		
4.72 AC. = 205,603.2 S.F. x 5% =	10,280.16 S.F.	17,027 S.F. Parkette
		TOTAL OPEN SPACE = 91,911.60 S.F.

ensure planting does not interfere with fire hydrant

REPLACEMENT TREE CREDITS	144
Specimen Tree Credits	-18
Replacement Tree Credits on Plan	-59
<b>TOTAL CREDITS DUE</b>	<b>67</b>
67 x \$334 Payment to City's tree fund	<b>\$22,378.00</b>

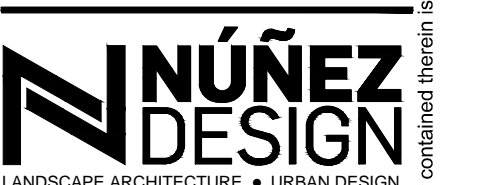
**NOTE:**  
1. All street tree plantings along the private roadway are the responsibility of the developer.  
2. All deciduous, evergreen, ornamental trees and shrubs proposed for buffer plantings and replacement trees as required for the City of Rochester Hills Site Plan approval are the responsibility of the developer.



CAMBRIDGE KNOLL  
AVON RD.  
ROCHESTER HILLS, MI  
PART OF THE SW 1/4 OF SECTION 14,  
T03N, R11E  
PLAN SUBMITTED FOR SITE PLAN REVIEW - NOT FOR CONSTRUCTION.

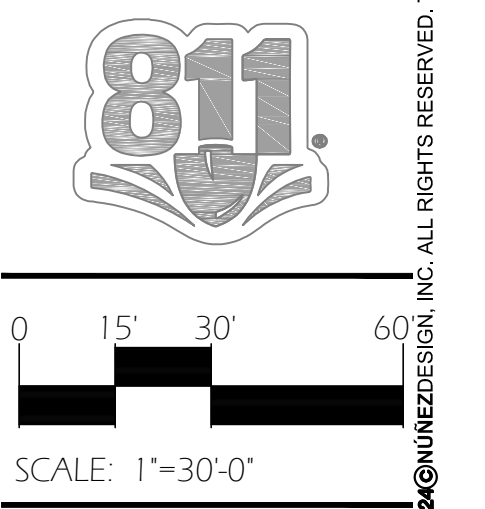
Cambridge Knoll, Inc  
Jim Polyzois  
14955 Technology Drive,  
Shelby Twp., MI 48315  
Phone: (586) 421-5729

Date: 8/1/2019	Date Revisions: Submitted for Preliminary Review
9/2/2019 Submitted for Preliminary Review	1/6/2020 PC Submittal - Revision
10/2/2020 PC Final Submittal	12/7/2020 Final CC Approval
2/11/2022 Final Landscape Plans	6/3/2024 Preliminary & Final Submittal
9/26/2024 Review Comments Submittal	
10/28/2024 Review Comments Submittal	



LANDSCAPE ARCHITECTURE - URBAN DESIGN  
30645 Woodgate Drive  
Southfield, MI 48076  
P: 248.224.5933  
nunezdesigninc@gmail.com

Designed/Drawn: RN / JN  
Checked/Approved: JN / RN  
Job #: N-01-50  
N-01-50 LA Submittal.dwg



SCALE: 1"=30'-0"  
SHEET:  
LA -1.0  
CITY FILE: #19-003  
SECTION # 14



## LANDSCAPE CONCEPT PLAN

**LANDSCAPE MATERIAL LIST:**

SHADE TREES					
QTY	KEY	BOTANICAL / COMMON NAME	SIZE	ROOT	UNIT COST TOTAL / ITEM
4	AR	Acer rubrum 'Bowhall' / Bowhall Red Maple	3" cal	B&B	335.00 1,340.00
4	CE	Celtis occidentalis / Common Hackberry	3" cal	B&B	320.00 1,280.00
8	GT	Gleditsia triacanthos inermis / Thornless Honeylocust	3" cal	B&B	320.00 2,560.00
3	MG	Metasequoia Glyptostroboides / Dawn Redwood	3" cal	B&B	335.00 1,005.00
5	PA	Platanus x acerifolia 'Columbia' / Columbia London Planetree	3" cal	B&B	335.00 1,675.00
7	QB	Quercus bicolor / Swamp White Oak	3" cal	B&B	335.00 2,345.00
8	TC	Tilia cordata 'Greenspire' / Greenspire Linden	3" cal	B&B	320.00 2,560.00
8	ZS	Zelkova serrata 'Musashino' / Musashino Japanese Zelkova	3" cal	B&B	335.00 2,680.00
EVERGREEN TREES					
QTY	KEY	BOTANICAL / COMMON NAME	SIZE	ROOT	UNIT COST TOTAL / ITEM
6	AB	Abies concolor / Concolor White Fir	10' ht x 5' sp	B&B	335.00 2,010.00
13	PG	Picea glauca / White Spruce	10' ht x 5' sp	B&B	320.00 4,160.00
1	PG14	Picea glauca / White Spruce	14' ht	B&B	450.00 450.00
9	PS	Pinus strobus / White Pine	10' ht x 5' sp	B&B	315.00 2,835.00
7	RP	Pinus densiflora / Korean Red Pine	10' ht x 5' sp	B&B	315.00 2,205.00
ORNAMENTAL TREES					
QTY	KEY	BOTANICAL / COMMON NAME	SIZE	ROOT	UNIT COST TOTAL / ITEM
8	AC	Amelanchier canadensis / Shadblow Serviceberry	2" cal or 6' ht	B&B	250.00 2,000.00
12	CC	Cercis canadensis / Eastern Redbud	2" cal or 6' ht	B&B	265.00 3,180.00
12	SR	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	2" cal or 6' ht	B&B	265.00 3,180.00

SHRUBS						
QTY	KEY	BOTANICAL / COMMON NAME	SIZE / SPACING	ROOT	UNIT COST	TOTAL / ITEM
24	AA	Aronia arbutifolia 'Brilliantissima' / Brilliant Red Chokeberry	30" ht, 24" sp	No. 5 Cont.	50.00	1,200.00
11	AM	Aronia melanocarpa 'Elata' / Glossy Black Chokeberry	30" ht, 24" sp	No. 5 Cont.	45.00	495.00
18	CR	Cornus racemosa / Gray Dogwood	30" ht, 24" sp	No. 5 Cont.	45.00	810.00
18	HS	Hibiscus syriacus 'SHIMRR38' / Lil' Kim Red Rose of Sharon	30" ht, 24" sp	No. 5 Cont.	50.00	900.00
12	PO	Physocarpus opulifolius 'Diabolo' / Diabolo Ninebark	30" ht, 24" sp	No. 5 Cont.	50.00	600.00
23	TO	Thuja occidentalis 'Wintergreen' / Wintergreen American Arborvitae	6' ht, 24" sp	B&B	150.00	3,450.00

PLANTING MATERIALS (Includes material needed for Sheets)			
QTY (+/-)	UNIT	ITEM	UNIT COST TOTAL / ITEM
23	CY	Plant Mix	TBD 575.00
23	CY	Shredded Hardwood Mulch Installed	TBD 1,035.00
	LBS	SoilMoist or Approved Equal (included in plant installation cost)	

LAWN			
QTY	UNIT	ITEM	UNIT COST TOTAL / ITEM
78,905	SF	Seed or Sod (owner's option)	0.1 7,890.50
20,530	SF	Detention Basin & Raingarden Seed Mix	0.25 5,132.50
8,315	SF	Woodland Edge Seed Mix	0.25 2,078.75

LANDSCAPING COST		\$59,316.75
IRRIGATION		LUMP SUM \$21,500.00
SHEET LA-1.1 TOTAL:		\$80,816.75
SHEET LA-1.1A SUBTOTAL REPLACEMENT TREES		\$11,921.25
TOTAL		\$92,738.00

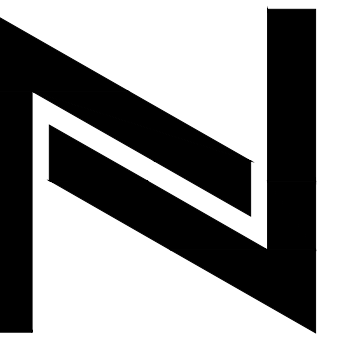
**REPLACEMENT TREE LEGEND:**

Replacement trees are labeled with the following designations

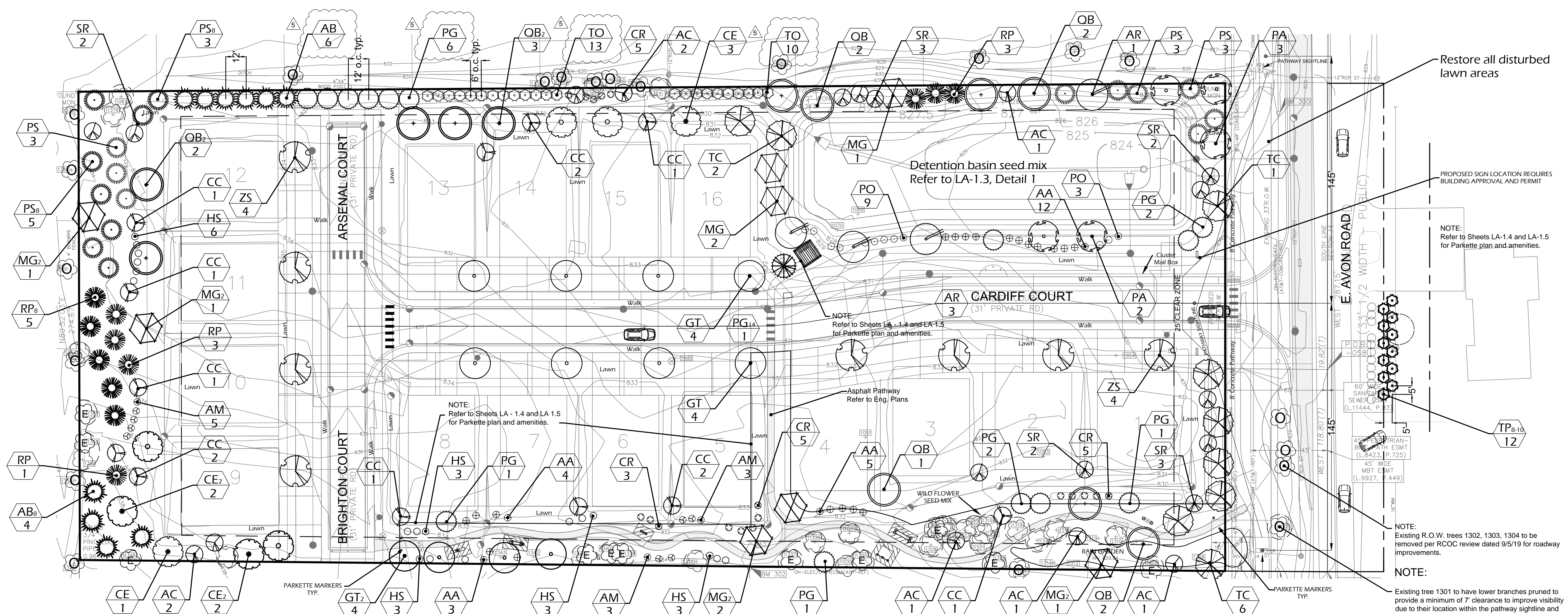
- OB<sub>2</sub> 2" Caliper Shade Tree = 1 Replacement Credit
- PS<sub>8</sub> 8' Ht. Evergreen Tree = 1 Replacement Credit

Refer to sheet LA-1.1A for Replacement Tree Credit Quantity List.

**NOTE:**  
 1. All street tree plantings along the private roadway are the responsibility of the developer.  
 2. All deciduous, evergreen, ornamental trees and shrubs proposed for buffer plantings and replacement trees as required for the City of Rochester Hills Site Plan approval are the responsibility of the developer.



**NÚÑEZ DESIGN**



ALL SIGNS MUST MEET THE REQUIREMENTS OF THE CITY AND BE APPROVED UNDER SEPARATE PERMITS ISSUED BY THE BUILDING DEPARTMENT

AN AUTOMATIC IRRIGATION SYSTEM IS INCLUDED FOR ALL LANDSCAPE AREAS AS REQUIRED BY CITY OF ROCHESTER HILLS  
 ALL LAWN AND PLANT BED AREAS TO BE IRRIGATED BETWEEN THE HOURS OF 12 AM AND 5 AM ONLY  
 IRRIGATION OVERSPRAY SHALL NOT BROADCAST ONTO THE CITY PATHWAY

THE MATURE MAXIMUM HEIGHT FOR ALL GROUNDCOVERS AND PLANTINGS WITHIN THE 25' CLEARZONE IS 30" IN HEIGHT UNMAINTAINED.

PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT ALL LANDSCAPE PLANTINGS.

Restore all disturbed lawn areas

PROPOSED SIGN LOCATION REQUIRES BUILDING APPROVAL AND PERMIT

NOTE: Refer to Sheets LA-1.4 and LA-1.5 for Parkette plan and amenities.

NOTE: Existing R.O.W. trees 1302, 1303, 1304 to be removed per ROCOC reviewed dated 9/5/19 for roadway improvements.

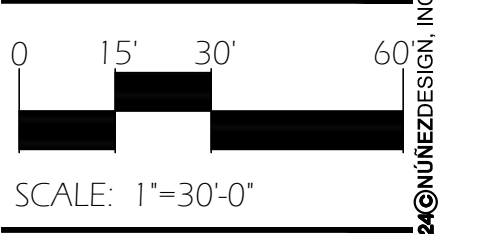
NOTE: Existing tree 1301 to have lower branches pruned to provide a minimum of 7' clearance to improve visibility due to their location within the pathway sightline and 25' corner clearance of the proposed private road.

CAMBRIDGE KNOLL  
 AVON RD.  
 ROCHESTER HILLS, MI  
 PART OF THE SW 1/4 OF SECTION 14,  
 T03N, R11E  
 PLAN SUBMITTED FOR SITE PLAN REVIEW - NOT FOR CONSTRUCTION.

Cambridge Knoll, Inc  
 Jim Polyzois  
 14955 Technology Drive,  
 Shelby Twp., MI 48315  
 Phone: (586) 421-5729

Date:	8/1/2019
Date Revisions:	Submitted for Preliminary Review
	9/2/2019 Submitted for Preliminary Review
	1/6/2020 PC Submittal - Review
	10/2/2020 PC Final Submittal
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	2/11/2022 Final Landscape Plans
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**NÚÑEZ DESIGN**  
 LANDSCAPE ARCHITECTURE • URBAN DESIGN  
 30645 Woodgate Drive  
 Southfield, MI 48076  
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 nunezdesigninc@gmail.com



SHEET: LA-1.1  
 CITY FILE: 419-033  
 SECTION #: 14

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**REPLACEMENT TREE CREDIT QUANTITY LIST:**

REPLACEMENT TREES					
SHADE TREES					
QTY	KEY	BOTANICAL / COMMON NAME	SIZE	ROOT	UNIT COST / TOTAL / ITEM
4	CE2	Celtis occidentalis / Common Hackberry	2" cal	B&B	216.75 / 867.00
4	GT2	Gleditsia triacanthos inemis / Thornless Honeylocust	2" cal	B&B	216.75 / 867.00
5	MG2	Metasequoia Glyptostroboides / Dawn Redwood	2" cal	B&B	216.75 / 1,083.75
5	QB2	Quercus bicolor / Swamp White Oak	2" cal	B&B	216.75 / 1,083.75
EVERGREEN TREES					
QTY	KEY	BOTANICAL / COMMON NAME	SIZE	ROOT	UNIT COST / TOTAL / ITEM
4	AB8	Abies concolor / Concolor White Fir	8' ht	B&B	216.75 / 867.00
8	PS8	Pinus strobus / White Pine	8' ht	B&B	216.75 / 1,734.00
5	RP8	Pinus densiflora / Korean Red Pine	8' ht	B&B	216.75 / 1,083.75
12	TP8	Thuja plicata 'Green Giant' / Green Giant Arborvitae	8-10' ht	B&B	361.25 / 4,335.00
47 Replacement Trees = 59 Replacement Credits					<b>\$11,921.25</b>

REPLACEMENT TREE CREDITS		
Specimen Tree Credits		144
Replacement Tree Credits on Plan		-18
<b>TOTAL CREDITS DUE</b>		<b>67</b>
67 x \$334 Payment to City's tree fund		<b>\$22,378.00</b>

**REPLACEMENT TREE LEGEND:**

Replacement trees are labeled with the following designations

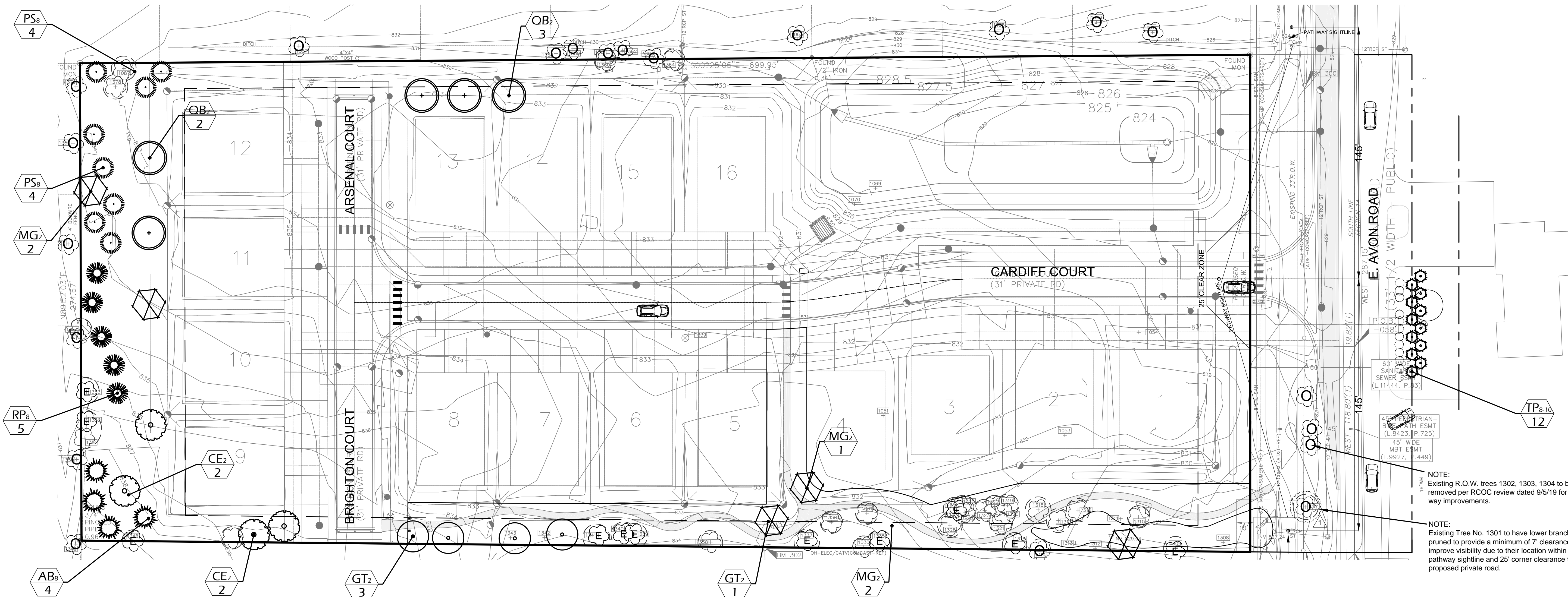
- OB<sub>2</sub> 2" Caliper Shade Tree = 1 Replacement Credit
- PS<sub>8</sub> 8' Ht. Evergreen Tree = 1 Replacement Credit

Refer to sheet LA-1.1A for Replacement Tree Credit Quantity List.



