



OVERALL SITE PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
21	A-B	ACER X F. 'AUTUMN BLAZE'	AUTUMN BLAZE MAPLE	2-1/2" CAL.	B&B
15	A-S	ACER S. 'LEGACY'	LEGACY SUGAR MAPLE	3" CAL.	B&B
28	A-P	ACER R. 'PACIFIC SUNSET'	PACIFIC SUNSET MAPLE	3" CAL.	B&B
7	A-R	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	2-1/2" CAL.	B&B
8	A-G	ACER P. 'PRINCETON GOLD'	PRINCETON GOLD MAPLE	2-1/2" CAL.	B&B
12	A-L	AMELACHIER LAEVIS	ALLEGHENY SERVICEBERRY	2" CAL.	B&B
15	A-E	ARONIA MELANOCARPA 'ELATA'	GLOSSY BLACK CHOKECHERRY	36"	B&B
14	B-H	BETULA NIGRA 'HERITAGE'	HERITAGE RIVER BIRCH	8-10' HT	B&B, MULTI-STEM
15	B-G	BUXUS 'GREEN VELVET'	GREEN VELVET BOXWOOD	15"	CONT.
35	C-K	CALAMAGROSTIS X A. 'KARL FOERSTER'	KARL FOERSTER REED GRASS	#1 CONT.	CLUMP
10	C-A	CORNUS AMOMUM	SILKY DOGWOOD	30"	B&B
13	C-M	CORNUS KOUSA 'MILKY WAY'	MILKY WAY DOGWOOD	8"	B&B, CLUMP
17	G-S	GLEDITSEA I 'SKYLINE'	SKYLINE HONEYLOCUST	2-1/2" CAL.	B&B
22	H-V	HAMMAMELIS VERNALIS	VERNAL WITCHHAZEL	36"	B&B
32	H-H	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP
37	I-V	ILEX VERTICILLATA	WINTERBERRY	30"	B&B
16	I-S	ILEX V. 'SOUTHERN GENTLEMAN'	SOUTHERN GENTLEMAN WINTERBERRY	30"	B&B
18	J-B	JUNIPERUS S. 'BROADMOOR'	BROADMOOR JUNIPER	15"	B&B
42	J-H	JUNIPERUS CH. 'HETZ GLAUCA'	HETZ BLUE JUNIPER	30"	B&B
24	J-G	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	18"	B&B
47	M-S	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2" CAL.	B&B, FRUITLESS
14	M-R	MAGNOLIA S. 'ROYAL STAR'	ROYAL STAR MAGNOLIA	8' HT	B&B
38	P-A	PICEA ABIES	NORWAY SPRUCE	10' HT	B&B
13	PI-A	PICEA ABIES	NORWAY SPRUCE	6' HT	B&B
30	P-G	PICEA GLAUCA	WHITE SPRUCE	10' HT	B&B
10	PI-G	PICEA GLAUCA	WHITE SPRUCE	6' HT	B&B
19	P-H	PINUS HELDREICHII	BOSNIAN PINE	10' HT	B&B
7	PI-H	PINUS HELDREICHII	BOSNIAN PINE	6' HT	B&B
15	P-B	PLATANUS X ACERFOLIA 'BLOODGOOD'	BLOODGOOD LONDON SYCAMORE	3" CAL.	B&B
19	P-C	PRUNUS X CISTENA	PURPLELEAF SAND CHERRY	30"	B&B
30	R-K	ROSA KNOCKOUT	KNOCKOUT ROSE	15"	CONT.
15	S-P	SYRINGA PATULA 'MISS KIM'	MISS KIM LILAC	30"	B&B
22	S-I	SYRINGA R 'IVORY SILK'	IVORY SILK LILAC	2" CAL.	B&B
4	Q-P	QUERCUS PALUSTRIS	PIN OAK	2-1/2" CAL.	B&B
15	T-C	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2-1/2" CAL.	B&B
18	T-R	TILIA A 'REDMOND'	REDMOND LINDEN	3" CAL.	B&B
10	U-P	ULMUS 'PRINCETON'	PRINCETON AMERICAN ELM	2-1/2" CAL.	B&B
15	U-F	ULMUS 'VALLEY FORGE'	VALLEY FORGE AMERICAN ELM	3" CAL.	B&B
44	V-S	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	30"	B&B
13	V-M	VIBURNUM P.T. 'MARIESII'	MARIES DOUBLEFILE VIBURNUM	30"	B&B

LANDSCAPE REQUIREMENTS

**SOUTH PROPERTY LINE BUFFER C**  
 1,317 LF LESS 687 EXISTING TREES = 630 LF - PROPERTY LINE LENGTH

REQUIRED SHADE TREES @ 2/100 LF. . . . . 13 TREES  
 SHADE TREES SHOWN . . . . . 13 TREES

REQUIRED ORNAMENTAL TREES @ 1.5/100 LF. . . . . 10 TREES  
 ORNAMENTAL TREES SHOWN . . . . . 10 TREES

REQUIRED EVERGREEN TREES @ 4/100 LF. . . . . 26 TREES  
 EVERGREEN TREES SHOWN . . . . . 26 TREES

REQUIRED SHRUBS @ 6/100 LF. . . . . 38 SHRUBS  
 SHRUBS SHOWN . . . . . 38 SHRUBS

**STORMWATER BASIN B**  
 490 LF PERIMETER

REQUIRED TREES @ 1.5/100 LF. . . . . 8 TREES  
 TREES SHOWN . . . . . 8 TREES

REQUIRED EVERGREEN @ 1/100 LF. . . . . 5 TREES  
 TREES SHOWN . . . . . 5 TREES

REQUIRED SHRUBS @ 4/100 LF. . . . . 20 SHRUBS  
 SHRUBS SHOWN . . . . . 20 TREES

LEGEND

- SHADE TREES - 3" CALIPER FOR ROW, BUFFERS AND STORMWATER REQUIREMENTS, 2-1/2" CALIPER FOR ALL OTHERS  
 PACIFIC SUNSET MAPLE, LEGACY SUGAR MAPLE, LONDON PLANE TREE, VALLEY FORGE ELM, LINDEN
- ORNAMENTAL TREES - 2" CALIPER or 6' CRABAPPLES, MAGNOLIA, TREE LILAC, RIVER BIRCH
- EVERGREEN TREES - 10' HT. FOR ROW, BUFFERS AND STORMWATER REQUIREMENTS, 6' HT. FOR ALL OTHERS  
 GREEN SPRUCE, SERBIAN SPRUCE, DOUGLAS FIR, NORWAY SPRUCE
- SHRUBS - LARGE 30" FOR BUFFER & SMALL 3 GAL DENSII YEW, VIBURNUM, BURNING BUSH, WINTERBERRY, JUNIPER, SPIRAEA, DOGWOOD, LILAC
- GRASSES/PERENNIALS - 1 GAL DAYLILY, MAIDEN GRASS, FEATHER REED GRASS, BLACK-EYED SUSAN
- EXISTING WOODED AREAS
- EXISTING WETLANDS
- T-C\* \* DENOTES 45 REPLACEMENT TREE LOCATIONS

