Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
SITE	+	0.6 fc	5.7 fc	0.0 fc	N/A	N/A	0.1:1
Parking and Drives	ж	1.0 fc	3.6 fc	0.1 fc	36.0:1	10.0:1	0.3:1
Property Line	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A	N/A

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
	A1	3	Lithonia Lighting	DSX1 LED P2 40K T5W MVOLT	DSX1 LED P2 40K T5W MVOLT	LED	9175	0.9	70
	A2	2	Lithonia Lighting	DSX1 LED P2 40K T5W MVOLT	DSX1 LED P2 40K T5W MVOLT	LED	9175	0.9	140
	В	7	Lithonia Lighting	DSX1 LED P2 40K BLC MVOLT	DSX1 LED P2 40K BLC MVOLT	LED	7293	0.9	70
	DW	13	Lithonia Lighting	WDGE1 LED P1 40K 90CRI VF	WDGE1 LED WITH P1 - PERFORMANCE PACKAGE, 4000K, 90CRI, VISUAL COMFORT FORWARD OPTIC	LED	1086	0.9	10.000
	WP	21	Lithonia Lighting	DSXW1 LED 10C 700 40K TFTM MVOLT	DSXW1 LED WITH (1) 10 LED LIGHT ENGINES, TYPE TFTM OPTIC, 4000K, @ 700mA.	LED	2808	0.9	26.2

Power Statistics								
Description	# Luminaires	Total Watts	Area	Density				
Power Density Zone # 2	46	1660.203 W	221371.400 ft ²	0.007 W/ft ²				

General Note

- 1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
- 2. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' 0"
- 3. LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

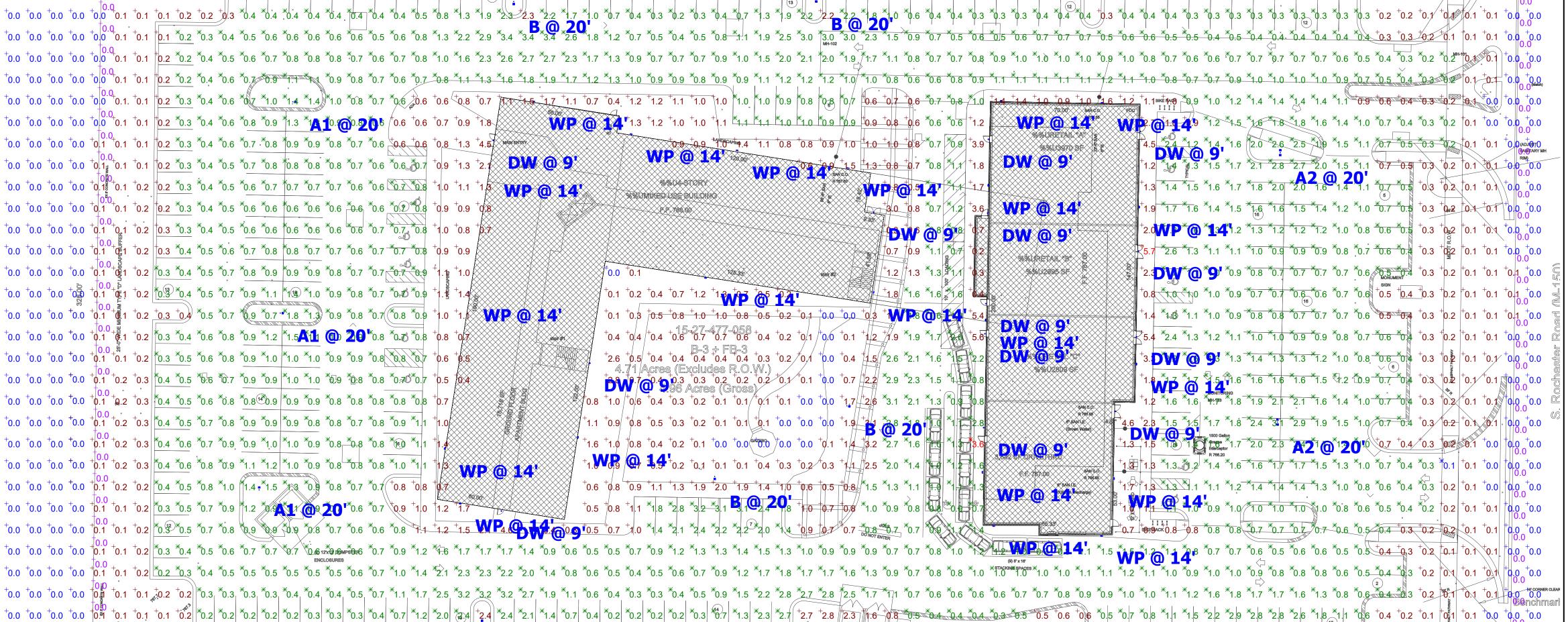
THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

FOR ORDERING INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

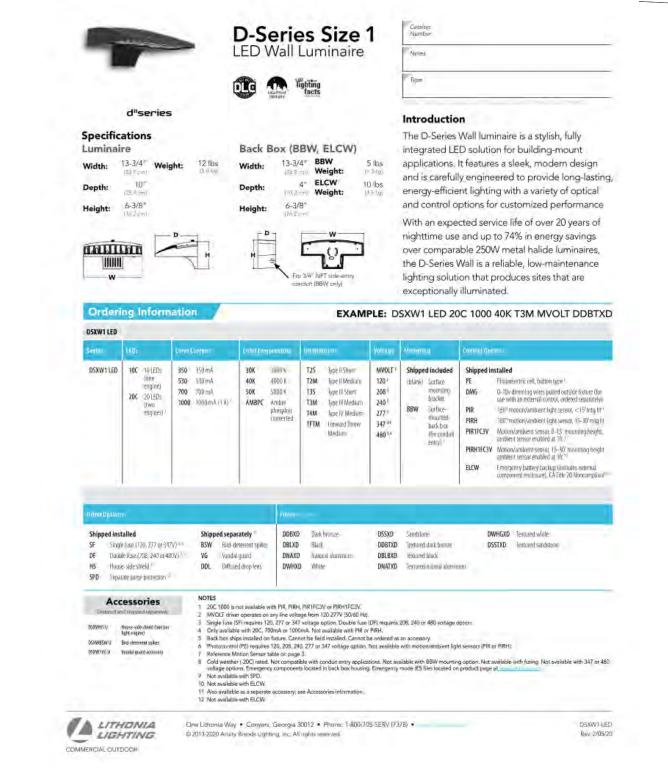
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT

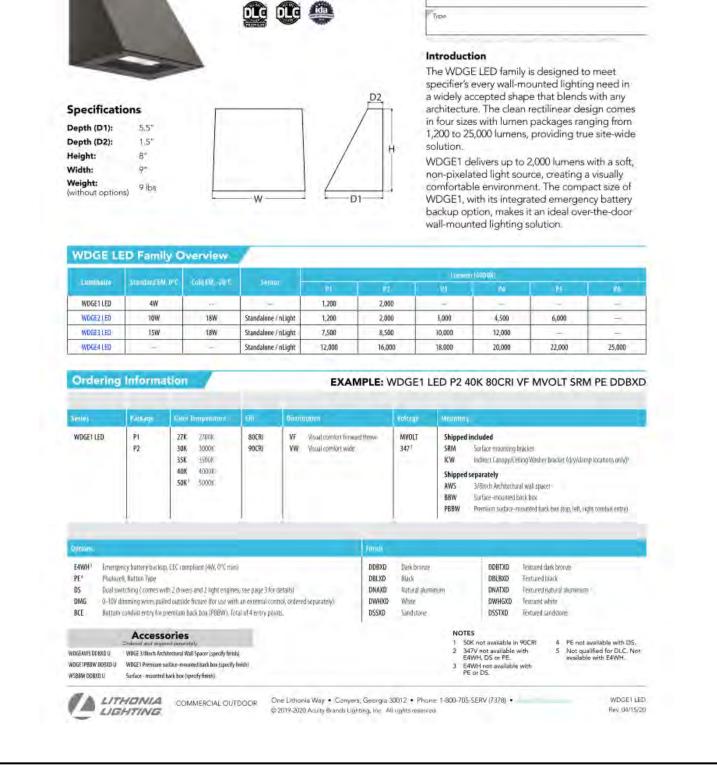


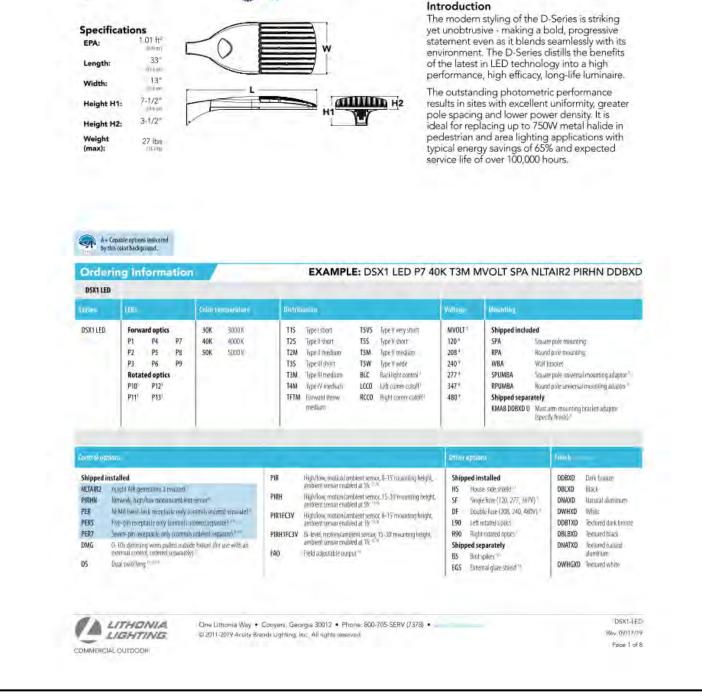
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WDGE1 LED