**REPLACEMENT TREE CREDITS**

	Required	Proposed On Plan	Credits Provided
Tree Credits	55	35 Trees at 1:1 12 Trees at 2:1	35 24
<b>Total Credits</b>	<b>55</b>	<b>47 Trees Proposed</b>	<b>59 Credits Provided</b>



CAMBRIDGE KNOLL  
AVON RD.  
ROCHESTER HILLS, MI  
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Cambridge Knoll, Inc  
Jim Polyzois  
14955 Technology Drive,  
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Phone: (586) 421-5729

- 1 9/26/2024 Review Comments Submittal
- 2 10/28/2024 Review Comments Submittal

**NÚÑEZ DESIGN**  
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30645 Woodgate Drive  
Southfield, MI 48076  
P: 248.224.5933  
nunezdesigninc@gmail.com

Designed/Drawn: RN / JN  
Checked/Approved: JN / RN  
Job #: LA-1.1A-20  
N-01-50 LA Submittal.dwg

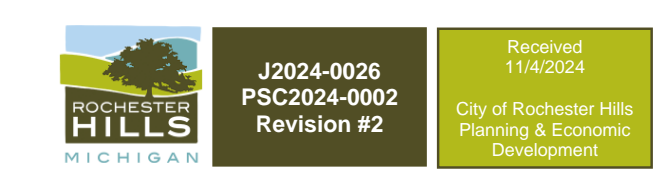
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SCALE: 1"=30'-0"  
CITY FILE: 419-033  
SECTION #: 14

ALL SIGNS MUST MEET THE REQUIREMENTS OF THE CITY AND BE APPROVED UNDER SEPARATE PERMITS ISSUED BY THE BUILDING DEPARTMENT

AN AUTOMATIC IRRIGATION SYSTEM IS INCLUDED FOR ALL LANDSCAPE AREAS AS REQUIRED BY CITY OF ROCHESTER HILLS  
ALL LAWN AND PLANT BED AREAS TO BE IRRIGATED BETWEEN THE HOURS OF 12 AM AND 5 AM ONLY  
IRRIGATION OVERSPRAY SHALL NOT BROADCAST ONTO THE CITY PATHWAY

THE MATURE MAXIMUM HEIGHT FOR ALL GROUNDCOVERS AND PLANTINGS WITHIN THE 25' CLEARZONE IS 30" IN HEIGHT UNMAINTAINED.

PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT ALL LANDSCAPE PLANTINGS.



**REPLACEMENT TREE CREDIT PLAN**

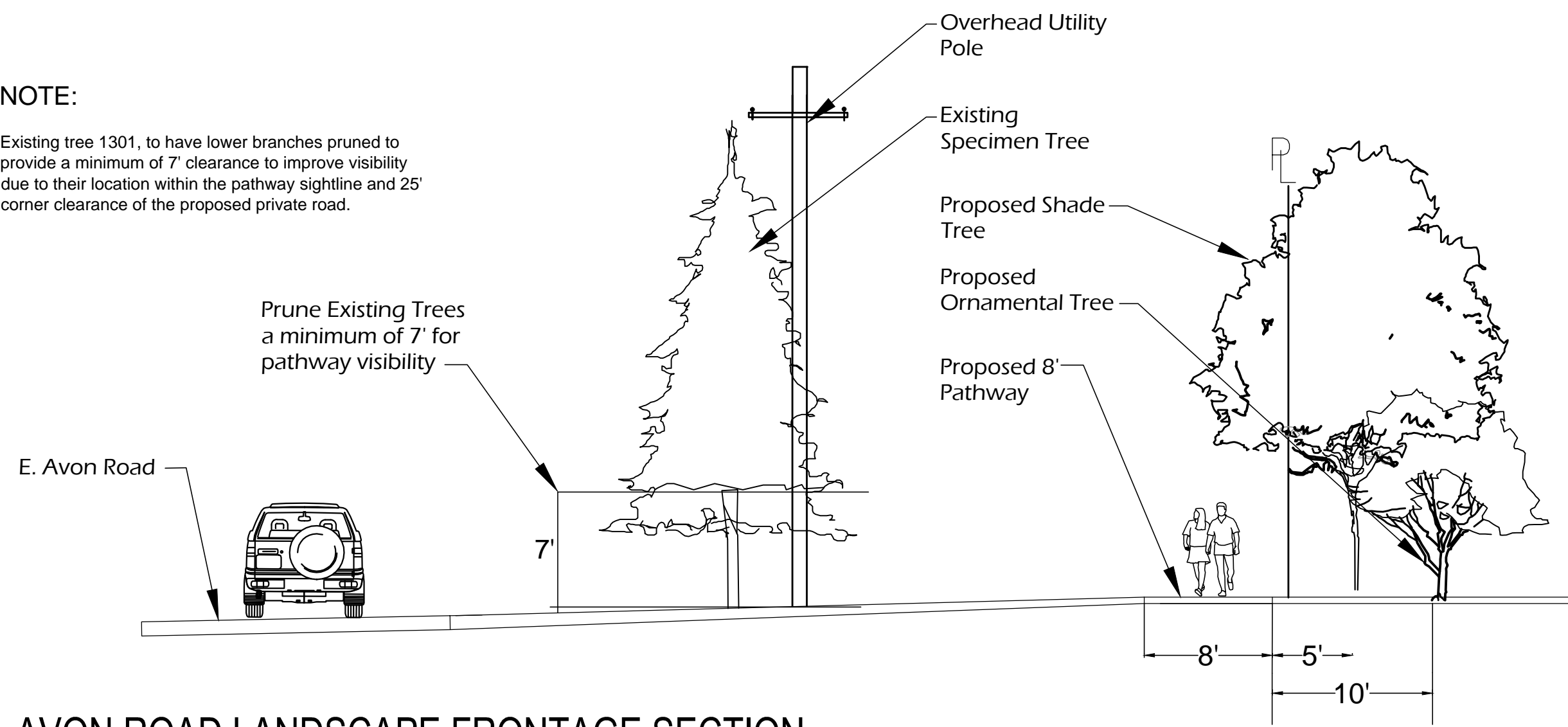
**LA -1.1A**

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**NOTE:**

Existing tree 1301, to have lower branches pruned to provide a minimum of 7' clearance to improve visibility due to their location within the pathway sightline and 25' corner clearance of the proposed private road.



**PLANTING SETBACK REQUIREMENTS:**

15' PLANTING SETBACK LINE FROM PROPOSED OVERHEAD UTILITY LINE AND EXISTING OVERHEAD UTILITY LINE. ALL EVERGREEN AND DECIDUOUS TREES MUST BE FIELD VERIFIED AND PLANTED A MINIMUM OF 15' FROM OVERHEAD UTILITY LINES.

10' PLANTING SETBACK LINE ORNAMENTAL TREES AND EVERGREEN TREES MUST BE PLANTED A MINIMUM OF 10' FROM A WALK OR PEDESTRIAN PATHWAY

5' PLANTING SETBACK FOR SHRUBS AND DECIDUOUS TREES FROM A PUBLIC WALK OR PEDESTRIAN PATHWAY. (5' SETBACK APPLIES TO DECIDUOUS TREES IF NO OVERHEAD UTILITIES EXIST)

ALL SIGNS MUST MEET THE REQUIREMENTS OF THE CITY AND BE APPROVED UNDER SEPARATE PERMITS ISSUED BY THE BUILDING DEPARTMENT

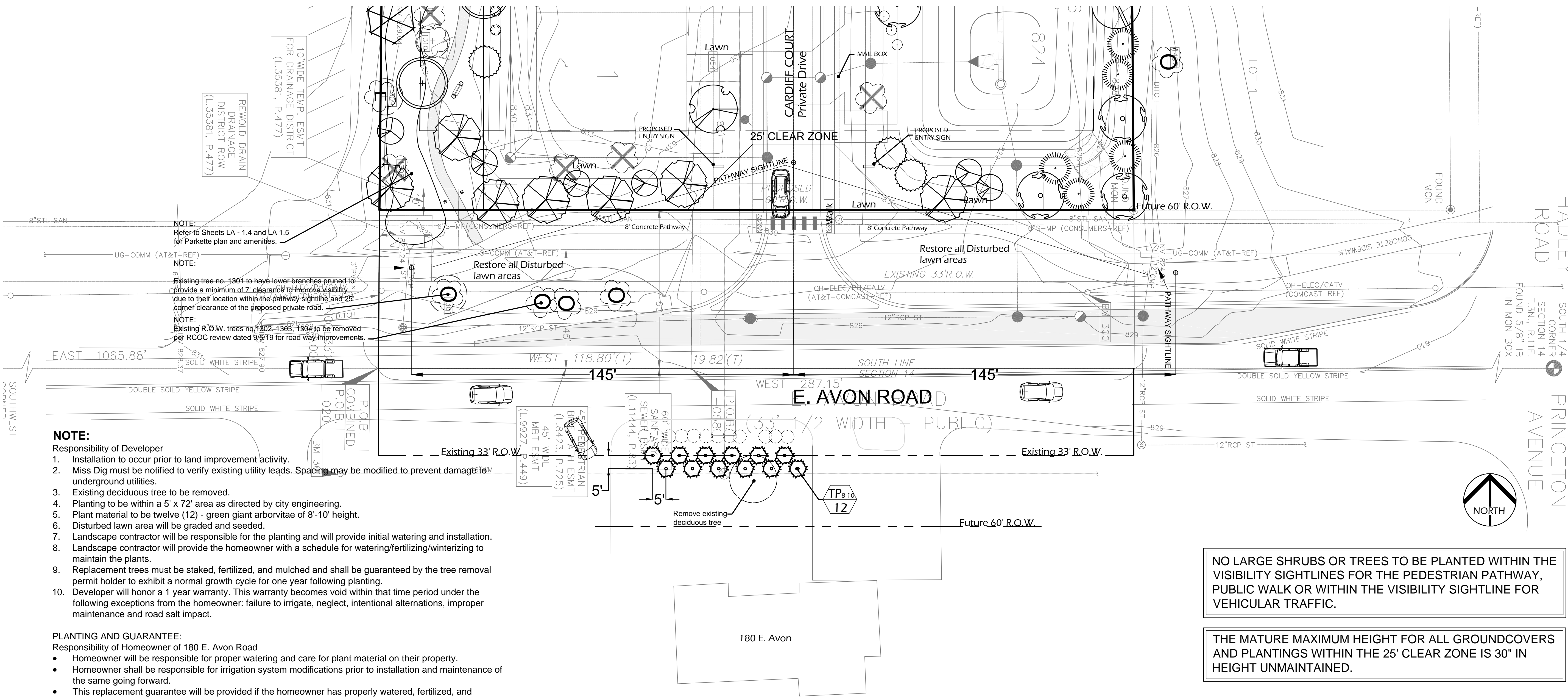
A CITY RIGHT-OF-WAY PERMIT IS REQUIRED FOR WORK WITHIN E. AVON ROAD.  
CITY SHALL FURNISH AND PLACE ALL PERMANENT R.O.W. STREET SIGNS WITH MONIES PAID BY DEVELOPER.

**TREE SYMBOL LEGEND:**

- Shade Tree
- Evergreen Tree
- Ornamental Tree
- Large Evergreen
- Shrubs



**2 E. AVON ROAD LANDSCAPE FRONTAGE SECTION**



**NOTE:** Refer to Sheets LA - 1.4 and LA 1.5 for Parkette plan and amenities.  
**NOTE:** Existing tree no. 1301 to have lower branches pruned to provide a minimum of 7' clearance to improve visibility due to their location within the pathway sightline and 25' corner clearance of the proposed private road.  
**NOTE:** Existing R.O.W. trees no. 1302, 1303, 1304 to be removed per RCOC review dated 9/5/19 for road way improvements.

**NOTE:**

Responsibility of Developer

1. Installation to occur prior to land improvement activity.
2. Miss Dig must be notified to verify existing utility leads. Spacing may be modified to prevent damage to underground utilities.
3. Existing deciduous tree to be removed.
4. Planting to be within a 5' x 72' area as directed by city engineering.
5. Plant material to be twelve (12) - green giant arborvitae of 8'-10' height.
6. Disturbed lawn area will be graded and seeded.
7. Landscape contractor will be responsible for the planting and will provide initial watering and installation.
8. Landscape contractor will provide the homeowner with a schedule for watering/fertilizing/winterizing to maintain the plants.
9. Replacement trees must be staked, fertilized, and mulched and shall be guaranteed by the tree removal permit holder to exhibit a normal growth cycle for one year following planting.
10. Developer will honor a 1 year warranty. This warranty becomes void within that time period under the following exceptions from the homeowner: failure to irrigate, neglect, intentional alternations, improper maintenance and road salt impact.

**PLANTING AND GUARANTEE:**

Responsibility of Homeowner of 180 E. Avon Road

- Homeowner will be responsible for proper watering and care for plant material on their property.
- Homeowner shall be responsible for irrigation system modifications prior to installation and maintenance of the same going forward.
- This replacement guarantee will be provided if the homeowner has properly watered, fertilized, and maintained the plants during this year.

NO LARGE SHRUBS OR TREES TO BE PLANTED WITHIN THE VISIBILITY SIGHTLINES FOR THE PEDESTRIAN PATHWAY, PUBLIC WALK OR WITHIN THE VISIBILITY SIGHTLINE FOR VEHICULAR TRAFFIC.

THE MATURE MAXIMUM HEIGHT FOR ALL GROUNDCOVERS AND PLANTINGS WITHIN THE 25' CLEAR ZONE IS 30" IN HEIGHT UNMAINTAINED.

CAMBRIDGE KNOLL  
AVON RD.  
ROCHESTER HILLS, MI  
PART OF THE SW 1/4 OF SECTION 14,  
T03N, R11E  
PLAN SUBMITTED FOR SITE PLAN REVIEW - NOT FOR CONSTRUCTION.

Cambridge Knoll, Inc  
Jim Polyzois  
14955 Technology Drive,  
Shelby Twp., MI 48315  
Phone: (586) 421-5729

Date: 8/1/2019  
Date Revisions: Submitted for Preliminary Review  
9/2/2019 Submitted for Preliminary Review  
1/6/2020 PC Submittal - Revision  
10/2/2020 PC Final Submittal  
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10/29/2024 Review Comments Submittal

**NÚÑEZ DESIGN**  
LANDSCAPE ARCHITECTURE • URBAN DESIGN  
30645 Woodgate Drive  
Southfield, MI 48076  
P: 248.224.5933  
nunezdesigninc@gmail.com



0 10' 20' 40'  
SCALE: 1"=20'-0"

SHEET:  
**LA -1.2**  
CITY FILE: 419-033  
SECTION #: 14

**1 E. AVON ROAD PLAN - SIGHTLINES, CLEAR ZONE AND PLANTING SETBACKS**

SCALE = 1" = 20' - 0"

**PATHWAY SIGHTLINE, CLEAR ZONE & PLANTING SETBACKS**

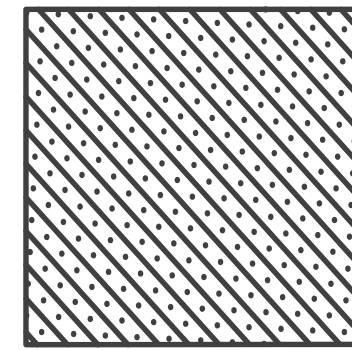
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**MICHIGAN WILDFLOWER FARM**  
 Detention Basin Mix  
 40% Forbs and 60% Grass/Sedge/Rush  
 Seeding Rate: 3 oz./1000 s.f. or 6 lbs./acre  
 \$16.50/oz. or \$264/lb.

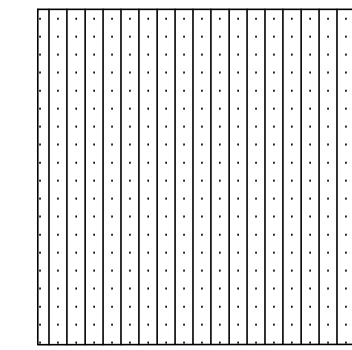
Scientific name	Common Name	% by wt.
<b>FORBS</b>		
Anemone canadensis	Canada Anemone	3.00
Angelica atropurpurea	Angelica	5.00
Asclepias incarnata	Swamp Milkweed	4.00
Eupatorium maculatum	Joe-Pye Weed	4.00
Eupatorium perfoliatum	Bonset	4.00
Helenium autumnale	Sneezeweed	4.00
Iris virginica	Wild Blue Flag	3.00
Lobelia siphilitica	Great Blue Lobelia	1.00
Rudbeckia hirta	Sweet Black-eyed Susan	1.00
Solidago graminifolia	Grassleaved Goldenrod	1.00
Solidago patula	Swamp Goldenrod	1.00
Symphoricarum puniceum	Swamp Aster	3.00
Vernonia hastata	Blue Vervain	3.00
Vernonia missouriensis	Ironweed	3.00
<b>Total Forbs</b>		<b>40.00</b>
<b>GRASSES</b>		
Carex spp.	Carex species	8.00
Elymus virginicus	Virginia Wild Rye	40.00
Scirpus spp.	Scirpus species	10.00
Sparganium eurycarpum	Common Bur Reed	2.00
<b>Total Grasses</b>		<b>60.00</b>

**MICHIGAN WILDFLOWER FARM**  
 Woodland Edge Mix  
 35% Forbs and 65% Grasses  
 Seeding Rate: 5 oz./1000 s.f. or 10 lbs./acre  
 \$14.50/oz. or \$232/lb.

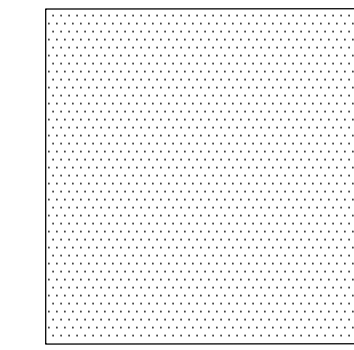
Scientific name	Common Name	% by wt.
Achillea millefolium	Yarrow	1.00
Allium cernuum	Nodding Wild Onion	3.00
Aquilegia canadensis	Wild Columbine	2.00
Asclepias syriaca	Common Milkweed	2.00
Asclepias tuberosa	Butterfly Weed	2.00
Desmodium canadense	Showy Tick-Trefoil	2.00
Eupatorium rugosum	Snakefoot	3.00
Monarda fistulosa	Wild Bergamot	3.00
Penstemon digitalis	Foxglove Beard-tongue	3.00
Penstemon hirsutus	Hairy Beard-tongue	1.00
Rudbeckia hirta	Black-eyed Susan	4.00
Rudbeckia triloba	Three-lobed Coneflower	2.00
Solidago rigida	Stiff Goldenrod	2.00
Symphoricarum novae-angliae	New England Aster	1.00
Symphoricarum orientaliangliensis	Prairie Heart-leaved Aster	1.00
Thalictrum dioicum	Early Meadow Rue	1.00
Thalictrum dasycarpum	Purple Meadow Rue	2.00
<b>Total Forbs</b>		<b>35.00</b>
<b>Grasses</b>		
Elymus canadensis	Canada Wild Rye	30.00
Elymus hystrix	Bottlebrush Grass	10.00
Koeleria cristata	June Grass	3.00
Schizachyrium scoparium	Little Bluestem	22.00
<b>Total Grasses</b>		<b>65.00</b>