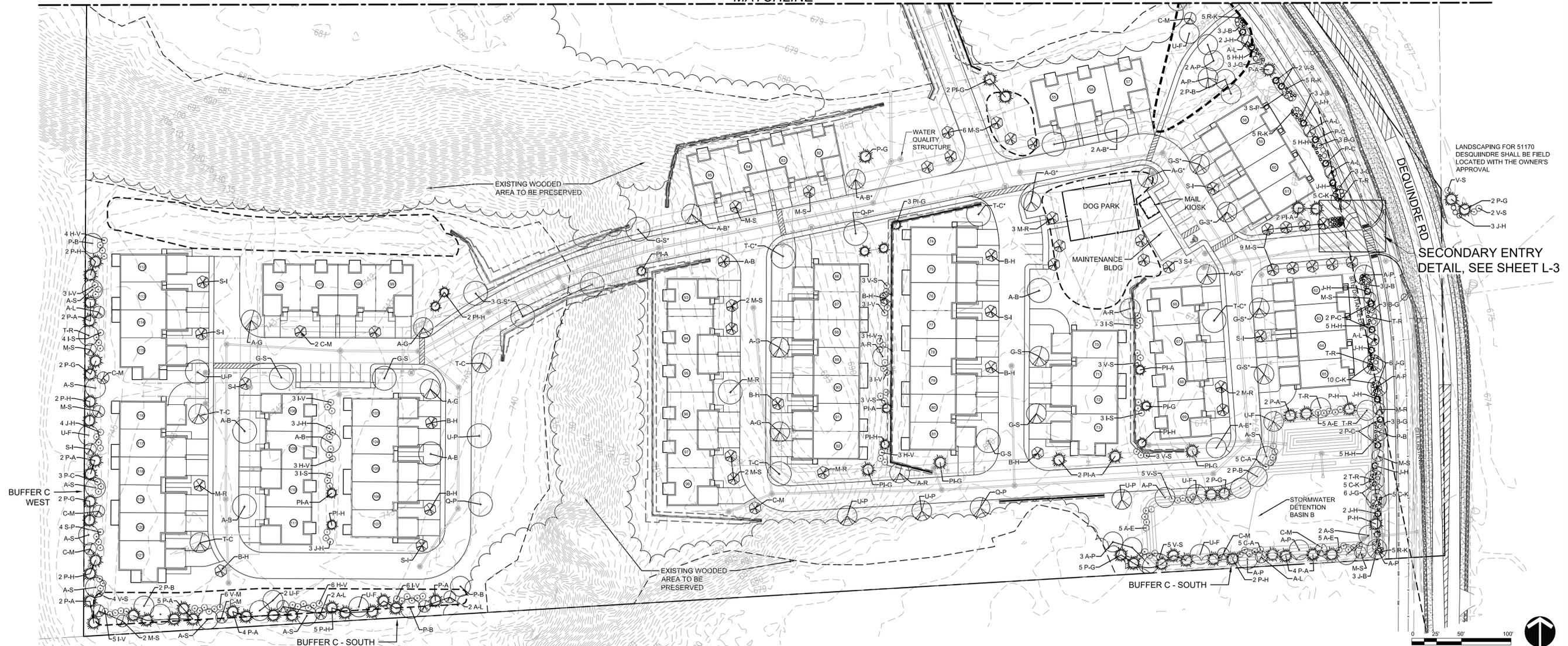


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**engineers  
 architects  
 planners**  
**consultants**

DATE	REVISION
07/11/19	TMP COMMENTS
07/30/19	REV. SITE PLAN
08/27/19	PG SUBMITTAL
12/20/19	REVISIONS
02/11/20	CITY COMMENT REVISIONS
03/16/20	CITY COMMENT REVISIONS



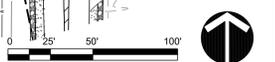
MATCHLINE



LANDSCAPING FOR 51170  
 DESQUINRE SHALL BE FIELD  
 LOCATED WITH THE OWNER'S  
 APPROVAL

DEQUINRE RD

SECONDARY ENTRY  
 DETAIL, SEE SHEET L-3



**ROCHESTER HILLS**  
 EAST AVON RD, ROCHESTER HILLS, OAKLAND COUNTY, MI  
 REDWOOD - 7510 EAST PLEASANT VALLEY ROAD  
 INDEPENDENCE, OH 44131

**SITE LANDSCAPE PLAN - SOUTH**

PROJECT NO.	190346
DISCIPLINE	LANDSCAPE
SHEET NAME	L-2
SHEET	2
OF	6

W:\2019\190346\ROCHESTER\190346 - LANDSCAPE.DWG - L-2 - 3/16/2020 9:55:52 AM - RICHARD WASHINGTON





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 your landscape architects  
 your consultants

DATE	REVISION	NO	ISSUED FOR:	PRELIM SET	NO	ISSUED FOR:
07/11/19		1	TMP COMMENTS		1	ISSUED FOR:
07/30/19		2	REV. SITE PLAN		2	ISSUE DATE:
08/27/19		3	PG SUBMITTAL		3	SCALE:
12/20/19		4	REVISIONS		4	DESIGNED BY:
02/11/20		5	CITY COMMENT REVISIONS		5	DRAWN BY:
03/16/20		6	CITY COMMENT REVISIONS		6	CHECKED BY:

**ROCHESTER HILLS**  
 EAST AVON RD, ROCHESTER HILLS, OAKLAND COUNTY, MI  
 REDWOOD - 7510 EAST PLEASANT VALLEY ROAD  
 INDEPENDENCE, OH 44131

**UNIT LANDSCAPE PLANS**

PROJECT NO.	190346
DISCIPLINE	LANDSCAPE
SHEET NAME	L-4
SHEET	4
OF	6

**MEADOWOOD / FORESTWOOD UNIT A PLANT MATERIAL LIST**

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	C-KF	CALAMAGROSTIS X A. 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	CLUMP, 18" O.C.
6	HM-PM	HEMEROCALLIS 'PARDON ME'	PARDON ME DAYLILY	#1 CONT.	CLUMP, 18" O.C.
1	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
3	JU-H	JUNIPERUS SQ. 'HOLGER'	HOLGER JUNIPER	15" HT.	B&B
3	JU-B	JUNIPERUS S. 'BROADMOOR'	BROADMOOR JUNIPER	15" HT.	#3 CONT.
1	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT.	#3 CONT.
3	PE-KR	PENNISETUM O. 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	#1 CONT.	2' O.C.
3	RU-G	RUDBECKIA HIRTA	BLACK-EYED SUSAN	#1 CONT.	18" O.C.
1	V-C	VIBURNUM O. 'COMPACTUM'	COMPACT EUROPEAN CRANBERRY	18"	#5 CONT.

**MEADOWOOD / FORESTWOOD UNIT B PLANT MATERIAL LIST**

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	C-KF	CALAMAGROSTIS X A. 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	CLUMP, 18" O.C.
3	PE-KR	PENNISETUM O. 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	#1 CONT.	2' O.C.
3	RO-KO	ROSA 'KNOCK-OUT'	KNOCK OUT ROSE	18" HT.	#3 CONT.
3	SP-NF	SPIRAEA X 'NEON FLASH'	NEON FLASH SPIREA	18"	#3 CONT.
1	V-SH	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	24"	#3 CONT.

**WILLOWOOD UNIT A PLANT MATERIAL LIST**

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
5	C-T	CERASTIUM TOMENTOSUM	SNOW IN SUMMER	#2 CONT.	CLUMP, 18" O.C.
12	EU-FC	EUONYMUS FORTUNEI 'COLORATUS'	PURPLELEAF WINTERCREEPER	#1 CONT.	CLUMP, 18" O.C.
3	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
1	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT.	#3 CONT.
3	SP-NF	SPIRAEA X 'NEON FLASH'	NEON FLASH SPIREA	18" HT.	#3 CONT.
1	V-SH	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	24"	#3 CONT.