Architectural Wall Sconce







D-Series Size 1

LED Area Luminaire

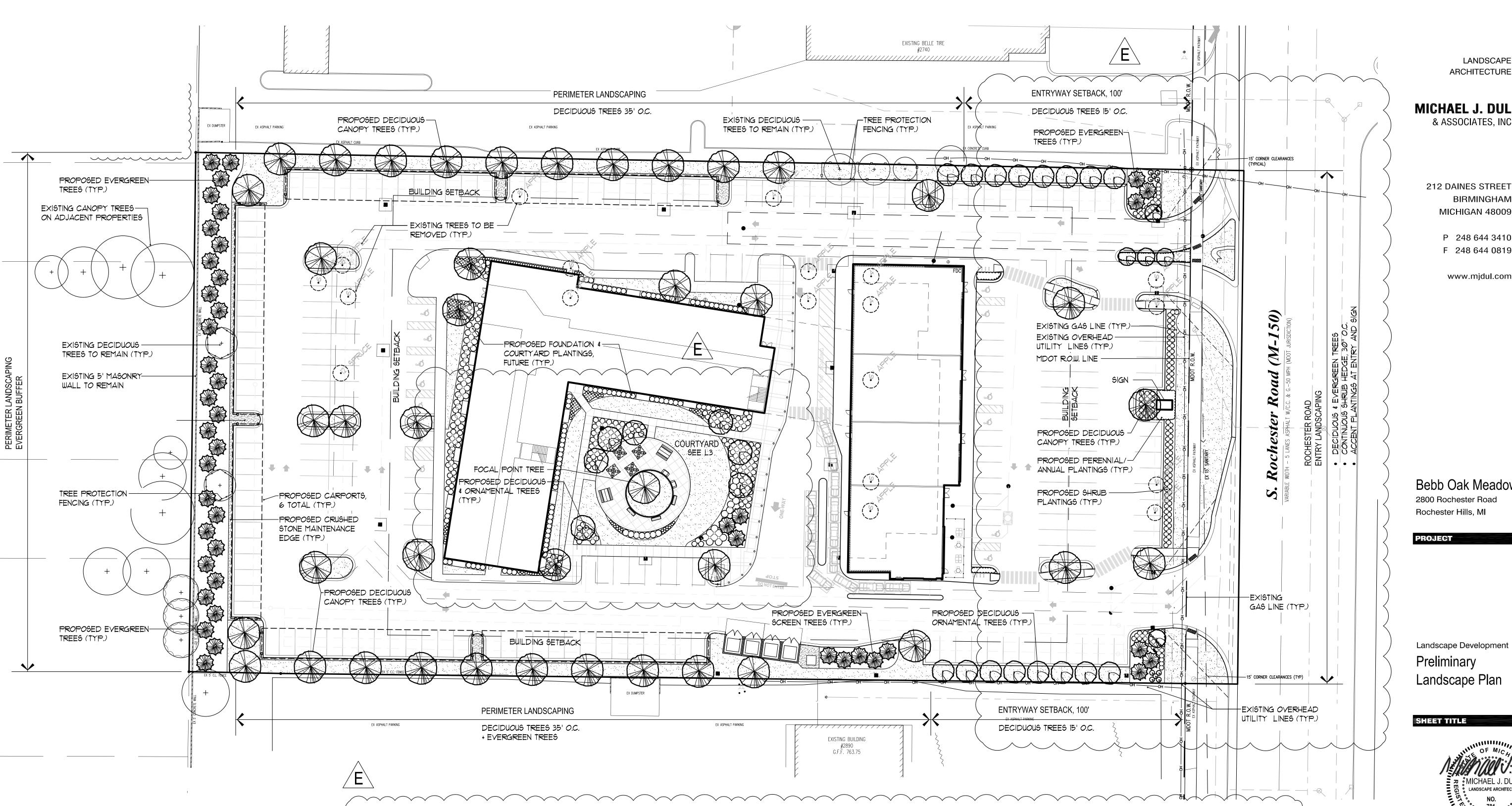
Designer Date 12/01/2021 Scale Not to Scale **Drawing No.**

#21-50170 V1

SL.1

OY ERIOR PR GASSE WWW

G



EXISTING TREE CALCULATIONS	OVERALL SITE	INSIDE BUILDING ENVELOPE	
EXISTING TREES:			
TOTAL EXISTING TREES 6" CALIPER OR GREATER: TOTAL EXISTING TREES LESS THAN 6" CALIPER:	18 6	5/18 5/6	 13/18 1/6
TOTAL EXISTING TE	REES: 24		
REGULATED TREE PRESERVATION:			
TOTAL EXISTING REGULATED TREES, 6-8" CALIPER:	12	5/12	7/12
TOTAL EXISTING REGULATED TREES, 9"+ CALIPER:	6	1/6	5/6
EXISTING REGULATED TREES TO BE REMOVED, 6-8" CALIPER:	12	5/12	7/12
EXISTING REGULATED TREES TO BE REMOVED, 9"+ CALIPER:	1		1/1
EXISTING REGULATED TREES TO REMAIN, 6-8" CALIPER:	Ø /12	Ø/5	Ø/T
EXISTING REGULATED TREES TO REMAIN, 9"+ CALIPER:	5/6	Ø	5/6
TREE PRESERVATION, 6-8" CALIPER:	<i>Ø</i> %	Ø%	<i>Ø</i> %
TREE PRESERVATION, 9"+ CALIPER:	83%		83%
TREE PRESERVATION, OVERALL:	28%	Ø%	38%
REPLACEMENT TREES:			
TOTAL TREES REQUIRED TO BE REPLACED WITH 2" CALIPER REPLACEMENT TREES: *SEE PROPOSED PARKING LOT TREE SCHEDULE FOR BREAKDOWN		 	 8*

PARKING LOT INTERIOR & PERIMETER TRE	ES
REQUIRED PARKING LOT TREES:	
TOTAL PROPOSED VEHICULAR USE AREA: TOTAL INTERIOR LANDSCAPE REQUIRED	107,692 S.F.
(5% OF PROP. VEHICULAR AREA):	5,385 S.F.
TOTAL TREES REQUIRED, I TREE PER 150 S.F. OF REQUIRED INTERIOR LANDSCAPE:	36 REQ. TREES
I TREE FOR EACH PARKING LOT ISLAND:	13 REQ. TREES
PERIMETER LANDSCAPING, FIRST 100' FROM ROCHESTER ROAD, TREES 25' O.C.	8 REQ. TREES
PERIMETER LANDSCAPING, NORTH AND SOUTH ADJACENT LOTS ARE ZONED B-3	Ø REQ. TREES
	AL REQUIRED TREES
PROPOSED PARKING LOT TREES:	
TOTAL INTERIOR LANDSCAPE PROVIDED AROUND PROPOSED 4 STORY BUILDING:	+/-11,000 S.F.
TOTAL TREES PROVIDED AROUND PROPOSED 4 STORY BUILDING:	17 TREES
TOTAL TREES PROVIDED IN PARKING LOT ISLANDS:	9 TREES
TOTAL TREES PROVIDED IN PERIMETER LANDSCAPING FIRST 100' FROM ROCHESTER:	16 TREES
TOTAL TREES PROVIDED IN PERIMETER LANDSCAPING OUTSIDE FIRST 100':	28 TREES
TOTAL EXISTING TREES TO REMAIN IN PERIMETER:	3 TREES

13 PROVIDED TREES

RIGHT OF WAY TREE CALCULATIONS

REQUIRED RIGHT OF WAY TREES: 10 TREES TOTAL REQUIRED CANOPY TREES: TOTAL REQUIRED ORNAMENTAL TREES: 13 TREES 23 TOTAL REQUIRED TREES PROPOSED RIGHT OF WAY TREES: 2 TREES TOTAL PROPOSED CANOPY TREES:

5 TREES TOTAL PROPOSED ORNAMENTAL TREES: 6 TREES TOTAL PROPOSED EVERGREEN TREES: 13 PROVIDED TREES

WEST BUFFER TREE CALCULATIONS

REQUIRED TYPE 'D' BUFFER TREES (328 L.F.): TOTAL REQUIRED CANOPY TREES: 9 TREES 5 TREES TOTAL REQUIRED ORNAMENTAL TREES: 17 TREES TOTAL REQUIRED EVERGREEN TREES:

31 TOTAL REQUIRED TREES PROPOSED TYPE 'D' BUFFER TREES (328 L.F.):

TOTAL PROVIDED CANOPY & ORNAMENTAL TREES: Ø TREES TOTAL EXISTING CANOPY TREES TO REMAIN IN BUFFER: 2 TREES TOTAL PROVIDED EVERGREEN TREES: 30 TREES 32 PROVIDED TREES

TOTAL TREES

TOTAL REQUIRED TREES: III TREES RIGHT OF WAY + PARKING LOT + BUFFER 118 TREES TOTAL PROVIDED TREES: RIGHT OF WAY + PARKING LOT + BUFFER (113 PROPOSED \$ 5 EXISTING)

TREE NOTES:

(1) SEE PLAN FOR REQUIRED SHRUB PLANTINGS (2) RIGHT-OF-WAY TREE PLANTINGS ARE LIMITED DUE TO SITE UTILITIES (OVERHEAD UTILITY LINES AND UNDERGROUND GAS LINE). THE ADDITIONAL TREES REQUIRED FOR RIGHT-OF-WAY TREE PLANTINGS ARE ACCOUNTED FOR IN OTHER AREAS ON SITE.