Detention Basin & Raingarden Hatch



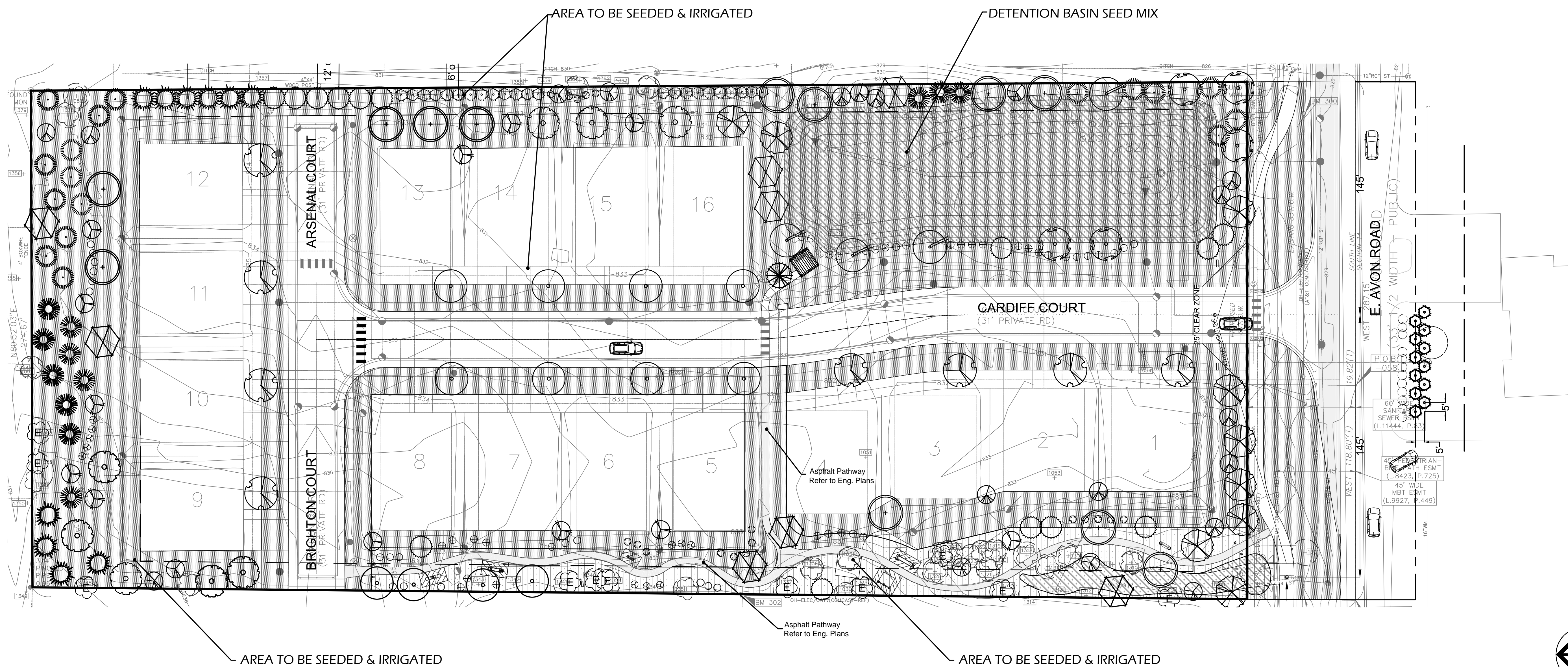
Woodland Edge Hatch



Seeded Area Hatch

1 DETENTION BASIN & RAINGARDEN SEED MIX

2 WOODLAND EDGE SEED MIX

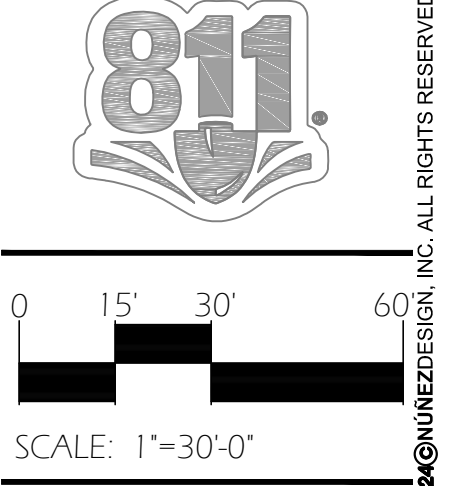


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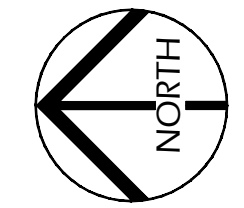
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SHEET:  
 LA-1.3  
 CITY FILE: 419-033  
 SECTION # 14

ROCHESTER HILLS MICHIGAN  
 2024-0026  
 PSC2024-0002  
 Revision #2  
 Received  
 11/4/2024  
 City of Rochester Hills  
 Planning & Economic  
 Development

SEEDING PLAN

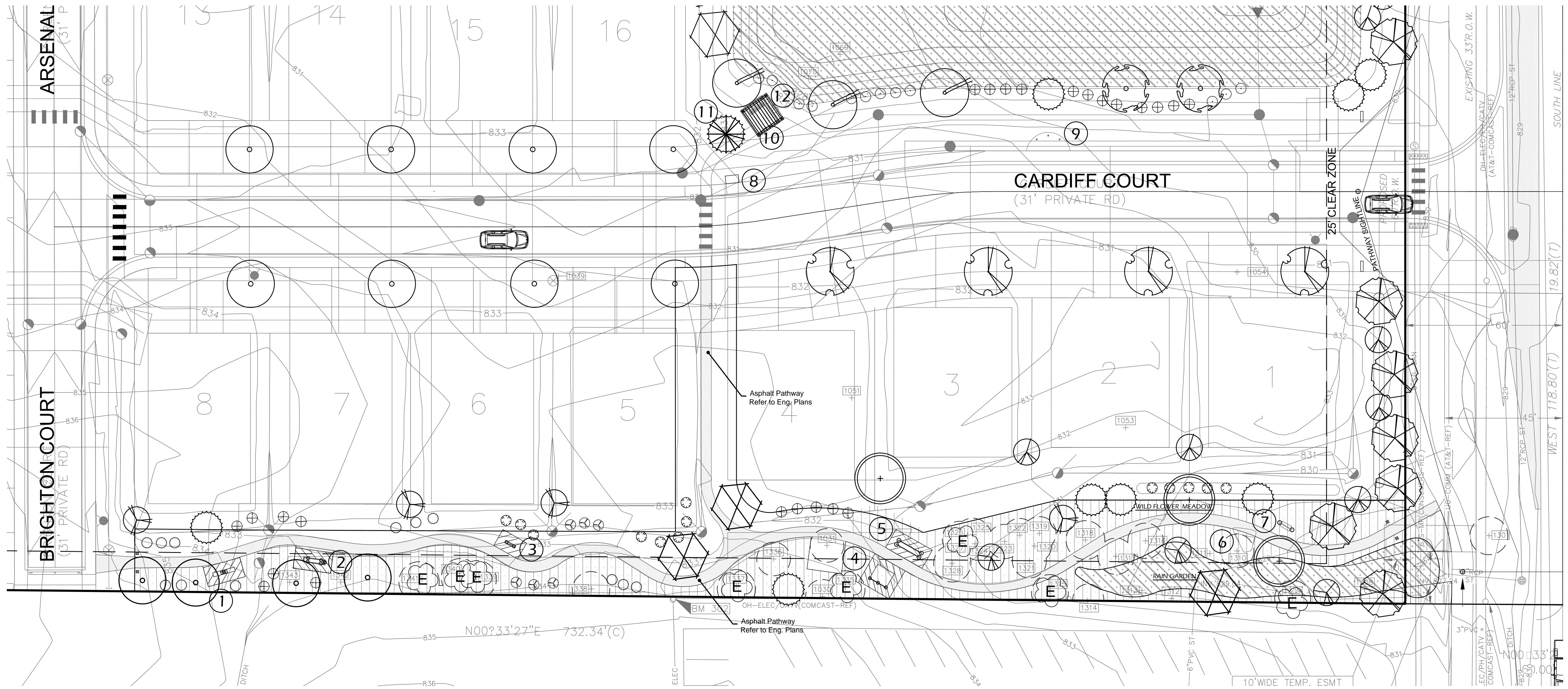


**LEGEND:**

- 1. KNEE LIFT STATION
- 2. SIT-UP STATION
- 3. BALANCE PLANK STATION
- 4. PUSH-UP STATION
- 5. PARALLEL BAR STATION
- 6. BAT BOX
- 7. BENCH SWING
- 8. MAILBOX
- 9. BIRD HOUSES
- 10. BENCH
- 11. HOLIDAY TREE
- 12. PERGOLA

NOTE: REFER TO SHEET LA-1.5 FOR AMENITY DETAILS

NOTE: ACTIVE OPEN SPACE REQUIRED - 10,280 S.F. PROVIDED - 17,027 S.F.



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Designed/Drawn: RN, JN  
 Checked/Approved: JN, RN  
 Job #: N-01-50  
 N-01-50 LA Submittal.dwg



NOT TO SCALE

SHEET:

LA-1.4

ROCHESTER HILLS MICHIGAN  
 J2024-0026  
 PSC2024-0002  
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 Received 11/14/2024  
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 Development

PARKETTE CONCEPT

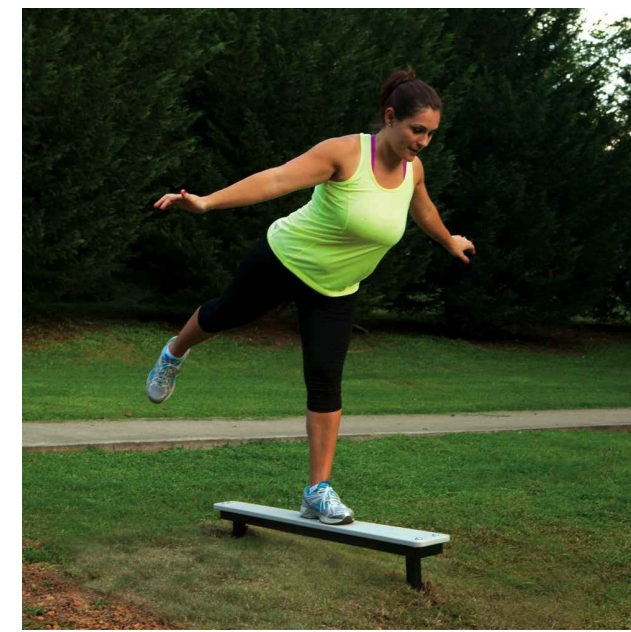
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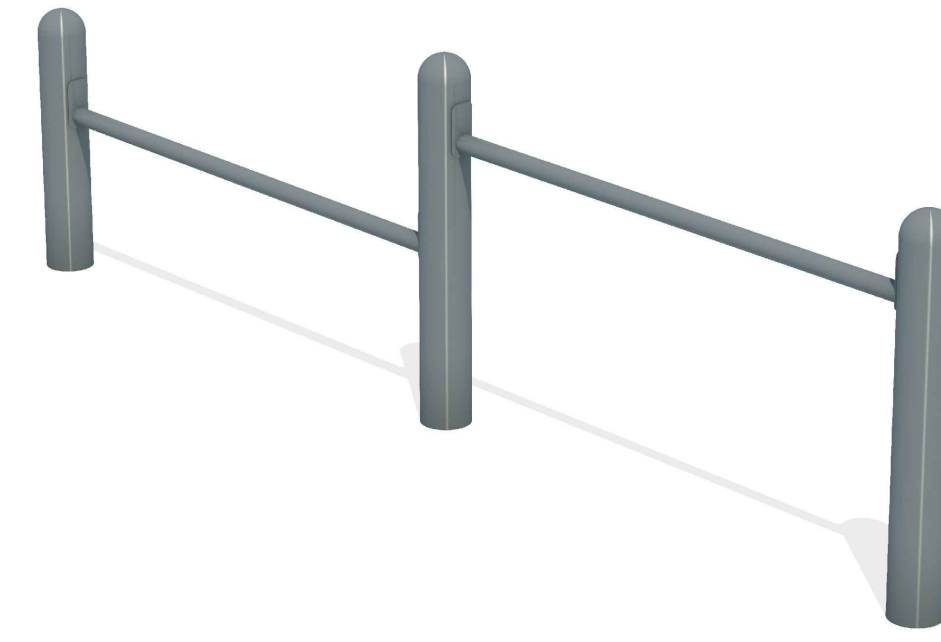
1 KNEE LIFT STATION  
LA-1.5



2 SIT-UP STATION  
LA-1.5



3 BALANCE PLANK STATION  
LA-1.5



4 PUSH-UP STATION  
LA-1.5



5 PARALLEL BAR STATION  
LA-1.5



6 BAT BOX  
LA-1.5



7 BENCH SWING  
LA-1.5

**FLORENCE CORPORATION**  
5935 CORPORATE DRIVE  
MANHATTAN, KS 66503  
TOLL FREE: 1-800-275-1747  
PHONE: (785) 323-4400  
FAX: (800) 275-5081  
www.florenccor.com

**VITAL™ 1570 CLUSTER BOX UNIT**  
MODEL 1570-16  
REVISION DATE: 24/03/2017

**MANUFACTURER NOTES:**  
1. THIS UNIT IS APPROVED FOR USPS AND PRIVATE APPLICATIONS.  
2. DECORATIVE MAILBOX ACCESSORIES SOLD SEPARATELY AND ARE USPS APPROVED PRODUCTS.  
3. PEDESTAL SHOULD BE INSTALLED WITH INCLUDED RUBBER PAD. MOUNTING HARDWARE NOT INCLUDED. REFER TO INSTALLATION MANUAL FOR RECOMMENDATIONS.  
4. FLORENCE "F" SERIES CBU IS OFFICIALLY LICENSED BY USPS LICENSE #00808-08-8-012.

**NOTES:**  
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.  
2. DO NOT SCALE DRAWING.  
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.  
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.  
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADetails.com/HS-AND-ENTER REFERENCE NUMBER: 709-078

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8 MAILBOX DETAIL  
LA-1.5



9 BIRD HOUSES  
LA-1.5



10 BENCH  
LA-1.5



11 HOLIDAY TREE  
LA-1.5



12 PERGOLA  
LA-1.5

**FITNESS EQUIPMENT USE ZONE DETAIL**  
LA-1.5

811 logo

13 FITNESS EQUIPMENT USE ZONE DETAIL  
LA-1.5



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N-01-50 LA Amenities.dwg



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# GENERAL NOTES

## CITY NOTES

- ALL PLANT MATERIAL SHALL MEET CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN AND APPROVED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE, INC.
- ALL PLANT MATERIAL SHALL BE TRUE TO NAME IN CONFORMANCE TO THE CURRENT EDITION OF STANDARDIZED PLANT NAMES ESTABLISHED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE, OR OTHER SOURCE ACCEPTED BY THE CITY.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN IN A NORTHERN CLIMATE; HARDY TO THE CLIMATE OF MICHIGAN; APPROPRIATE FOR THE SOIL; CLIMATIC AND ENVIRONMENTAL CONDITIONS; AND RESISTANT TO DISEASE AND INSECT ATTACK.
- A MINIMUM FOUR (4) INCHES OF TOPSOIL SHALL BE PROVIDED FOR ALL LAWN AREAS, GROUND COVERS, AND PLANTING BEDS.
- ARTIFICIAL PLANT MATERIAL IS PROHIBITED AND SHALL NOT BE USED TO MEET THE REQUIREMENTS OF THIS ARTICLE.
- LAWN AREAS SHALL BE PLANTED IN SPECIES OF GRASS NORMALLY GROWN IN MICHIGAN. GRASS MAY BE SODDED OR HYDRO-SEEDED, PROVIDED THAT ADEQUATE MEASURES ARE TAKEN TO MINIMIZE SOIL EROSION. SOD OR SEED SHALL BE CLEAN AND FREE OF WEEDS AND NOXIOUS PESTS OR DISEASE.
- A MINIMUM 4-INCH LAYER OF SHREDDED HARDWOOD BARK SHALL BE PLACED IN ALL PLANTER BEDS CONTAINING TREES OR SHRUBS AND AROUND THE BASE OF ALL TREES PLANTED WITHIN LAWN AREAS. ALL SHRUBS PLANTED WITHIN LAWN AREAS ARE TO BE PLANTED IN GROUPS AND MULCHED AS A GROUP, AND HEDGEROWS ARE TO BE MULCHED AS ONE CONTINUOUS STRIP.
- LIVE GROUNDCOVERS SUCH AS MYRTLE, BLUE RUG JUNIPERS, BALTIC IVY AND OTHER SIMILAR VINES AND PLANT MATERIAL SHALL BE MULCHED WITH A 2-INCH LAYER OF SHREDDED HARDWOOD BARK. ANY DEVIATIONS MUST BE APPROVED BY THE CITY'S LANDSCAPE ARCHITECT.
- PLANT MATERIALS SHALL NOT BE PLACED CLOSER THAN FOUR FEET FROM THE FENCE LINE OR PROPERTY LINE.
- DECIDUOUS AND ALL SHRUBS MAY NOT BE PLANTED WITHIN 5 FEET, AND EVERGREEN TREES MAY NOT BE PLANTED WITHIN TEN (10) FEET OF ANY CURB OR PUBLIC WALKWAY.
- TREES AND SHRUBS MAY NOT BE PLANTED WITHIN 10 FEET OF A FIRE HYDRANT.

- WHERE PLANT MATERIALS ARE PLANTED IN TWO OR MORE ROWS, PLANTING SHALL BE STAGGERED IN ROWS.
- WHERE SHRUB PLANTINGS ARE REQUIRED TO FORM A CONTINUOUS HEDGE, THE PLANTS SHALL NOT BE SPACED OUT MORE THAN 36 INCHES ON CENTER AT PLANTING AND SHALL HAVE A MINIMUM HEIGHT AND SPREAD OF 30 INCHES AT PLANTING. SHRUBS THAT WILL NOT ATTAIN SUFFICIENT WIDTH TO FORM A COMPLETE HEDGE SPACED 36 INCHES ON CENTER SHALL BE PLANTED AT A SPACING THAT WILL ALLOW THEM TO FORM A COMPLETE HEDGE WITHIN TWO YEARS OF PLANTING.

## RESPONSIBILITY NOTES

- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, THE PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
- CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO SUPPLY 4" TOPSOIL DEPTH IN ALL PLANTING BEDS AND 4" TOPSOIL DEPTH IN ALL LAWN AREAS USING MATERIAL FROM SPOIL PILE.
- ACCEPTANCE OF GRADING AND SOD SHALL BE BY THE LANDSCAPE ARCHITECT AND/OR PROJECT REPRESENTATIVE AND AS DETERMINED BY THE CITY. THE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITY FOR A MINIMUM OF TWO (2) YEARS. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REPLACEMENTS OF WASHOUTS AND OTHER OPERATIONS NECESSARY TO KEEP SOD IN A THRIVING CONDITION. UPON FINAL ACCEPTANCE BY LANDSCAPE ARCHITECT AND/OR PROJECT REPRESENTATIVE AND AS DETERMINED BY THE CITY, THE OWNER SHALL ASSUME ALL MAINTENANCE RESPONSIBILITIES.
- THE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPING FOR A PERIOD OF TWO (2) YEARS BEGINNING AFTER APPROVAL BY THE CITY OF ROCHESTER HILL'S LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE CITY OF ROCHESTER HILL'S LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.

## LANDSCAPING NOTES

- PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT ALL LANDSCAPE PLANTING INCLUDING BUT NOT LIMITED TO EXISTING TREES, REPLACEMENT TREES, BUFFER PLANTINGS, AND PARKING LOT ISLANDS. THE RIGHT-OF-WAY WILL BE INSPECTED BY THE FORESTRY DIVISION TO IDENTIFY ANY PLANTINGS NEW OR EXISTING THAT POSE A HAZARD TO THE SAFE USE OF THE RIGHT-OF-WAY. FORESTRY MAY REQUIRE THE DEVELOPER TO REMOVE AND POSSIBLY REPLACE ANY SUCH TREES.
- ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC R.O.W. SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' FROM THE EDGE OF THE PUBLIC WALKWAY. EVERGREEN AND ORNAMENTAL TREES MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC WALKWAY. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM ANY FIRE HYDRANT. SHADE AND EVERGREEN TREES MUST BE PLANTED AT LEAST 15' FROM THE NEAREST OVERHEAD WIRE AND AT LEAST 10' FROM THE NEAREST UNDERGROUND UTILITY.
- NO TREES OR SHRUBS MAY BE PLANTED WITHIN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY STREET RIGHT-OF-WAY AT A DISTANCE OF 25' FROM THEIR POINT OF INTERSECTION. NO TREES OR SHRUBS MAY BE PLANTED IN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY DRIVEWAY WITH A PUBLIC WALKWAY AT A DISTANCE ALONG EACH LINE OF 15' FROM THEIR POINT OF INTERSECTION.
- PRIOR APPROVAL IS REQUIRED TO PLANT ANY TREE OR SHRUB IN THE PUBLIC RIGHT-OF-WAY.
- NO SUBSTITUTIONS OR CHANGES OF LOCATION OR PLANT TYPES SHALL BE MADE WITHOUT THE APPROVAL OF THE DEVELOPER AND THE CITY OF ROCHESTER HILLS.
- THE DEVELOPER AND/OR THE CITY OF ROCHESTER HILL SHALL HAVE THE RIGHT, AT ANY STAGE OF THE INSTALLATION, TO REJECT ANY WORK OR MATERIAL THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS OR SPECIFICATIONS.
- REPLACEMENT TREES MAY NOT BE PLANTED WITHIN THE DRIP LINE OF EXISTING TREES.
- NO PLANT SUBSTITUTIONS OR CHANGES OF LOCATION OR PLANT TYPE SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT AND THE CITY'S PLANNING DEPARTMENT. ALL REQUESTS WILL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING. THE REQUEST WILL INCLUDE THE REASON FOR THE REQUESTED CHANGE ALONG WITH THE PROPOSED SUBSTITUTION AND HOW IT MEETS THE ORIGINAL DESIGN INTENT, SIZE, COLOR, ETC. THE LANDSCAPE ARCHITECT WILL EITHER MAKE RECOMMENDATIONS, APPROVE OR REJECT REQUESTS. IF THE SUBSTITUTION IS NEEDED AND APPROVED, THE LANDSCAPE ARCHITECT WILL FORWARD THE REQUEST AND HIS APPROVAL TO THE CITY FOR THEIR APPROVAL. FAILURE TO DO SO WILL RESULT IN PLANTS BEING REJECTED AND REPLACED AT CONTRACTOR'S EXPENSE.
- TREES MUST BE AT LEAST 10' FROM UNDERGROUND UTILITIES AND 15' FROM OVERHEAD UTILITIES.
- THESE REQUIREMENTS ARE INCORPORATED INTO THE PLAN.