**WILLOWOOD UNIT B PLANT MATERIAL LIST**

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
5	HM-HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP, 18" O.C.
3	JU-H	JUNIPERUS SQ. 'HOLGER'	HOLGER JUNIPER	15" HT.	B&B
2	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT.	#3 CONT.
5	SP-LP	SPIRAEA J. 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	12" HT.	#3 CONT.
12	V-M	VIBURNUM P.T. 'MARIESI'	MARIES DOUBLEFILE VIBURNUM	30"	B&B

**CAPEWOOD UNIT A PLANT MATERIAL LIST**

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	CO-Z	COREOPSIS 'ZAGREB'	ZAGREB COREOPSIS	#2 CONT.	CLUMP, 18" O.C.
3	PE-KR	PENNISETUM O. 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	#1 CONT.	2' O.C.
1	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
3	TX-M	TAXUS M. 'DENSIFORMUS'	DENSE YEW	24"	#3 CONT.
4	JU-H	JUNIPERUS SQ. 'HOLGER'	HOLGER JUNIPER	15" HT.	B&B

**HAYDENWOOD UNIT A PLANT MATERIAL LIST**

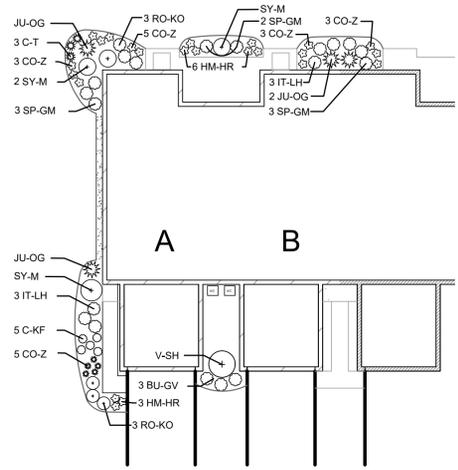
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
5	C-KF	CALAMAGROSTIS X A. 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	CLUMP, 18" O.C.
3	C-T	CERASTIUM TOMENTOSUM	SNOW IN SUMMER	#2 CONT.	CLUMP, 18" O.C.
13	CO-Z	COREOPSIS 'ZAGREB'	ZAGREB COREOPSIS	#2 CONT.	CLUMP, 18" O.C.
3	HM-HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP, 18" O.C.
3	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
2	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT.	#3 CONT.
6	RO-KO	ROSA 'KNOCK-OUT'	KNOCK OUT ROSE	18" HT.	#3 CONT.
4	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
3	SY-M	SYRINGA 'MEYER'	PALABIN LILAC	18" HT.	#5 CONT.

**HAYDENWOOD UNIT B PLANT MATERIAL LIST**

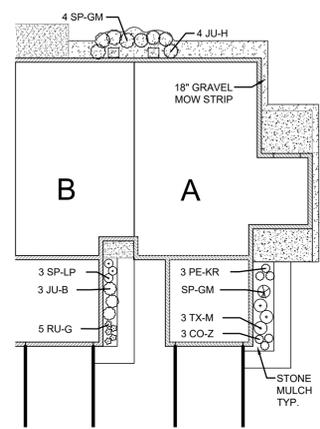
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	BU-GV	BUXUS 'WINTERGREEN'	WINTERGREEN BOXWOOD	18" HT.	#3 CONT.
3	CO-Z	COREOPSIS 'ZAGREB'	ZAGREB COREOPSIS	#2 CONT.	CLUMP, 18" O.C.
3	HM-HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP, 18" O.C.
3	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
2	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT.	#3 CONT.
4	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
1	SY-M	SYRINGA 'MEYER'	PALABIN LILAC	18" HT.	#5 CONT.
1	V-SH	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	24"	#3 CONT.

**CAPEWOOD UNIT B PLANT MATERIAL LIST**

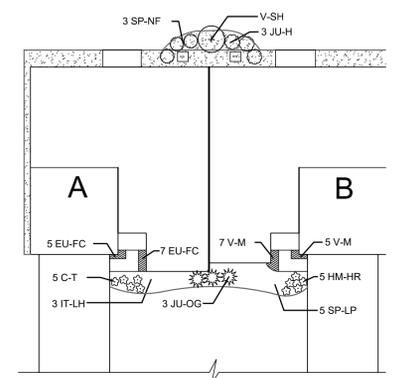
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	JU-B	JUNIPERUS S. 'BROADMOOR'	BROADMOOR JUNIPER	15" HT.	#3 CONT.
5	RU-G	RUDBECKIA HIRTA	BLACK-EYED SUSAN	#1 CONT.	18" O.C.
4	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
3	SP-LP	SPIRAEA J. 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	12" HT.	#3 CONT.



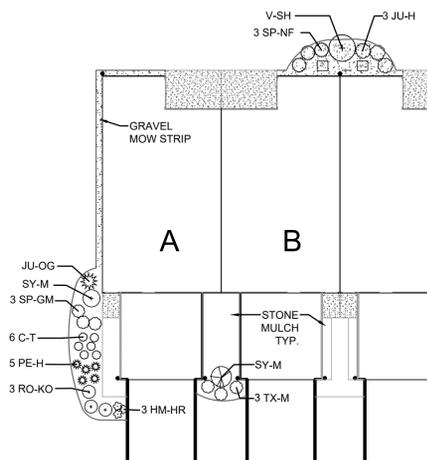
TYP. HAYDENWOOD LANDSCAPE PLAN



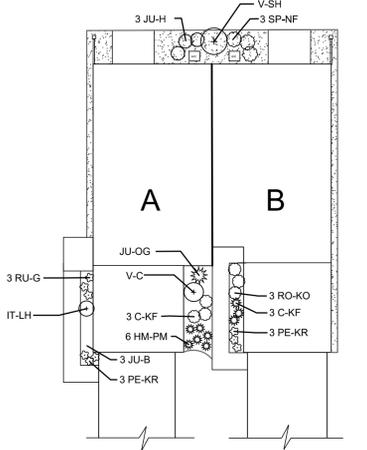
TYP. CAPEWOOD LANDSCAPE PLAN



TYP. WILLOWOOD LANDSCAPE PLAN



TYP. BREEZEWOOD LANDSCAPE PLAN



TYP. MEADOWOOD/FORESTWOOD LANDSCAPE PLAN

1  
 L-4  
 TYPICAL UNIT LANDSCAPE PLANS  
 NOT TO SCALE

# SECTION 02900 - LANDSCAPING

## PART 1 - GENERAL

### A. DESCRIPTION:

1. Work Included: Planting required for this Work is indicated on the Drawings and, in general, includes the planting and other ground cover throughout the Work.

### B. QUALITY ASSURANCE:

1. Qualifications of workers: Provide at least one person who shall be present at all times during execution of this portion of the Work and who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct all work performed under this Section.
2. Codes, Regulations and Standards:
  - a. All plants and planting material shall meet or exceed the Specifications of Federal, State and County laws requiring inspection for plant disease and insect control.
  - b. Quality and Size: (1) General: Quality and size shall conform with the current edition of "Horticultural Standards" for number one grade nursery stock as adopted by the American Association of Nurserymen. (2) Deciduous Trees: Trees will measure in units of average height in feet above the ground or of an average girth at a point 6 inches above the ground. (3) Evergreen Trees: Trees will measure in units of average height in feet above the ground. (4) Plant stock: Each ball shall be of sufficient size to insure successful fibrous feeding roots necessary to insure successful recovery and development of the plant.
  - c. Topsoil shall conform with ASTM D 5268-92.