(3) 8' EVERGREEN TREES HAVE BEEN SUBSTITUTED FOR CANOPY/ORNAMENTAL TREE REQUIREMENTS DUE TO SITE LIMITATIONS AND TO PROVIDE A MORE SUBSTANTIAL EVERGREEN BUFFER AND PRESENCE YEAR ROUND.

(4) ALL WEST BUFFER TREES HAVE BEEN SUBSTITUTED FOR 8' EVERGREEN TREES DUE TO NEIGHBOR CONCERNS REGARDING WINTER SCREENING. THE WESTERN RESIDENTIAL SITES HAVE EXISTING LARGE CANOPY TREES TO BALANCE THE PROPOSED EVERGREEN SCREEN TREES.

PROJECT NUMBER: DRAWN: CHECKED:

1"=30'-0"

SCALE

21105 T. Shoemaker M. Dul DATE: **REVISIONS:**



& ASSOCIATES, INC

LANDSCAPE ARCHITECTURE

212 DAINES STREET **BIRMINGHAM** MICHIGAN 48009

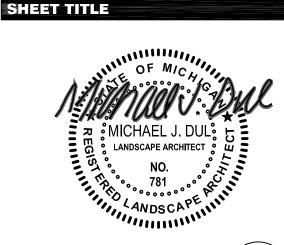
> P 248 644 3410 F 248 644 0819

www.mjdul.com

Bebb Oak Meadows 2800 Rochester Road

PROJECT

Landscape Development Preliminary Landscape Plan



March 10, 2021 March 18, 2021 June 1, 2021 June 29, 2021 December 1, 2021 / January 20, 2022 /E\



PLANT & MATERIAL SCHEDULE Symbol Common Name Size Root Comments Qty. Botanical Name **Evergreen Trees** Picea abies Norway Spruce 10-12' ht. Unsheared, branched to ground White Spruce 10-12' ht. BŧB Picea glauca Unsheared, branched to ground BŧB Picea mariana Black Spruce 10-12' ht. Unsheared, branched to ground Deciduous Trees Acer rubrum 'Red Sunset' 3-3 1/2" cal. B\$B Red Sunset Maple Full uniform heads, single stem Full uniform heads, single stem 3-3 1/2" cal. B&B Ginkqo biloba 'Autumn Gold' Autumn Gold Ginkgo Gleditsia tricanthos inermis 'Skyline' Skyline Thornless Honeylocust 3-3 1/2" cal. BŧB Full uniform heads, single stem B≰B Syringa reticulata 'Ivory Silk' Ivory Silk Lilac Tree 2 1/2-3" cal. Full uniform heads, single stem Tilia cordata 'Greenspire' 3-3 1/2" cal. BŧB Greenspire Little Leaf Linden Full uniform heads, single stem 90"SPADE Full uniform head, specimen Red Oak 6" cal. Quercus rubra Shrubs (Site Entry) Min. 3 gal., space 30" o.c., acidify soil 24-3Ø" Hydrangea paniculata 'Little Lime Little Lime Hydrangea Min. 5 gal., space 48" o.c., acidify soil Hydrangea paniculata 'Lime Light' 30-36" Can Lime Light Hydrangea 18-24" Pinus mugo var. pumilio Dwarf Mugo Pine Can Min. 3 gal., space 30" o.c. Spiraea x bumalda 'Magic Carpet' 24-3**0**" Can Min. 3 qal., space 30" o.c. Magic Carpet Spirea Perennials, Grasses, Groundcovers, & Annuals (Site Entry) 750sf. Mixed variety, seasonal rotation

LANDSCAPE DEVELOPMENT NOTES

1.) ALL EXISTING AND/OR PROPOSED SITE UTILITIES SHALL BE FIELD LOCATED, FLAGGED, AND VERIFIED PRIOR TO ANY LANDSCAPE CONSTRUCTION 2.) ALL SPECIFIED AND INSTALLED PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH AMERICAN NURSERYMAN STANDARDS (LATEST EDITION) AND BE:

- A.) NURSERY GROWN.
- B.) STATE DEPARTMENT OF AGRICULTURE INSPECTED AND APPROVED.
- C.) NO. 1 GRADE WITH STRAIGHT, UNSCARRED TRUNKS & WELL-DEVELOPED UNIFORM CROWNS ON TREES.
- D.) WARRANTED FOR A MIN. I YEAR FROM DATE OF ACCEPTANCE
- 3.) SPECIFIED PLANTING SOIL MIXTURE FOR ALL SPECIFIED BEDS & PLANTS SHALL BE THREE (3) PARTS IMPORTED WELL-DRAINED, SCREENED ORGANIC TOPSOIL, TO ONE (1) PART IMPORTED CLEAN SAND, TO ONE (1) PART CANADIAN SPHAGNUM PEAT MOSS, TO ONE (1) PART NATURAL COMPOST (WEED-FREE)-COMPLETE WITH 1% NATURAL POULTRY MANURE. INSTALL 12" MIN. DEPTH IN ALL PERENNIAL, GROUNDCOVER, ANNUAL, AND SHRUB BEDS. ALL BEDS MUST BE EXCAVATED, REMOVE AND DISPOSE (OFF-SITE) EX. EARTH/SOIL TO ACCEPT PROPOSED PLANT MIXTURE.
- 4.) PROPOSED SHREDDED HARDWOOD BARK MULCH SHALL BE SEASONED FOR A MINIMUM 6 MONTHS, DARK BROWN IN COLOR, AND INSTALLED 4" DEEP UNDER ALL PROPOSED TREES (INCLUDED IN UNIT COST), 4" DEEP IN ALL SHRUB AND TREE BEDS, AND 3" DEEP IN ALL PERENNIAL AND GROUNDCOVER BEDS. 5.) THE LANDSCAPE CONTRACTOR SHALL KEEP THE STREET AND DRIVE CLEAN AND FREE OF DIRT AND DEBRIS AT ALL TIMES, AND SHALL THOROUGHLY SWEEP AND/OR WASH THE DRIVE AT THE END OF EACH WORK DAY.
- 6.) ALL DEAD AND UNACCEPTABLE PLANT MATERIALS SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR DURING THE WARRANTY PERIOD. THE WARRANTY PERIOD SHALL BE ONE (1) YEAR FROM THE ACCEPTANCE OF INSTALLATION.
- 7.) 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' AWAY FROM THE EDGE OF THE PUBLIC ROAD. (TREES MUST BE PLANTED AT LEAST 15' AWAY FROM CURB OR ROAD EDGE WHERE THE SPEED LIMIT IS MORE THAN 35 MPH.) SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' AWAY FROM THE EDGE OF PUBLIC WALKWAY. EVERGREEN AND ORNAMENTAL TREES MUST BE PLANTED AT LEAST 10' FROM 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. NO TREES OR SHRUBS MAY BE PLANTED IN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY DRIVEWAY WITHIN PUBLIC WALKWAY AT A DISTANCE ALONG EACH LINE OF 15' FROM THEIR POINT OF INTERSECTION. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' AWAY FROM ANY FIRE HYDRANT. SHADE AND EVERGREEN TREES MUST BE PLANTED 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 RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS FORESTRY UNIT NEEDS TO INSPECT ALL TREES, EXISTING OR PLANTED, TO IDENTIFY ANY THAT POSE A HAZARD TO THE SAFE USE OF THE PUBLIC RIGHT-OF-WAY, FORESTRY MAY REQUIRE THE DEVELOPER TO REMOVE, AND POSSIBLY REPLACE, ANY SUCH TREES. THE ABOVE REQUIREMENTS ARE INCORPORATED INTO THE PLAN. 8.) LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
- 9.) PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES, SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
- 10.) ALL DEAD, DAMAGED, OR DISEASED PLANT MATERIAL SHALL BE REMOVED IMMEDIATELY AND REPLACED WITHIN SIX (6) MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER COMES FIRST. FOR PURPOSES OF THIS SECTION, THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE MARCH I TO JUNE I AND OCTOBER UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH I 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.
- 11.) THE APPROVED LANDSCAPE PLAN SHALL BE CONSIDERED A PERMANENT RECORD AND INTEGRAL PART OF THE SITE PLAN APPROVAL. UNLESS OTHERWISE APPROVED IN ACCORDANCE WITH THE AFOREMENTIONED PROCEDURES, ANY REVISIONS TO OR REMOVAL OF PLANT MATERIALS, OR NON-COMPLIANCE WITH THE MAINTENANCE REQUIREMENTS OF SECTION 138-12.109 WILL REPLACE THE PARCEL IN NON-CONFORMITY WITH THE APPROVED LANDSCAPE PLAN AND BE A VIOLATION OF THE ORDINANCE.
- 12.) 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
- 13.) PRIOR TO RELEASE OF PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT AND APPROVE ALL LANDSCAPE PLANTINGS.