## CITY OF ROCHESTER HILLS NOTES

- ALL LANDSCAPE AREAS MUST BE IRRIGATED. WATERING WILL ONLY OCCUR BETWEEN THE HOURS OF 12 AM AND 5 AM. IRRIGATION PLAN TO BE PROVIDED AT FINAL SUBMITTAL.
- IRRIGATION OVERSPRAY SHALL NOT BROADCAST ONTO THE CITY PATHWAY.
- SIGNS SHALL MEET THE REQUIREMENTS OF CHAPTER 134 OF THE CITY'S CODE OF ORDINANCES.
- PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT ALL LANDSCAPE DRAWINGS.

## TREE PROTECTION NOTES

- THE TREE PROTECTION FENCING (TPF) SHALL BE ERECTED PER THE PLANS APPROVED BY THE CITY OF ROCHESTER HILLS PLANNING DEPARTMENT. THE TPF MUST BE IN PLACE AND BE INSPECTED BY THE CITY OF ROCHESTER HILLS PRIOR TO THE START OF ANY EARTHWORK OR CONSTRUCTION OPERATIONS. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE A TPF INSPECTION. THE TPF SHALL REMAIN IN PLACE THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS OR UNTIL THE CITY AUTHORIZES THE REMOVAL OR ISSUES A FINAL CERTIFICATE OF OCCUPANCY, WHICHEVER OCCURS FIRST.
- UPON COMPLETION OF GRADING AND THE INSTALLATION OF THE INFRASTRUCTURE A SECOND INSPECTION OF THE TPF AND THE TREES DESIGNATED FOR PRESERVATION IS REQUIRED BY THE CITY OF ROCHESTER HILLS PRIOR TO THE START OF ANY ADDITIONAL CONSTRUCTION. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE THIS TPF INSPECTION.
- UPON COMPLETION OF ALL CONSTRUCTION AND PRIOR TO THE REMOVAL OF THE CITY OF ROCHESTER HILLS MUST INSPECT ALL TREES DESIGNATED TO BE PRESERVED. THE LANDSCAPE PERFORMANCE BOND WILL NOT BE RELEASED UNTIL THIS INSPECTION IS COMPLETE AND ALL RELATED ISSUES ARE RESOLVED. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE THIS INSPECTION.
- A FINAL INSPECTION BY THE CITY OF ROCHESTER HILLS IS REQUIRED AT THE END OF THE WARRANTY AND MAINTENANCE PERIOD. THE LANDSCAPE MAINTENANCE BOND WILL NOT BE RELEASED UNTIL THIS INSPECTION IS COMPLETE AND ALL RELATED ISSUES ARE RESOLVED. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE THIS INSPECTION.
- THE TREE CONSERVATION ORDINANCE PROHIBITS ANY CONSTRUCTION OR DEVELOPMENT ACTIVITIES WITHIN THE DRIP LINE OF AND REGULATED TREES NOT APPROVED FOR REMOVAL, INCLUDING BUT NOT LIMITED TO LAND CLEARING, GRUBBING, TRENCHING, GRADING OR FILLING, NO PERSON SHALL PLACE ANY SOLVENTS, BUILDING MATERIALS, CONSTRUCTION EQUIPMENT, SOIL DEPOSITS, OR HARMFUL MATERIALS WITHIN THE DRIP LINE LIMIT OF TREES DESIGNATED FOR PRESERVATION.
- PROPOSED GRADES ARE TO MATCH THE EXISTING ELEVATIONS OUTSIDE THE LIMITS OF THE TPF. NO GRADING EITHER CUT OR FILL IS PERMITTED WITHIN THE DRIP LINE OF ANY TREE DESIGNATED FOR PRESERVATION.
- DURING THE CONSTRUCTION PROCESS NO PERSON SHALL ATTACH ANY DEVICE OR WIRE/CABLE/CORD/ROPE TO AN EXISTING TREE DESIGNATED TO BE PRESERVED.
- ALL UTILITY SERVICE REQUEST MUST INCLUDED NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE THE TPF.
- SWALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIP LINE OF THE ANY TREE DESIGNATED FOR PRESERVATION. SWALES SHALL BE CONSTRUCTED SO AS NOT TO DIRECT ANY ADDITIONAL FLOW INTO THE DRIP LINE A TREE DESIGNATED FOR PRESERVATION.
- IF TREE PROTECTION CANNOT BE MAINTAINED FOR A TREE THROUGHOUT ENTIRE PERIOD REQUIRED, THE REPLACEMENT OF THAT TREE WILL BE REQUIRED ON AN INCH FOR INCH BASIS PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- REGULATED TREES LOCATED OFF-SITE ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION OPERATIONS MUST BE PROTECTED AS DEFINED HERE IN.

- THE TPF SHALL CONSIST OF 4 FOOT HIGH ORANGE SNOW FENCING TO BE INSTALLED AROUND THE DRIP LINE OF ALL TREE DESIGNATED TO BE SAVED. THIS FENCING SHALL BE SUPPORTED BY 6 FOOT METAL T-BAR POSTS 5 FEET ON CENTER AND DRIVEN A MINIMUM OF 24" INTO GROUND. THE TPF FENCING SHALL REMAIN UPRIGHT AND SECURELY IN PLACE FOR THE REQUIRED TIME AS SPECIFIED ABOVE.

## CITY OF ROCHESTER HILLS MAINTENANCE NOTES 138-12.109

- LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
- PRUNING SHALL BE MINIMAL AT TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
- ALL DEAD, DAMAGED, OR DISEASED PLANT MATERIAL SHALL BE REMOVED IMMEDIATELY AND REPLACED WITHIN (6) SIX MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICH EVER COMES FIRST. THE PLANTING SEASON FOR THE DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE. THE CITY MAY NOTIFY PROPERTY OWNERS OF THE NEED TO REPLACE DEAD, DAMAGED, OR DISEASED MATERIAL.
- THE APPROVED LANDSCAPE PLAN SHALL BE CONSIDERED A PERMANENT RECORD AND INTEGRAL PART OF THE SITE PLAN APPROVAL. UNLESS OTHERWISE APPROVED, ANY REVISIONS OR REMOVAL OF PLANT MATERIALS, OR NON-COMPLIANCE WITH THE MAINTENANCE REQUIREMENTS OF SECTION 138-12.109 WILL PLACE THE PARCEL IN NON-CONFORMITY WITH THE APPROVED LANDSCAPE PLAN AND BE A VIOLATION OF THE ORDINANCE.
- IF PROTECTED TREES ARE DAMAGED, A FINE SHALL BE ISSUED ON AN INCH BY INCH BASIS AT A MONETARY RATE AS DEFINED BY THE FORESTRY DEPARTMENT.

## CITY OF ROCHESTER HILLS FORESTRY NOTES

- PRIOR APPROVAL IS REQUIRED TO PLANT ANY TREE OR SHRUB ON THE PUBLIC RIGHT-OF-WAY. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC ROAD. SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' FROM THE EDGE OF THE PUBLIC WALKWAY. EVERGREEN AND ORNAMENTAL TREES MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC WALKWAY.
- NO TREES OR SHRUBS MAY BE PLANTED WITHIN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY STREET RIGHT-OF-WAY LINES AT A DISTANCE ALONG EACH LINE OF 25' FROM THEIR POINT OF INTERSECTION. ALL TREES AND SHRUBS MUST BE AT LEAST 10' FROM ANY HYDRANT. SHADE AND EVERGREEN TREES MUST BE AT LEAST 15' AWAY FROM THE NEAREST OVERHEAD WIRE. TREES MUST BE PLANTED A MINIMUM OF 5' FROM AN UNDERGROUND UTILITY, UNLESS THE CITY'S LANDSCAPE ARCHITECT REQUIRES A GREATER DISTANCE.
- PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS FORESTRY DIVISION NEEDS TO INSPECT ALL TREES, EXISTING OR PLANTED, TO IDENTIFY ANY THAT POSE A HAZARD TO THE SAFE USE OF PUBLIC RIGHT-OF-WAY. FORESTRY MAY REQUIRE THE DEVELOPER TO REMOVE, AND POSSIBLY REPLACE, ANY SUCH TREES.

## TREE PROTECTION FENCE NOTE:

ALL TREES ON ADJACENT PROPERTIES MUST BE PROTECTED. THE TREE PROTECTIVE FENCING MAY BE PLACED ALONG THE ACTUAL PROPERTY LINE IF THE BRANCHES OF THE TREES ON THE ADJACENT PROPERTIES DO NOT OVERHANG ONTO THE SITE BEING DEVELOPED. IF THE BRANCHES OVERHANG ONTO THE AREA OF THE SITE BEING DEVELOPED THE TREE PROTECTIVE FENCING MUST BE PLACED AT THE ACTUAL DRIP LINE OF THESE TREES. IT SHOULD ALSO BE NOTED THAT THE SILT FENCING MUST BE PLACED ON THE DEVELOPMENT SIDE OF THE TREE PROTECTIVE FENCING. THE SILT FENCING MAY NOT BE PLACED BETWEEN THE TREE BEING PRESERVED AND THE TREE PROTECTIVE FENCING. IF ANY REGULATED TREES ARE DAMAGED ON THE ADJACENT PROPERTIES THE DAMAGED TREES WILL BE EITHER REPLACED ON THE OWNERS PROPERTY ON AN INCH FOR INCH BASIS OR A FINE IN THE SUM \$122.00 PER CALIPER INCH WILL BE ISSUED AGAINST THE DEVELOPMENT. THIS FINE WILL BE DUE PRIOR THE BUILDING PERMITS BEING ISSUED. IF YOU HAVE ANY QUESTIONS OR NEED ADDITIONAL INFORMATION CALL THE CITY'S PLANNING DEPARTMENT 248-646-4660.

## PLANTING NOTES:

- INSTALL AND MAINTAIN ALL LANDSCAPING ACCORDING TO ROCHESTER HILLS STANDARDS. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, THE PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK. PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK. CONTRACTOR TO SUPPLY NURSERY SOURCES FOR ALL PURCHASED MATERIAL. NO BARE ROOT OR PARK GRADE MATERIAL WILL BE ACCEPTED.
- SOD: IF OWNER SELECTS THIS OPTION, CONTRACTOR WILL INSTALL SOD IN ALL AREAS INDICATED AS LAWN ON PLAN. SOD TO BE WELL ESTABLISHED, MINERAL GROWTH. SOD BLEND SHALL CONSIST OF A MINIMUM OF THREE (3) IMPROVED VARIETIES OF BLUEGRASS. ACCEPTANCE AND GUARANTEE NOTES SHALL APPLY TO ALL SOD.
- EDGING SHALL BE A SHOVEL EDGE.
- ALL TREE PITS MUST BE TESTED FOR PROPER DRAINAGE PRIOR TO PLANTING TREES. A DRAINAGE SYSTEM MUST BE INSTALLED IF PLANTING PIT DOES NOT DRAIN SUFFICIENTLY (REQUIRED IN HEAVY CLAY SOILS).
- ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESS WATER FROM STANDING ON LAWN AREAS OR AROUND TREES AND SHRUBS.
- STAKES USED FOR TREE SUPPORTS SHALL POINT AWAY FROM ANY CIRCULATION ROUTES.
- MULCHING AND WATERING OF ALL PLANTS AND TREES SHALL BE IMMEDIATELY OR WITHIN 16 HOURS AFTER INSTALLATION.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- REMOVE ALL TREE STAKES AND GUY WIRES AFTER ONE WINTER.
- USE GRADE "A" DOUBLE SHREDDED HARDWOOD BARK.
- DIG SHRUB PITS 1' LARGER THAN SHRUB ROOT BALLS AND TREE PITS 2' LARGER THAN ROOT BALLS. BACK FILL WITH ONE PART TOPSOIL AND ONE PART SOIL FROM THE EXCAVATED PLANTING HOLE. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE PLANTED AT THE NURSERY. IF WET, CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS HIGHER.
- REMOVE ALL TWINE, WIRE, AND BURLAP FROM THE TOP 1/3 OF TREE AND SHRUB EARTH BALLS AND FROM TREE TRUNKS.
- LAWN TREES ARE TO BE MULCHED WITH A MINIMUM OF 4" WIDE BY 4" DEEP SHREDDED BARK FOR TRUNK PROTECTION. ONLY NATURAL-COLORED SHREDDED HARDWOOD BARK MULCH WILL BE ACCEPTED.
- SHRUB BEDS ARE TO BE MULCHED WITH SHREDDED BARK MULCH TO A MINIMUM DEPTH OF 4". ONLY NATURAL-COLORED SHREDDED HARDWOOD BARK MULCH WILL BE ACCEPTED.
- BACKFILL DIRECTLY BEHIND ALL CURBS AND ALONG SIDEWALKS AND COMPACT TO THE TOP OF CURB OR WALK TO SUPPORT VEHICLE AND PEDESTRIAN WEIGHT WITHOUT SETTILING.

- ALL LANDSCAPE AREAS, SPECIAL PARKING LOT ISLANDS AND LANDSCAPE BEDS NEXT TO BUILDINGS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOILS TO A DEPTH OF 12"-18" AND BACK-FILLED WITH GOOD, MEDIUM TEXTURED PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY). ADD 4"-6" OF TOPSOIL OVERFILL MATERIAL AND CROWN A MINIMUM OF 6" ABOVE TOP OF CURBS AND/OR WALKS AFTER EARTH SETTILING UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.

- CONVERSION OF ALL ASPHALT AND GRAVEL AREAS TO LANDSCAPE SHALL BE DONE IN THE FOLLOWING MANNER:
  - REMOVE ALL ASPHALT, GRAVEL AND COMPACTED EARTH TO A DEPTH OF 6"-18" DEPENDING ON THE DEPTH OF THE SUB-BASE AND DEPTH OF OFF SITE.
  - REPLACE EXCAVATED MATERIAL WITH GOOD, MEDIUM TEXTURES PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY) TO A MINIMUM OF 2" ABOVE TOP OF CURB AND SIDEWALK. ADD 4"-6" OF TOPSOIL AND CROWN TO A MINIMUM OF 6" ABOVE ADJACENT CURB AND WALK AFTER EARTH SETTILING UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.
- IF CONVERSION TO LANDSCAPE OCCURS IN AN EXISTING (OR BETWEEN) LANDSCAPE AREA(S), REPLACE EXCAVATED MATERIAL TO 4"-6" BELOW ADJACENT EXISTING GRADES WITH GOOD MEDIUM TEXTURED PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY) AND ADD 4"-6" OF TOPSOIL TO MEET EXISTING GRADES AFTER EARTH SETTILING.

- ALL PLANT MATERIAL TO RECEIVE SOILMOIST SUPER ABSORBENT POLYMER OR APPROVED EQUAL BY LANDSCAPE ARCHITECT, FOLLOW MANUFACTURER'S SPECIFICATIONS.

