

HINESBURG CENTER UNIT COUNTS

HC I EXISTING MULTI-FAMILY	18
HC II SINGLE-FAMILY DETACHED	15
BLDG F, G - NINE-UNIT BUILDING	18
BLDG E - SIX-UNIT BUILDING	6
BLDG. C - MIXED USE BUILDING	34
PHASE II SUB-TOTAL	73
TOTAL UNITS	91

COMMERCIAL / LIGHT INDUSTRIAL / RETAIL

HC I +/- 17,600 SF RETAIL +/- 2,500 SF RESTAURANT	
HC II +/- 8,000 SF OFFICE +/- 4,000 SF RETAIL +/- 2,500 SF LIGHT INDUSTRIAL	
TOTALS +/- 8,000 SF OFFICE +/- 2,500 SF LIGHT INDUSTRIAL +/- 21,600 SF RETAIL +/- 2,500 SF RESTAURANT	

PARKING REQUIREMENTS

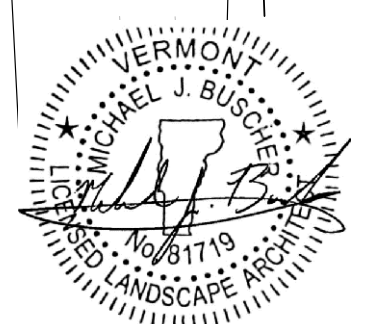
HC I 18 MULTI-FAMILY UNITS @ 2 SPACES PER UNIT RETAIL @ 1 SPACE PER 400 GSF RESTAURANT @ 1 SPACE PER 2 SEATS PHASE I SUB-TOTAL	36 44 18 98		
HCII * 34 MULTI-FAMILY UNITS @ 2 SPACE PER UNIT OFFICE/LIGHT IND. @ 1 SPACE PER 400 SF RETAIL @ 1 SPACE PER 400 SF PHASE II SUB-TOTAL	68 31 10 109		
TOTAL PARKING (HC I & II)	203		
SHARED PARKING REDUCTIONS (35.8)			
TOTAL PARKING REQUIRED	171.6		
TOTAL PARKING PROVIDED			
HC I	HC II	TOTAL	
ON-STREET PARKING	33	39	72
OFF-STREET PARKING	64	43	107
TOTAL PARKING	97	82	179

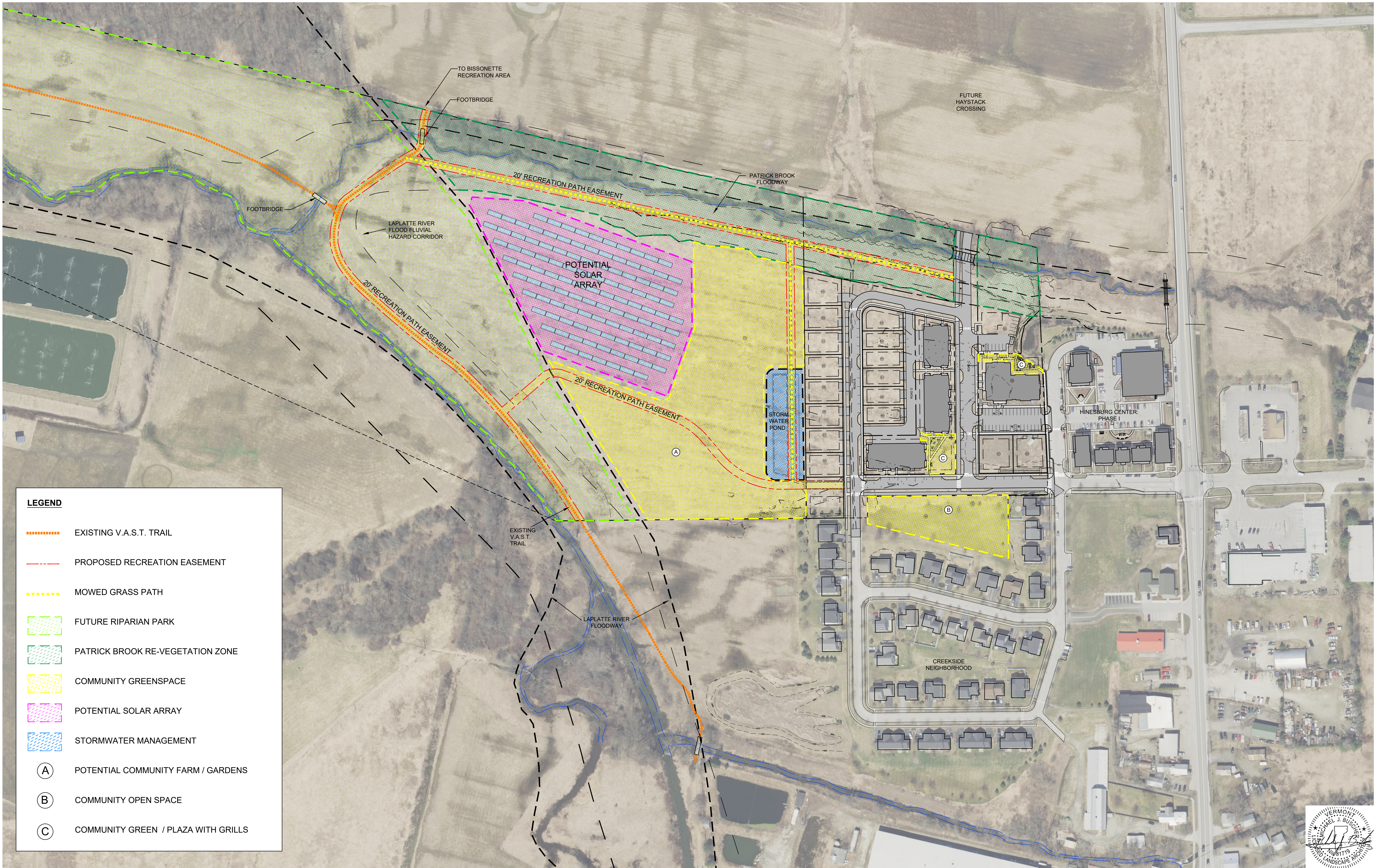
*NOTE: PARKING CALCULATIONS DO NOT INCLUDE SINGLE FAMILY LOTS OR BUILDINGS E, F, AND G WHICH ALL HAVE A MINIMUM OF 2 DEDICATED PARKING SPACES PER UNIT.

WIND NRG PARTNERS, N/F 199/158 199/162

JOLLEY ASSOCIATE, n/f 98/307

AUBUCH REALTY CO., INC. n/f 220/124

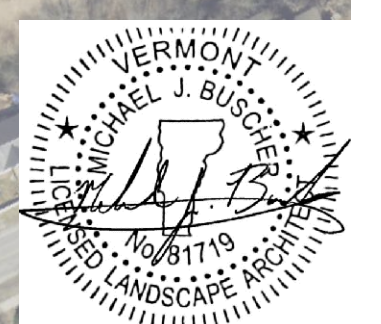




LEGEND

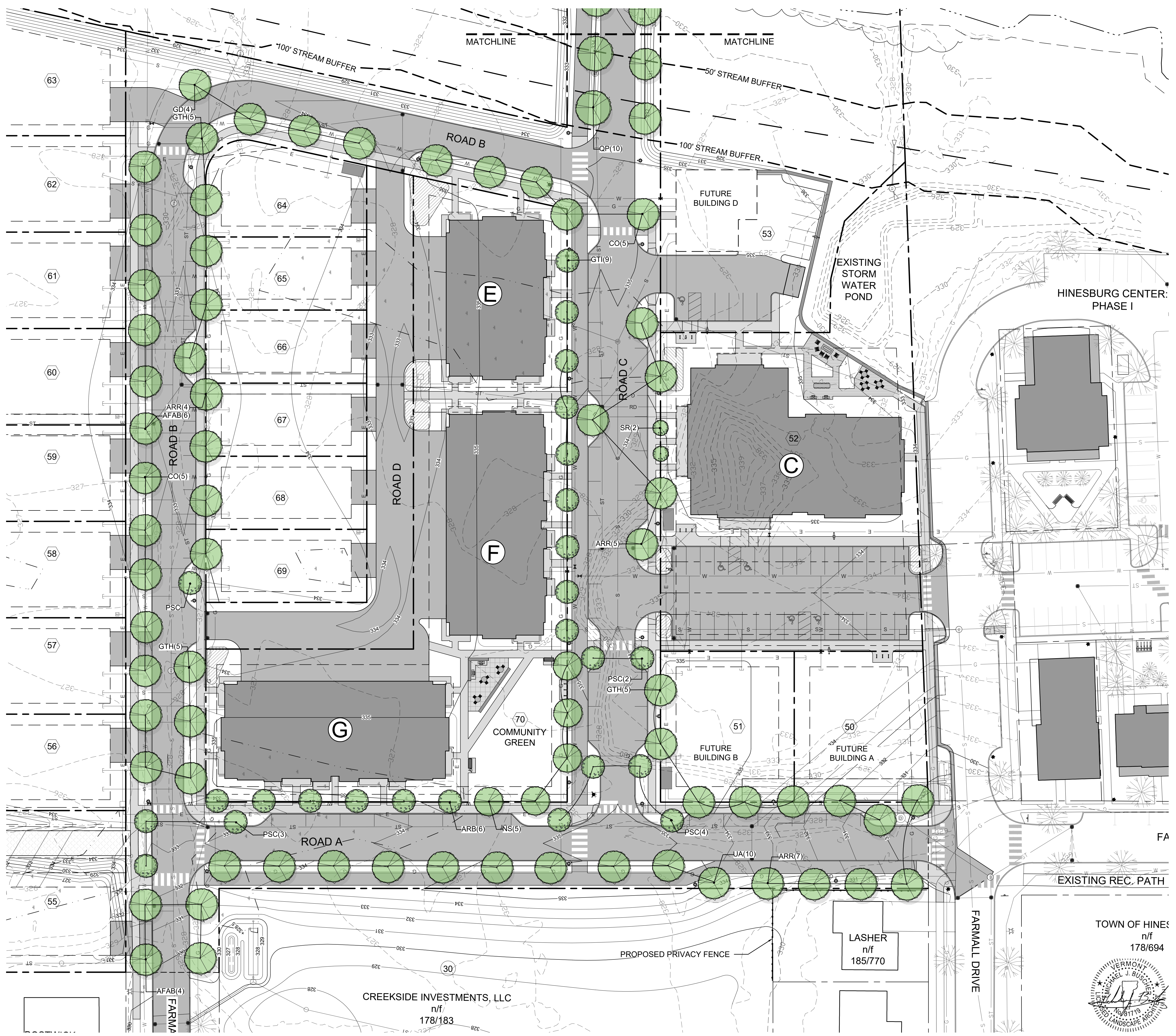
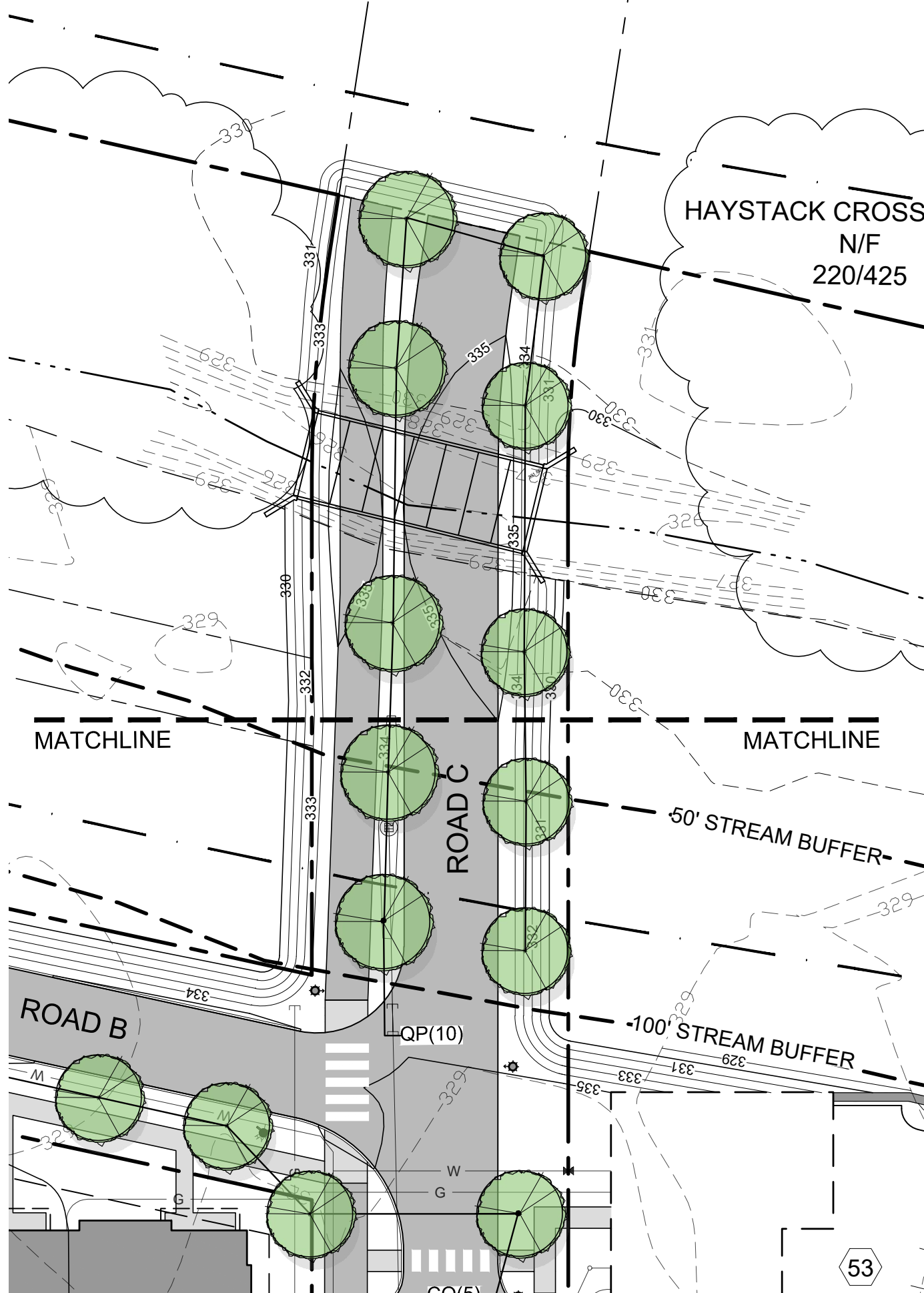
- EXISTING V.A.S.T. TRAIL
- PROPOSED RECREATION EASEMENT
- MOWED GRASS PATH
- FUTURE RIPARIAN PARK
- PATRICK BROOK RE-VEGETATION ZONE
- COMMUNITY GREENSPACE
- POTENTIAL SOLAR ARRAY
- STORMWATER MANAGEMENT