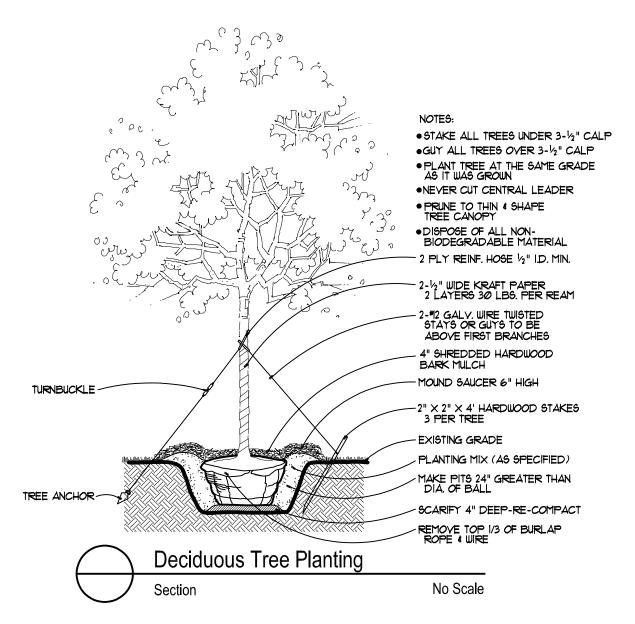
IRRIGATION NOTES

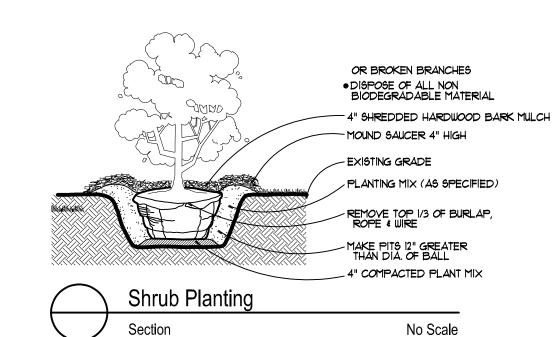
- 1.) INSTALL UNDERGROUND AUTOMATIC IRRIGATION SYSTEM FOR ALL LAWN AND PLANTING BEDS. 2.) USE SEPARATE ZONES FOR LAWN, DECIDUOUS SHRUBS, AND EVERGREEN SHRUBS.
- 3.) WATER SOURCED FROM CITY WATER/BUILDING TAP 4.) OWNER TO DECIDE IRRIGATION CONTROLLER LOCATION.
- 5.) WATERING SHALL ONLY OCCUR BETWEEN THE HOURS OF 12AM AND 5AM PER CITY
- 6.) IRRIGATION SPRAYS/OVER-SPRAYS SHALL NOT BROADCAST ONTO CITY PATHWAYS/SIDEWALKS.

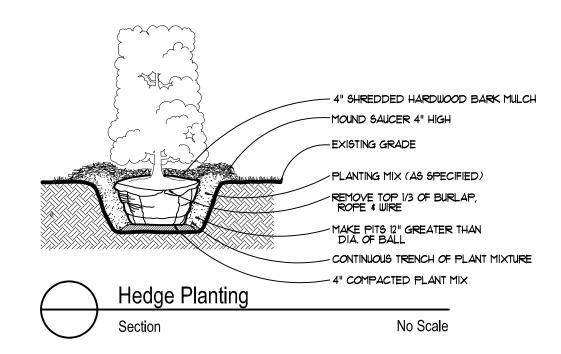
LAWN SCHEDULE

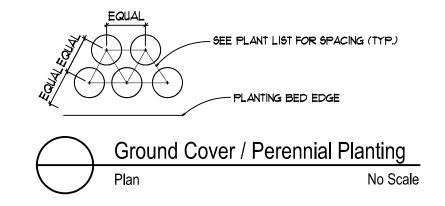
OVERALL SITE

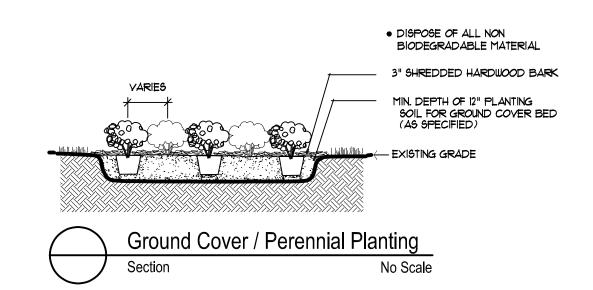
Supply and install Class 'A' Blended Blue Grass Sod on minimum 3" imported screened topsoil





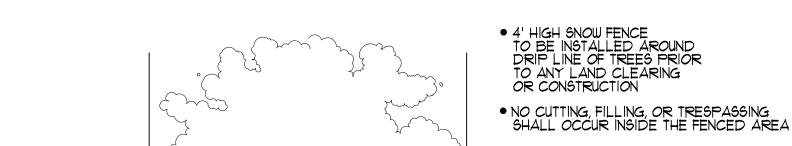




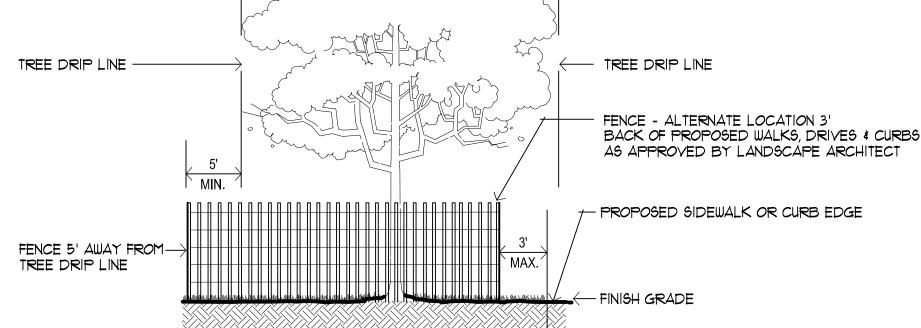


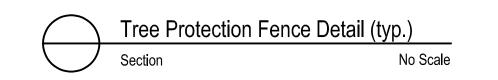
TREE PROTECTION NOTES

- 1) ALL TREES PROPOSED TO BE REMOVED SHALL BE MARKED IN THE FIELD WITH FLUORESCENT SPRAY PAINT (CHALK BASED) OR BY FLUORESCENT FLAGGING TAPE. 2) 4' HT. PLASTIC SNOW FENCING SHALL BE INSTALLED AT OR BEYOND THE DRIPLINE, UNLESS MORE SUBSTANTIAL FENCING IS REQUIRED.
- 3) STAKES SHALL BE METAL "T" POLES SPACED NO FURTHER APART THAN 10' ON CENTER 4) FENCING SHALL BE INSTALLED FIVE (5) FEET OUTSIDE THE TREE DRIP LINE UNLESS IT CAN BE DEMONSTRATED THAT THIS IS NOT PRACTICAL
- 5) FENCING SHALL BE ERECTED PRIOR TO CONSTRUCTION. THE CITY SHALL BE NOTIFIED ONCE THE FENCING IS INSTALLED FOR INSPECTION.
- 6) TREE PROTECTION SHALL REMAIN IN ITS APPROVED LOCATION UNTIL SUCH TIME REMOVAL IS AUTHORIZED BY THE LANDSCAPE ARCHITECT.
- 1) NO ACTIVITY SHALL BE CONDUCTED WITHIN TEN (10) FEET OF THE TREE DRIP LINE, INCLUDING BUT NOT LIMITED TO PLACING OF ANY SOLVENTS, MATERIALS, CONSTRUCTION MACHINERY, VEHICLES OR SOIL.
- 8) THE LOCATION OF FENCING MAY BE ADJUSTED, AS APPROVED BY THE LANDSCAPE ARCHITECT, IN THE FIELD TO ACCOMMODATE SITE-SPECIFIC CONDITIONS/CONSTRAINTS 9) DURING CONSTRUCTION, NO PERSON SHALL ATTACH A DEVICE OR WIRE TO ANY REMAINING



TREE, EXCEPT TO CORDON OFF PROTECTED AREAS AS REQUIRED





212 DAINES STREET

MICHAEL J. DUL

& ASSOCIATES, INC

P 248 644 3410

MICHIGAN 48009

BIRMINGHAM

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Bebb Oak Meadows 2800 Rochester Road

Rochester Hills, MI

PROJECT

Landscape Development **Preliminary** Landscape Plan **Specifications & Details**