## MAINTENANCE NOTES

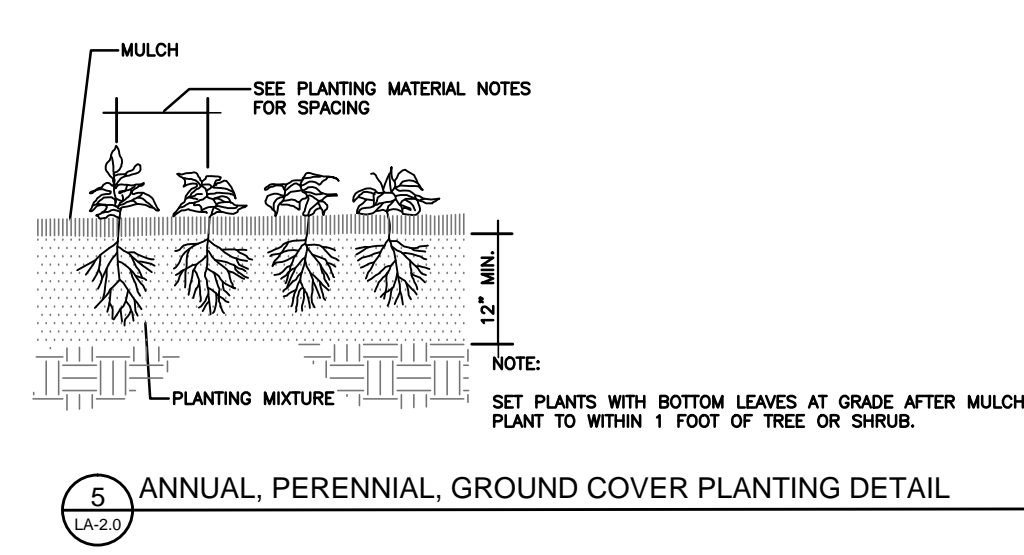
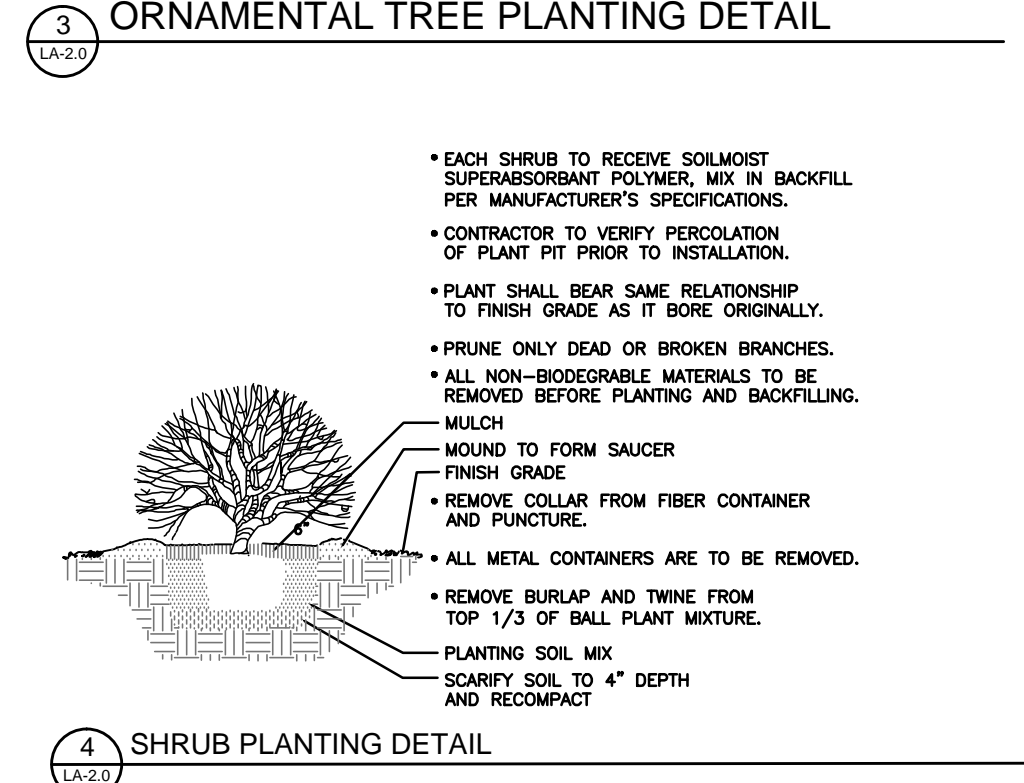
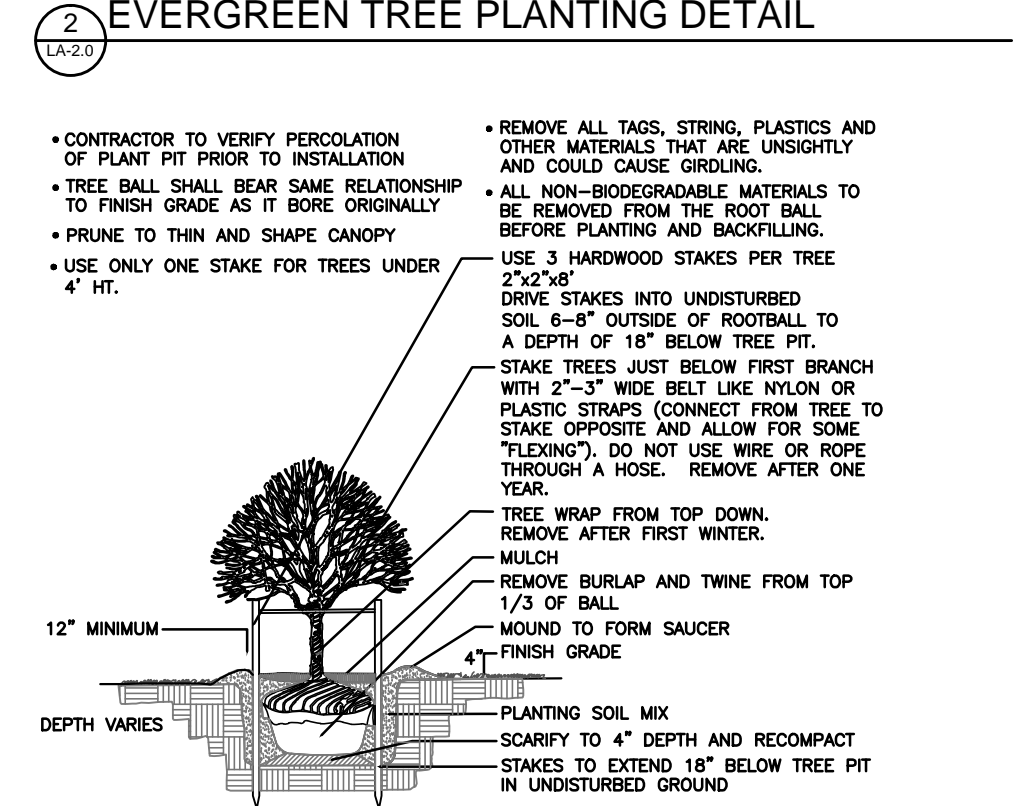
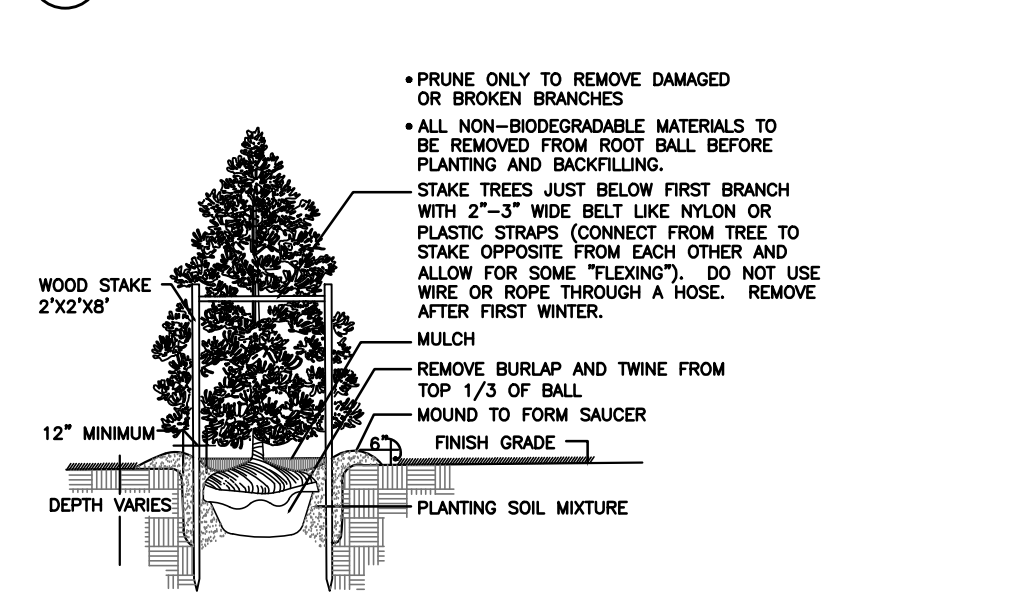
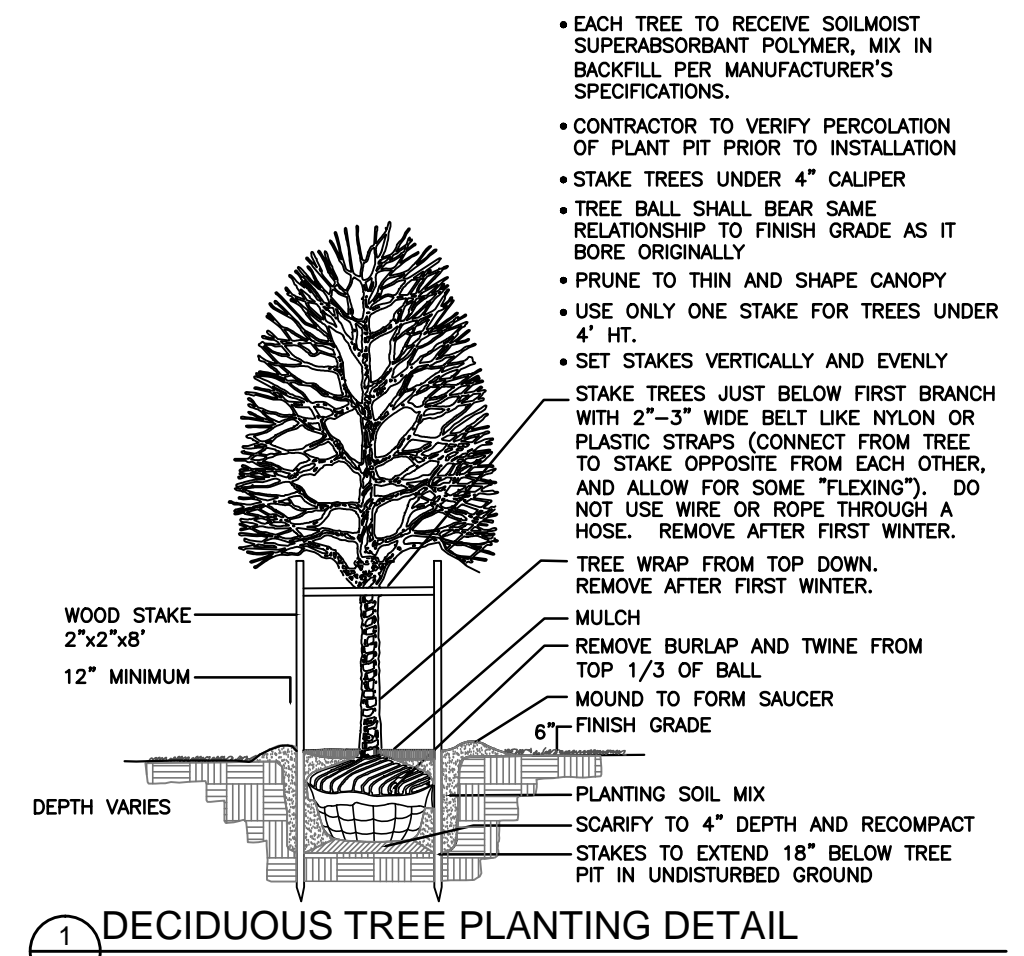
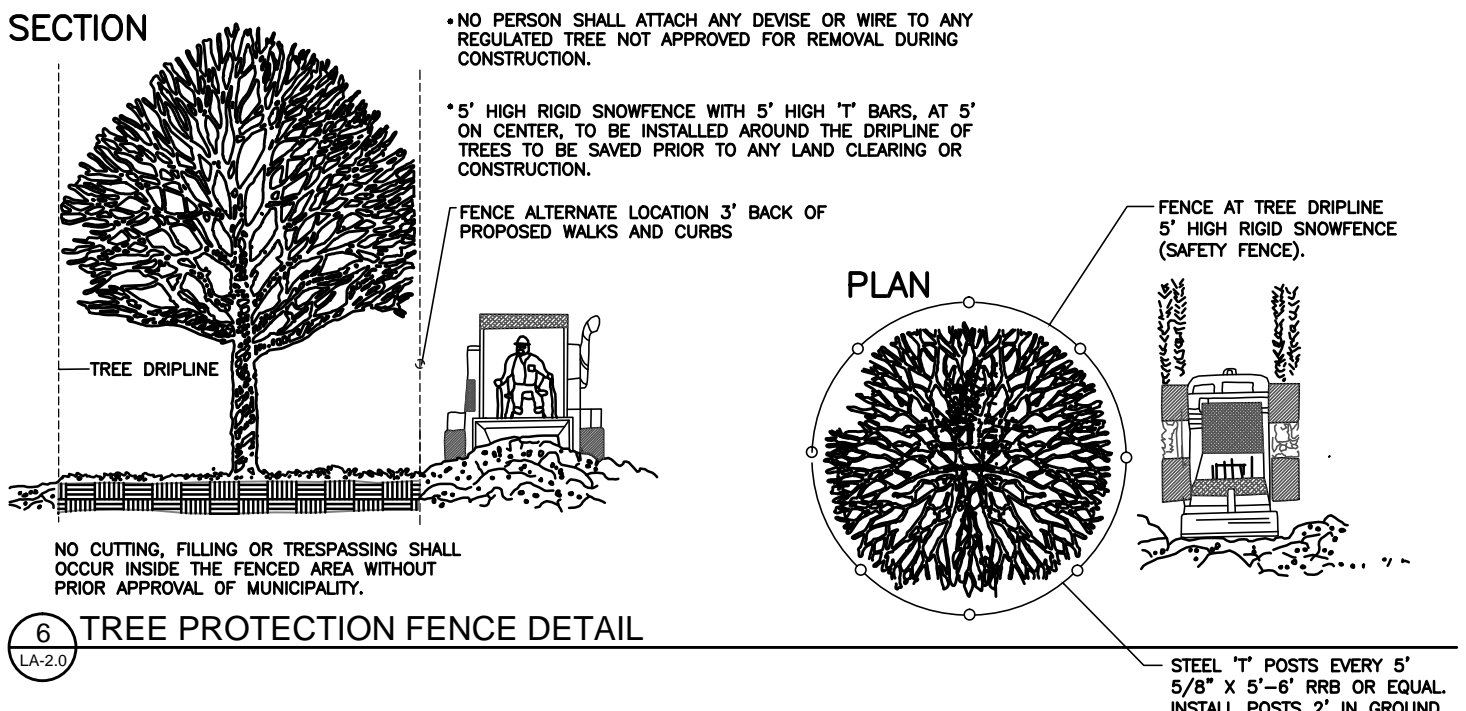
- THE CLEAR ZONE SHALL BE MAINTAINED AT ALL INTERSECTIONS THAT INGRESS AND EGRESS TO THE SITE. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN THE PLANT MATERIAL AT A HEIGHT OF NOT OVER THIRTY (30) INCHES ABOVE PAVEMENT AND PROVIDE UNOBSTRUCTED SIGHT DISTANCE FOR DRIVERS IN VEHICLES APPROACHING THE INTERSECTION.
- VERTICAL CLEARANCE OF AT LEAST EIGHTY (80) INCHES MUST BE PROVIDED ABOVE WALKS AT ALL TIMES. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN TREES AND OTHER OVERHANGING OBJECTS TO PROVIDE ADEQUATE HEADROOM TO COMPLY WITH ADA GUIDELINES.

## PLANT WARRANTY

A. WARRANTED PLANT MATERIAL TO REMAIN ALIVE AND BE IN HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF 2 YEARS AFTER COMPLETION AND ACCEPTANCE OF ENTIRE PROJECT. INSPECTION OF PLANTS WILL BE MADE BY THE LANDSCAPE ARCHITECT OR CLIENT'S REPRESENTATIVE AT COMPLETION OF PLANTING.

B. REPLACE, IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, ALL PLANTS THAT ARE DEAD OR, AS DETERMINED BY THE LANDSCAPE ARCHITECT OR CLIENT'S REPRESENTATIVE, ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION, AND HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, OR OTHER CAUSES DUE TO THE CONTRACTOR'S NEGLIGENCE. THE COST OF SUCH REPLACEMENT(S) IS AT CONTRACTOR'S EXPENSE. WARRANTY ALL REPLACEMENT PLANTS FOR 1 YEAR AFTER INSTALLATION.

C. WARRANTY SHALL NOT INCLUDE DAMAGE OR LOSS OF TREES, PLANTS, OR GROUND COVERS CAUSED BY FIRES, FLOODS, FREEZING RAINS, LIGHTNING STORMS, OR WINDS OVER 75 MILES PER HOUR. WINTER KILL CAUSED BY EXTREME COLD AND SEVERE WINTER CONDITIONS NOT TYPICAL OF PLANTING AREA; ACTS OF VANDALISM OR NEGLIGENCE ON THE PART OF THE OWNER.



CAMBRIDGE KNOLL  
AVON RD.  
ROCHESTER HILLS, MI  
PART OF THE SW 1/4 OF SECTION 14,  
T03N, R11E  
PLAN SUBMITTED FOR SITE PLAN REVIEW - NOT FOR CONSTRUCTION.

Cambridge Knoll, Inc  
Jim Polyzois  
14955 Technology Drive,  
Shelby Twp., MI 48315  
Phone: (586) 421-5729

Date:	6/1/2019
Date/Revisions:	Submitted for Preliminary Review
	02/20/19 Submitted for Preliminary Review
	1/6/2020 PC Submittal - Revision
	10/2/2020 PC Final Submittal
	12/7/2020 Final DC Approval
	2/11/2022 Final Landscape Plans
	03/20/24 Preliminary & Final Submittal
	02/26/2024 Review Comments Submittal
	10/28/2024 Review Comments Submittal

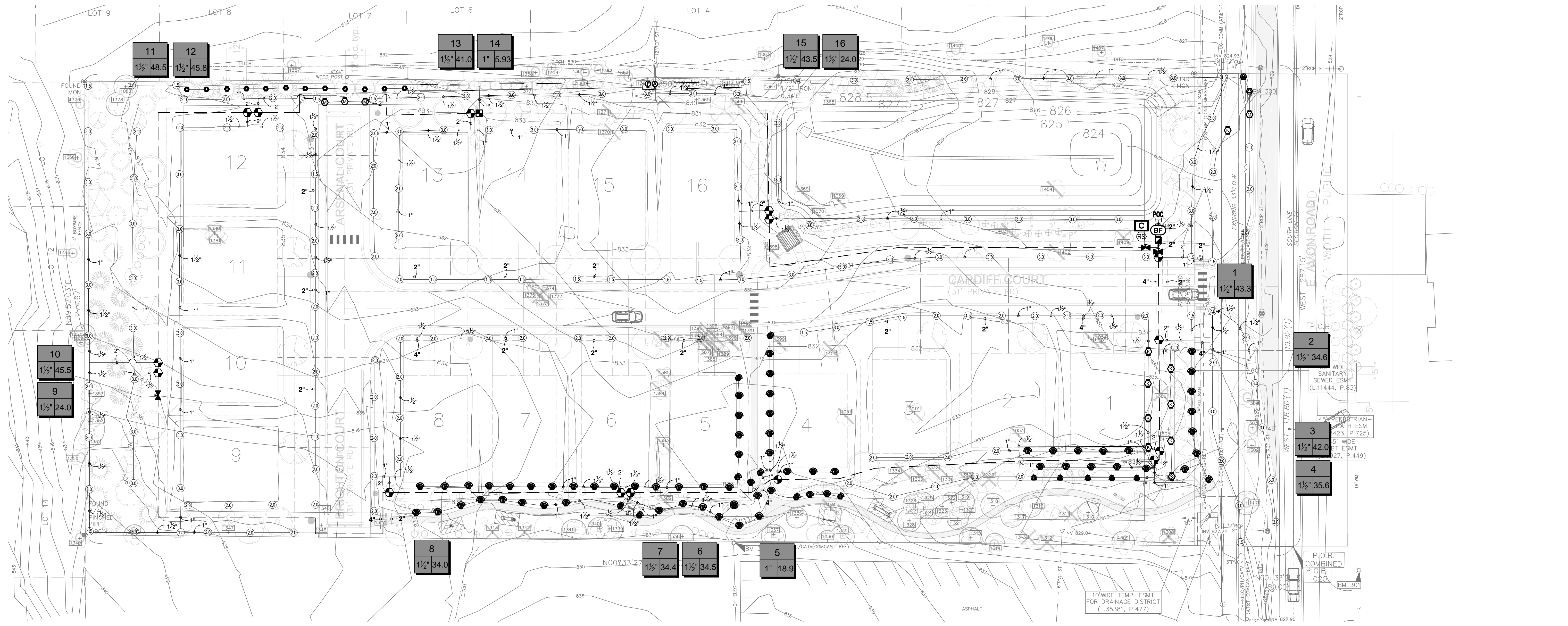


30645 Woodgate Drive  
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nunezdesigninc@gmail.com  
Designed/Drawn: RL / JN  
Checked/Approved: JN / BN  
Job #: 21-01-50  
N-01-50 LA Submittal.dwg

CITY FILE: #19-033  
SECTION # 14

## LANDSCAPE PLANTING DETAILS & NOTES

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**CAMBRIDGE KNOLL**  
 AVON RD.  
 ROCHESTER HILLS, MI  
 PART OF THE SW 1/4 OF SECTION 14,  
 T03N, R11E  
 PLAN SUBMITTED FOR SITE PLAN REVIEW - NOT FOR CONSTRUCTION.

**CLIENT:**  
 Cambridge Knoll, Inc.  
 Jim Polyzois  
 14955 Technology Drive,  
 Shelby Twp., MI 48315  
 Phone: (586) 421-5729

**IRRIGATION SCHEDULE**

SYMBOL	MANUFACTURER/MODEL	QTY
	Hunter PROS-04 5' strip spray	5
	Hunter PROS-04 10' radius	4
	Hunter PROS-04 12' radius	20
	Hunter PROS-04 15' radius	50
	Hunter MP Strip PROS-04-PRS40-CV	2
	Hunter MP1000 PROS-04-PRS40-CV	4
	Hunter MP2000 PROS-04-PRS40-CV	9
SYMBOL	MANUFACTURER/MODEL	QTY
	Hunter PGP-04	24
	Hunter PGP-04	71
	Hunter PGP-04	81
SYMBOL	MANUFACTURER/MODEL	QTY
	Rain Bird XCZ-100-PRF 1"	1
	Flush Valve	1
	Drip Air Relief Valve	1
	Drip Ring-0.6 @ 12" OC, Approx. 20 LF per tree	12
	Netafim TLDL-06-12	350.3 l.f.

SYMBOL	MANUFACTURER/MODEL	QTY
	Hunter PGV-101G 1"	1
	Hunter PGV-151 Globe 1-1/2"	14
	Hunter HQ-44RC 1"	1
	Isolation Valve Mainline Size	3
	Febco 765 1-1/2"	1
	Hunter PC-400 w/ (01) PCM-300 & (01) PCM-900	1
	Hunter WR-CLIK	1
	POC 1 1/2"	1
	Irrigation Lateral Line: Polyethylene Pipe 100 PSI 1"	4,289 l.f.
	Irrigation Lateral Line: Polyethylene Pipe 100 PSI 1 1/2"	1,831 l.f.
	Irrigation Lateral Line: Polyethylene Pipe 100 PSI 2"	222.9 l.f.
	Irrigation Mainline: PVC Class 160 SDR 26 2"	1,760 l.f.
	Pipe Sleeve: PVC Class 160 SDR 26 2"	238.8 l.f.
	Pipe Sleeve: PVC Class 160 SDR 26 4"	88.4 l.f.
	Valve Callout	
	Valve Number	
	Valve Flow	
	Valve Size	

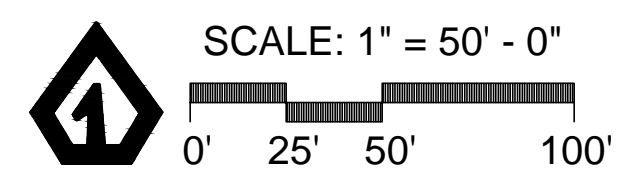
**IRRIGATION SPECIFICATIONS**

- IRRIGATION SYSTEM DESIGN BASED ON 50 GPM AT 62 PSI.
- IRRIGATION DESIGN IS FROM THE POINT OF CONNECTION (POC) ONLY. THE DESIGN IS BASED ON GALLONS PER MINUTE (GPM) AND POUNDS PER SQUARE INCH (PSI) FURNISHED BY OTHERS.
- IRRIGATION CONTRACTOR IS TO VERIFY POINT OF CONNECTION IN THE FIELD. INSTALLER IS TO CONFIRM THE MINIMUM DISCHARGE REQUIREMENTS OF THE POINT OF CONNECTION AS INDICATED ON THE LEGEND PRIOR TO INSTALLATION.
- THE PRESSURE REQUIREMENT AT THE POINT OF CONNECTION IS BASED ON NO MORE THAN 5 FEET OF ELEVATION CHANGE IN THE AREAS OF IRRIGATION.
- ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO LOCAL BUILDING, ELECTRICAL, AND PLUMBING CODES.
- IRRIGATION CONTRACTOR WILL ARRANGE INSPECTIONS REQUIRED BY LOCAL AGENCIES AND ORDINANCES DURING THE COURSE OF CONSTRUCTION AS REQUIRED. ALL WIRING TO BE PER LOCAL CODE. BACKFLOW PREVENTION TO BE PER LOCAL CODE.
- LOCATION OF IRRIGATION COMPONENTS SHOWN ON DRAWING IS APPROXIMATE. ACTUAL PLACEMENT MAY VARY SLIGHTLY AS REQUIRED TO ACHIEVE FULL, EVEN COVERAGE.
- ALL SPRINKLER HEADS SHALL BE INSTALLED PERPENDICULAR TO FINISH GRADES, EXCEPT AS OTHERWISE INDICATED.
- INSTALL IRRIGATION MAINS WITH A MINIMUM 18" OF COVER BASED ON FINISH GRADES. INSTALL IRRIGATION LATERALS WITH MINIMUM 12" OF COVER BASED ON FINISH GRADES.
- PIPE LOCATIONS ARE DIAGRAMMATIC. VALVES AND MAINLINE SHOWN IN PAVED AREAS ARE FOR GRAPHIC CLARITY ONLY.
- THE IRRIGATION CONTRACTOR SHALL COMPLY WITH PIPE SIZES AS INDICATED.
- ALL WIRE SPLICES OR CONNECTIONS SHALL BE MADE WITH APPROVED WATERPROOF WIRE CONNECTIONS AND BE IN A VALVE OR SPLICE BOX.
- ALL CONTROL WIRING DOWNSTREAM OF THE CONTROLLER IS TO BE 14 AWG, UL APPROVED DIRECT BURY.
- THE DESIGN IS BASED ON THE SITE INFORMATION AND/OR DRAWING SUPPLIED WITH THE DESIGN CRITERIA BEING SET (AREA TO BE IRRIGATED, EQUIPMENT MANUFACTURER AND MODEL TO BE USED, WATER SOURCE INFORMATION, ELECTRICAL POWER AVAILABILITY, ETC...). SITEONE LANDSCAPE SUPPLY BEARS NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS IN DESIGN OR INSTALLATION THAT ARISE DUE TO INACCURACIES IN THE ABOVE REFERENCED INFORMATION SUPPLIED TO SITEONE LANDSCAPE SUPPLY LANDSCAPES IN RELATION TO THIS PROJECT, UNLESS OTHERWISE NOTED.