### C. SUBMITTALS:

1. Material List: Within 35 days after award of Contract, and before any planting materials are delivered to the job site, submit to the Architect a complete list of nurseries where plants are to be obtained and other types proposed to be installed.
  - a. Include complete data on source, size and quality.
  - b. Demonstrate complete conformance with the requirements of this Section.
  - c. This shall in no way be construed as permitting substitutions for specific items described in the Drawings or these Specifications unless the substitution has been approved in advance by the Architect.
2. Certificates:
  - a. All certificates required by law shall accompany shipments.
  - b. Upon completion of the installation, deliver all certificates to the Architect.
  - c. Approval of plants at source does not alter right of rejection at project site.

### D. PRODUCT HANDLING:

1. Delivered and Burlapped Stock: Care should be taken at all times as to not damage the bark or branches. Plants shall be lifted and handled from the bottom of the ball as much as possible in order to prevent damage to the plant.
  - a. Plant stock to be delivered in B & B shall be moved with a compact natural ball of earth so firmly wrapped in burlap, that upon delivery the soil is still firm and compact about the small feeding roots.
  - b. Temporary Storage and Protection:
    - i. Protect plants at all times from sun or drying winds.
    - ii. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected with soil, wood chips, straw or other acceptable material, and shall be kept well watered.
  - c. Replacements: In the event of damage, immediately make all repairs and replacements necessary for the approval of the architect and at no additional expense to the Owner.

### E. PRE-LANDSCAPING SITE PREPARATION - BUILDING CONTRACTOR/SUBS

1. Call in for any utility locations as required and follow all approved safety practices.
2. Remove any construction debris from site before grading. Properly mark all utility boxes, drains, or irrigation fixtures before grading. These are to remain marked through completion of grading process. MARK UP A SITE DETAIL PLAN TO IDENTIFY KEY COMPONENTS.
3. Site should be graded to minus (-) 4" of final grade removing as much rocks and debris as possible.
4. Concrete walks and drives can now be formed and poured following this grade adjustment. Following install of concrete, clean up any concrete debris and construction materials in planting areas. VERIFY UNDERDRAINS ARE IN PLACE AND MARKED.
5. Remove as much of the remaining stabilization seeding plants and weed growth on lawn and planting areas as practical. Loosen existing subsoil to a depth of 4".
6. Backfill exterior concrete and finish grade per plans with a minimum of 4" of screened topsoil that has rock, wood and debris removed (Screened topsoil = 12" of depth to landscape planting beds. The topsoil will come either from onsite stockpiles or will be provided when necessary. Maintain any drainage swales and define new ones as needed. Remove any high or low spots. VERIFY DEPTH OF PLANT BED TOPSOIL PRIOR TO ACCEPTANCE.
7. Provide a finish grade separation of 2" below slab elevation and maintain minimum slope away from buildings. Topsoil should be brought to finish grade of all patios, walks and driveways. VERIFY METAL FLASHING HAS BEEN PLACED TO PROTECT THE INSULATION ATTACHED TO THE FOUNDATION.
8. Subcontractor to be paid additional fees if soils have to be loaded and trucked from one area of site to another. Per hour equipment charges are to be negotiated in advance with the Project Manager. PROVIDE A LOG TO ACCOUNT FOR TIME AND SIGN OFF BY BOTH CONTRACTOR AND MANAGER.
9. Irrigation will be provided on a separate irrigation plan. Site irrigation needs to be installed and working prior to landscape establishment.
  - i. Irrigation overspray shall not broadcast onto the city pathway.
  - ii. Irrigation watering will only occur between the hours of 12am and 5am.
  - iii. Subcontractor will keep streets and walkways clean during and upon completion of work.
  - iv. Clean up all debris created and dispose of in job site dumpster provided.
10. Notify Redwood Landscape that site is being prepared and landscaper has been scheduled (Minimum of 5 business days before install)

### F. SOIL AND SITE PREPARATION FOR SEEDED, HYDRO-SEEDED AND SODDED LAWNS - LANDSCAPE CONTRACTOR

1. Soil testing by a regional extension office is suggested prior to establishment and should be done during the planning process to the stockpiled or transported soil. Soil testing reveals the soil pH and amount of available nutrients such as phosphorus (P) and potassium (K).
2. Call in for any utility locations as required and follow all approved safety practices.