SHEETTITLE

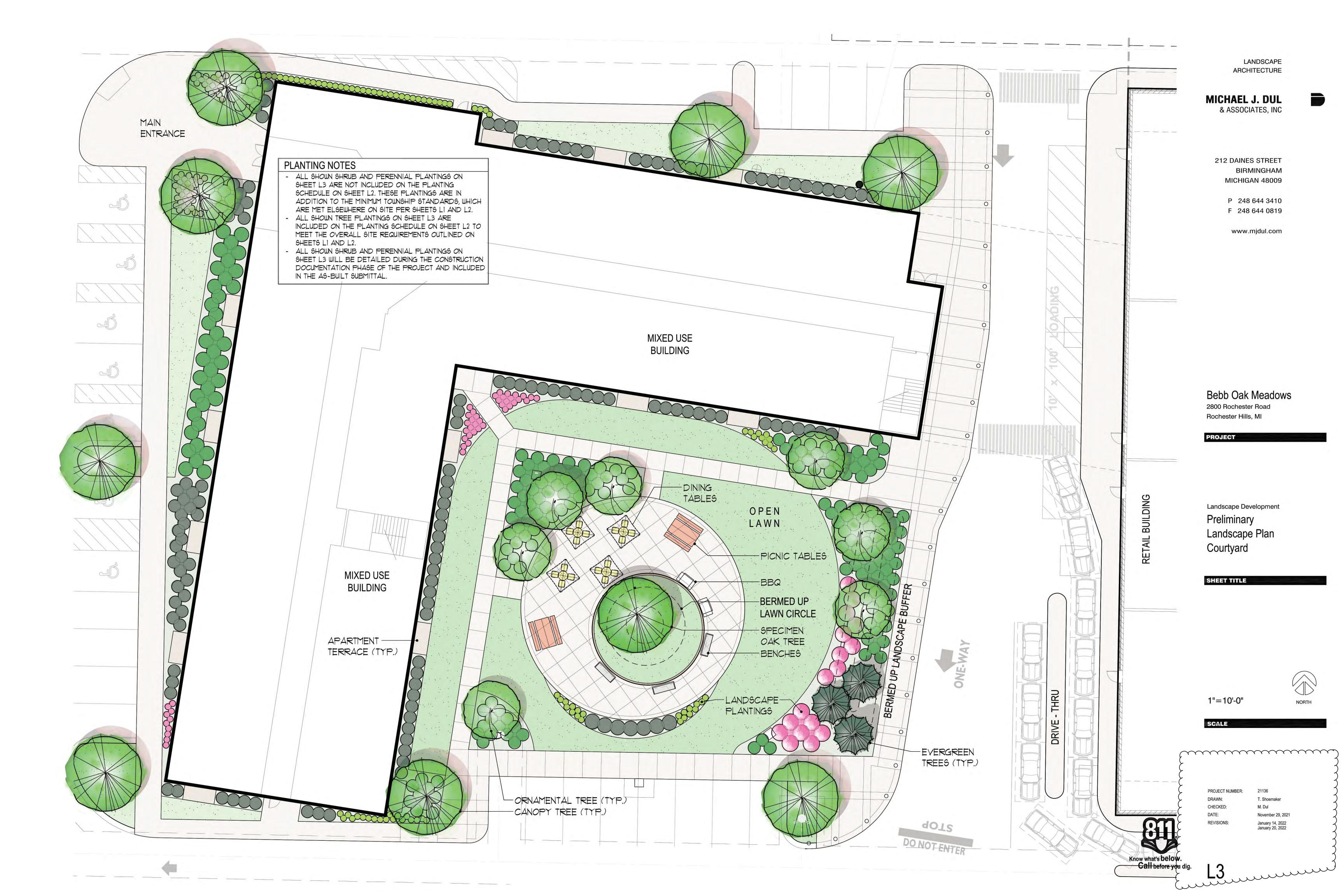


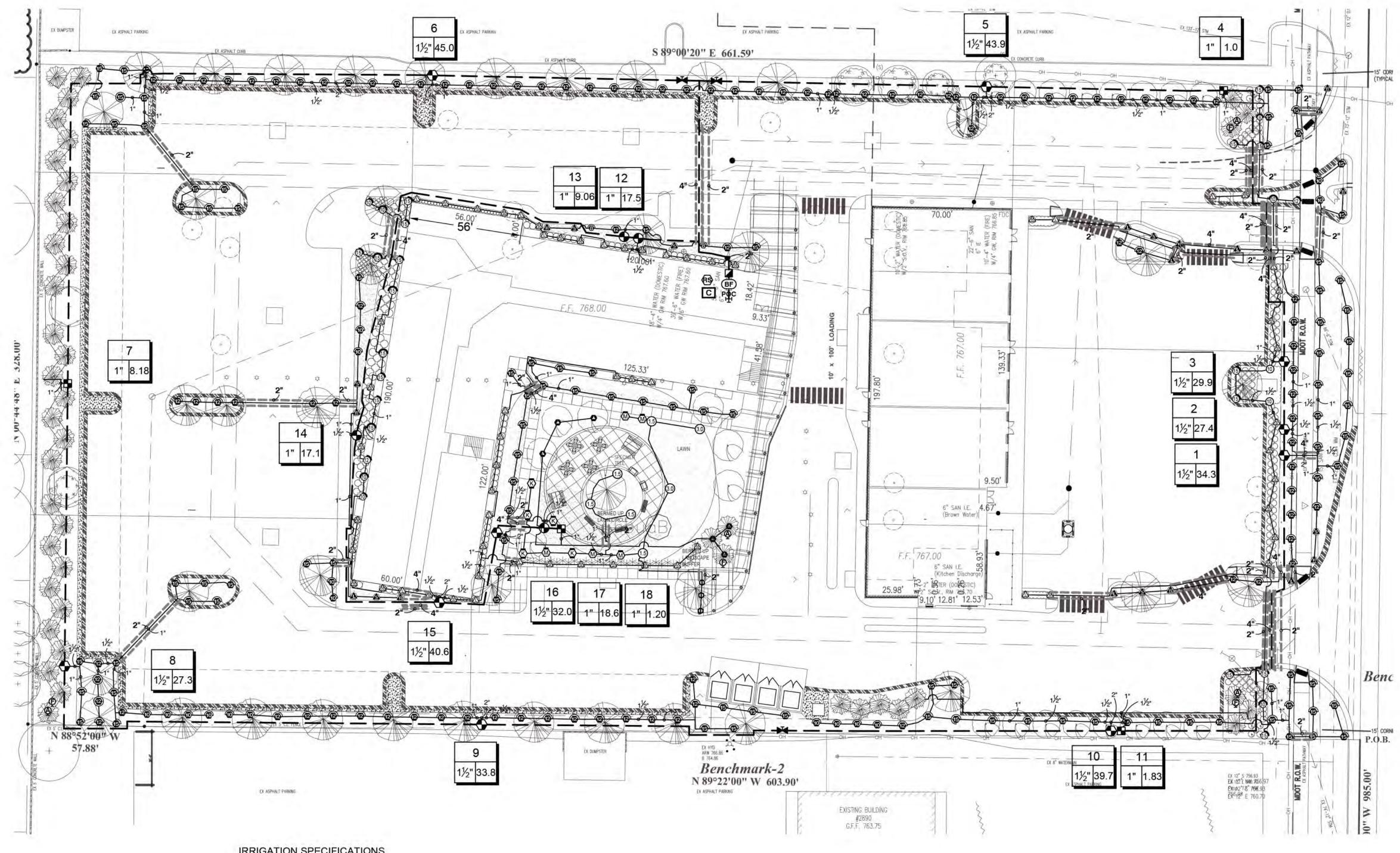
See Details

PROJECT NUMBER: T. Shoemaker M. Dul November 9, 202 December 1, 2021

Know what's **below**. Call before you dig. CHECKED: DATE: **REVISIONS:**

January 20, 2022





IRRIGATION SPECIFICATIONS

- IRRIGATION SYSTEM DESIGN BASED ON 45 GPM AT 60 PSI.
- 2. 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.
- 3. 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.
- 4. THE PRESSURE REQUIREMENT AT THE POINT OF CONNECTION IS BASED ON NO MORE THAN 5 FEET OF ELEVATION CHANGE IN THE AREAS OF IRRIGATION.
- 5. ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO LOCAL BUILDING, ELECTRICAL, AND PLUMBING CODES.
- 6. 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.
- 7. 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.
- 9. 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.
- 10. 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.
- 12. ALL WIRE SPLICES OR CONNECTIONS SHALL BE MADE WITH APPROVED WATERPROOF WIRE CONNECTIONS AND BE IN A VALVE OR SPLICE BOX.
- 13. ALL CONTROL WIRING DOWNSTREAM OF THE CONTROLLER IS TO BE 14 AWG, UL APPROVED DIRECT BURY.
- 14. 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.



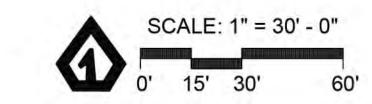
1-800-347-4272

http://www.projectservices.siteone.com

650 Stephenson Highway Troy, Michigan 48083 Phone 248.588.2100 Fax 248.588.3528 www.Siteone.com 800.347.4272 Project Services Number: 276417

BEBB OAK MEADOWS

ROCHESTER, MI, 48308 Design Date: 01/18/22 CH Drawn By: C.GRAHAM Checked By:



IRRIGATION SCHEDULE MANUFACTURER/MODEL ES LCS RCS CS SS Hunter PROS-04 5' strip spray

LANDSCAPE **ARCHITECTURE**

MICHAEL J. DUL & ASSOCIATES, INC

> 212 DAINES STREET **BIRMINGHAM** MICHIGAN 48009

P 248 644 3410 F 248 644 0819

www.mjdul.com

Hunter PGP-04 Hunter PGP-04 SYMBOL MANUFACTURER/MODEL Hunter PCZ-101-40 1" Flush Valve

Drip Air Relief Valve Drip Ring-0.6 @12" OC, Approx. 20 LF per tree Hunter HDL-06-12-PC

Hunter PROS-04 8' radius

Hunter PROS-04 10 radius

Hunter PROS-12 5' strip spray

Hunter PROS-12 8' radius

Hunter PROS-12 10' radius

Hunter MP1000 PROS-04-PRS40-CV

Hunter MP2000 PROS-04-PRS40-CV

Hunter MP800SR PROS-04-PRS40-CV

MANUFACTURER/MODEL

Hunter PROS-04 15' radius

@ @ @ @ Hunter PROS-12 12' radius

(5) (5) (5) (5) Hunter PROS-12 15' radius

⑥ ⑧ ⑩ ② ⑤ 何 Hunter PROS-12 Adjustable Arc

SYMBOL MANUFACTURER/MODE Hunter PGV-101G 1" Hunter PGV-151 Globe 1-1/2" Hunter HQ-44RC 1" Isolation Valve Line Size

SYMBOL

SYMBOL

0 0 0

0 0 0 0

0 0 0 0

Febco 765 1-1/2" Hunter I2C-2400-PL Hunter WR-CLIK

POC 1 1/2" Irrigation Lateral Line: Polyethylene Pipe100 PSI 1" Irrigation Lateral Line: Polyethylene Pipe100 PSI 1 1/2"

Irrigation Lateral Line: Polyethylene Pipe100 PSI 2" Irrigation Mainline: PVC Class 160 SDR 26 2" Pipe Sleeve: PVC Class 160 SDR 26 2" Pipe Sleeve: PVC Class 160 SDR 26 4"

Bebb Oak Meadows 2800 Rochester Road Rochester Hills, MI

PROJECT

1,028 l.f.