1-800-347-4272  
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**CAMBRIDGE KNOLL**  
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 Design Date: 10/06/20  
 Drawn By: SW  
 Checked By: C. GRAHAM

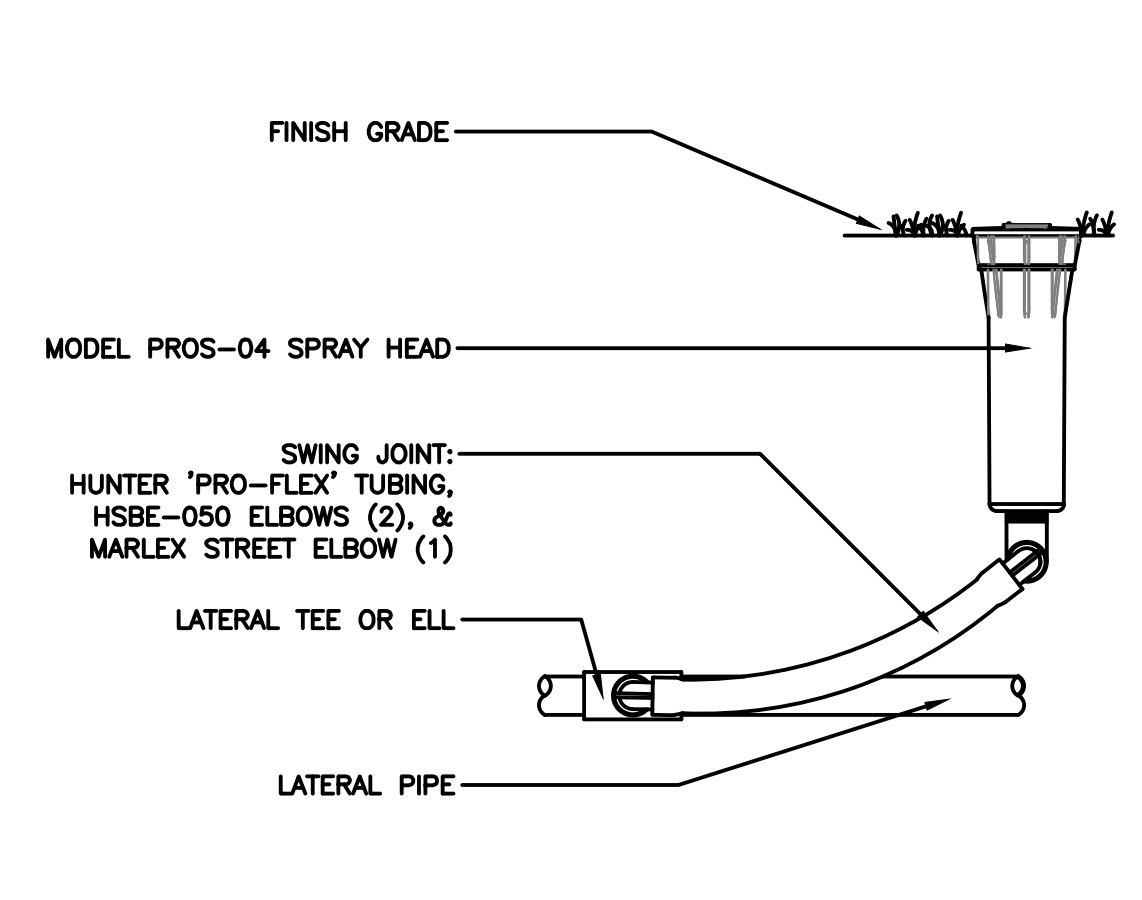


Date: 8/1/2019  
 Date Revisions: Submitted for Preliminary Review  
 8/22/2019 Submitted for Preliminary Review  
 7/6/2020 PC Submittal - Revision  
 10/2/2020 PC Final Submittal  
 12/7/2020 Final CC Approval  
 2/11/2022 Final Landscape Plans  
 6/3/2024 Preliminary & Final Submittal  
 8/26/2024 Review Comments Submittal

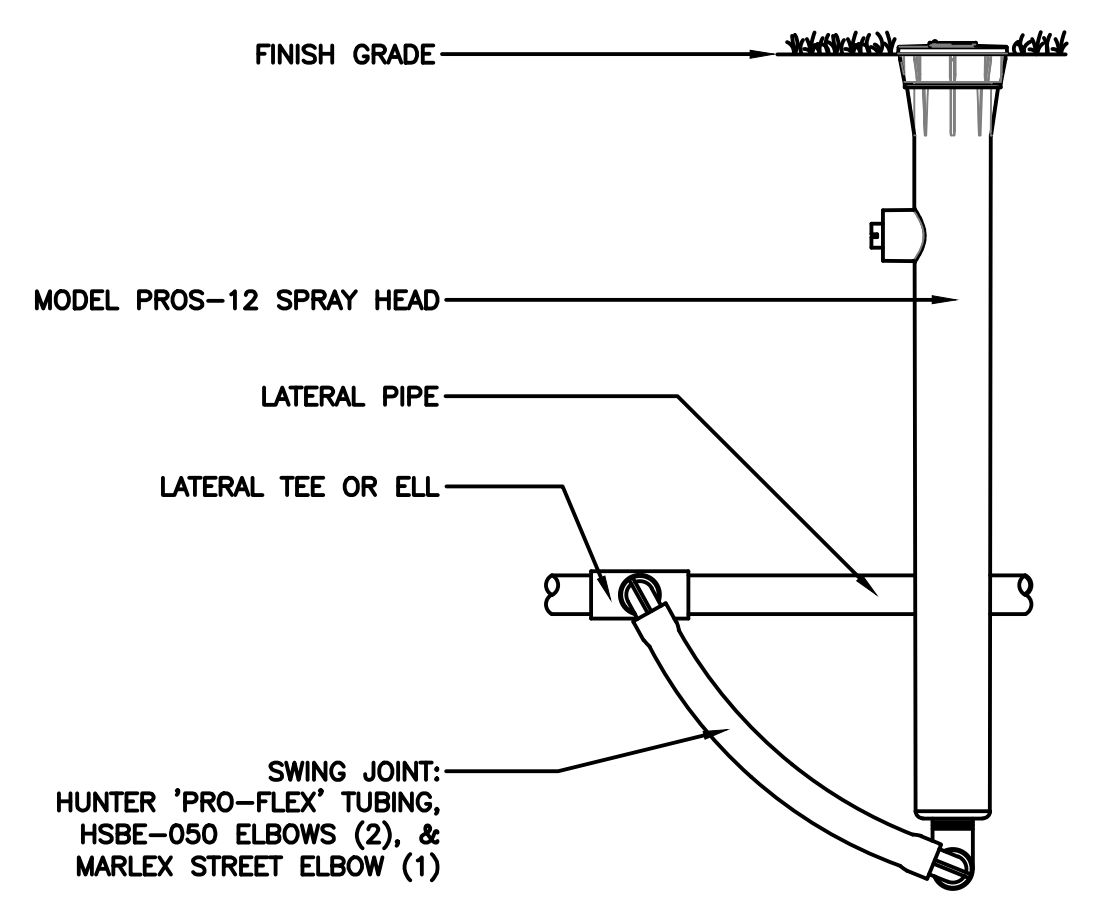


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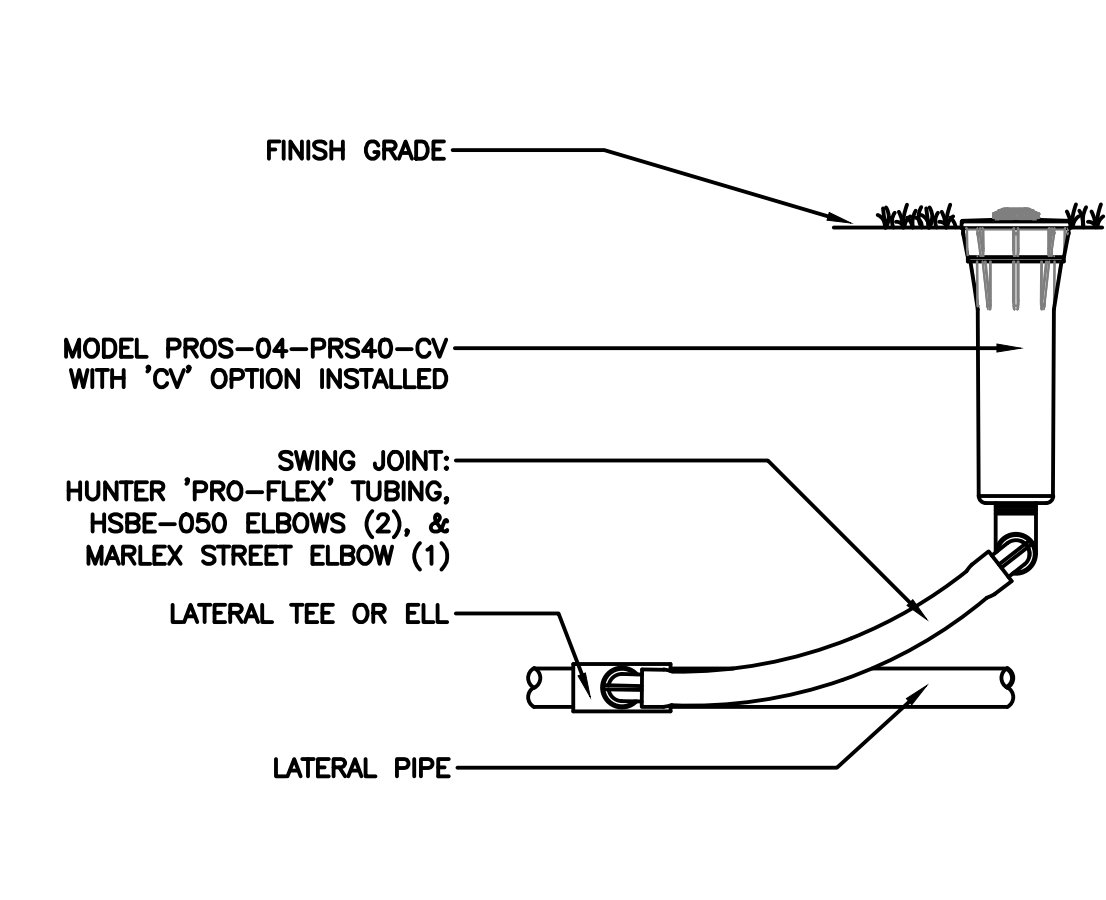




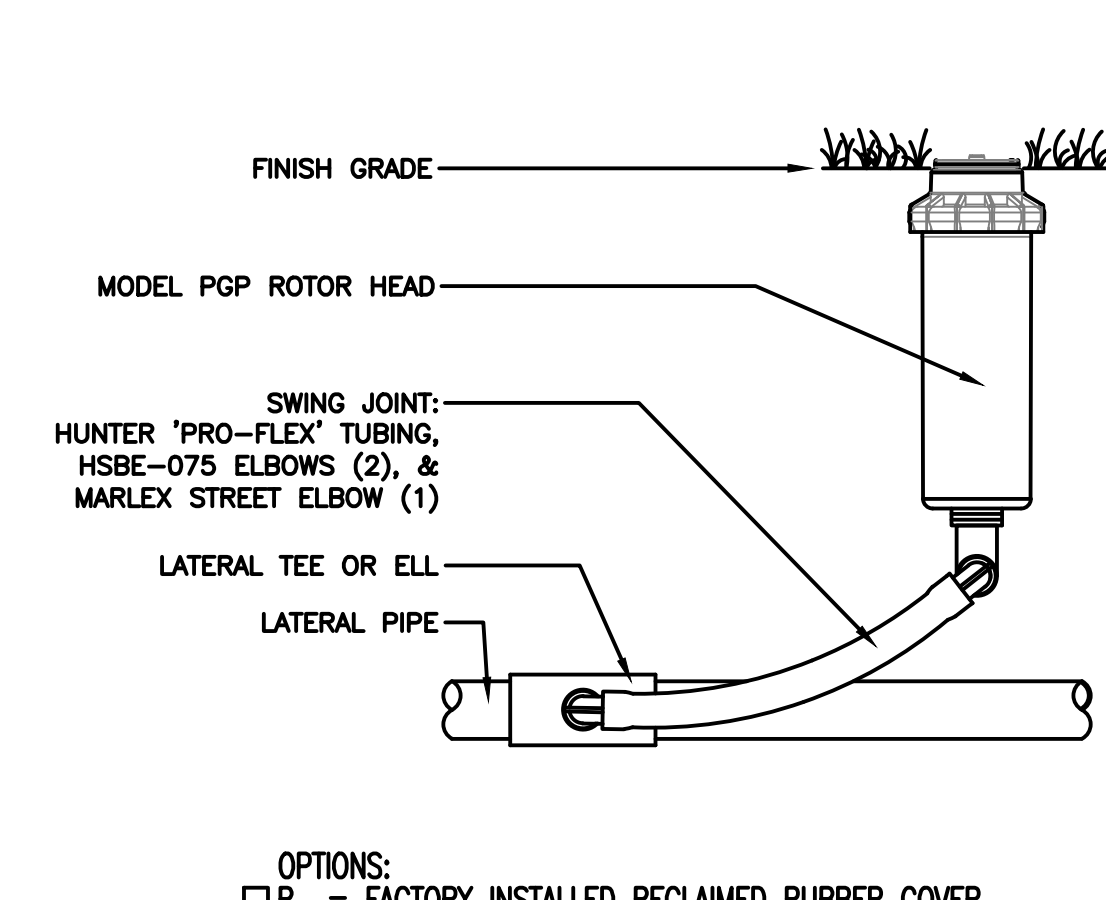
1 PROS-04 SPRAY HEAD WITH PRO-FLEX TUBING  
S1-SP-HUN-01