- (A) POTENTIAL COMMUNITY FARM / GARDENS
- (B) COMMUNITY OPEN SPACE
- (C) COMMUNITY GREEN / PLAZA WITH GRILLS



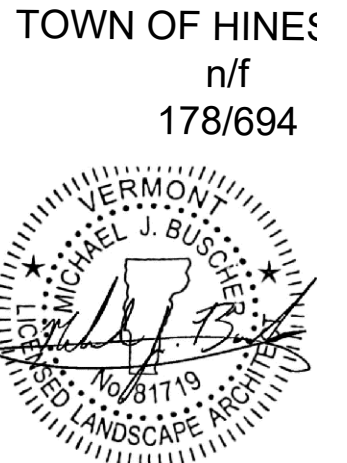
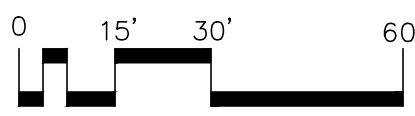
LEGEND

- DECIDUOUS SHADE TREE
- DECIDUOUS ORNAMENTAL TREE
- CONIFER LARGE TREE
- CONIFER SMALL TREE
- DECIDUOUS SHRUB
- CONIFER SHRUB
- PERENNIAL, GROUNDCOVER
- EXISTING TREE TO REMAIN
- POTENTIAL SNOW STORAGE



STREET TREE - PLANTING SCHEDULE

Trees Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
6	ARB	ACER rubrum 'Bowhall'	Bowhall Maple	2" cal.	B&B		45'	15'
16	ARR	ACER rubrum 'Red Sunset'	Red Sunset Maple	2" cal.	B&B		45'	35'
10	AFAB	ACER x freemanii 'Autumn Blaze'	Autumn Blaze Maple	2" cal.	B&B		50'	40'
10	CO	CELTIS occidentalis	Common Hackberry	2" cal.	B&B		40'	30'
15	GTH	GLEDTISIA LI. 'Halka'	Halka Honeylocust	2" cal.	B&B		40'	40'
9	GTI	GLEDTISIA LI. 'Street Keeper'	Street Keeper Honeylocust	2" Cal.	B&B		45'	20'
4	GD	GYMNOCLADUS dioicus 'Espresso'	Espresso Kentucky Coffeetree	2" cal.	B&B		50'	35'
5	NS	NYSSA sylvatica	Black Tupelo	2" Cal.	B&B		40'	25'
10	PSC	PRUNUS sargentii	Sargent Cherry	2" cal.	B&B		30'	30'
10	QP	QUERCUS palustris	Pin Oak	2" cal.	B&B		70'	40'
2	SR	SYRINGA reticulata 'Ivory Silk'	Ivory Silk Tree Lilac	2" cal.	B&B		20'	15'
10	UA	ULMUS x 'Accolade'	Accolade Elm	2" cal.	B&B		70'	60'



TOWN OF HINESBURG
n/f 178/694

LOT 52 - PLANTING SCHEDULE

Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
3	AFAB	ACER x Freemanii 'Autumn Blaze'	Autumn Blaze Maple	2" cal.	B&B		50'	40'
3	AFA	ACER x Freemanii 'Amstrong'	Armstrong Freeman Maple	2" cal.	B&B		50'	15'
6	BPS	BETULA papyrifera 'Solea'	Paper Birch	8" Ht.	B&B	Clump Form	50'	30'
4	NS	NYSSA sylvatica	Black Tupelo	2" cal.	B&B		40'	25'
2	PSC	PRUNUS sargentii	Sargent Cherry	2" cal.	B&B		30'	30'

Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
7	AN	AZALEA 'Northern Lights'	Northern Lights Azalea	#2 Cont.			4.5'	4.5'
10	CAH	CLETHRASA 'Hummingbird'	Hummingbird Summersweet	#5 Cont.			3.4'	3.4'
11	CSF	CORNUS sericea 'Firedance'	Firedance Red-Osier Dogwood	2" Ht.			3.4'	4.5'
9	HM	HYDRANGEA macrophylla 'Newport'	Newport Hydrangea	#3 Cont.	6" O.C.		3.4'	3.4'
12	HP	HYDRANGEA paniculata 'Tree View'	Tree View Hydrangea	#5 Cont.			3.4'	3.4'
8	POS	PHYSCOCARPUS opulifolius 'Summer Wine'	Summer Wine Ninebark	#3 Cont.			5.6'	5.6'
1	RA	RHO DODENDRON 'Aglo'	PJM Hybrid Rhododendron	#5 Cont.			3.4'	3.4'
21	RAG	RHUS aromatica 'Grow Low'	Grow Low Sumac	#3 Cont.	Groundcover		18-24"	6-8"
6	TMD	TAXUS media 'Densiformis'	Dense Spreading Yew	2" Ht.	#5 Cont.		4.5'	8-10'
9	TMG	TAXUS media 'Greenwave'	Greenwave Yew	18" Ht.	B&B		5' O.C.	3.4'

Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
21	CK	CALAMAGROSTIS x 'Karl Foerster'	Karl Foerster Reed Grass	Clump	#3 Cont.	24" O.C.	5'	18-30"
20	LM	LIRIOPE muscari 'Big Blue'	Big Blue Lilyturf	Clump	#1 Cont.	18" O.C.	12-18"	1-2"

LOT 53 - PLANTING SCHEDULE

Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
1	AB	ABIES balsamea	Balsam Fir	5' Ht.	B&B		60'	30'
2	AFAB	ACER x Freemanii 'Autumn Blaze'	Autumn Blaze Maple	2" cal.	B&B		50'	40'
3	PS	PINUS strobus	White Pine	5' Ht.	B&B		100'	50'

COMMON LOT 54 / 55 / ROAD D / - PLANTING SCHEDULE

Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
5	AB	ABIES balsamea	Balsam Fir	5' Ht.	B&B		60'	30'
11	ASGM	ACER saccharum 'Green Mountain'	Green Mountain Maple	2" cal.	B&B		70'	40'
3	BNH	BETULA lanigera 'Heritage'	Heritage Birch	10" Ht.	B&B	Clump	40'	30'
6	CCI	CRATAEGUS sanguinolenta	Thornless Cockspur Hawthorn	1.5" Cal.	B&B		15'	20'
4	PS	PINUS strobus	White Pine	5' Ht.	B&B		100'	50'
3	PG	PICEA glauca	White Spruce	5' Ht.	B&B		75'	35'
1	PO	PLATANUS occidentalis	Sycamore	2" cal.	B&B		70'	70'
3	QR	QUERCUS rubra	Red Oak	2" cal.	B&B		60'	60'
7	ZS	ZELKOVA serata 'Green Vase'	Green Vase Zelkova	2" cal.	B&B		50'	40'

LOT 70 - PLANTING SCHEDULE

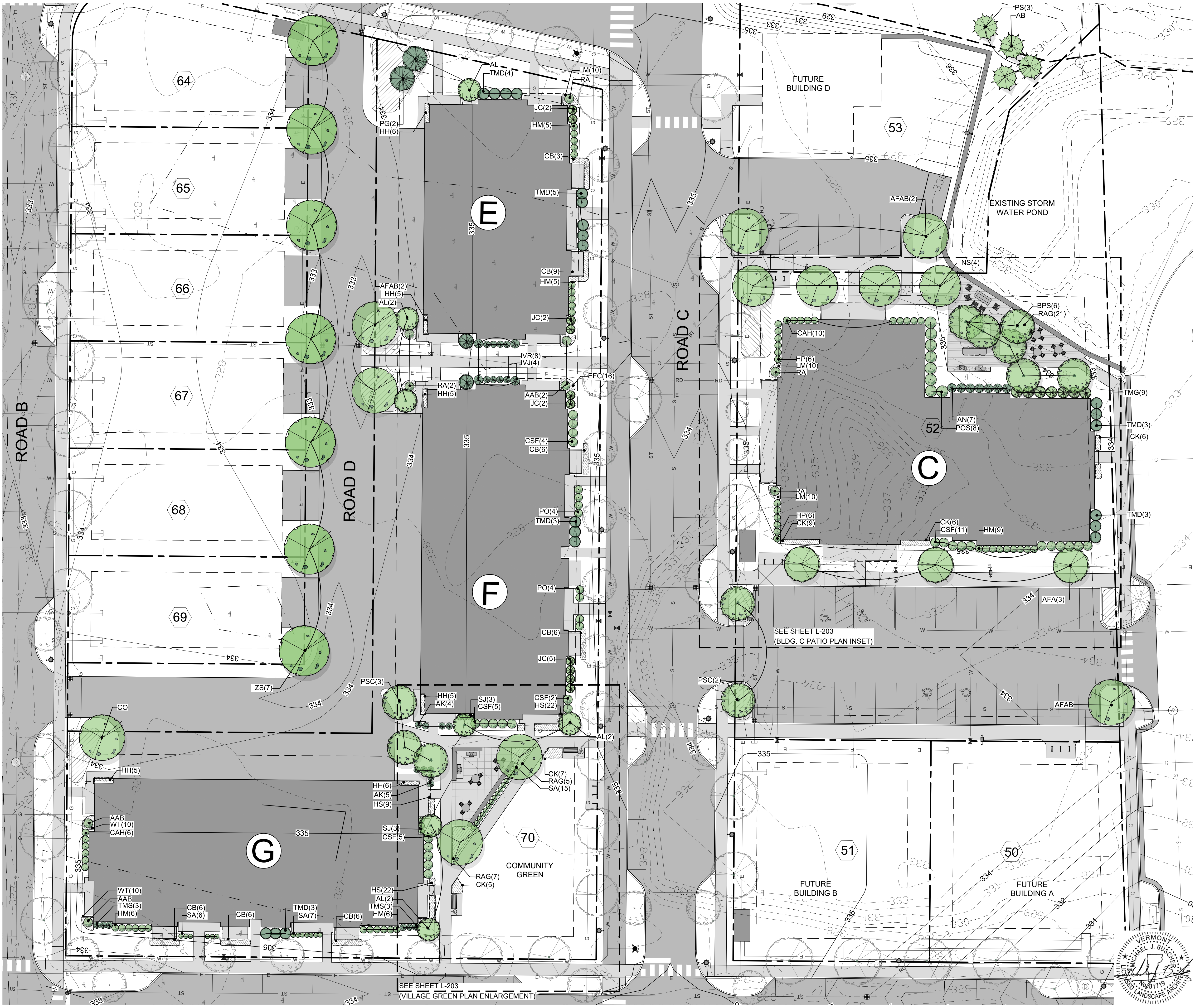
Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
2	AFAB	ACER x Freemanii 'Autumn Blaze'	Autumn Blaze Maple	2" cal.	B&B		50'	40'
7	AL	AMELANCHIER laevis	Allegheny Serviceberry	6" Ht.	B&B		25'	20'
1	CD	CELTIS occidentalis	Common Hackberry	2" cal.	B&B		40'	30'
2	GTH	GLEDETIA 'Halka'	Halka Honeylocust	2" cal.	B&B		40'	40'
2	PG	PICEA glauca	White Spruce	5' Ht.	B&B		75'	35'
3	PSC	PRUNUS sargentii	Sargent Cherry	2" cal.	B&B		30'	30'

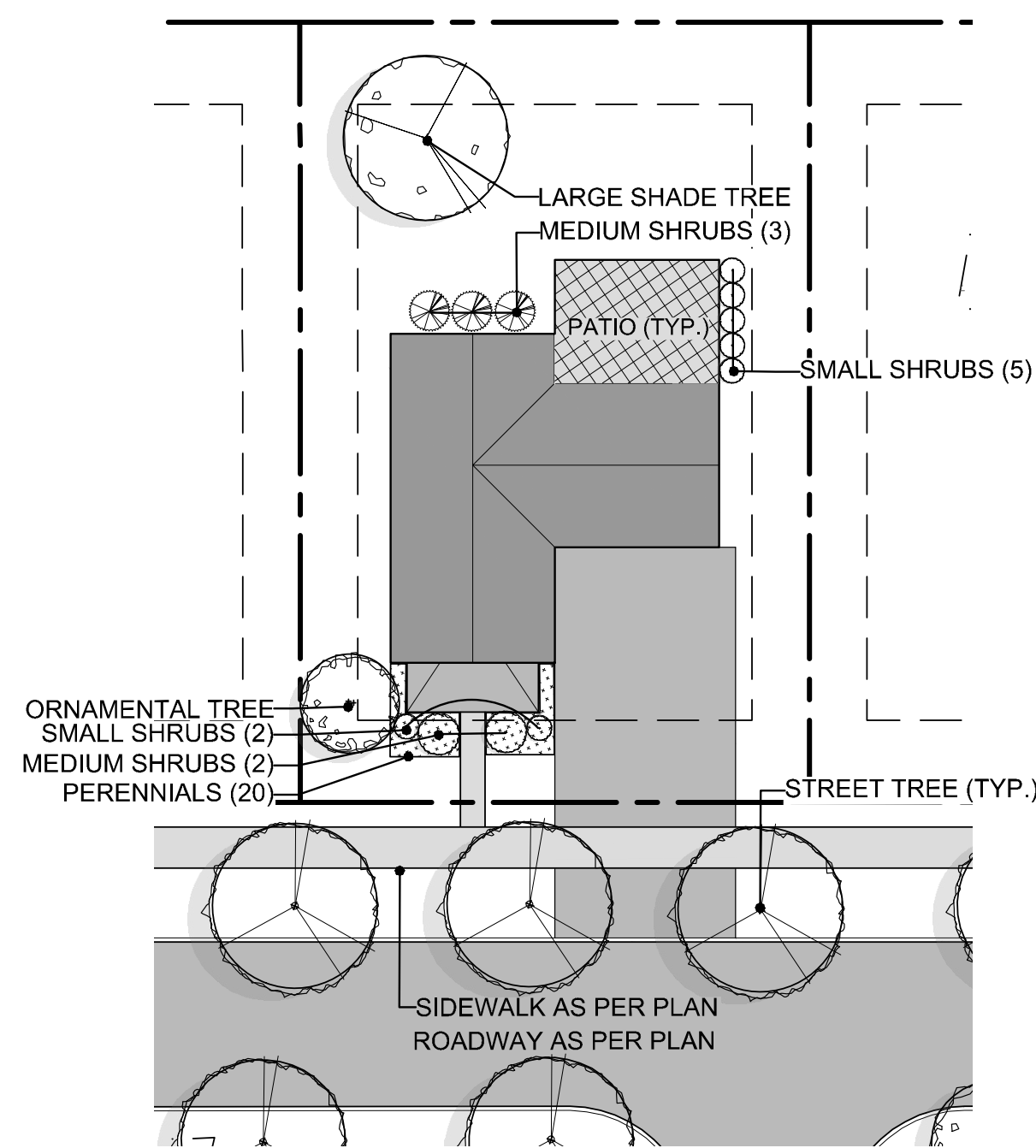
Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
4	AAB	ARONIA arbutifolia 'Brilliantissima'	Brilliant Red Chokeberry	#7 Cont.			8-10'	3.4'
9	AK	AZALEA 'Karen'	Karen Azalea	#5 Cont.			3.4'	3.4'
6	CAH	CLETHRASA 'Hummingbird'	Hummingbird Summersweet	#5 Cont.			3.4'	3.4'
16	CSF	CORNUS sericea 'Firedance'	Firedance Red-Osier Dogwood	2" Ht.			3.4'	4.5'
22	HM	HYDRANGEA macrophylla 'Newport'	Newport Hydrangea	#3 Cont.	6" O.C.		3.4'	3.4'
4	IV	ILEX verticillata 'Jim Dandy'	Jim Dandy Winterberry	18" Ht.	#3 Cont.		4.5'	5.6'
8	IVR	ILEX verticillata 'Red Sprite'	Red Sprite Winterberry	#3 Cont.			3.4'	3.4'
11	JC	JUNIPERUS chinensis 'Sea Green'	Sea Green Juniper	#3 Cont.			5.6'	4.5'
8	PO	PHYSCOCARPUS opulifolius 'Little Devil'	Little Devil Ninebark	#3 Cont.			3.4'	3.4'
3	RA	RHO DODENDRON 'Aglo'	PJM Hybrid Rhododendron	#5 Cont.			3.4'	3.4'
12	RAG	RHUS aromatica 'Grow Low'	Grow Low Sumac	#3 Cont.	Groundcover		18-24"	6-8"
28	SA	SPIRAEA alba 'Little Princess'	Little Princess Spirea	#3 Cont.			2-3'	2-3'
6	SJ	SPIRAEA 'Little Princess'	Little Princess Spirea	#3 Cont.			2-3'	3.4'
15	TMD	TAXUS media 'Densiformis'	Dense Spreading Yew	2" Ht.	#5 Cont.		4.5'	8-10'
6	TMS	TAXUS media 'Sentinel'	Sentinel Yew	4"	B&B		6-8"	2-3'

Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
42	CB	CALAMAGROSTIS a. var. brachytricha	Korean Feather Reed Grass	Clump	#1 Cont.	24" O.C.	36"	36"
12	CK	CALAMAGROSTIS x 'Karl Foerster'	Karl Foerster Reed Grass	Clump	#3 Cont.	24" O.C.	5'	18-30"
16	EFC	EUONYMUS fortunei coloratus	Purple Leaf Wintercreeper	Clump	#1 Cont.	30" O.C.	12"	1-3'
32	HH	HEMEROCALLIS 'Happy Returns Daylily'	Happy Returns Daylily	Clump	#2 Cont.	24" O.C.	3'	12-18"
44	HS	HEMEROCALLIS 'Stella d'Oro Daylily'	Stella d'Oro Daylily	Clump	#2 Cont.	24" O.C.	12-18"	11"
10	LM	LIRIOPE muscari 'Big Blue'	Big Blue Lilyturf	Clump	#1 Cont.	18" O.C.	12-18"	1-2"
20	WT	WALDSTEINIA nemoralis	Barren Strawberry	Clump	#2 Cont.	18" O.C.	6"	18"

LEGEND

- DECIDUOUS SHADE TREE
- DECIDUOUS ORNAMENTAL TREE
- CONIFER LARGE TREE
- CONIFER SMALL TREE
- DECIDUOUS SHRUB
- CONIFER SHRUB
- PERENNIAL, GROUNDCOVER.
- EXISTING TREE TO REMAIN
- POTENTIAL SNOW STORAGE

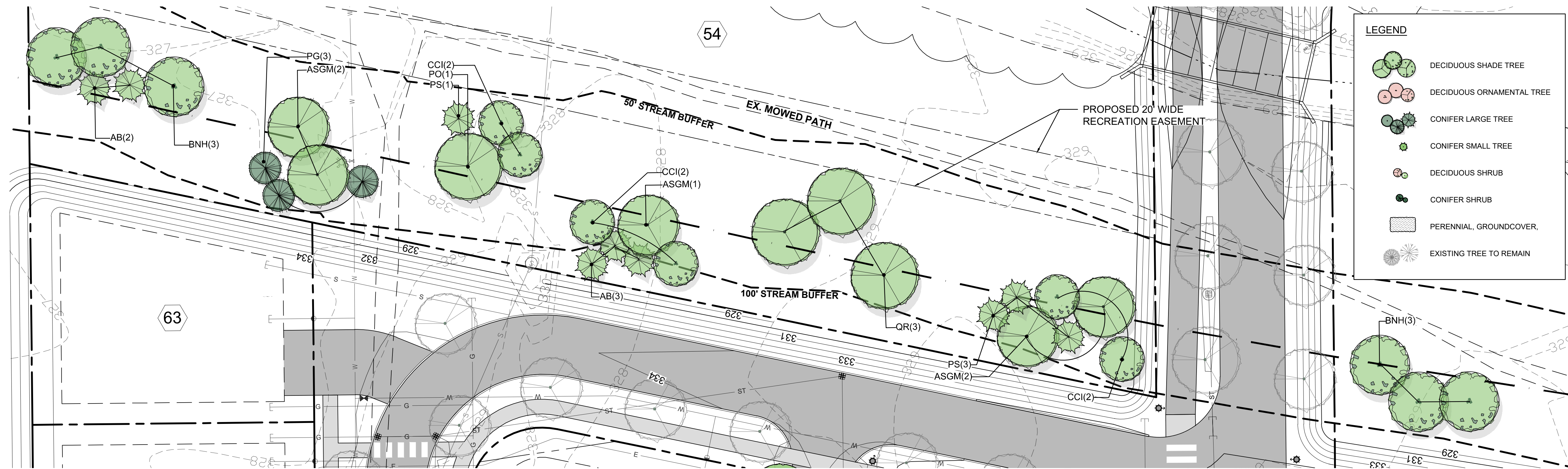




TYPICAL MEDIUM SINGLE-FAMILY DETACHED LOT PLANTING SCHEDULE

Qty.	Plant Type	Size	Spec
1	Large Shade Tree - Maple, Oak, Honey Locust, Etc.	2" cal	B&B
1	Ornamental Flowering Tree - Crabapple, Serviceberry, Magnolia, Etc.	6" Ht.	B&B
7	Small Shrubs - Taxus, Juniper, Spiraea, Clethra, Etc.	1-3'	#3 Cont.
8	Medium Shrubs - Hydrangea, Aronia, Ninebark, Thuja, Etc.	3-6'	#3 Cont.
20	Perennial Ground Cover - Phlox, Andromeda, Myrtle, Lenten Rose, Etc.	Clump	#1 Cont.

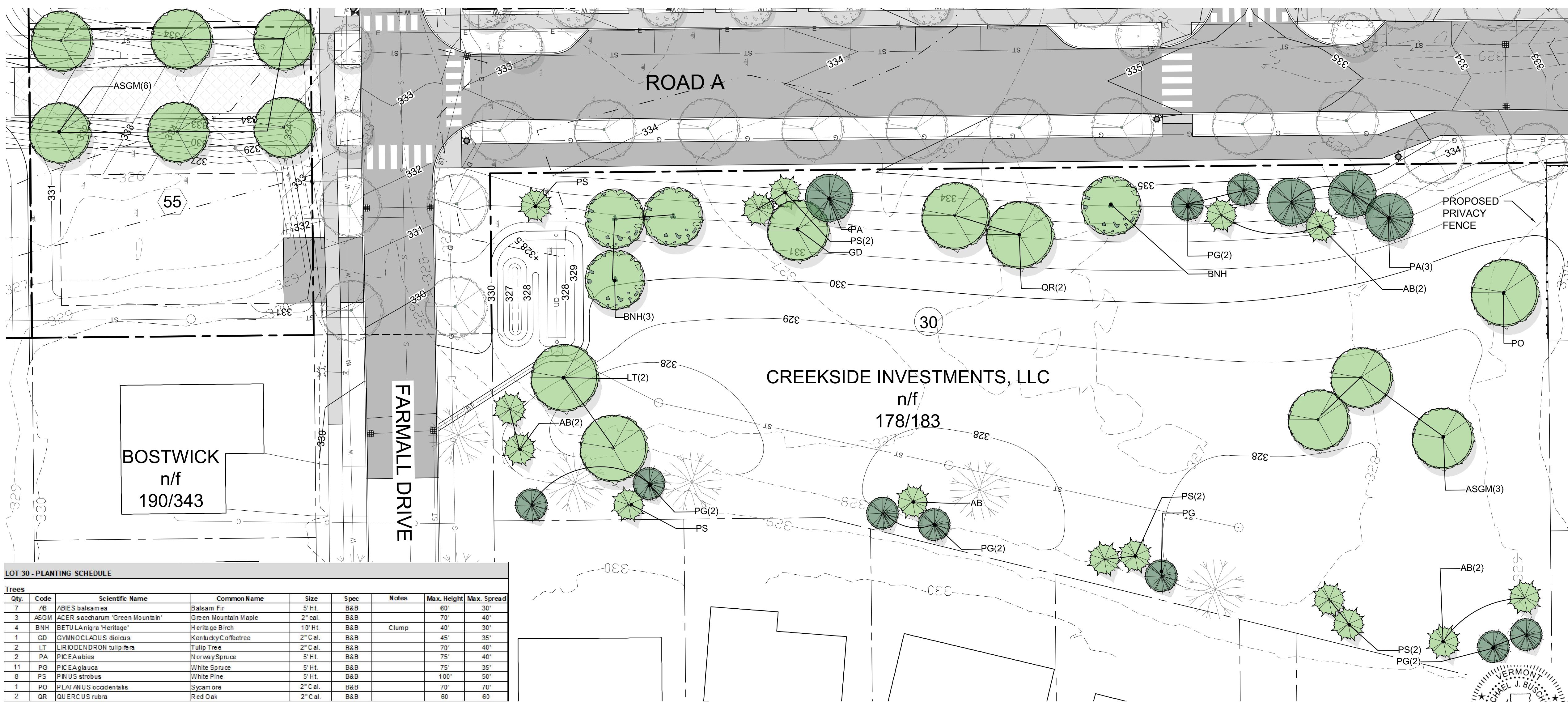
4 TYPICAL MEDIUM SINGLE-FAMILY LOT PLANTING
L-202 PLAN SCALE: 1" = 20'



LEGEND

- DECIDUOUS SHADE TREE
- DECIDUOUS ORNAMENTAL TREE
- CONIFER LARGE TREE
- CONIFER SMALL TREE
- DECIDUOUS SHRUB
- CONIFER SHRUB
- PERENNIAL GROUNDCOVER
- EXISTING TREE TO REMAIN

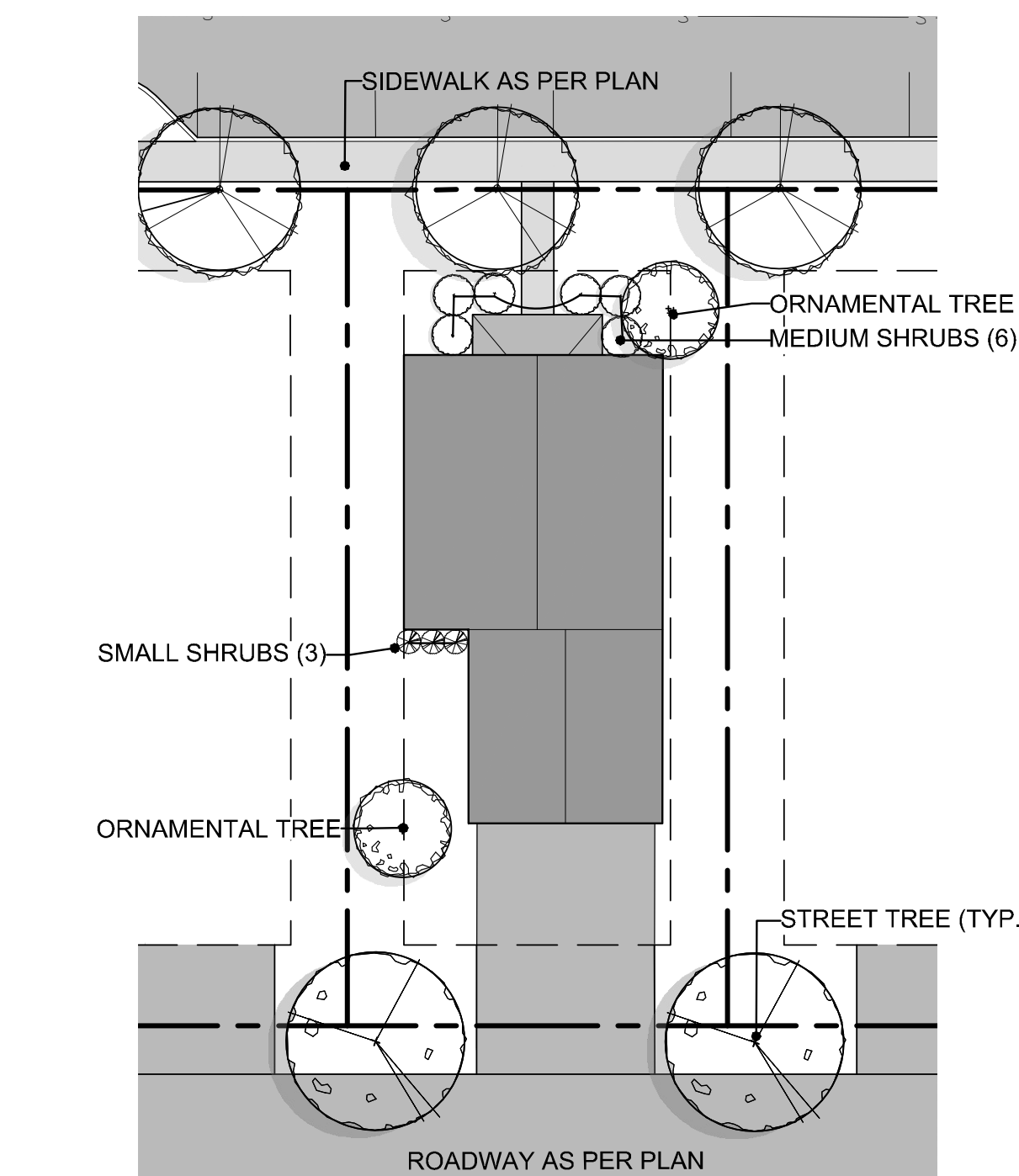
2 LANDSCAPE PLAN B - NORTH
L-202 PLAN SCALE: 1" = 20'