4,677 l.f.

965.9 l.f.

95.4 l.f.

2,483 l.f.

568.1 l.f.

273.7 l.f.

Landscape Development Preliminary Irrigation Plan

SHEET TITLE

See Details

PROJECT NUMBER:

T. Shoemaker M. Dul January 20, 2022 REVISIONS:

 \sim

Know what's below. Call before you dig.



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Bebb Oak Meadows 2800 Rochester Road

Rochester Hills, MI

PROJECT

Landscape Development Preliminary Irrigation Details

SHEET TITLE

See Details

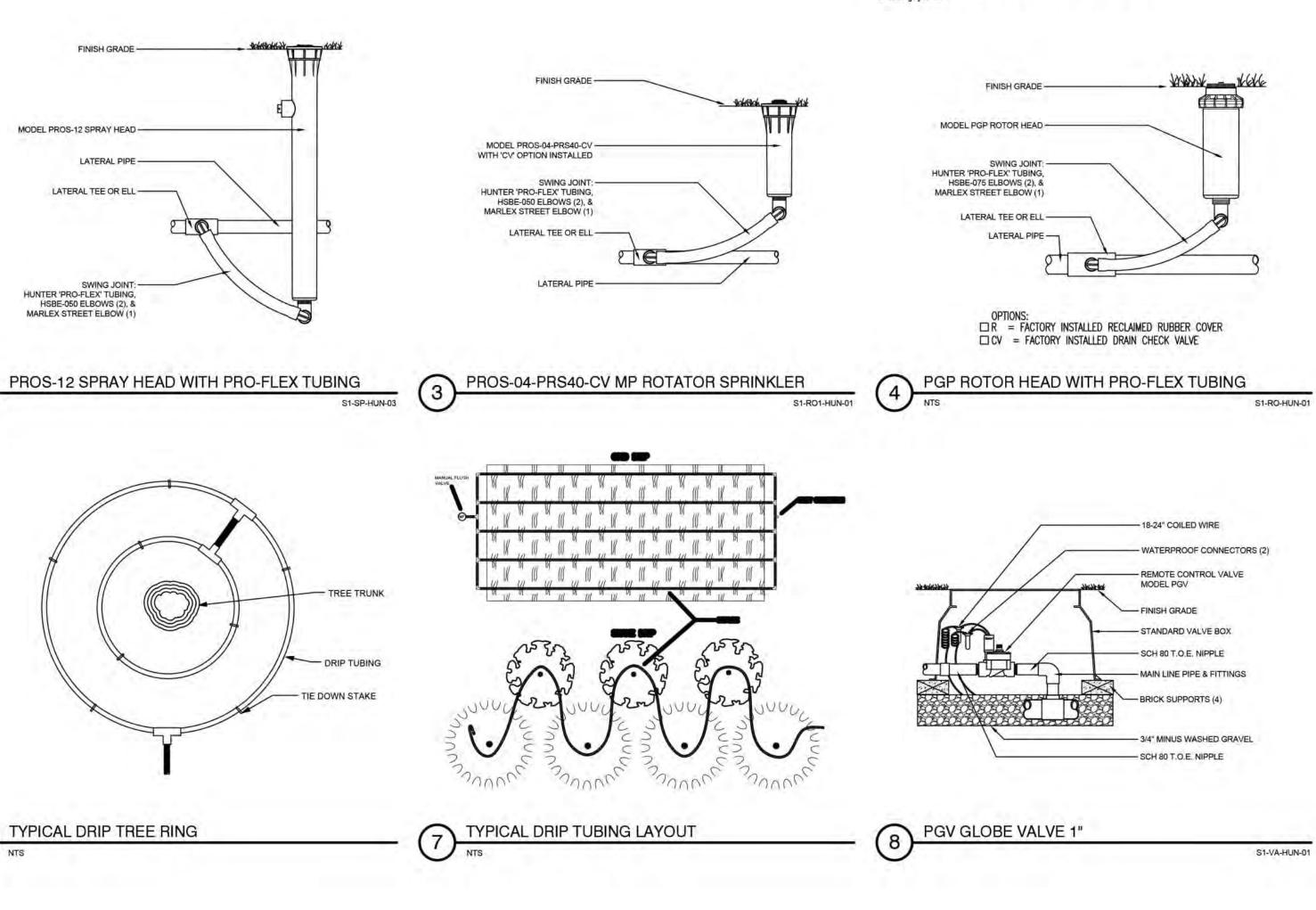
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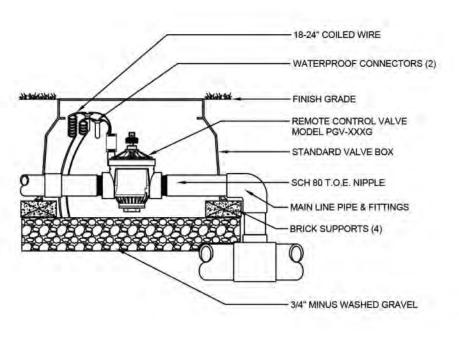
CHECKED: DATE:

21136 PROJECT NUMBER: T. Shoemaker M. Dul January 20, 2022 REVISIONS:

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FINISH GRADE -

SWING JOINT: -

LATERAL TEE OR ELL -

LATERAL PIPE -

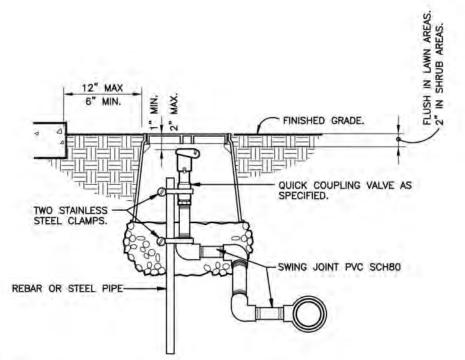
MODEL PROS-04 SPRAY HEAD -

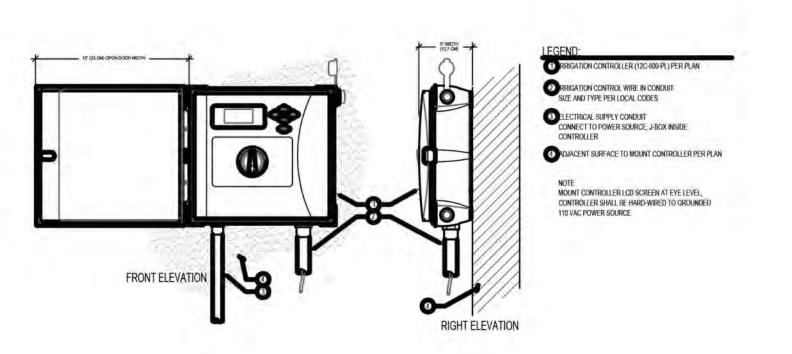
HUNTER 'PRO-FLEX' TUBING

HSBE-050 ELBOWS (2), & MARLEX STREET ELBOW (1)

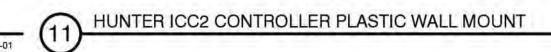
9-/

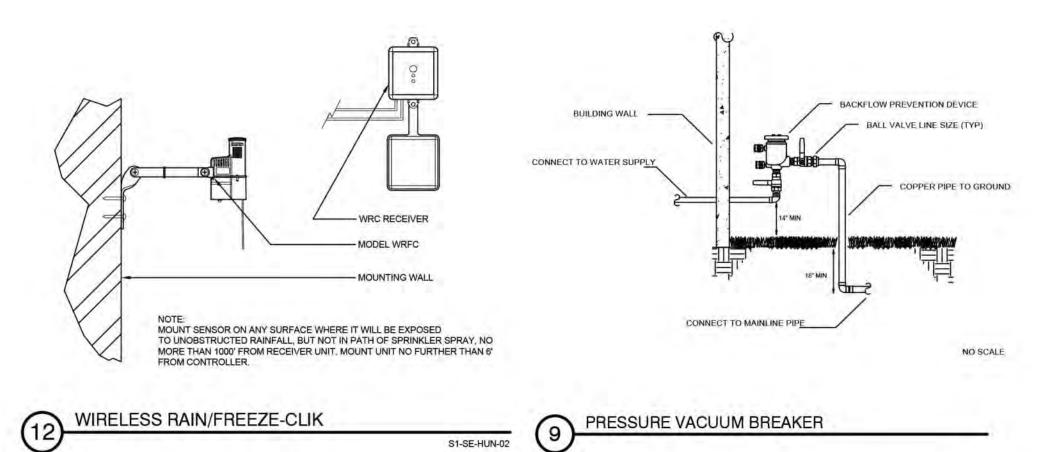
(5) PCZ-101-1 DRIP ZONE KIT











S1-SP-HUN-01

1 STANDARD VALVE BOX

3 DRIP ZONE KIT: MODEL PCZ-101-1 FILTER, REGULATOR:

(4) WATERPROOF CONNECTORS (2)