2 PROS-12 SPRAY HEAD WITH PRO-FLEX TUBING  
S1-SP-HUN-03

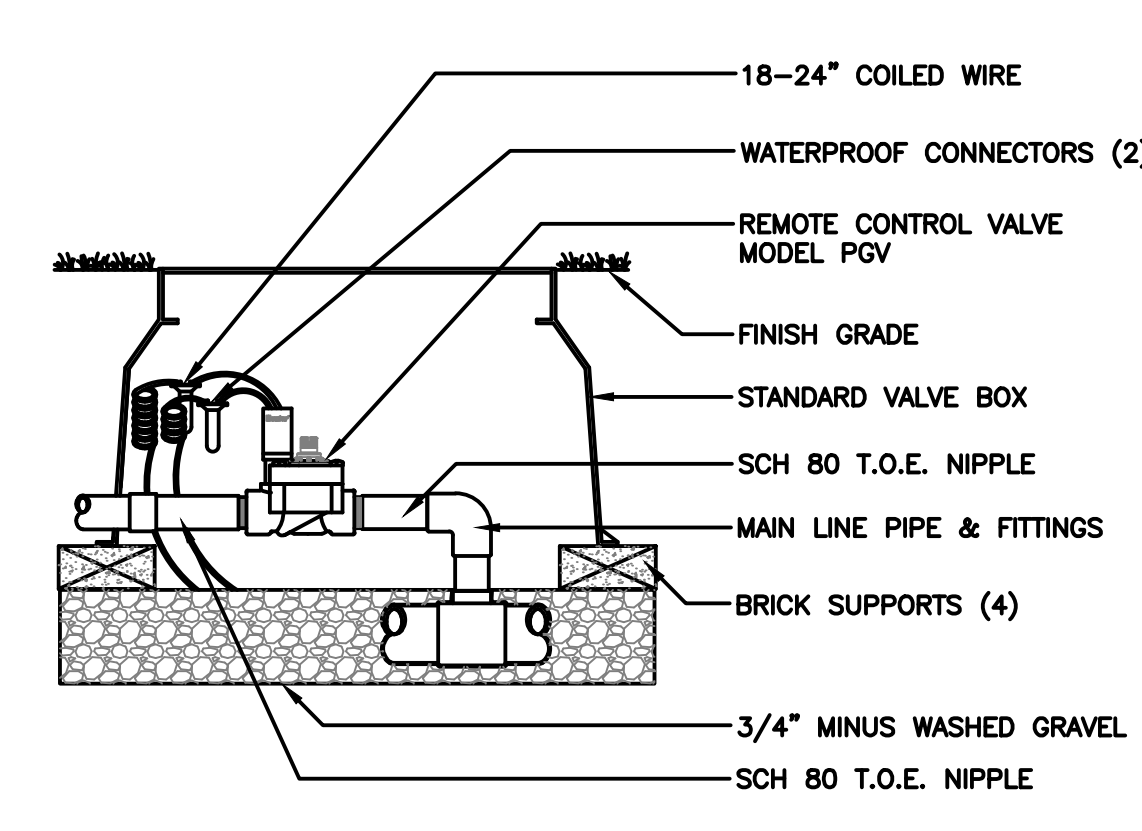


3 PROS-04-PRS40-CV MP ROTATOR SPRINKLER  
S1-RO-HUN-01

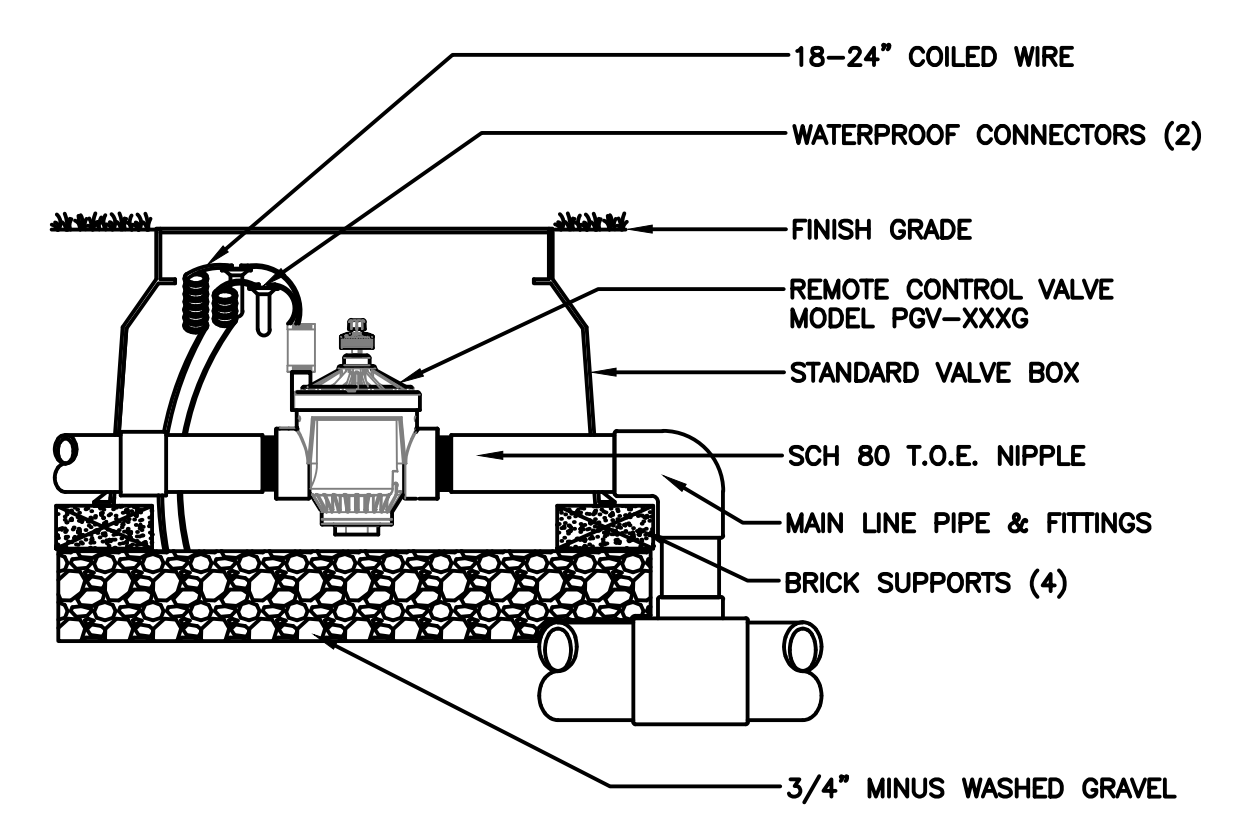


4 PGP ROTOR HEAD WITH PRO-FLEX TUBING  
NTS S1-RO-HUN-01

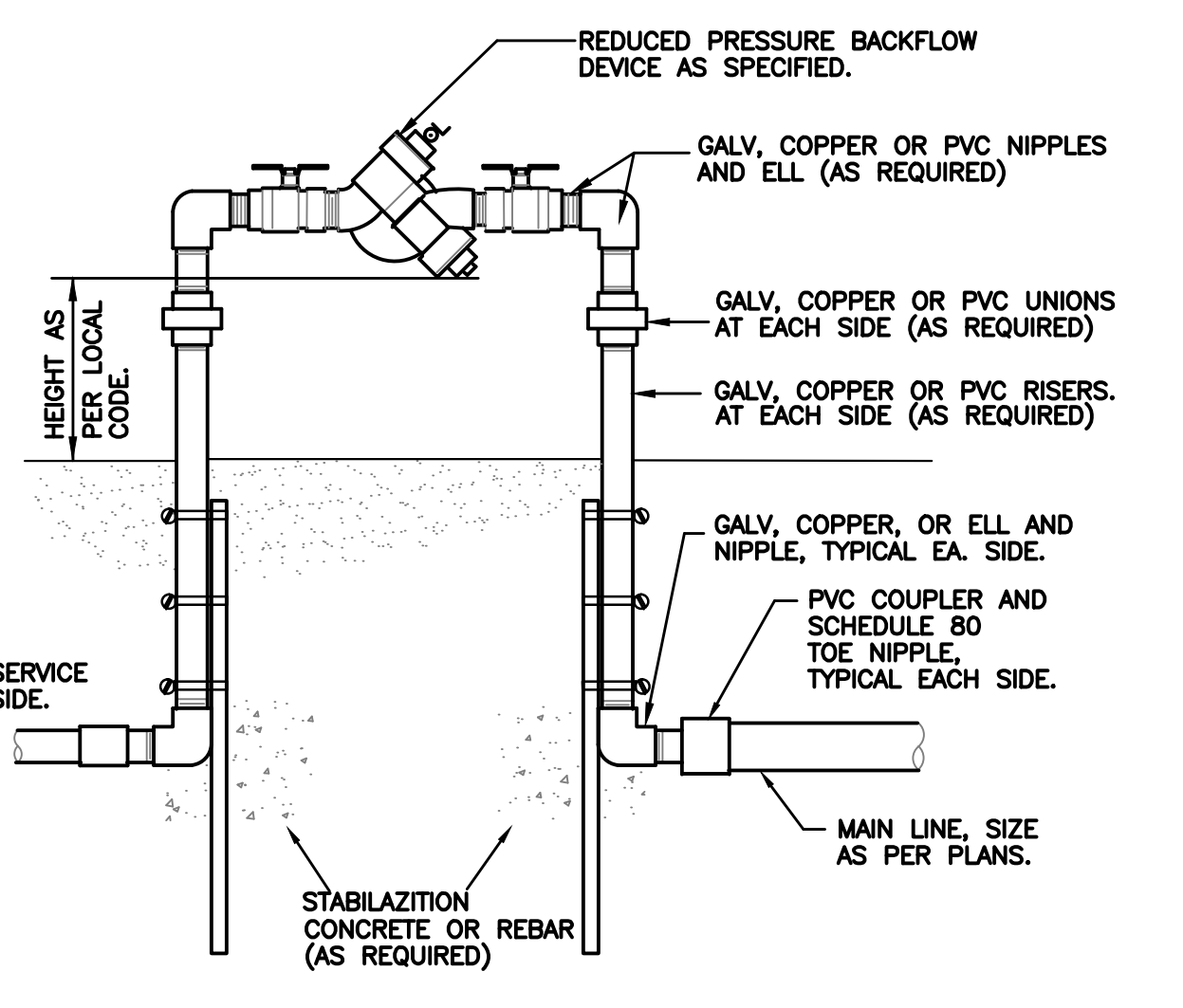
OPTIONS:  
 R = FACTORY INSTALLED RECLAIMED RUBBER COVER  
 CV = FACTORY INSTALLED DRAIN CHECK VALVE



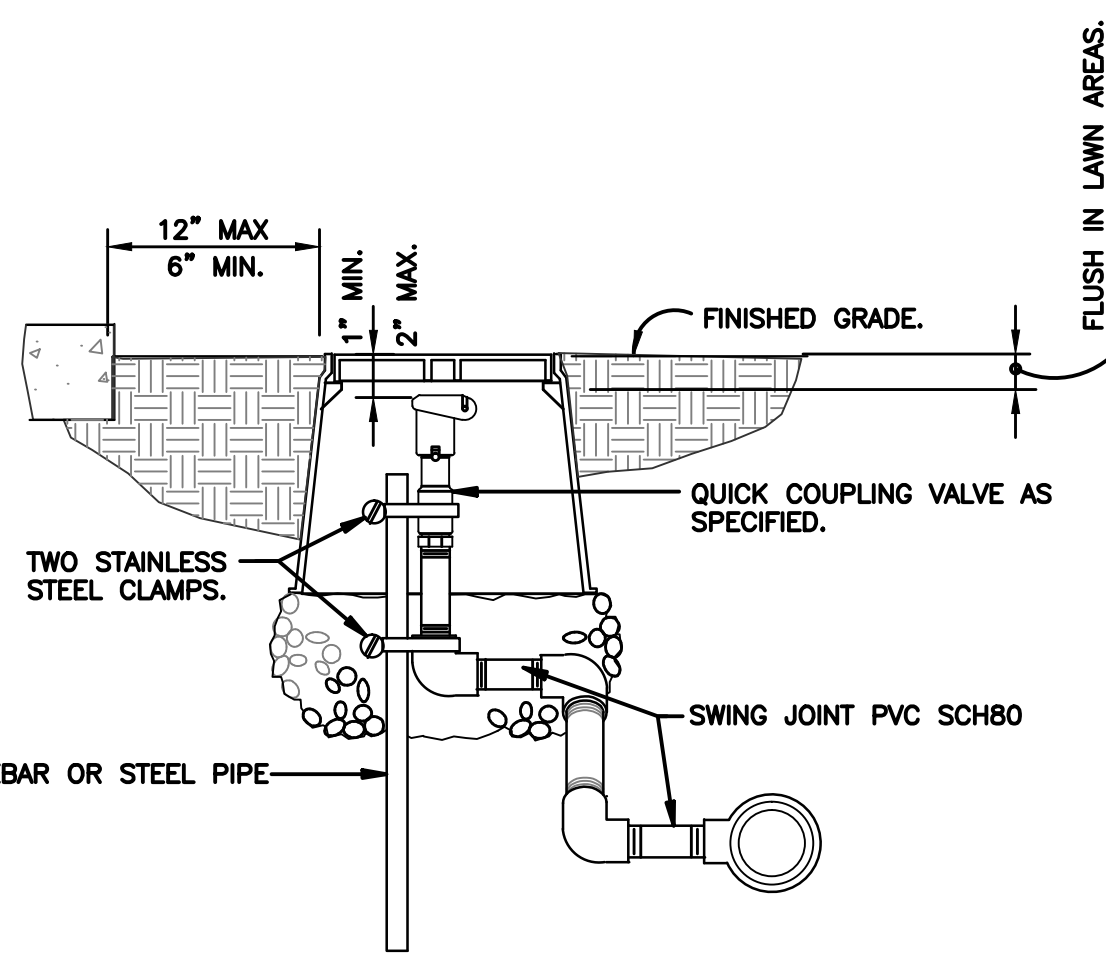
5 PGV GLOBE VALVE 1"  
S1-VA-HUN-01



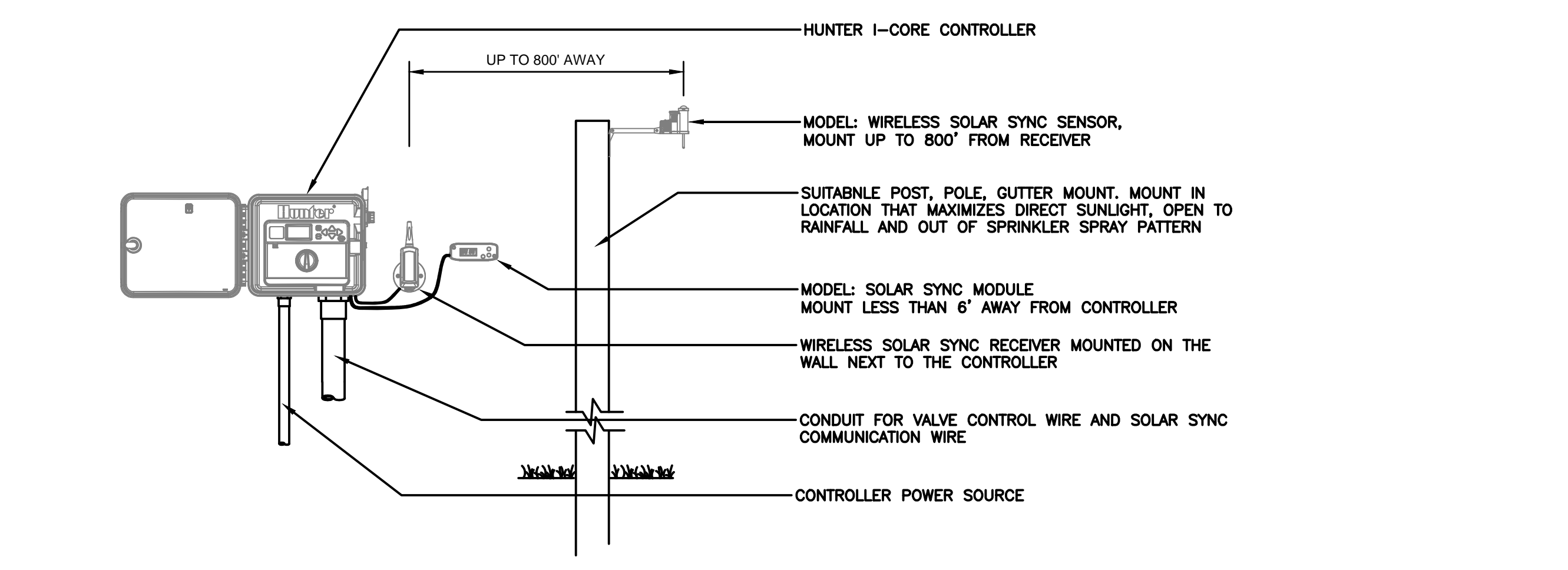
6 PGV GLOBE VALVE 151/201  
NTS S1-VA-HUN-02



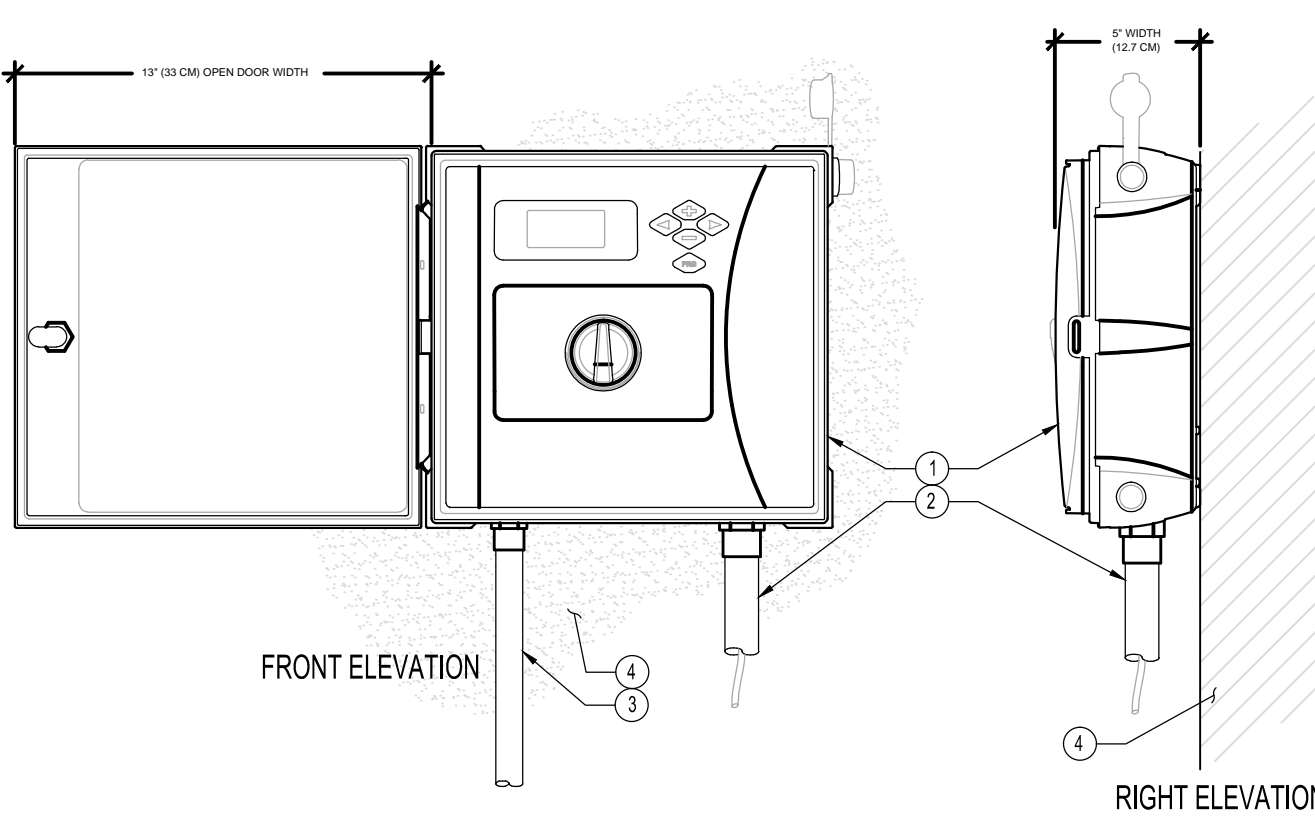
7 REDUCED PRESSURE BACKFLOW DEVICE STANDARD  
S1-BA-01



8 QUICK COUPLING VALVE IN BOX  
S1-QU-01



9 WIRELESS SOLAR SYNC SYSTEM WITH I-CORE  
NTS S1-SE-HUN-07



10 HUNTER ICC2 CONTROLLER PLASTIC WALL MOUNT  
NTS

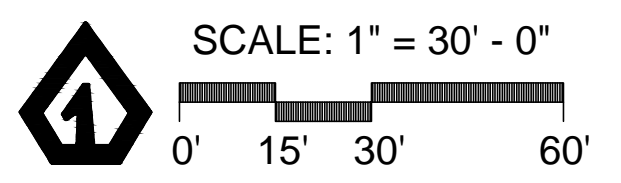
LEGEND:  
 1 IRRIGATION CONTROLLER (12C-800-PL) PER PLAN  
 2 IRRIGATION CONTROL WIRE IN CONDUIT SIZE AND TYPE PER LOCAL CODES  
 3 ELECTRICAL SUPPLY CONDUIT CONNECT TO POWER SOURCE, -BOX INSIDE CONTROLLER  
 4 ADJACENT SURFACE TO MOUNT CONTROLLER PER PLAN

NOTE:  
 MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL. CONTROLLER SHALL BE HARD-WIRED TO GROUNDING 110 VAC POWER SOURCE.

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Project Services Number: 232122  
 Design Date: 10/24/19  
 Drawn By: CH  
 Checked By: C. GRAHAM



CAMBRIDGE KNOLL  
 AVON RD.  
 ROCHESTER HILLS, MI  
 PART OF THE SW 1/4 OF SECTION 14,  
 T03N, R11E  
 PLAN SUBMITTED FOR SITE PLAN REVIEW - NOT FOR CONSTRUCTION.

CLIENT:  
 Cambridge Knoll, Inc.  
 Jim Polyois  
 14955 Technology Drive,  
 Shelby Twp., MI 48315  
 Phone: (586) 421-5729

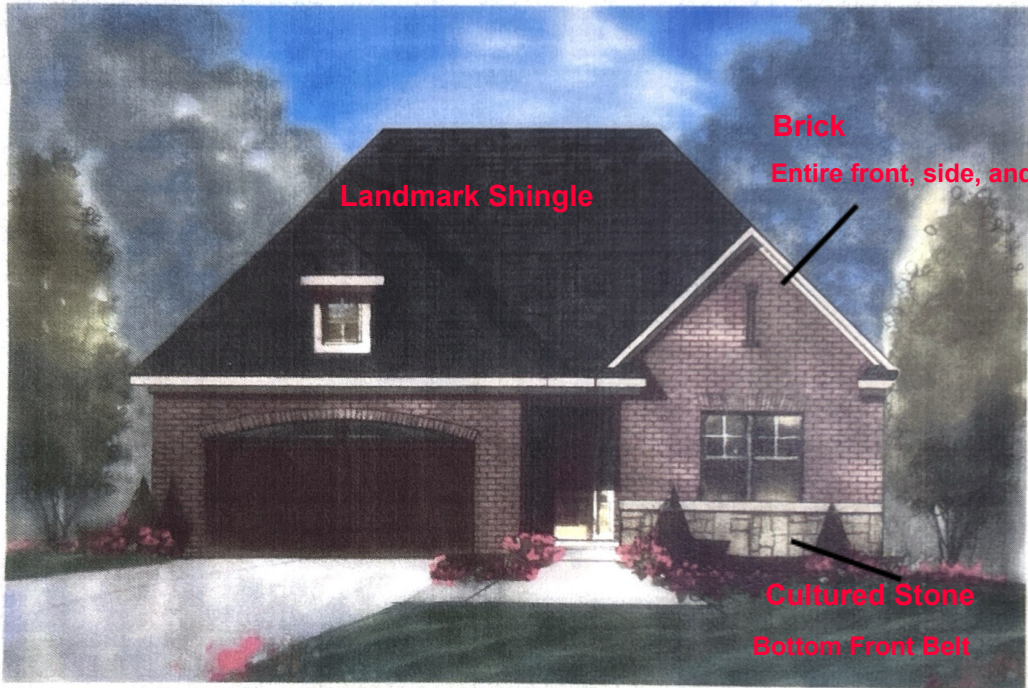
Date: 8/1/2019  
 Date/Revisions: Submitted for Preliminary Review  
 8/2/2019 Submitted for Preliminary Review  
 7/30/2020 PC Submittal - Review  
 10/2/2020 PC Final Submittal  
 12/7/2020 Final CC Approval  
 2/11/2023 Final Landscape Plans  
 6/3/2024 Preliminary & Final Submittal  
 8/26/2024 Review Comments Submittal

LANDSCAPE ARCHITECTURE • URBAN DESIGN  
 30645 Woodgate Drive  
 Southfield, Michigan 48076  
 P: 248.224.5933  
 nunezdesigninc@gmail.com

Designed/Drawn: RN / JN  
 Checked/Approved: JN / RN  
 Job #: 24101-00  
 Cambridge Knoll R11e

811

SHEET:  
 IR-1.1  
 CITY FILE: #19-033  
 SECTION #14



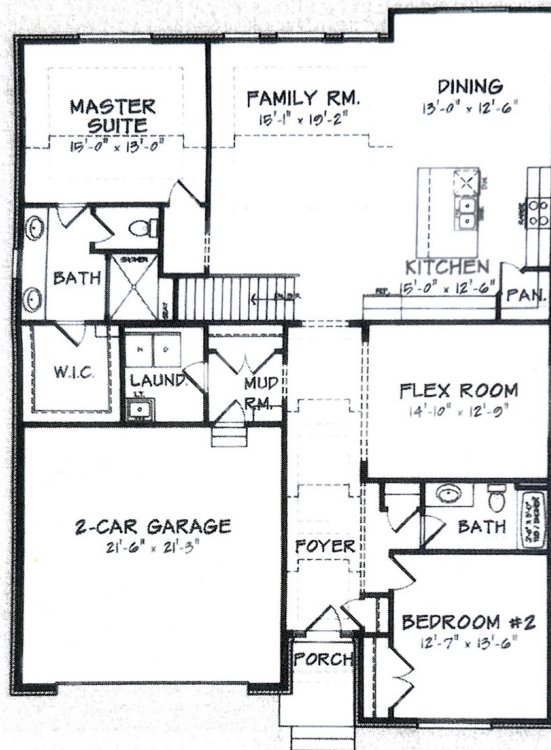
FRONT ELEVATION

Artist renderings and floor plans are for illustration purposes only and are subject to change. These plans are not to be reproduced, changed, or copied in any form or manner whatsoever, nor are they to be assigned to any third party without first obtaining the express written permission and consent of TR Design Group LLC.