LOT 30 - PLANTING SCHEDULE

Trees	Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes	Max. Height	Max. Spread
	7	AB	ABIES balsamea	Balsam Fir	5' Ht.	B&B		60'	30'
	3	ASGM	ACER saccharum 'Green Mountain'	Green Mountain Maple	2" cal	B&B		70'	40'
	4	BNH	BETULA nigra 'Heritage'	Heritage Birch	10' Ht.	B&B	Clump	40'	30'
	1	GD	GYMNOCADUS dioicus	Kentucky Coffeetree	2" C cal.	B&B		45'	35'
	2	LT	LIRIODENDRON tulipifera	Tulip Tree	2" C cal.	B&B		70'	40'
	2	PA	PICEA abies	Norway Spruce	5' Ht.	B&B		75'	40'
	11	PG	PICEA glauca	White Spruce	5' Ht.	B&B		75'	35'
	8	PS	PINUS strobus	White Pine	5' Ht.	B&B		100'	50'
	1	PO	PLATANUS occidentalis	Sycamore	2" C cal.	B&B		70'	70'
	2	QR	QUERCUS rubra	Red Oak	2" C cal.	B&B		60'	60'

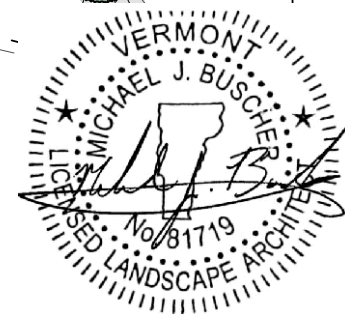
1 LANDSCAPE PLAN B - SOUTH
L-202 PLAN SCALE: 1" = 20'

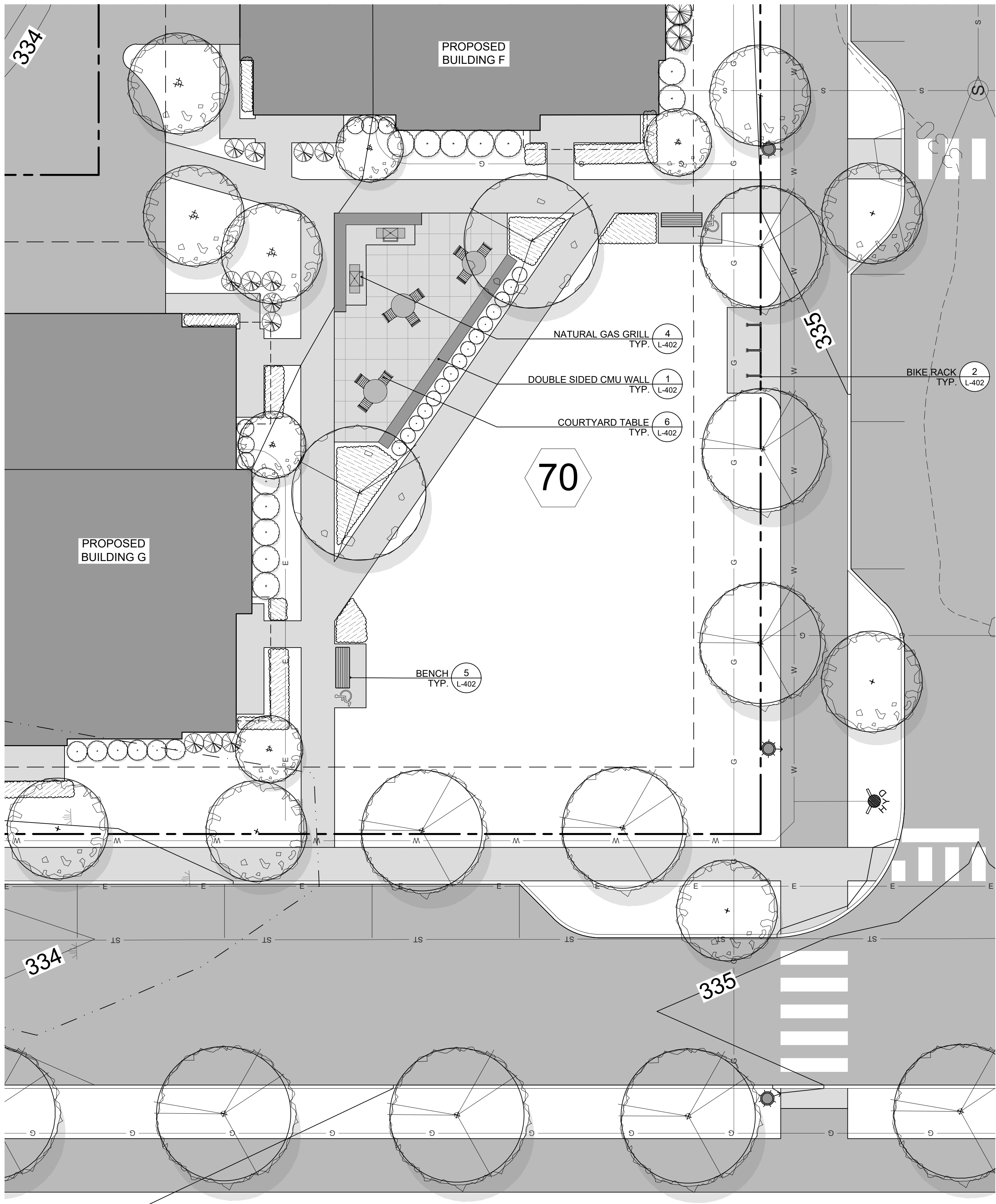


TYPICAL SMALL SINGLE-FAMILY DETACHED LOT PLANTING SCHEDULE

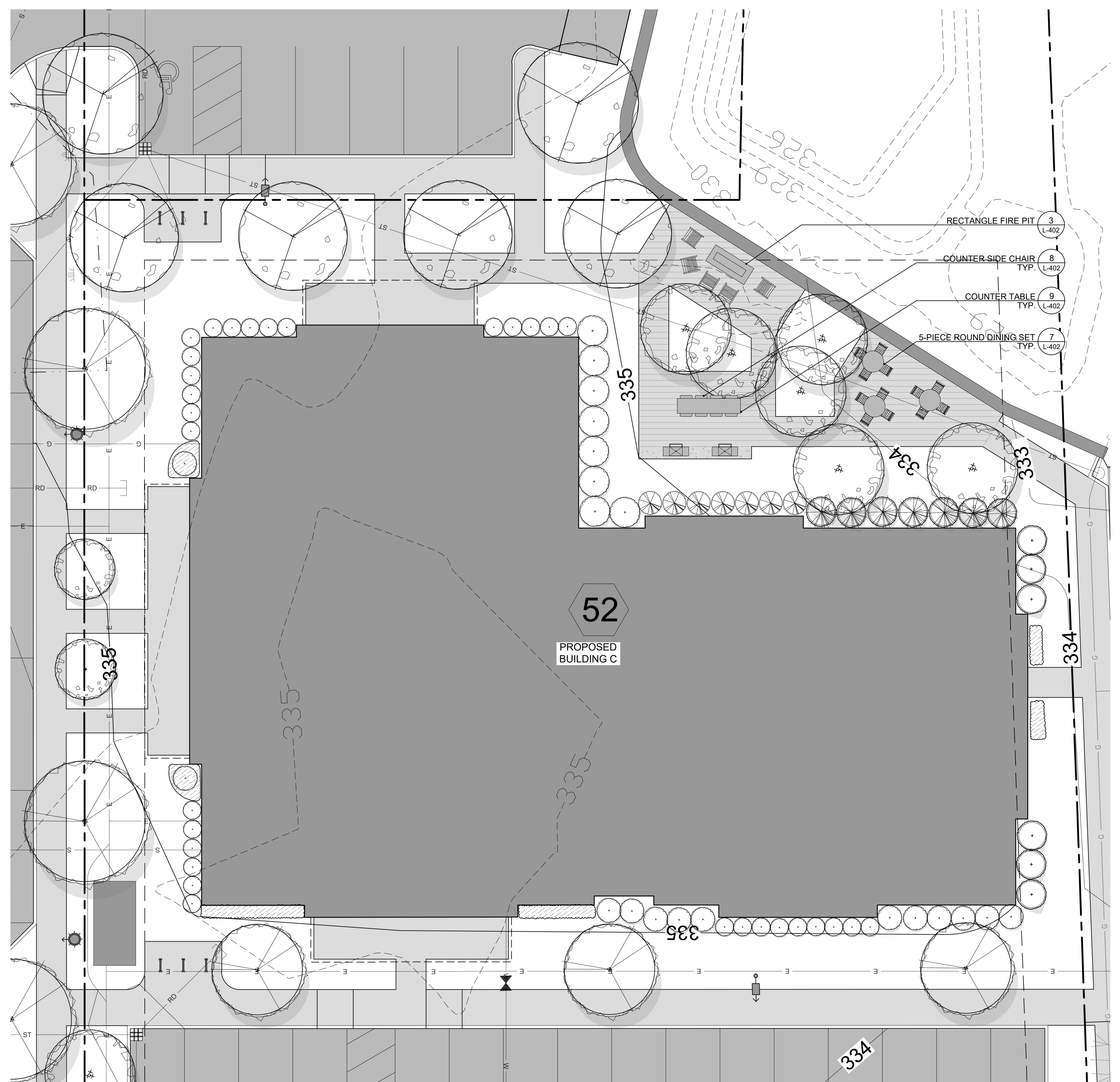
Qty.	Plant Type	Size	Spec
2	Ornamental Flowering Tree - Crabapple, Serviceberry, Magnolia, Etc.	6" Ht.	B&B
3	Small Shrubs - Taxus, Juniper, Spiraea, Clethra, Etc.	1-3'	#3 Cont.
6	Medium Shrubs - Hydrangea, Aronia, Ninebark, Thuja, Etc.	3-6'	#3 Cont.

3 TYPICAL SMALL SINGLE-FAMILY LOT PLANTING
L-202 PLAN SCALE: 1" = 20'

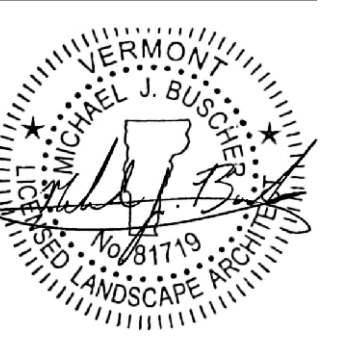




2 VILLAGE GREEN PLAN ENLARGEMENT
L-203 PLAN SCALE: 1" = 10'



1 BLDG. C PATIO PLAN ENLARGEMENT
L-203 PLAN SCALE: 1" = 10'



LEGEND

- PUBLIC ROAD FIXTURE
- PARKING LOT LIGHT
- PEDESTRIAN LIGHT
- BOLLARD
- CANOPY LIGHT
- WALL LIGHT
- 1.00 CONTOUR LEVEL (fc)
- 0.50 CONTOUR LEVEL (fc)
- 0.20 CONTOUR LEVEL (fc)

REFER TO EACH INDIVIDUAL FIXTURE'S POLE SPECIFICATIONS FOR MOUNTING DIRECTIONS.

ARROW (ON LIGHTING PLANS) INDICATES THE DIRECTION THE LUMINAIRE IS FACING

POLE

BOLT CIRCLE

CONCRETE FOUNDATION

POLE MOUNT ORIENTATION DETAIL SECTION, NTS

- GENERAL LIGHTING NOTES:**
- MOUNTING HEIGHT EQUATES BETWEEN THE LIGHT SOURCE AND THE GROUND PLANES FOR USING CALCULATION PHOTOMETRIC ANALYSIS, CUT POLES AS NEEDED
 - VOLTAGE TO BE VERIFIED BY ELECTRICAL ENGINEER PRIOR TO ORDERING
 - DRIVE CURRENT - REVIEW DRIVE CURRENT AND WATTAGE WITH ELECTRICAL ENGINEER AND CONTRACTOR BEFORE INSTALLATION
 - EXISTING ILLUMINATION LEVELS OF NEARBY LIGHT SOURCES (EXISTING STREET FIXTURES) ARE INCLUDED IN THE LIGHTING CALCULATIONS, FOR ACCURACY, AND DEPICTED IN LIGHTING PLANS AND CALCULATION SUMMARY.
 - BASE MOUNT - SEE LIGHTING PLANS FOR THE FIXTURE'S ORIENTATION.
 - SEE LIGHTING PLANS AND DETAILS WITH SPECIFICATIONS FOR LIGHT FIXTURES, POLES, ARMS AND OTHER INFORMATION.

Hinesburg Zoning Requirements

Area	Max. Average Luminaire		Max. Uniformity Ratio		Max. / Min. Ratio
	Ave. (fc)	Max. (fc)	Ave./Min. (fc)	Max./Min. (fc)	
(Hinesburg) Parking Lots	1.5	6.00		8:1	

Label	Area	Lighting Calculations				
		Ave. (fc)	Max. (fc)	Min. (fc)	Ave./Min. (fc)	Max./Min. (fc)
INT1	Isolated Intersection ³ - Drive Surface	1.5	2.2	0.6	2.5	3.7
INT2	Intersection - Drive Surface	1.4	2.5	0.4	3.5	6.3
INT3	Intersection - Drive Surface	1.4	2.3	0.6	2.3	3.8
MB1	Mid-Block Crossing - at grade ⁴	1.5	2	1.2	1.2	1.7
	Mid-Block Crossing - 5ft above grade	2.2	4.4	0.6	3.7	7.3
MB2	Mid-Block Crossing - at grade	1.5	1.9	1.1	1.4	1.7
	Mid-Block Crossing - 5ft above grade	2	5.2	0.2	9.8	26
MB3	Mid-Block Crossing - at grade	1.5	2.1	1.1	1.4	1.9
	Mid-Block Crossing - 5ft above grade	2	4.1	0.5	4	8.2
PL1	Parking Lot - Drive Surface	1.1	2.3	0.4	2.7	5.8
	Walkway - Paved Surface	1.1	2.4	0.2	5.3	12
PL2	Parking Lot - Drive Surface	1.2	2	0.4	3	5
	Walkway - Paved Surface	1	2	0.2	5.2	10
ST1	Roadway - Drive Surface	0.9	2.5	0.2	4.4	12.5
	Walkway ² - Paved Surface	1	2.7	0.2	5.2	13.5

Footnotes:

¹ Illuminance - All calculations are in Horizontal Footcandles (fc)

² Walkway Lighting - Light Levels for Pedestrian Areas meet IESNA Recommendations Per (IESNA) Lighting For Exterior Environments (RP-39-99), which recommends a Minimum Maintained Average Horizontal Illuminance Level Of 0.5 Footcandles and a 4:1 Horizontal Average to Minimum Ratio. Intermediate Area Classification (IESNA) - Light Levels are specific to this Classification, which is defined as "those areas of a Municipality often characterized by moderately heavy nighttime pedestrian activity such as in block having libraries, Community Recreation Centers, Large Apartment Buildings, Industrial Buildings, Or Neighborhood Retail Stores."