2) FINISH GRADE

25 OR 40 PSI

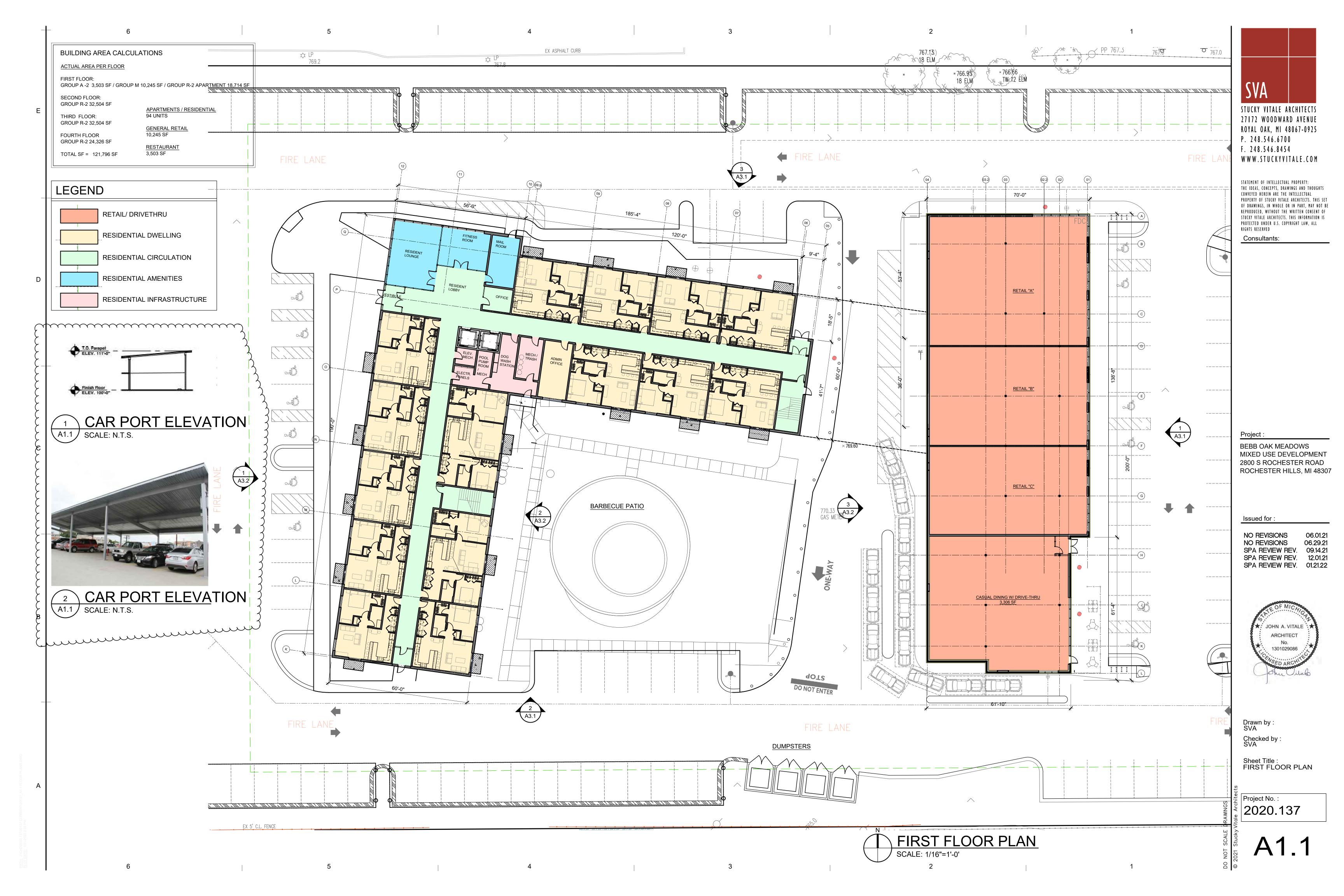
10 PVC SLIP UNIONS

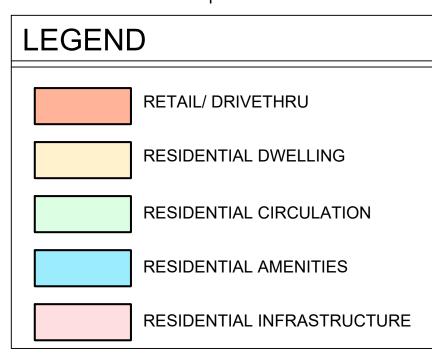
5) 18-24" COILED WIRE

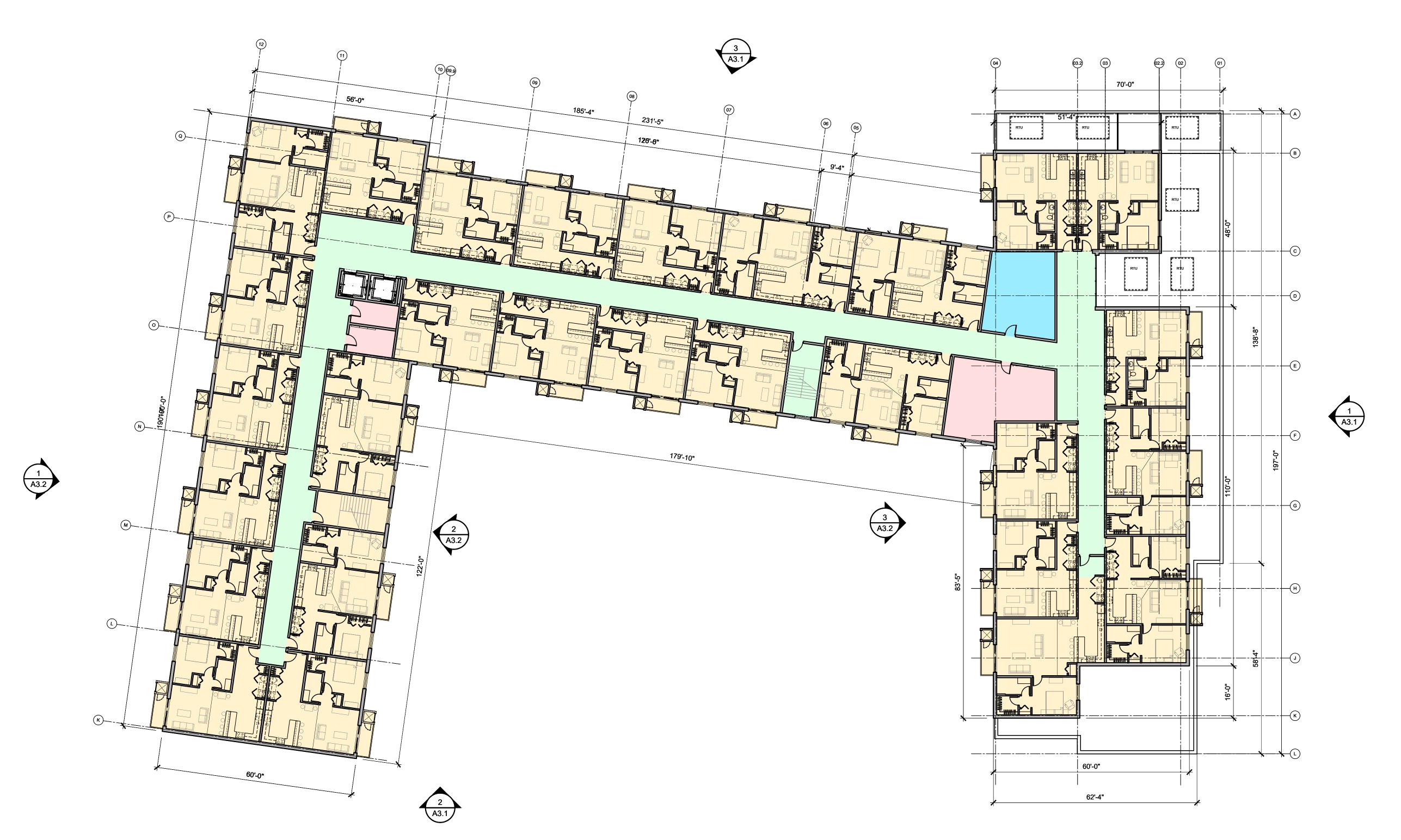
SCH 80 T.O.E. NIPPLE MAIN LINE PIPE & FITTINGS 8) BRICK SUPPORTS (4) 9 3/4" MINUS WASHED GRAVEL



Checked By:









SVA

STUCKY VITALE ARCHITECTS
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NO REVISIONS 06.01.21 NO REVISIONS 06.29.21 SPA REVIEW REV. 09.14.21 SPA REVIEW REV. 12.01.21