WE RESERVE THE RIGHT TO MAKE CHANGES IN DESIGN, FEATURES AND OPTIONS WITHOUT NOTICE OR OBLIGATION. ELEVATION PLAN DIMENSIONS AND SQUARE FOOTAGES ARE APPROXIMATE. NOTE: PLANS WILL VARY PER ELEVATION.







## FIRST FLOOR PLAN

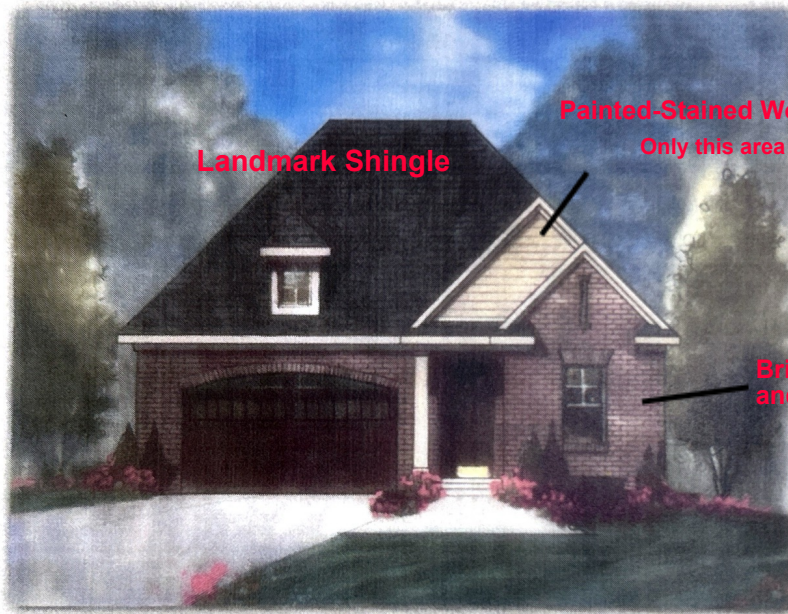
**SQUARE FOOTAGE**  
 FIRST FLOOR: 1,994 SQ. FT.  
 45'-0" X 57'-0" FOOTPRINT

Artist renderings and floor plans are for illustration purposes only and are subject to change. These plans are not to be reproduced, changed, or copied in any form or manner whatsoever. Nor are they to be assigned to any third party without first obtaining the express written permission and consent of TR Design Group LLC.

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# Rochester Hills



Landmark Shingle

Painted-Stained Wood Material  
Only this area

Brick entire front, sides,  
and back

FRONT ELEVATION

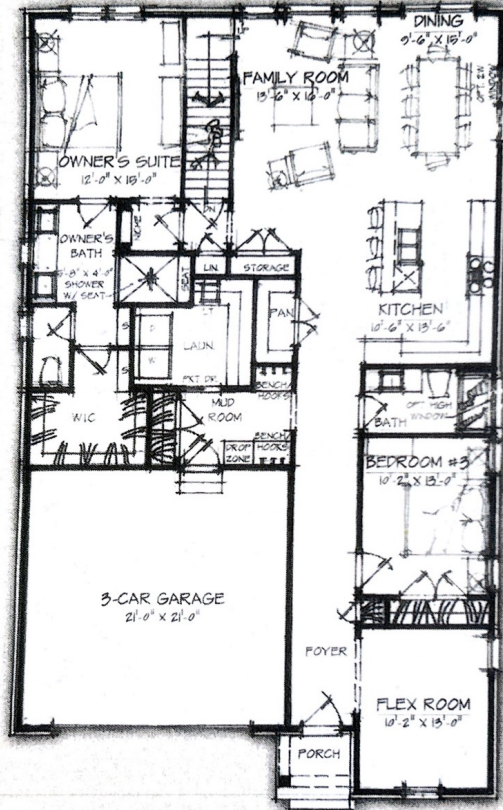


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# Rochester Hills



## FIRST FLOOR PLAN

**SQUARE FOOTAGE**  
FIRE FLOOR: 1,922 SQ. FT.

39'-0" X 65'-0" FOOTPRINT



Artist renderings and floor plans are for illustration purposes only and are subject to change. These plans are not to be reproduced, changed, or copied in any form or manner whatsoever. Nor are they to be assigned to any third party without first obtaining the express written permission and consent of TR Design Group LLC.

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# Site plan.pdf Markup Summary

---

Assessing Yes (1)

---

Assessing Yes

**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:56:23 AM  
**Status:**

Assessing

Yes

---

BP (1)

---



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:53 AM  
**Status:**

BP

---

City of Rochester Hills Planning & Economic Development (1)

---



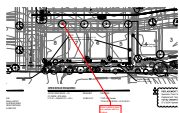
**Subject:** Group  
**Author:** macdonaldj  
**Date:** 11/4/2024 3:07:54 PM  
**Status:**

City of Rochester Hills Planning & Economic Development

---

ensure planting does not interfere with fire hydrant (1)

---



**Subject:** Fire Department  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:30:03 AM  
**Status:**

ensure planting does not interfere with fire hydrant

---

If access is not granted by homeowner of 180 E. Avon, the landscaping shall not be a requirement of the approval. (1)

---



**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:10:51 PM  
**Status:**

If access is not granted by homeowner of 180 E. Avon, the landscaping shall not be a requirement of the approval.

---

Jason Rhoades 248-841-2435 RhoadesJa@RochesterHills.org (1)

---

Jason Rhoades 248-841-2435  
RhoadesJa@RochesterHills.org

**Subject:** Building Department  
**Author:** J Rhoades  
**Date:** 11/11/2024 8:24:58 AM  
**Status:**

Jason Rhoades 248-841-2435  
RhoadesJa@RochesterHills.org

---

LIP (1)

---



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:37 AM  
**Status:**

LIP

Maintenance. The owner, tenant, occupant or person responsible for any property which was the subject of an approved site plan s

**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:17:23 PM  
**Status:**

Maintenance. The owner, tenant, occupant or person responsible for any property which was the subject of an approved site plan shall maintain the property and the improvements thereon in accordance with the approved site plan or an approved amendment thereof. This responsibility shall include the duty to maintain in a condition substantially similar as approved, including the duty to replace, if necessary, all improvements such as, but not by way of limitation, all greenbelts, planting, walls, fences, paving, trash receptacles, handicapped parking areas, etc.

MR District requires a minimum of ten (10) acres. A modification is required to develop pursuant to the MR District. (1)

**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:18:30 PM  
**Status:**

MR District requires a minimum of ten (10) acres. A modification is required to develop pursuant to the MR District.

Provide RCOC permit (1)

**Subject:** Traffic, Pathways, Sidewalks  
**Author:** Keith  
**Date:** 11/6/2024 8:23:42 AM  
**Status:**

Provide RCOC permit

Received 11/4/2024 City of Rochester Hills Planning & Economic Development (22)



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:13:58 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:57 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:50 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:44 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:40 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development





**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:53 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:48 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:42 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic  
Development



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**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:33 PM  
**Status:**

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11/4/2024

City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:22 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:16 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic  
Development

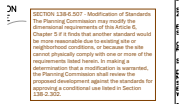


**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:10 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic  
Development

**SECTION 138-6.507 - Modification of Standards** The Planning Commission may modify the dimensional requirements of this Article



**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:18:08 PM  
**Status:**

SECTION 138-6.507 - Modification of Standards  
The Planning Commission may modify the  
dimensional requirements of this Article 6, Chapter  
5 if it finds that another standard would be more  
reasonable due to existing site or neighborhood  
conditions, or because the site cannot physically  
comply with one or more of the requirements listed  
herein. In making a determination that a  
modification is warranted, the Planning  
Commission shall review the proposed  
development against the standards for approving a  
conditional use listed in Section 138-2.302.

**SP (1)**



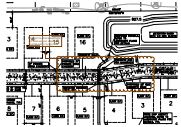
**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:33 AM  
**Status:**

SP

---

Subject to final acceptance of roadway and easement configuration by City DPS (1)

---



**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:17:53 PM  
**Status:**

Subject to final acceptance of roadway and easement configuration by City DPS

---

The applicant will need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans

---



**Subject:** Engineering Department  
**Author:** Jason Boughton  
**Date:** 11/5/2024 9:10:38 AM  
**Status:**

The applicant will need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to proceed with the construction plan review process.

---

Yes (1)

---

Yes

**Subject:** Building Department  
**Author:** J Rhoades  
**Date:** 11/11/2024 8:25:02 AM  
**Status:**

Yes

---

(13)

---

Jason Boughton 248-641-2400 BoughtonJ@RochesterRIle.org Yes

**Subject:** Engineering Department  
**Author:** Jason Boughton  
**Date:** 11/5/2024 9:13:03 AM  
**Status:**

Matt Cheng 248-641-2523 ChengM@RochesterRIle.org Yes

**Subject:** Traffic  
**Author:** Keith  
**Date:** 11/6/2024 8:23:52 AM  
**Status:**

Ann Echols 248-641-2701 EcholsA@RochesterRIle.org Yes

**Subject:** Fire Department  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:30:46 AM  
**Status:**

Matt Einheuser 248-641-2551 EinheuserM@RochesterRIle.org Yes

**Subject:** Natural Resources  
**Author:** Matt Einheuser  
**Date:** 11/8/2024 2:28:06 PM  
**Status:**

Jenny McGuckin 248-641-2551 McGuckinJ@RochesterRIle.org Yes

**Subject:** Jenny McGuckin - YES  
**Author:** Seth Bucholz  
**Date:** 11/12/2024 8:39:25 AM  
**Status:**

C.McLeod 248-641-2400 McLeodC@RochesterRIle.org Yes

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:11 AM  
**Status:**





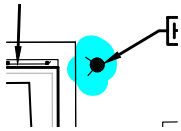
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**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:45 AM  
**Status:**

Chris McLeod 268.841.2072  
cmcleod@trpwatertrb.org

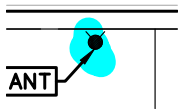
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**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:23:56 PM  
**Status:**



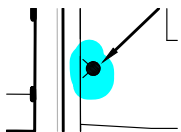
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**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:10 AM  
**Status:**



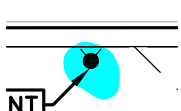
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**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:12 AM  
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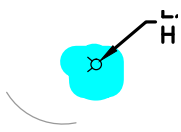
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**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:14 AM  
**Status:**



---

**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:16 AM  
**Status:**



---

**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:20 AM  
**Status:**

# Site plan.pdf Markup Summary

---

## Assessing Yes (1)

---

Assessing Yes

**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:56:23 AM  
**Status:**

Assessing

Yes

---

## BP (1)

---



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:53 AM  
**Status:**

BP

---

## City of Rochester Hills Planning & Economic Development (1)

---



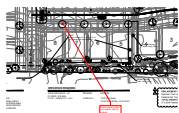
**Subject:** Group  
**Author:** macdonaldj  
**Date:** 11/4/2024 3:07:54 PM  
**Status:**

City of Rochester Hills Planning & Economic Development

---

## ensure planting does not interfere with fire hydrant (1)

---



**Subject:** Fire Department  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:30:03 AM  
**Status:**

ensure planting does not interfere with fire hydrant

---

## If access is not granted by homeowner of 180 E. Avon, the landscaping shall not be a requirement of the approval. (1)

---



**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:10:51 PM  
**Status:**

If access is not granted by homeowner of 180 E. Avon, the landscaping shall not be a requirement of the approval.

---

## Jason Rhoades 248-841-2435 RhoadesJa@RochesterHills.org (1)

---

Jason Rhoades 248-841-2435  
RhoadesJa@RochesterHills.org

**Subject:** Building Department  
**Author:** J Rhoades  
**Date:** 11/11/2024 8:24:58 AM  
**Status:**

Jason Rhoades 248-841-2435  
RhoadesJa@RochesterHills.org

---

## LIP (1)

---



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:37 AM  
**Status:**

LIP

Maintenance. The owner, tenant, occupant or person responsible for any property which was the subject of an approved site plan s

**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:17:23 PM  
**Status:**

Maintenance. The owner, tenant, occupant or person responsible for any property which was the subject of an approved site plan shall maintain the property and the improvements thereon in accordance with the approved site plan or an approved amendment thereof. This responsibility shall include the duty to maintain in a condition substantially similar as approved, including the duty to replace, if necessary, all improvements such as, but not by way of limitation, all greenbelts, planting, walls, fences, paving, trash receptacles, handicapped parking areas, etc.

MR District requires a minimum of ten (10) acres. A modification is required to develop pursuant to the MR District. (1)

**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:18:30 PM  
**Status:**

MR District requires a minimum of ten (10) acres. A modification is required to develop pursuant to the MR District.

Provide RCOC permit (1)

**Subject:** Traffic, Pathways, Sidewalks  
**Author:** Keith  
**Date:** 11/6/2024 8:23:42 AM  
**Status:**

Provide RCOC permit

Received 11/4/2024 City of Rochester Hills Planning & Economic Development (22)

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:13:58 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:57 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:50 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:44 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:40 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

FORWARDED TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW AND TO BE INCLUDED IN THE REPORT TO BE SUBMITTED TO THE CITY ENGINEERING DEPARTMENT.



CIT

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:07 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

FORWARDED TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW AND TO BE INCLUDED IN THE REPORT TO BE SUBMITTED TO THE CITY ENGINEERING DEPARTMENT.



CIT

TY FILE #19-033, SECTION #14

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:16:02 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

FORWARDED TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW AND TO BE INCLUDED IN THE REPORT TO BE SUBMITTED TO THE CITY ENGINEERING DEPARTMENT.



CIT

TY FILE #19-033, SECTION #14

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:15:54 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

FORWARDED TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW AND TO BE INCLUDED IN THE REPORT TO BE SUBMITTED TO THE CITY ENGINEERING DEPARTMENT.



CIT

TY FILE #19-033, SECTION #14

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:15:49 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

CITY REFERENCE NUMBER  
City File: #19-033



CC

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:15:44 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

FORWARDED TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW AND TO BE INCLUDED IN THE REPORT TO BE SUBMITTED TO THE CITY ENGINEERING DEPARTMENT.



EXI

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:15:38 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

R TO SHEET LA-2.0 FOR TREE I  
L & NOTE



TR

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:15:33 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

FORWARDED TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW AND TO BE INCLUDED IN THE REPORT TO BE SUBMITTED TO THE CITY ENGINEERING DEPARTMENT.



L

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:15:13 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development

REVISED TO REFLECT UPDATED ENGINEERING



L

LANDSCAPE PLANTING I

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:15:07 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development



L

REPLACEMENT TREE CREDIT

**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:59 PM  
**Status:**

Received  
11/4/2024

City of Rochester Hills Planning & Economic Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:53 PM  
**Status:**

Received  
11/4/2024  
City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:48 PM  
**Status:**

Received  
11/4/2024  
City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:42 PM  
**Status:**

Received  
11/4/2024  
City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:33 PM  
**Status:**

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Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:22 PM  
**Status:**

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11/4/2024  
City of Rochester Hills Planning & Economic  
Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:16 PM  
**Status:**

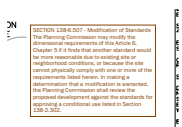
Received  
11/4/2024  
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Development



**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:14:10 PM  
**Status:**

Received  
11/4/2024  
City of Rochester Hills Planning & Economic  
Development

**SECTION 138-6.507 - Modification of Standards** The Planning Commission may modify the dimensional requirements of this Article



**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:18:08 PM  
**Status:**

SECTION 138-6.507 - Modification of Standards  
The Planning Commission may modify the  
dimensional requirements of this Article 6, Chapter  
5 if it finds that another standard would be more  
reasonable due to existing site or neighborhood  
conditions, or because the site cannot physically  
comply with one or more of the requirements listed  
herein. In making a determination that a  
modification is warranted, the Planning  
Commission shall review the proposed  
development against the standards for approving a  
conditional use listed in Section 138-2.302.

**SP (1)**



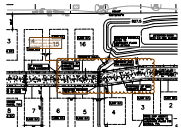
**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:33 AM  
**Status:**

SP

---

Subject to final acceptance of roadway and easement configuration by City DPS (1)

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**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:17:53 PM  
**Status:**

Subject to final acceptance of roadway and easement configuration by City DPS

---

The applicant will need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans

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**Subject:** Engineering Department  
**Author:** Jason Boughton  
**Date:** 11/5/2024 9:10:38 AM  
**Status:**

The applicant will need to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to proceed with the construction plan review process.

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Yes (1)

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Yes

**Subject:** Building Department  
**Author:** J Rhoades  
**Date:** 11/11/2024 8:25:02 AM  
**Status:**

Yes

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(13)

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Jason Boughton 248-641-2400 BoughtonJ@RochesterNH.org Yes

**Subject:** Engineering Department  
**Author:** Jason Boughton  
**Date:** 11/5/2024 9:13:03 AM  
**Status:**

Matt Cheng 248-641-2523 ChengM@RochesterNH.org Yes

**Subject:** Traffic  
**Author:** Keith  
**Date:** 11/6/2024 8:23:52 AM  
**Status:**

Ann Echols 248-641-2701 EcholsA@RochesterNH.org Yes

**Subject:** Fire Department  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:30:46 AM  
**Status:**

Matt Einheuser 248-641-2551 EinheuserM@RochesterNH.org Yes

**Subject:** Natural Resources  
**Author:** Matt Einheuser  
**Date:** 11/8/2024 2:28:06 PM  
**Status:**

Jenny McGuckin 248-641-2551 McGuckinJ@RochesterNH.org Yes

**Subject:** Jenny McGuckin - YES  
**Author:** Seth Bucholz  
**Date:** 11/12/2024 8:39:25 AM  
**Status:**

C.McLeod 248-641-2400 McLeodC@RochesterNH.org Yes

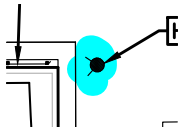
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**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:11 AM  
**Status:**



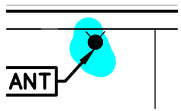
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**Subject:** Group  
**Author:** C.McLeod  
**Date:** 11/15/2024 11:59:45 AM  
**Status:**

Chris McLeod 2024-04-11 2022  
 mcLeod@trp.com

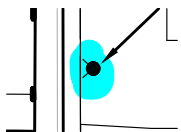
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**Subject:** Planning Department  
**Author:** C.McLeod  
**Date:** 11/15/2024 12:23:56 PM  
**Status:**



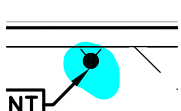
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**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:10 AM  
**Status:**



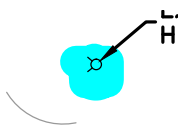
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**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:12 AM  
**Status:**



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**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:14 AM  
**Status:**



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**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:16 AM  
**Status:**



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**Subject:** Highlight  
**Author:** Ann Echols  
**Date:** 11/6/2024 9:28:20 AM  
**Status:**