³ Isolated Intersections - Light Levels at Isolated Intersections, which are defined as an area in which two or more non continuously lighted roadways join or cross at the same level, meet IESNA Recommendations Per (IESNA) Lighting For Roadway Lighting (RP-8-14), which recommends a Minimum Horizontal Illuminance Level Of 0.6 Footcandles and a 6:1 Horizontal Average to Minimum Ratio for local roads with an R2 or R3 pavement classification for the intersection conflict zone.

⁴ Mid-Block Crossings - Light Levels for Mid-Block Crossings meet IESNA recommendations per ANSI/IES Roadway Lighting (RP-8-14), which recommends on average a vertical illuminance level of 2.0 Footcandles measured at 1.5m (5 ft.) from the road surface to allow drivers to detect pedestrians in midblock crosswalks at a adequate stopping distance under rural conditions. All calculations for Mid-Block crossings are for 5ft. height from road surface.

Pole Schedule

Qty.	Ht.	Pole	Catalog Number	Type
5	20'	Beacon - Round Straight Alum	RSA-B-S-20-40-B-CAP-1-B3-BLT	Parking Lot
23	12'	Kim Lighting - Round Alumini	PRA12-4125-FM-BLS	Pedestrian

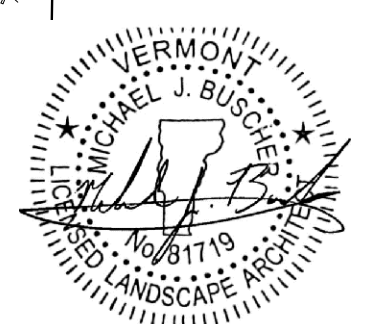
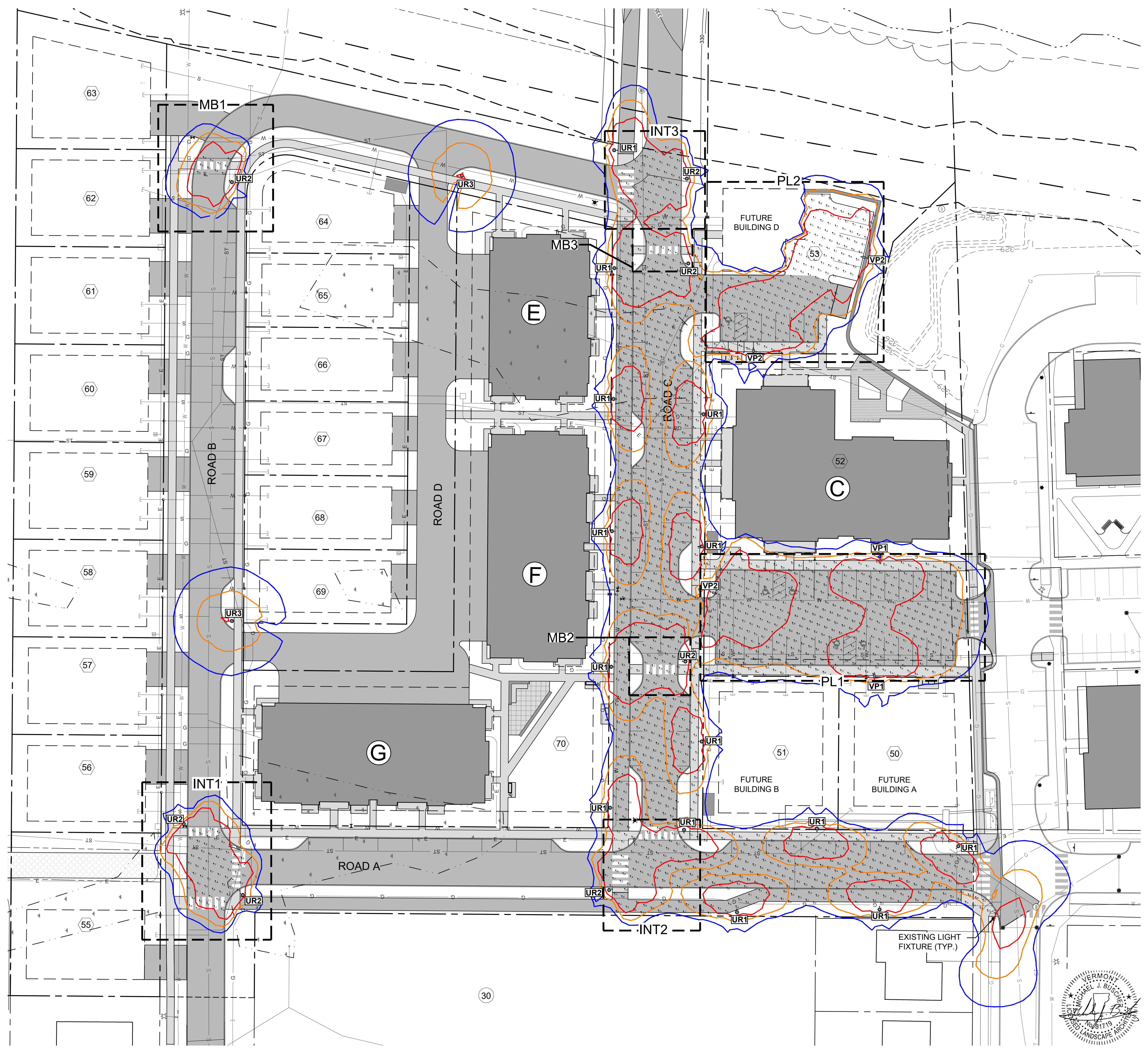
Luminaire Schedule

Label	Qty.	Fixture	Catalog Number	Type	# LEDs	Color Temp	Voltage ²	CRI	Watts	Lumens	Mounting	Finish	Ht. ¹
Parking Lot													
VP1	2	BEACON Viper Small	VPS-36L-65-3K7-3-UNV-A-BL-7PR-TL	3	24	3000K	UNV ²	70	65	6802	Arm	BLT	20'
VP2	3	BEACON Viper Small	VPS-36L-65-3K7-4F-UNV-A-BL-7PR-TL	4	24	3000K	UNV ²	70	65	6688	Arm	BLT	20'
Pedestrian													
UR1	14	KIM Outo Post Top	UR20-24L-25-3K7-3-UNV-PT24-BLS-7PR-TL	3	36	3000K	UNV ²	70	25	3007	Post Top	BLS	12'
UR2	7	KIM Outo Post Top	UR20-24L-25-3K7-4-UNV-PT24-BLS-7PR-TL	4	36	3000K	UNV ²	70	25	3056	Post Top	BLS	12'
UR3	2	KIM Outo Post Top	UR20-24L-25-3K7-5W-UNV-PT24-BLS-7PR-TL	5W	36	3000K	UNV ²	70	25	3043	Post Top	BLS	12'

Notes

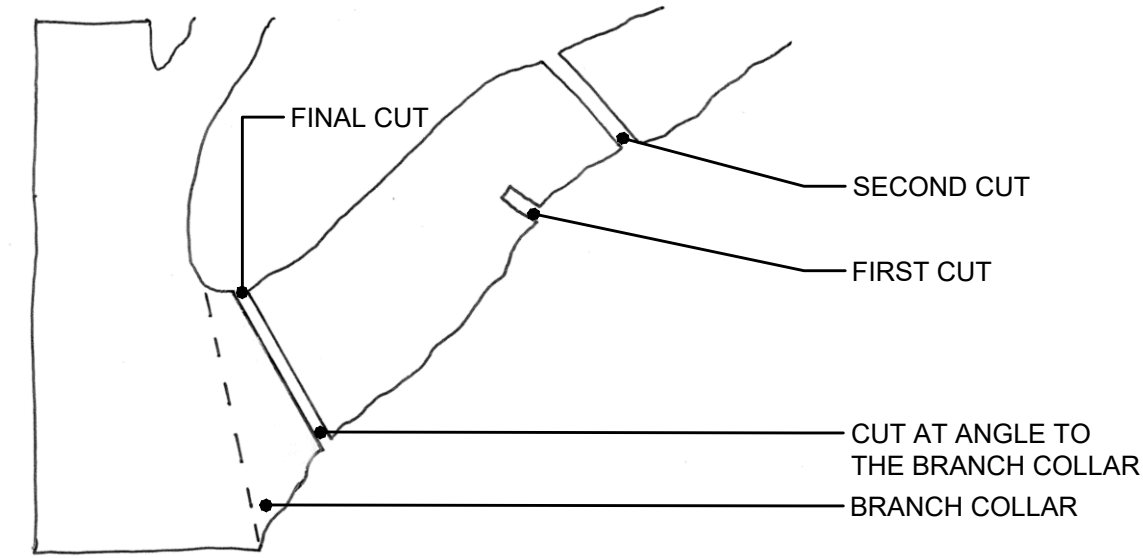
¹ Mounting height equates between the light source and the ground planes for using calculation photometric analysis. Cut poles as needed

² Voltage to be verified by Electrical Engineer prior to ordering



TREE PRUNING NOTES:

- REFER TO ANSI A300 (Part 1, MOST UPDATED VERSION) PRUNING SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- WORK SHOULD BE PERFORMED BY A CERTIFIED ARBORIST OR PROFESSIONAL TREE COMPANY.
- AVOID DAMAGING BARK AND OTHER LIVING TISSUE THROUGHOUT THE PRUNING PROCESS.
- MAKE SURE PRUNING TOOLS ARE SHARP.
- MAKE CLEAN CUT AS CLOSE TO THE BRANCH COLLAR AS POSSIBLE. DO NOT LEAVE A STUB.
- REDUCE THE SIZE OF THE BRANCH FOR A BETTER CUT.
- THE FIRST AND SECOND CUTS SHOULD BISECT THE ANGLE BETWEEN ITS BRANCH BARK RIDGE AND AN IMAGINARY LINE PERPENDICULAR TO THE BRANCH OR STEM.
- NOT MORE THAN 25% OF GROWTH SHOULD BE REMOVED FROM A CANOPY DURING A GROWING SEASON.



10 TREE PRUNING ILLUSTRATION

L400 NTS

TREE PROTECTION NOTES:

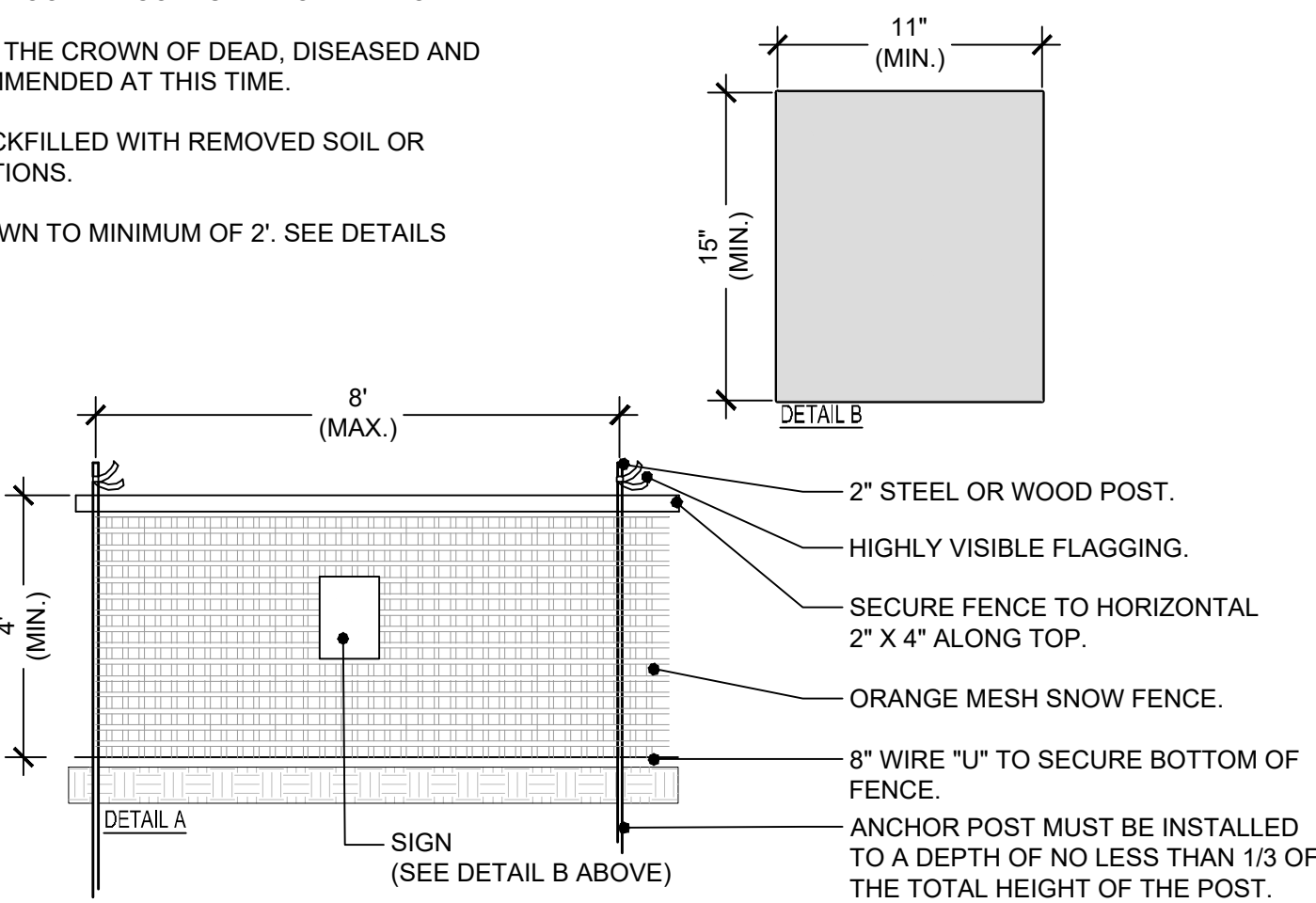
- PRIOR TO ANY CONSTRUCTION ACTIVITY, ALL TREE PRESERVATION MEASURES MUST BE IMPLEMENTED.
- CONTRACTOR CHOSEN FOR THIS WORK WILL BE AN EXPERIENCED TREE SERVICE FIRM THAT HAS SUCCESSFULLY COMPLETED TREE PROTECTION, ROOT PRUNING, AND TRIMMING WORK, SIMILAR TO THAT REQUIRED FOR THIS PROJECT.
- PRIOR TO CONSTRUCTION SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK. CONTACT DIG SAFE TWO FULL BUSINESS DAYS BEFORE PLANTING. (48 HOUR MIN.)
- PRIOR TO THE SITE VISIT ALL TREE PRESERVATION AREAS SHALL BE STAKED OUT ON SITE BY SURVEY.
- TREE PROTECTION FENCING SHALL REMAIN INTACT THROUGHOUT ALL CONSTRUCTION ACTIVITY.
- THERE WILL BE NO EXCAVATION FOR PROPOSED SITE WORK WITHIN FENCED AREA.
- NO MATERIALS OR EQUIPMENT SHALL BE STORED, STOCKPILED OR OPERATED WITHIN TREE PROTECTION AREAS.
- TREE PROTECTED AREAS WILL BE LEFT AS NATURAL AS POSSIBLE.
- IN AREAS OF EXCAVATION NEAR TREE, IDENTIFY AND CUT ROOTS IN CONSULTATION WITH OWNER.
- REMOVE POORLY ATTACHED AND RUBBING LIMBS. CLEAN THE CROWN OF DEAD, DISEASED AND WEAK LIMBS. THINNING OF HEALTHY LIMBS IS NOT RECOMMENDED AT THIS TIME.
- ANY NECESSARY TRENCHING SHALL BE IMMEDIATELY BACKFILLED WITH REMOVED SOIL OR OTHER SOIL MIX AS DESCRIBED IN CONTRACT SPECIFICATIONS.
- AN AIR SPADE/AIR KNIFE IS TO BE USED TO EXCAVATE DOWN TO MINIMUM OF 2'. SEE DETAILS.