## PART 2 - PRODUCTS

### A. MATERIALS:

1. Topsoil/Planting Mix:
  - a. Lawn Areas: Use on-site stockpiled topsoil. If the quantity of on-site topsoil stockpiled is insufficient to complete the work, provide imported topsoil.
  - b. Planting Beds: Use imported topsoil. Contractor to obtain rights and pay all costs for imported topsoil material. Topsoil shall meet the following requirements:
    - 1) Shall be free from admixture of subsoil, heavy clay, coarse sand, stone, plants roots, sticks, and other foreign material.
    - 2) Shall be classified in the "Loam" portion of the U.S.D.A. Soil Textural Triangle. For topsoil to be classified as "Loam", that fraction passing through a #10 sieve shall meet the following mechanical analysis:
      - a) 8 to 25% clay (less than 0.002 mm particle size)
      - b) 30 to 55% sand (2.0 to 0.05 mm particle size)
      - c) 30 to 50% silt (0.05 mm to 0.02 mm particle size)
    - 3) Contain neither less than 5%, nor more than 20%, organic matter as determined by loss on ignition of samples oven-dried to constant weight at 212 degrees F.
    - 4) Have a pH level of between 6.2 and 6.8.
    - 5) All topsoil shall be screened through a 1-1/4" screen.
    - 6) Submit an analysis of proposed topsoil. Topsoil shall be acceptable to Landscape Architect and Soils Testing Firm.
2. Seeding and Equivalent:
  - a. Where applicable, seed shall be: Pennington - Smart Seed Pro Athletic Field Mixture
  - b. Lawn Seed Mix: A mixture of Water Star Qualified cultivar such as PENN RK4, Rebel Xtreme, Rebel XLR and PENN ATF 1258 TTFs, plus Soprano PRG and Ridgeline KGB. The seed is treated with Myco Advantage and Penkoted for long term sustainability with quicker establishment. This mix is designed to provide a durable playing surface for high-use park settings, a wide range of landscape settings, and home lawns. The Smart Seed Pro Athletic Field Mix will tolerate extended periods of high temperatures and periods of drought with remarkable color retention.
  - c. Detention Basin Seed Mix: Mix shall be a grass like selection of species designed to tolerate fluctuating water levels and poor water quality. Seeding and planting should begin immediately upon completion of the structure while the soil is still friable and before invasive weeds emerge. Plan seeding and planting before the basin is flooded or allow the basin to drain to a few inches before seeding.
3. SEED MIXES MAY VARY BY LOCATION AND USE. CONTACT REDWOOD LANDSCAPING TO VERIFY CHANGES.
4. SEED LABELS SHALL BE PROVIDED TO REDWOOD LANDSCAPING FOR VERIFICATION.
5. Minimum Seed Label Specifications:
  - 1) Weed seed: any weed seed present is listed by percentage of weight. We really don't want any weed seeds in our seed container, but it is difficult and expensive to catch all weed seeds during the cleaning process. Acceptable limits range from 0.3 to 0.5%.
  - 2) Noxious weed: Your label should read: NONE FOUND.
  - 3) Seed is to have been tested less than 12 months before planting date.
3. Sod:
  - a. Sod shall be of a variety preapproved by Redwood Landscaping for each climatic region. Sod is to be cut no more than 24 hrs. prior to install. Keep delivered sod shaded and watered until it is laid. Time deliveries of sod so that no material is on site more than 24 hrs. before it is installed. No sod shall be laid on a Friday afternoon or weekend without Redwood Landscape's approval so as to coordinate irrigation Maintenance.
  - b. Lime: Lime shall be ground limestone containing not less than 85% of total carbonates and shall be ground to such a fineness that 50% will pass through a 200-mesh sieve and 90% will pass through a 90-mesh sieve.
  - c. Fertilizer For Lawns: Fertilizer shall be 22-0-15, uniform in composition, free flowing and suitable for application with approved equipment delivered to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
4. Plants:
  - a. Trees, shrubs, and herbaceous plants:
    - 1) All trees, shrubs and herbaceous plants, deciduous plants or evergreens shall be sound, healthy, vigorous, first-class, freshly dug, nursery grown in a climate similar to or more severe than Ohio.
    - 2) All plant material shall be free of insects, their eggs, and larvae.
    - 3) Plants shall be free of mechanical or cultural injury by rodents, and free of noticeable after effects of insects (borers)
  - b. Plants shall be true to scientific names. The names used are those of "Standardized Plant Names".
5. Soil Amendments: "Soil Moist" granular soil moisturizer Polymer Product or equal, as manufactured and distributed by JRM Chemical Inc., Cleveland, Ohio, (216-475-8488).
6. Mulch:
  - a. All buffer & tree planting mulch shall be triple shredded, hardwood bark, dark brown in color.
  - b. All signage planting mulch shall be triple shredded, hardwood bark, dark brown in color.
  - c. All landscape beds at project entries as well as trees planted outside of landscape beds shall have hardwood mulch.
  - d. All foundation planting adjacent to units shall be installed with washed rock mulch. Stone mulch shall be 1" native gravel as supplied by DEW Supply (214-649-9970) or approved equal.
  - e. Fertilizer For Plantings: Fertilizer shall be 22-0-15, uniform in composition, free flowing and suitable for application with approved equipment delivered to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
  - f. Wood Cellulose Filler Mulch: Degradable green dyed wood cellulose fiber or 100% recycled long fiber pulp, free from weeds or other foreign matter toxic to seed germination and suitable for hydromulching.
  - g. Tackifier: Liquid concentrate diluted with water forming a transparent 3-dimensional film like crust permeable to water and air and containing no agents to seed germination.
7. Erosion Control Blanket: S-75 by North American Green as distributed by Meredith Brothers, Phone: (614) 258-4991 or equal.

13. Anti-Desiccant: Emulsion type, film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants. Deliver in manufacturer's fully-identified containers and mix in accordance with manufacturer's instructions.
14. Herbicide: Round Up, or Kleenup or equal.
15. Wrapping: Tree-wrap tape not less than four inches (4") wide, designed to prevent bore damage and winter freezing.
16. Stakes and Guyes: Provide stakes and deadmen of sound new hardwood, treated softwood, or redwood, free of knot holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire no lighter than 12 ga. with zinc-coated turnbuckles. Provide not less than one-half inch (1/2") diameter rubber or plastic hose, cut to required lengths and of uniform color, material and size to protect tree trunks from damage by wire.
17. Soil Separator: Shall be non-woven, water-permeable polyester geotextile, manufactured as a landscaping product.
18. Weed mat: Provide 4.1 oz., woven polypropylene, needle-punched fabric, weed barrier.

## PART 3 - EXECUTION

### A. SURFACE CONDITIONS:

1. Inspection: Prior to all work in this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.
2. Discrepancies:
  - a. In the event of any discrepancies, immediately notify the Architect.
  - b. Do not proceed with the installation in the areas of discrepancy until all such discrepancies have been fully resolved.

### B. LAYOUT: Shrubs and trees shall be installed within 1'-0" and groundcover shall be installed within 6" of plant location shown on plan.

### C. SOIL AND SITE PREPARATION FOR SEEDED, HYDRO-SEEDED AND SODDED LAWNS - LANDSCAPE CONTRACTOR

1. Soil testing by a regional agricultural extension office is suggested prior to establishment and should be done during the planning process to the stockpiled or transported soil. Soil testing reveals the soil pH and amount of available nutrients such as phosphorus (P) and potassium (K).
2. Call in for any utility locations as required and follow all approved safety practices.
3. Seed installation: Fall: Seed from August 15 to October 15. Spring: Seed from time ground is workable to July 1.
4. Confirm install with Redwood Landscape 3-5 business days prior to commencement of work each time a lawn is installed. Schedule a preconstruction meeting with Redwood Landscape and construction prior to install of first lawns on the construction site.
5. Remaining perennial weeds and grasses on site need to be controlled prior to lawn seeding or sodding. Weed control options include using a systemic nonselective herbicide, digging by hand, or tilling/excavation.
6. When preparing the soil, it's important to establish a favorable final grade. Rough grading should include removal of any rock or other debris in excess of 1". Gravel and water table piping should be cleaned up and soil added as needed to restore grade. Avoid burying construction debris, as this could cause problems for the grass later.
7. Eliminate any depressions or raised areas. Provide a finish grade separation of 2" below slab elevation and maintain minimum slope away from buildings. Topsoil should be brought to finish grade of all patios, walks and driveways.
8. Final slopes should be one to two percent away from buildings (1 to 2 feet drop per 100 feet of run) to assure good surface drainage. Maintain established drainage swales and define new ones as required to remove excess water runoff from site.
9. Before seeding or sodding, it's important to thoroughly loosen the soil one last time and to remove any remaining stone and debris.
10. Amend poor soils, such as heavy clay or straight sand, by adding organic matter. Sources include compost, composted organics, peat, and quality topsoil. If major modifications are needed, it is easier to make these prior to establishing the lawn. Required soil amendments should be mixed at the recommend rates into the soil surface prior to lawn establishment. Apply final seed mix or apply to soils at time of seeding/sod at recommended rates. Install erosion control mats as specified in the landscaping specifications as required.
11. Soil preparation should be done when the soil is not too dry or wet as tillage at these times will destroy soil structure, and create problems with air and water holding capacity and drainage after a rain event.
12. Hydro seed, seed, or sod site per standards, using Redwood approved seed mix. Provide initial starter fertilizer application in hydro seed mix or apply to soils at time of seeding/sod at recommended rates.
13. Provide initial irrigation of prepared site and schedule a follow up visit with Redwood Landscape/maintenance within 15 days of install for an inspection walk through.
14. Landscape install contractor provides 90 days of follow up and maintenance recommendations and guarantees all work for that same period.