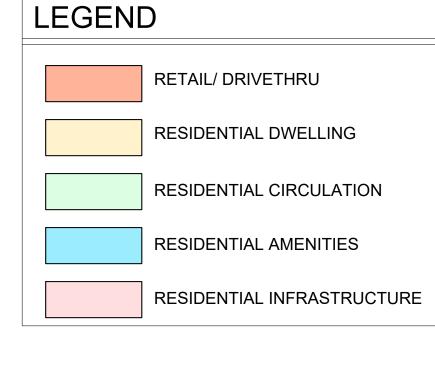


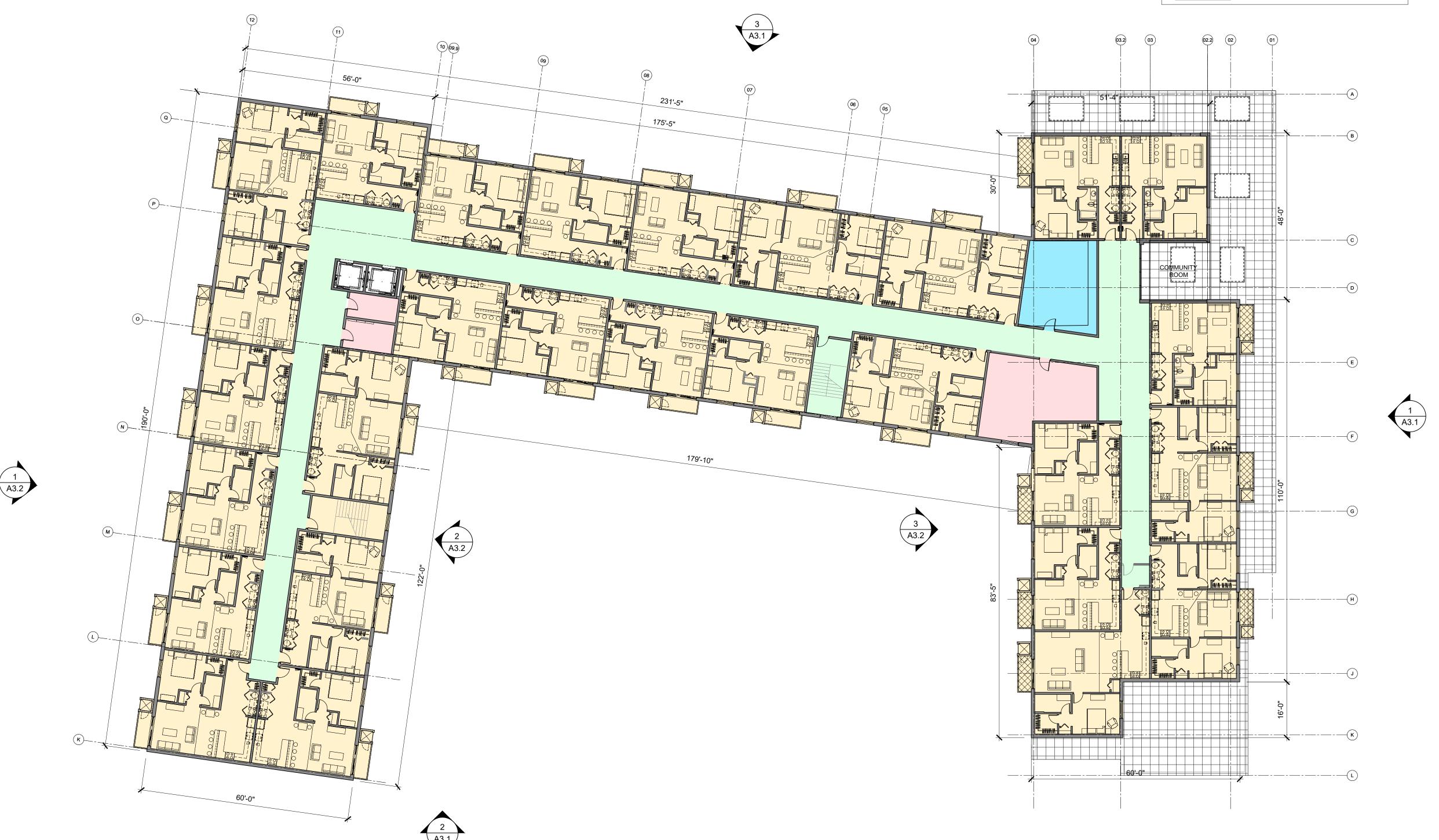
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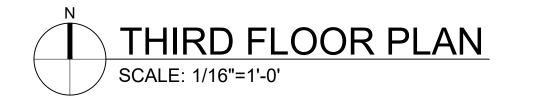
Sheet Title : SECOND FLOOR PLAN

Project No. : 2020.137

A1.2









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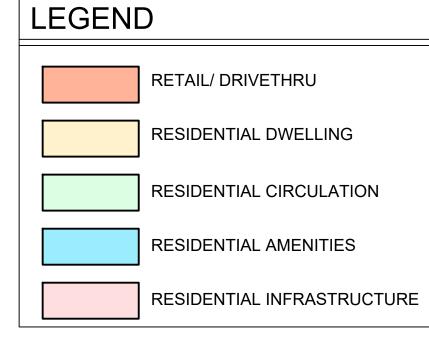


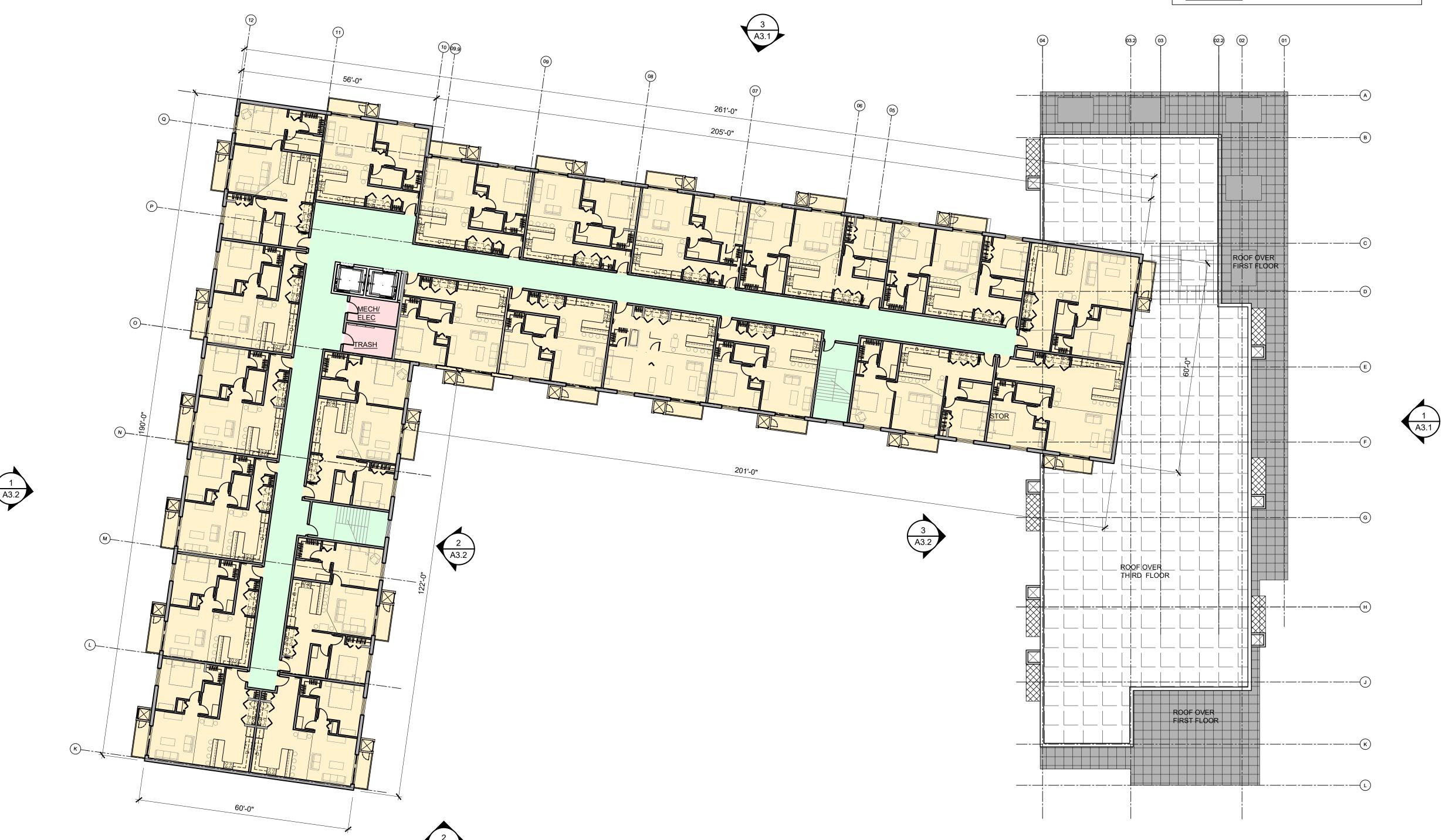
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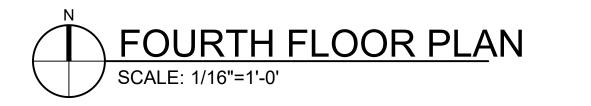
Sheet Title : THIRD FLOOR PLAN

Project No. : 2020.137

A1.3







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Sheet Title : FOURTH FLOOR PLAN

Project No. : 2020.137

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Sheet Title : EXTERIOR

EXTERIOR RENDERINGS

Project No. : 2020.137

A3.1





VIEW 2 TREELINE PROPERTY VISIBILITY
SCALE: N.T.S.

AERIAL SITE SCALE: N.T.S.



VIEW 1 EYE LEVEL TREELINE PROPERTY VISIBILITY
SCALE: N.T.S.

NOTE:

PHOTOGRAPHS TAKEN FROM THE PERSPECTIVE OF SURROUNDING PROPERTIES TO SHOW APPROXIMATE VISIBILITY OF THE PROPOSED STRUCTURE

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Sheet Title : SITE VISIBILITY IMAGES

Project No. : 2020.137

A3.2