SIGN DETAIL

- ATTACHMENTS OF SIGNS TO TREES IS PROHIBITED.
- SIGNS SHOULD BE MADE OF VINYL OR PLASTIC.
- SIGNS SHOULD BE PROPERLY MAINTAINED. PENALTIES WILL BE ENFORCED FOR REMOVAL OF SIGNS.
- AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
- SIGNS SHOULD BE POSTED 50' O.C. AND WITHIN 20' OF THE BEGINNING AND END OF EACH FENCE TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL.
- SIGNS TO BE SECURELY FASTENED TO THE FENCE OR FENCE POSTS.
- SIGNS TO HAVE A WHITE BACKGROUND AND ORANGE OR RED TEXT.

FENCE DETAIL:

- THIS FENCE SERVES AS A TREE PROTECTION DEVICE ONLY.
- ROOT DAMAGE SHALL BE AVOIDED WITHIN FENCED AREA.
- FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

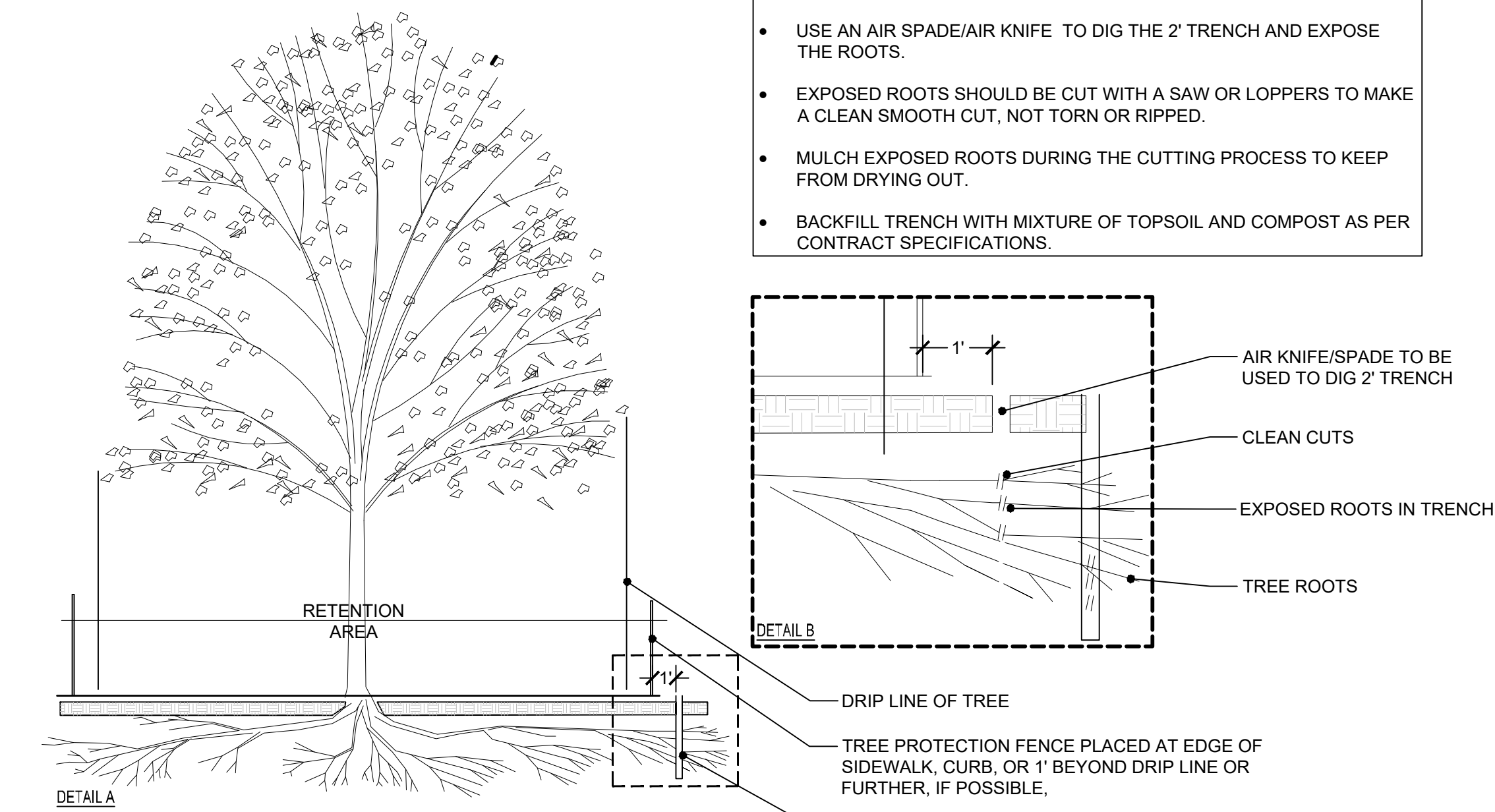


9 TREE PROTECTION FENCE

L400 NTS

ROOT PRUNING TRENCH NOTES:

- USE AN AIR SPADE/AIR KNIFE TO DIG THE 2' TRENCH AND EXPOSE THE ROOTS.
- EXPOSED ROOTS SHOULD BE CUT WITH A SAW OR LOPPERS TO MAKE A CLEAN SMOOTH CUT. NOT TORN OR RIPPED.
- MULCH EXPOSED ROOTS DURING THE CUTTING PROCESS TO KEEP FROM DRYING OUT.
- BACKFILL TRENCH WITH MIXTURE OF TOPSOIL AND COMPOST AS PER CONTRACT SPECIFICATIONS.



8 TREE PROTECTION

L400 NTS

GENERAL PLANTING NOTES:

- THE LANDSCAPE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK. CONTACT DIG SAFE TWO FULL BUSINESS DAYS BEFORE PLANTING. (48 HOUR MIN.)
- THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS. THE PLAN QUANTITIES SHALL ALWAYS SUPERCEDE THE PLANT LIST.
- ALL PLANT MATERIAL SHALL CONFORM AND BE INSTALLED TO THE GUIDELINES ESTABLISHED BY THE CURRENT ANSI Z60.1.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN FINISHED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR EQUAL.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE AMENDED PLANTING SOIL AS PER THE CONTRACT SPECIFICATIONS.
- SOIL DEPTH SHOULD BE AS LISTED BELOW WITH A 2/3 PLANTING SOIL TO 1/3 COMPOST MIX. EXISTING SOIL ON SITE WHICH MEETS THE CONTRACT SPECIFICATIONS MAY BE USED. REMOVE SUB GRADE AND OTHER GRAVEL FILL IN PLANTING AREAS ON SITE.
 - 7.1. GROUND COVER BEDS: 12" DEPTH.
 - 7.2. LAWN AREAS: 6" DEPTH
 - 7.3. SHRUB/PLANT BEDS: 18" DEPTH
- PLANTS SHALL BE INSTALLED SUCH THAT THE ROOT FLARE IS AT OR SLIGHTLY ABOVE FINAL GRADE (DUE TO NURSERY PRACTICES THIS MAY REQUIRE REMOVING SOIL FROM THE TOP OF THE ROOT BALL TO LOCATE THE ROOT FLARE).
- ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT THE TIME OF PLANTING.
- WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
- THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE FLAGGED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR EQUAL.
- LANDSCAPE ARCHITECT MAY REQUIRE ALL PLANTS BE SPRAYED WITH AN ANTIDESSICANT WITHIN 24 HOURS AFTER PLANTING. IN TEMPERATE ZONES, ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT AT THE BEGINNING OF THEIR FIRST WINTER.
- STAKING PLANTS IS AT THE DISCRETION OF THE LANDSCAPE CONTRACTOR. ONLY STAKE PLANTS IN THE MANNER SPECIFIED IN THE PLANTING DETAILS.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY, IF NECESSARY, DURING THE FIRST GROWING SEASON.
- THE LANDSCAPE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- THE LANDSCAPE CONTRACTOR SHALL REFER TO THE PLANT LIST FOR SEASONAL REQUIREMENTS RELATED TO THE TIME OF PLANTING.

PLANT SPACING CHART

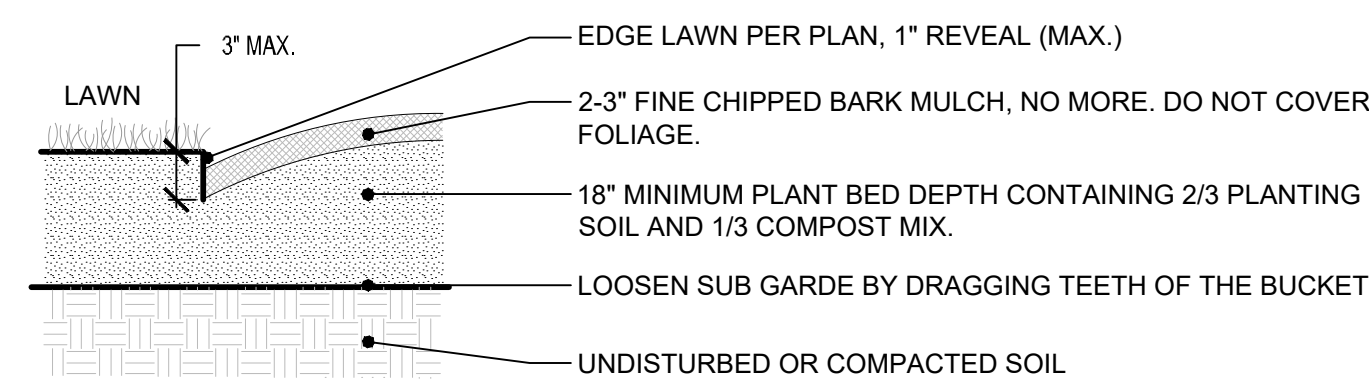
Spacing 'D'	Row 'A'	Number of Plants	Area Unit
6" O.C.	5.2'	4.61	1 SQ. FT.
8" O.C.	6.93'	2.6	
10" O.C.	8.66'	1.66	
12" O.C.	10.4'	1.15	
15" O.C.	13.0'	0.73	10 SQ. FT.
18" O.C.	15.6"	5.12	
24" O.C.	20.8"	2.91	
30" O.C.	26.0"	1.55	
36" O.C.	30.0"	1.25	
4" O.C.	3.46'	7.25	100 SQ. FT.
5" O.C.	4.38'	4.61	
6" O.C.	5.2'	3.2	
8" O.C.	6.93'	1.8	
10" O.C.	8.66'	1.16	
12" O.C.	10.4'	0.8	1000 SQ. FT.
15" O.C.	13.0'	0.5	
20" O.C.	17.3'	2.88	
25" O.C.	21.65'	1.85	
30" O.C.	26.0'	1.29	
40' O.C.	34.6'	7.22	10,000 SQ. FT.

O.C. = ON CENTER FOR USE WHEN PLANTS ARE SHOWN EQUIDISTANT FROM EACH OTHER (AS SHOWN) PLANT SPACING CHART

7 PLANT SPACING CHART DETAIL

L400 NTS

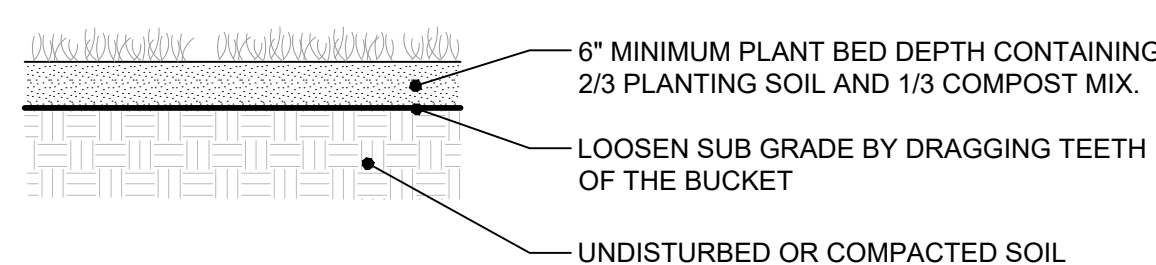
- SOIL COMPACTION AFTER INSTALLATION SHALL BE 75-250 PSI AT SOIL MOISTURE BETWEEN FIELD CAPACITY AND WILTING POINT