### D. HYDRO-SEEDING PROTOCOL

1. Per Seed supplier recommendations and Redwood Landscaping's approval.
2. Erosion Control, Steep Slopes and Low Maintenance areas.
3. Per erosion mat supplier and seed supplier recommendations as well as Redwood Landscaping's approval.
4. Erosion Control Matting Recommendations: Western Excelsior's Excel SR-1 Erosion Control Blanket (ECB) consists of a 100% certified weed free straw matrix stitched to a single net (top). Excel SR-1 is available with photodegradable, synthetic netting (Regular); rapid photodegradable, synthetic netting (Rapid-Go) or all natural, biodegradable netting (All Natural).
5. Variations, alternate products or exceptions are to be cleared through Redwood Landscaping before any changes are made. Information and/or questions pertaining to Pennington seed or fertilizer products along with Western Excelsior/ Wind, Water and Soil matting can be resourced through: Scott Fisher Pennington Seed Ohio Cell: (513)246-4543 Fax: (513)860-3472 sfisher@penningtonseed.com

### E. Sod

1. Soil preparation should be done as per the specifications in the Soil and Site Preparation for Seeded, Hydro-seeded and Sodded Lawns - Landscape contractor section when the soil is not too dry or wet as tillage at these times will destroy soil structure, and create problems with air and water holding capacity and drainage after a rain event.
2. Sod work can be performed from time ground is workable to the first frost.
3. Add starter fertilizer at the recommended rate to the soil and lightly rake it in prior to laying sod.
4. Water the soil lightly before laying sod. Soil should just be moist and water added incrementally in front of the sod laying process.
5. Start laying the sod on a straight edge such as a driveway. Lay one piece of sod at a time laying each piece snug against each other. Work the seams tightly together without overlapping. Lay the sod like bricks in a staggered or stair step fashion so end seams don't line up. Cut the sod to size as needed.
6. Use a water-filled roller to help level the sod. Rolling the sod also makes sure there's good contact between the sod and soil so it can root in properly.
7. Water newly laid sod thoroughly each day (if there is no rainfall) for the first 14 days as per maintenance protocols. Slowly cut back on the watering to encourage deep root growth. Water will need to be maintained until weather conditions cool and sod is established.
8. Follow up in 6 weeks with an approved maintenance level fertilizer

### F. TREE, SHRUB, PERENNIAL AND ANNUAL PLANTINGS

1. Tree and shrub planting shall be done according to the International Society of Arboriculture (ISA) guidelines and landscape plan specs.
2. ISA Guidelines can be found here: <https://www.isa-arbor.com/education/onlineresources/cadplanning/specifications/#planting>
3. Contractor is responsible for verifying plant quantities. If quantities listed in Plant Material List do not correlate with plantings indicated on plan, the quantities indicated on plan shall govern.
4. All planting operations shall be performed between the dates of March 1 and November 1. All plantings to be performed between the dates of June 1 and August 31 to be with proofed with anti-desiccant.
5. Perennials and small shrub landscape plantings shall be installed as follows:
  - a. Dig up the soil to aerate it, reduce compaction and remove any weeds. Then dig in some organic matter, such as well-rotted manure or compost.
  - b. Planting Depth: Most perennials/shrubs flourish when their crowns are planted at the same depth or slightly higher as they were in the growing container. Test planting depth by laying a tool handle across the planting hole with the perennial placed at the proposed planting depth in the hole. Adjust the soil in the planting hole accordingly. When the crown is even with the tool handle, the plant is at the proper depth.
  - c. The hole for each perennial should be twice the size of the container the perennial/shrub comes in. The wider the hole, the better, since plants' roots grow out more easily into loosened, enriched soil. Remove the perennial from the container and lightly loosen the roots so the plant will grow out of its tightly wrapped ball and settle in more quickly.
  - d. Refill the hole with enriched soil that has been amended with organics. Set plants into holes at their original growing level or slightly higher. Never bury a plant deeper than its roots and the stems meet! Buried crowns mean suffocated plants! Plant 2 inches higher than ground level if you are going to mulch. Backfill the rest of the hole with enriched soil. Tamp down the soil to remove any large air pockets.
  - e. Water well, with a soft trickle of water that lasts long enough to saturate the root ball deep into the soil. Different soil types may need slightly more or less water. Monitor the soil moisture to help you judge when the plant should receive more water.
6. Annuals:
  - a. Refer to Redwood Landscape Design Standards Handout for spring, summer and fall seasonal annual and bulb varieties and planting layout.
  - b. All annual planting beds shall have a minimum of 10" of "annual bed mix".
  - c. "Annual bed mix" shall be processed shredded topsoil with organic compost and fine silica gravel for annuals.
  - d. Mulch with 1" of compost mulch or treat soil with a granular pre-emergence herbicide suitable for annual plantings.

### 7. Pruning:

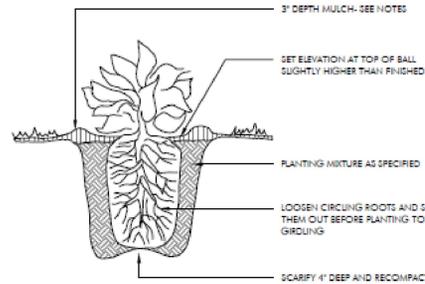
1. Prune all new trees and shrubs in accordance with acceptable standard practices. All cuts over one inch in diameter shall be treated with an approved tree paint. In the same manner, prune existing trees which are to remain if indicated on the landscape plan.
2. Protection:
  - a. Protect all plant areas and plants from damage. If any plants are injured, treat and replace as required. Execute no work in or over prepared plant areas, or adjacent to planting without proper safeguards and protection.
3. 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. (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' 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. 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. All trees and shrubs must be planted at least 10' from any fire hydrant. Shade and evergreen trees must be at least 15' away from a minimum overhead wire. Trees must be planted a minimum of 15' 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 Unit needs to inspect all trees, existing or planned, 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.

### G. Maintenance During Installation:

1. Maintain immediately following the accomplishment of planting operations of any plant unit.
2. Spray foliage with water, where required, during the evening after sundown or otherwise as directed. Keep all plantings in a healthy, growing condition by watering, weeding, cultivating, pruning, spraying, trimming and by performing any other necessary operations of maintenance.
3. The Contractor shall be responsible for continued proper care of the lawn areas during the period when the grass is becoming established. The period of maintenance for all lawn areas shall extend for sixty (60) days with two (2) mowings required or as long as necessary to establish over the entire lawn areas a uniform stand of grasses as specified, free of weeds and undesirable grasses. After the required maintenance period and upon acceptance of lawn area by the Architect, the Owner will assume maintenance responsibility.
4. Mowing: The lawn seeded areas shall be mowed with approved mowing equipment to a height of two inches (2") whenever the average height of grass becomes three inches (3"). If weeds or other undesirable vegetation threaten to smother the planted species, such vegetation shall be mowed, or in the case of exceedingly rank growths, be uprooted, raked and removed from the area.