6 PLANT BED

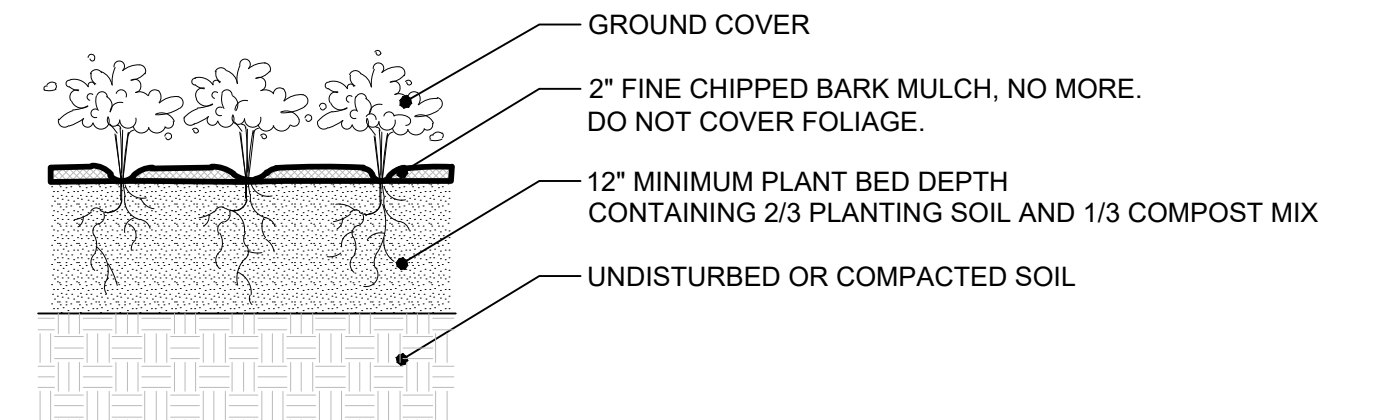
L400 NTS

- SOIL COMPACTION AFTER INSTALLATION SHALL BE 75-250 PSI AT SOIL MOISTURE BETWEEN FIELD CAPACITY AND WILTING POINT



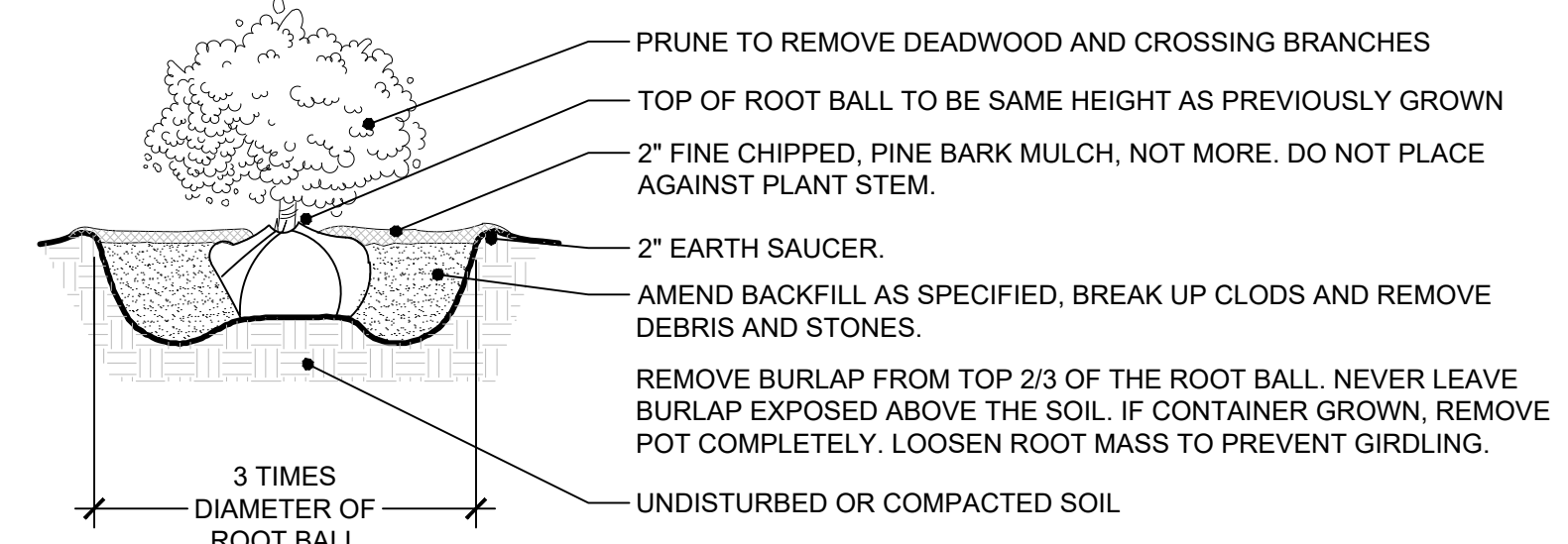
5 LAWN & SEEDING AREA

L400 NTS



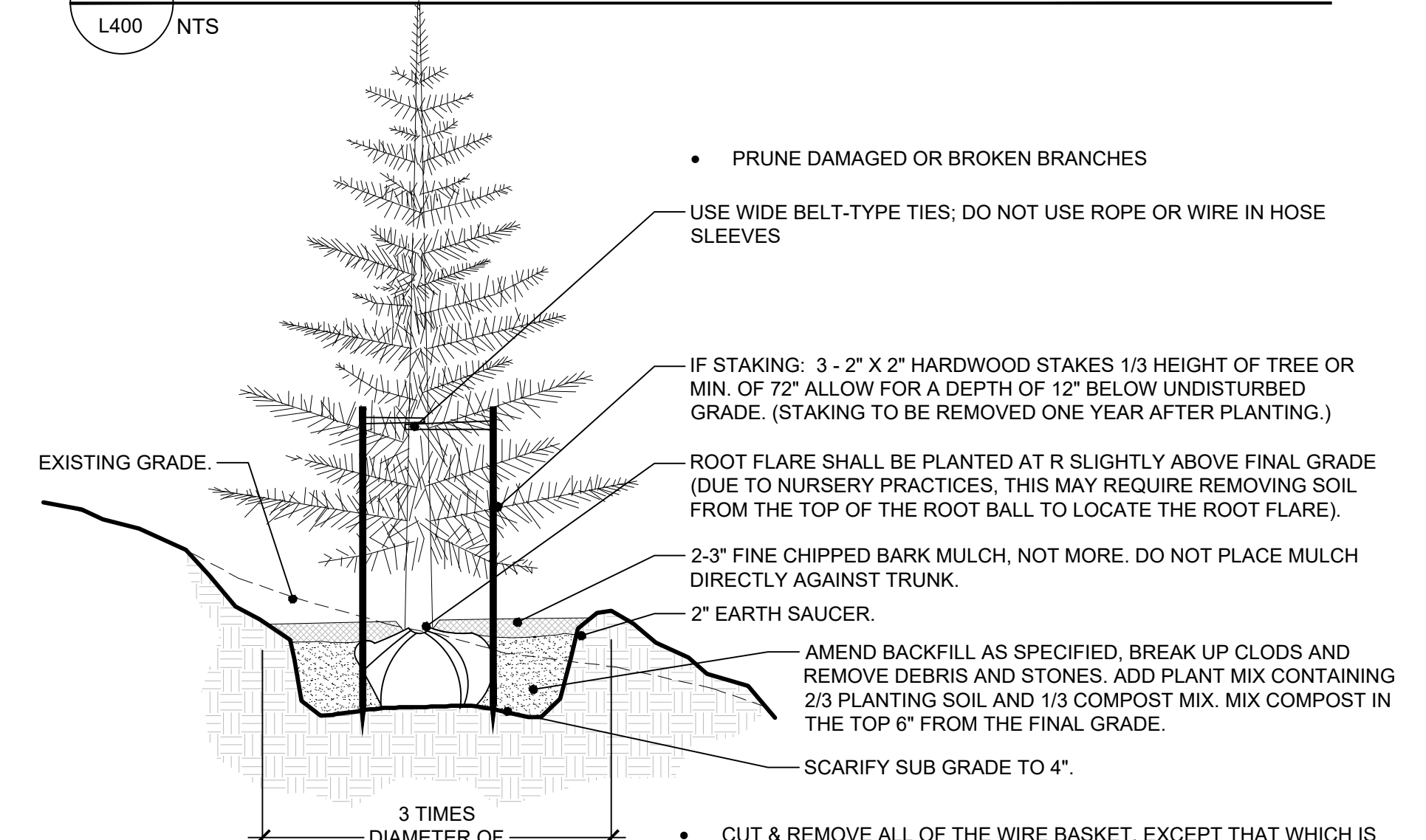
4 GROUNDCOVER PLANTING

L400 NTS



3 SHRUB PLANTING

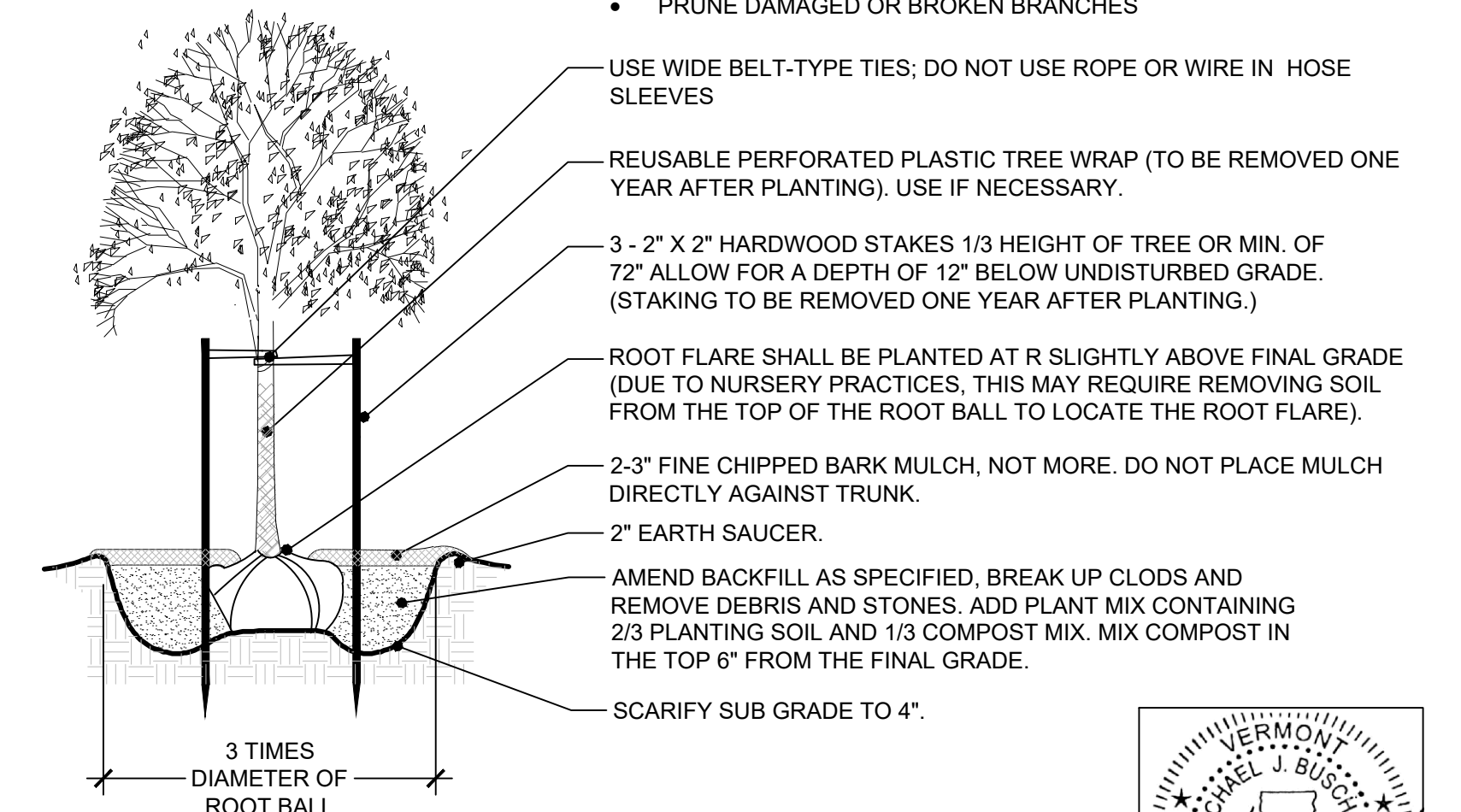
L400 NTS



2 TREE PLANTING ON SLOPE DETAIL

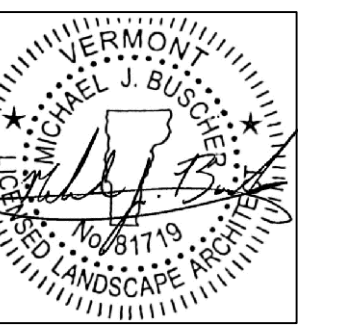
L400 NTS

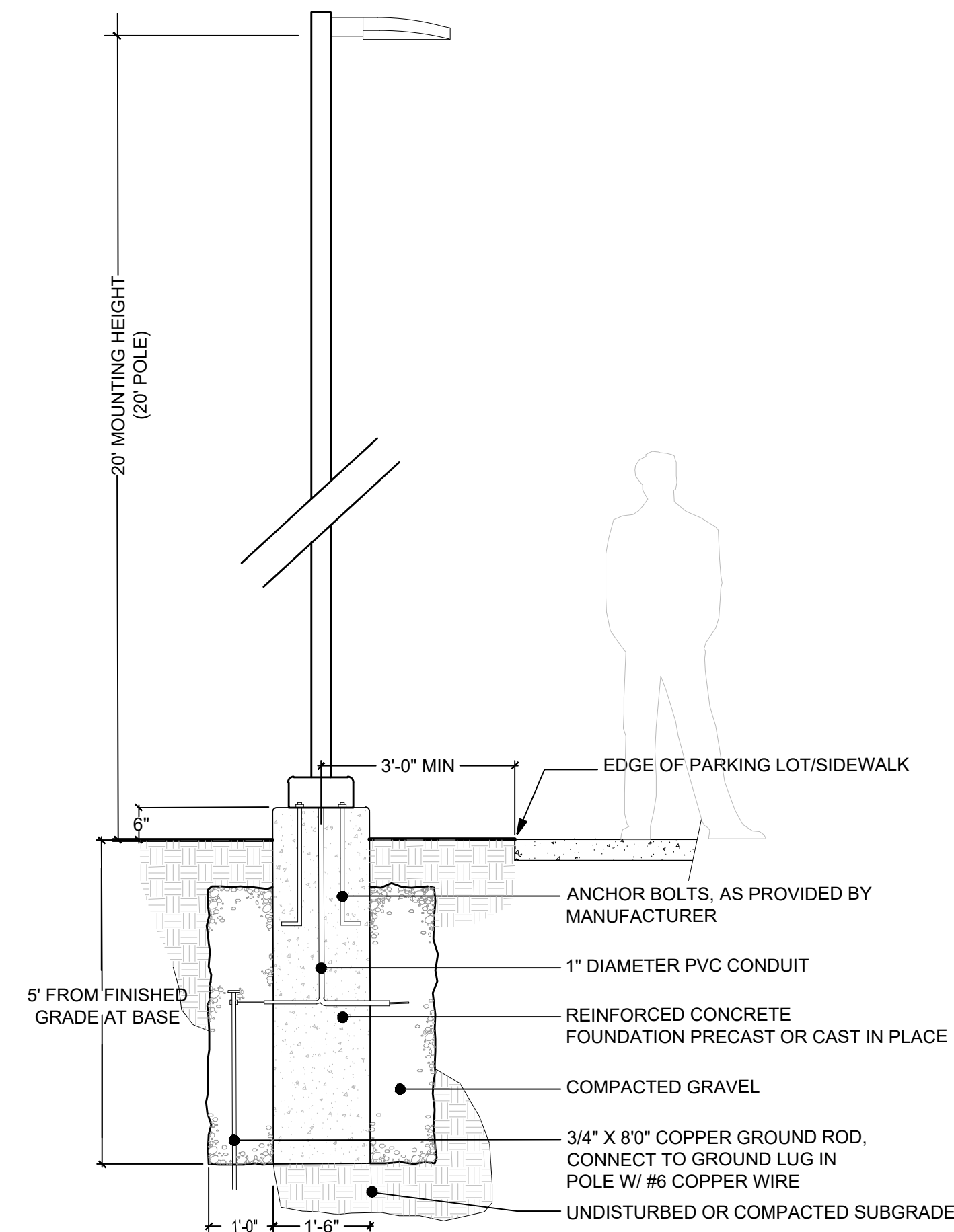
- PRUNE DAMAGED OR BROKEN BRANCHES



1 TREE PLANTING DETAIL

L400 NTS





6 PARKING LOT LIGHT DETAIL SECTION, NTS

RSA-B-S SERIES POLES

ROUND STRAIGHT ALUMINUM

Job: _____ Type: _____

Approvals: _____

APPLICATIONS

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- SHAFT: One-piece straight aluminum with round cross section; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum.
- BOLT COVERS: Four (4) individual bolt covers, painted to match pole and base finish.
- POLE CAP OR FINALS: Cap or decorative finials available for side mounted luminaires. Open top or finions provided for post top mounted luminaires.
- HAND HOLE: Aluminum hand hole frame; Mounting provisions for grounding lug located behind cover
- ANCHOR BOLTS: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

FINISH

- Durable thermoplastic powder coat paint finish with nominal 3.0 mil thickness
- Powder paint finish coat available in multiple standard colors. Custom colors available; RAL number preferable.