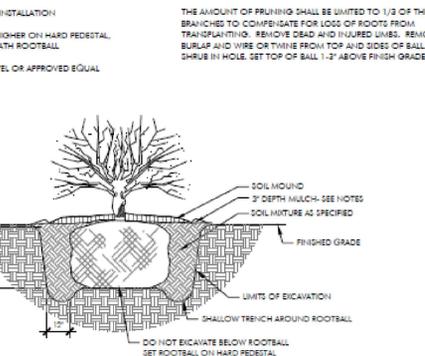
## Perennial Planting

NOTE:  
1. ALL MULCH TO BE 1" NATIVE GRAVEL OR APPROVED EQUAL (DOW SITE SUPPLY) WWW.DOWSITESUPPLY.COM (214) 649-9970

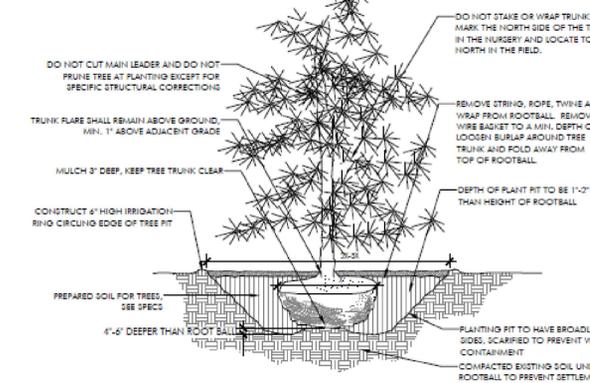


## Shrub Planting

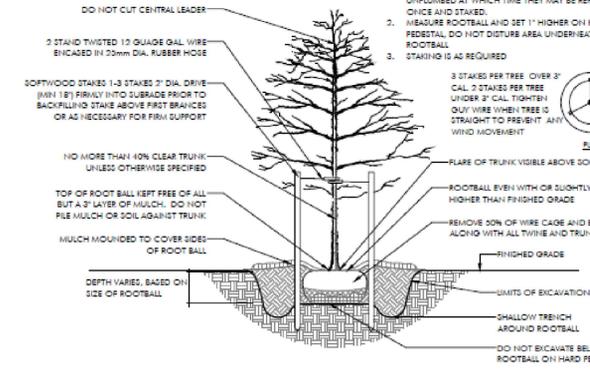
NOTE:  
1. DO NOT PRUNE SHRUBS DURING INSTALLATION.  
2. MEASURE ROOTBALL AND SET 1\"/>



## Evergreen Tree Planting



## Tree Planting



your trusted advisor  
engineers  
architects  
planners  
landscape  
consultants

DATE	REVISION
07/11/19	1
07/30/19	2
08/27/19	3
9/29/19	4
02/11/20	5
03/16/20	6

ISSUED FOR:	PRELIM SET	NO	NO	NO	NO	NO	NO
1. TYP COMMENTS	06/7/19	1	AS NOTED	2	REV	4	CITY COMMENT REVISIONS
2. REV SITE PLAN		3		4	REV	5	CITY COMMENT REVISIONS
3. POC SUBMITTAL		4		5	REV	6	CITY COMMENT REVISIONS
4. REVISIONS		5		6	CC		
5. CITY COMMENT REVISIONS		6					
6. CITY COMMENT REVISIONS							

ROCHESTER HILLS  
EAST AVON RD, ROCHESTER HILLS, OAKLAND COUNTY, MI  
REDWOOD - 7510 EAST PLEASANT VALLEY ROAD  
INDEPENDENCE, OH 44131

LANDSCAPE NOTES & DETAILS

PROJECT NO:	190346
DISCIPLINE:	LANDSCAPE
SHEET NAME:	L-5
SHEET	OF
5	6



your trusted advisor  
**engineers  
 architects  
 planners  
 consultants**

DATE	NO.	ISSUED FOR:	PRELIM SET	NO.	REVISION
07/11/19	1	TYP COMMENTS	06/7/19	1	
07/30/19	2	REV SITE PLAN	AS NOTED	2	
08/27/19	3	PG SUBMITTAL	RW	3	
12/20/19	4	REVISIONS	RW	4	
03/11/20	5	CITY COMMENT REVISIONS	RW	5	
03/16/20	6	CITY COMMENT REVISIONS	CC	6	

**ROCHESTER HILLS**  
 EAST AVON RD, ROCHESTER HILLS, OAKLAND COUNTY, MI  
 REDWOOD - 7510 EAST PLEASANT VALLEY ROAD  
 INDEPENDENCE, OH 44131

**SITE FURNISHINGS DETAILS**

PROJECT NO.	190346
DISCIPLINE	LANDSCAPE
SHEET NAME	L-6
SHEET	6
OF	6

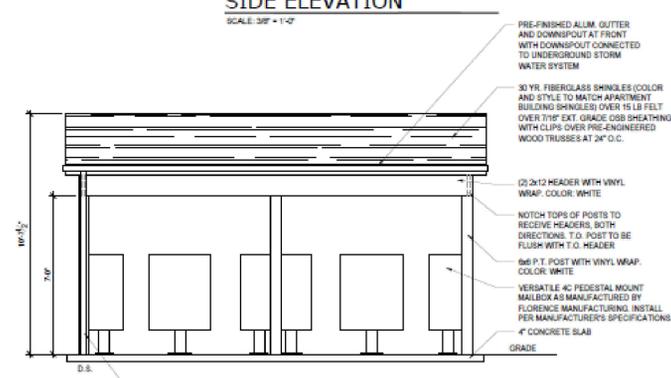
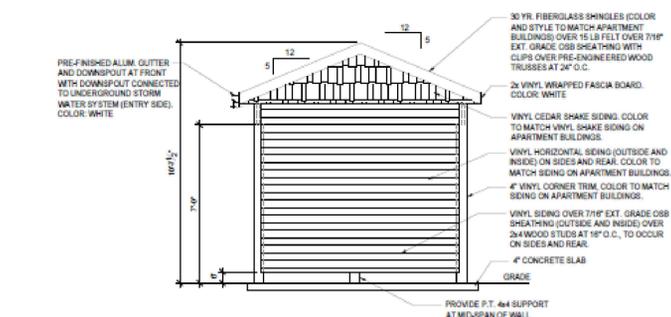
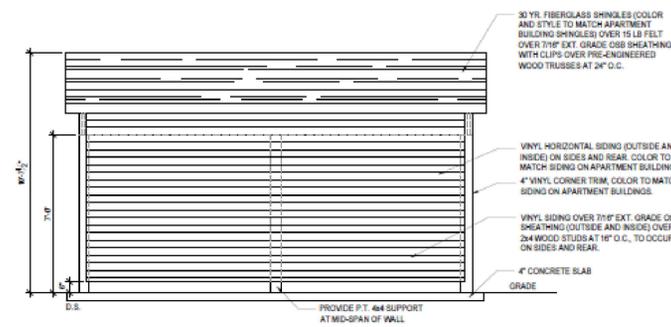
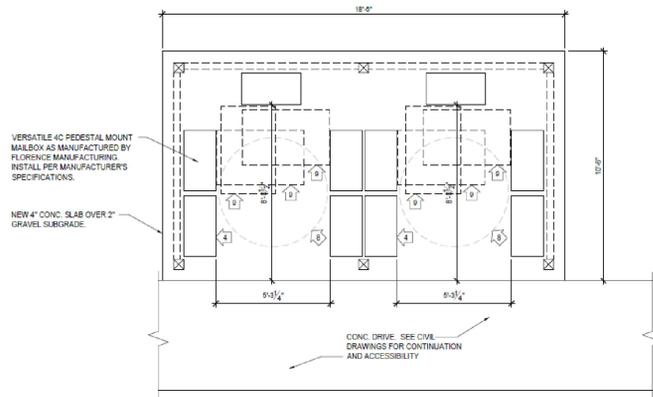
## BARK PARK NOTES:

### Park Surface

- The surface will be either natural lawn or pea gravel (installed to a depth of 6") throughout the fenced in dog park area. Consult with Redwood on desired surface

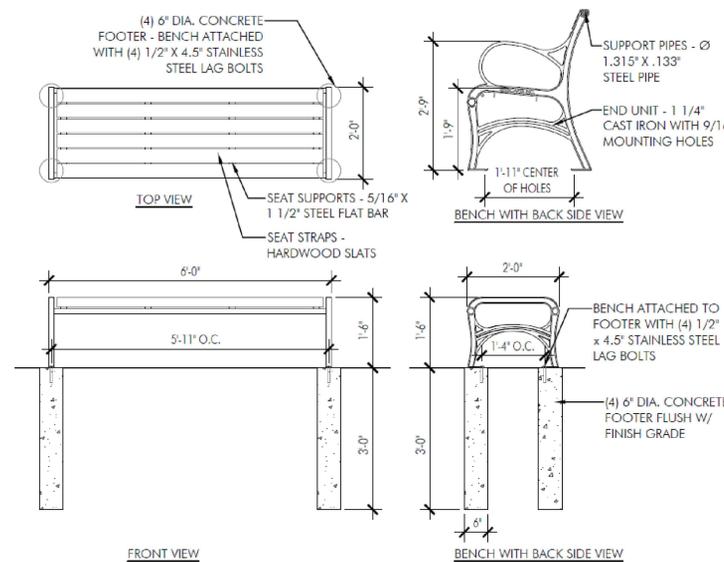
### Fencing

- Installed around the perimeter of the dog park
- Standard construction (see detail 1, this page)
- Each dog park will have two (2) access points. These gates will be the same height as the surrounding fence. The access point for the dog park will consist of a double gate. The first, or outer gate, will provide the user access to a sixteen (16) square foot leashing/unleashing vestibule. This area will serve as a buffer between the dog park and the entrance. A second access point will provide access for maintenance of the dog park, but will not be accessible by users. All gates will be lockable.
- All gates will be the same height as the surrounding fence and will be a minimum of 42" wide.



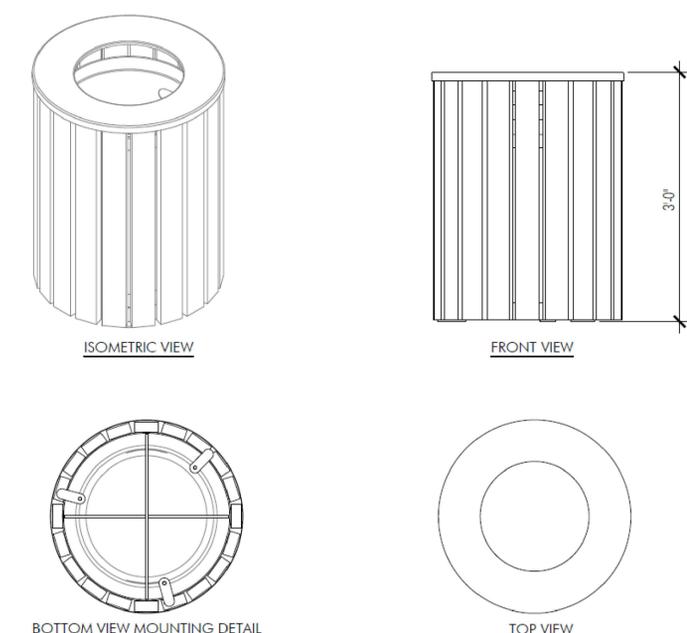
NOTE: REFER TO SITE PLAN FOR MAIL KIOSK SIZE AND LOCATION.

### 6 MAIL KIOSK (TYP.) L-6 NOT TO SCALE

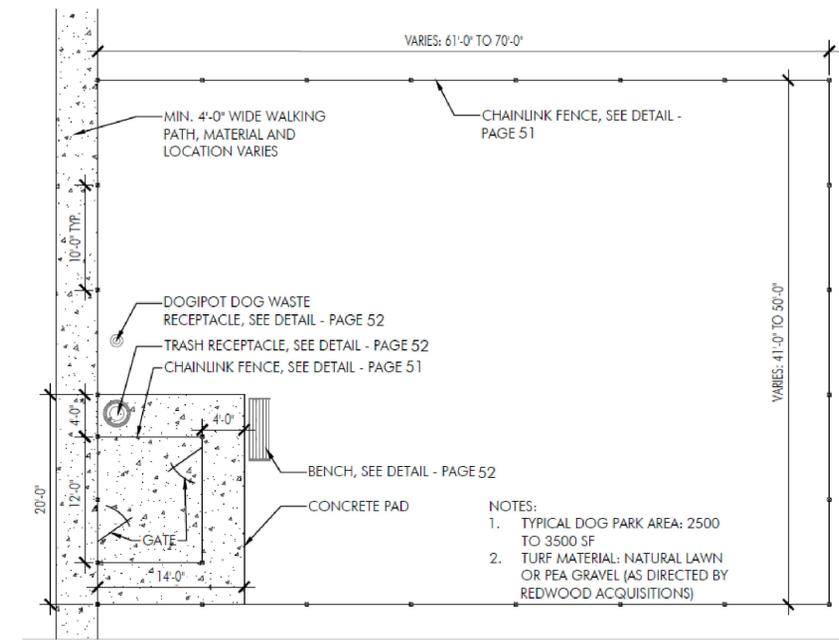


**sitescapes**  
 AVONDALE BENCH  
 PRODUCT AV1-1110  
 AND AV1-1010  
 AVAILABLE FROM:  
 SITESCAPES  
 www.sitescapesonline.com  
 402-421-9464

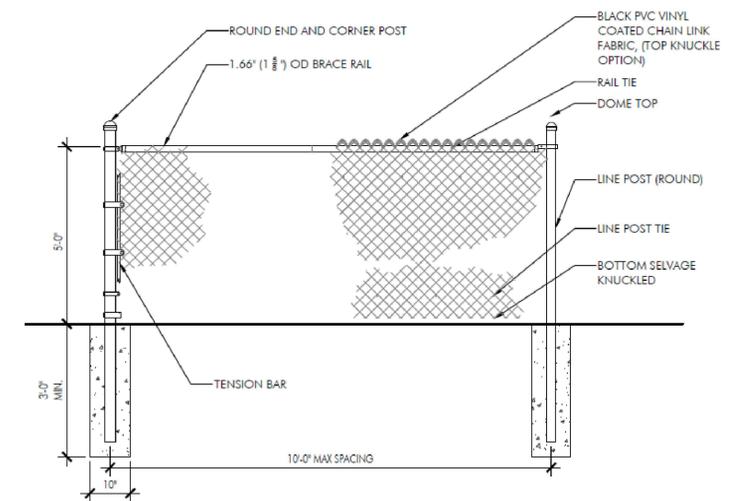
NOTES:  
 1. 6' BACKED OR BACKLESS BENCH  
 2. CAST IRON END UNITS  
 3. HARDWOOD SLATS  
 4. NO CENTER ARMREST  
 5. POWDER COATED  
 6. COLOR - SLATE



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 PRODUCT AV2-3000  
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 SITESCAPES  
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 402-421-9464



### 3 DOG PARK LAYOUT L-6 NOT TO SCALE



### 2 DOG PARK FENCING L-6 NOT TO SCALE



Notes: Pet Station Dispenser and Pet Station Can to be ordered from [zerowasteusa.com](http://zerowasteusa.com) and mounted on a 4x4 post with white vinyl sleeve and cap

### 1 PET STATION AND SIGN DETAILS L-6 NOT TO SCALE