ORDERING EXAMPLE:

RSA-B-S - 16 - 40 - A/B/C - CAP - 2L - B3 - DBT - VM2

SERIES HEIGHT SHAFT THICKNESS MOUNTING

1 Single arm mount 2 Two fixtures at 90° 3T Three fixtures at 90° 4 Four fixtures at 180° OT Open top (no cap) TMT Tension 3 x 3 TMT Tension 4 x 3 TMT Tension 4 x 5 TMT Tension 4 x 8 ANZ Acorn Finial BAL Ball Finial CAP Flat Cap

FINISH BLS Black Gloss Smooth DBS Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PFS Platinum Silver Smooth WHT White Matte Textured WWS White Gloss Smooth WVT Verde Green Textured CC Custom Color

OPTIONS GFI 20 Amp GFCI Receptacle and Cover EMT Extra Hatches CDP 3" Cooping CDP 7 1/2" Cooping CDP 2" Cooping VMD 2nd mode vibration damper LA8 Lead Anchor Bolts

DESCRIPTION 1 Single optic location using long lead as per page 3 (Optim. Orientation) 2 Specify pole top

INSTALLATION

- Mounting options for horizontal arm, vertical tension or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 120V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Ambient operating temperature -40°C to 25°C
- Power factor is > 90 on full load
- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard.

CONSTRUCTION (CONTINUED)

- Component-resistant wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 15A or higher. 15A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components
- Optional 7-pin ANSI C36.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C36.41 external wireless control devices
- Surge protection: 20KA
- LifeShield® Circuit Breaker (Patent Pending)

CONTROLS (CONTINUED)

- In addition, Viper can be specified with SiteSync™ wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application

CERTIFICATIONS

- DLX (DesignLights Consortium) Qualified. Please refer to the DLX website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 9750
- 3S rated for ANSI C36.31 high vibration applications with MAF mounting
- This product qualifies as a "designated country construction material" per FAR 23.225-11 Buy American Construction Materials under Trade Agreements effective 04/23/2020. See Buy.American.Solutions.com

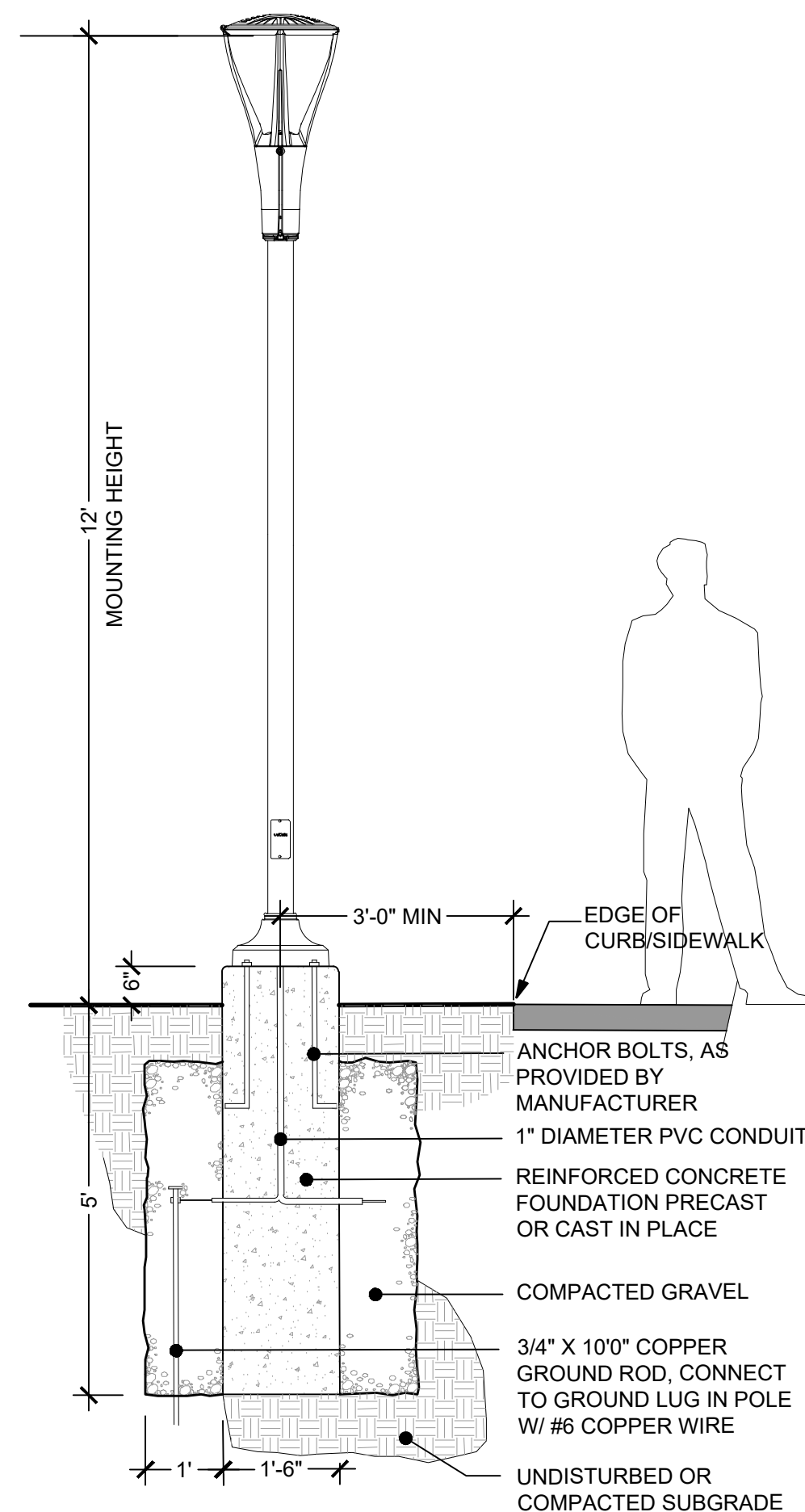
WARRANTY

- 5 year warranty
- See J.H.Commercial.and.Industrial.Outdoor.Lighting.Warranty for additional information

4 PARKING LOT POLE SPEC SHEET, NTS

GENERAL LIGHTING NOTES:

- MOUNTING HEIGHT EQUATES BETWEEN THE LIGHT SOURCE AND THE GROUND PLANES FOR USING CALCULATION PHOTOMETRIC ANALYSIS, CUT POLES AS NEEDED
- VOLTAGE TO BE VERIFIED BY ELECTRICAL ENGINEER PRIOR TO ORDERING
- DRIVE CURRENT - REVIEW DRIVE CURRENT AND WATTAGE WITH ELECTRICAL ENGINEER AND CONTRACTOR BEFORE INSTALLATION
- BASE MOUNT - SEE LIGHTING PLANS FOR THE FIXTURE'S ORIENTATION.
- SEE LIGHTING PLANS AND DETAILS WITH SPECIFICATIONS FOR LIGHT FIXTURES, POLES, ARMS AND OTHER INFORMATION.



5 PEDESTRIAN LIGHT DETAIL SECTION, NTS

KIM LIGHTING®

Round Aluminum Non-Tapered Pole

Job: _____ Type: _____

Approvals: _____

CONSTRUCTION

- Low copper aluminum alloy die-casting is designed as one-piece.
- Molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- All external fasteners are stainless steel.
- Cover is secured to lens frame by the latch and hinge.

OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Optional Backlight Control on each LED module to completely control unwanted backlighting.
- Optional feature: Finish optical surfaces will not exceed BUG ratings of the standard white finish.

LENS

- Standard lens (CLR) IK08
- Clear Polycarbonate Lens (CP) IK10

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

Specifications

Conduit Opening

Presswood Template

Base Cover

Plan View

Longitudinal reference line. Orient parallel to curb or walkway.

Leveling Nut and Washer

Anchor Bolt

Base Detail

Grout can be packed under pole base to insure full contact with footing and prevent loosening of leveling nuts.

Provide a channel through the grout for drainage from the pole interior.

Pole Construction: Seamless round extruded aluminum tube of alloy 6061-T6, welded to top and bottom of aluminum base casting of alloy 356.

Base Cover: Base has a two-piece cast aluminum full cover of 319 alloy, secured by stainless steel screws.

Pole Cap: A flush-sided cast aluminum pole cap is provided for side arm mounted luminaires.

Handhole: 18" up from base, with a gasketed cover and ground lug.

Anchor Bolts: Four galvanized anchor bolts provided, complete with eight nuts, eight flat washers, and a presswood template.

Vibration Damper: All poles 25' and above include an internally mounted, factory installed pendulum vibration damper, with flush stainless steel socket head fasteners finished to match pole.

Strength: Poles will withstand wind loads as listed in chart (See page 2) when luminaires are mounted per fixture installation instructions.

Finish: Durable thermoplastic powder coat paint finish with nominal 3.0 mil thickness. Decorative finish coat available in multiple standard colors. Custom colors available; RAL number preferable.

CAUTION: Installation of poles without luminaires will compromise pole strength. Any accessories attached to pole, or other modifications will compromise pole strength and may result in pole failure.

Maintenance: A regularly scheduled maintenance program must be established to insure the protective coating is intact, corrosion or structural damage has not occurred, and anchor bolt nuts are tight. Failure to do so could lead to pole collapse and serious personal injury.

Certification: Certified UL 1598 in accordance with Article 410 of ANS/NFPA 70, National Electrical Code.

KEY DATA

Lumen Range	2694 - 16674
Wattage Range	25 - 150
Efficacy Range (LPW)	95 - 133
Reported Life (Hours)	L70>60,000
Weight	35 lbs - 15.8 kg
EA	0.608

3 PEDESTRIAN POLE SPEC SHEET, NTS

BEACON

VIPER S

SMALL VIPER LUMINAIRE

Job: _____ Type: _____

Approvals: _____

FEATURES

- Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- Suitable for wet locations

CONTROL TECHNOLOGY

NX DISTRIBUTION INTELLIGENCE WISCAPE energent SiteSync

SPECIFICATIONS

CONSTRUCTION

- Corrosion resistant, die-cast aluminum housing with powder coat paint finish rated for 1000 hour salt spray.
- External hardware is corrosion resistant.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED, engine, optics, gasket and stainless steel bezel

INSTALLATION

- Mounting options for horizontal arm, vertical tension or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 120V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Ambient operating temperature -40°C to 25°C
- Power factor is > 90 on full load
- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard.

ORDERING EXAMPLE:

VIPER-S - 16 - 40 - A/B/C - CAP - 2L - B3 - DBT - VM2

SERIES HEIGHT SHAFT THICKNESS MOUNTING

1 Single arm mount 2 Two fixtures at 90° 3T Three fixtures at 90° 4 Four fixtures at 180° OT Open top (no cap) TMT Tension 3 x 3 TMT Tension 4 x 3 TMT Tension 4 x 5 TMT Tension 4 x 8 ANZ Acorn Finial BAL Ball Finial CAP Flat Cap

FINISH BLS Black Gloss Smooth DBS Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PFS Platinum Silver Smooth WHT White Matte Textured WWS White Gloss Smooth WVT Verde Green Textured CC Custom Color

OPTIONS GFI 20 Amp GFCI Receptacle and Cover EMT Extra Hatches CDP 3" Cooping CDP 7 1/2" Cooping CDP 2" Cooping VMD 2nd mode vibration damper LA8 Lead Anchor Bolts

DESCRIPTION 1 Single optic location using long lead as per page 3 (Optim. Orientation) 2 Specify pole top

CONSTRUCTION (CONTINUED)

- Component-resistant wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 15A or higher. 15A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components
- Optional 7-pin ANSI C36.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C36.41 external wireless control devices
- Surge protection: 20KA
- LifeShield® Circuit Breaker (Patent Pending)

CONTROLS (CONTINUED)

- In addition, Viper can be specified with SiteSync™ wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application

CERTIFICATIONS

- DLX (DesignLights Consortium) Qualified. Please refer to the DLX website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 9750
- 3S rated for ANSI C36.31 high vibration applications with MAF mounting
- This product qualifies as a "designated country construction material" per FAR 23.225-11 Buy American Construction Materials under Trade Agreements effective 04/23/2020. See Buy.American.Solutions.com

WARRANTY

- 5 year warranty
- See J.H.Commercial.and.Industrial.Outdoor.Lighting.Warranty for additional information

KEY DATA

Lumen Range	4,045 - 16,716
Wattage Range	39 - 136
Efficacy Range (LPW)	100 - 124
Reported Life (Hours)	L70>60,000
Input Current Range (Amps)	0.3 - 1.1

2 PARKING LOT LIGHT FIXTURE SPEC SHEET, NTS

BEACON

VIPER S

SMALL VIPER LUMINAIRE

Job: _____ Type: _____

Approvals: _____

FEATURES

- Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- Suitable for wet locations

CONTROL TECHNOLOGY

NX DISTRIBUTION INTELLIGENCE WISCAPE energent SiteSync

SPECIFICATIONS

CONSTRUCTION

- Corrosion resistant, die-cast aluminum housing with powder coat paint finish rated for 1000 hour salt spray.
- External hardware is corrosion resistant.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED, engine, optics, gasket and stainless steel bezel

INSTALLATION

- Mounting options for horizontal arm, vertical tension or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 120V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Ambient operating temperature -40°C to 25°C
- Power factor is > 90 on full load
- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard.

ORDERING EXAMPLE:

VIPER-S - 16 - 40 - A/B/C - CAP - 2L - B3 - DBT - VM2

SERIES HEIGHT SHAFT THICKNESS MOUNTING

1 Single arm mount 2 Two fixtures at 90° 3T Three fixtures at 90° 4 Four fixtures at 180° OT Open top (no cap) TMT Tension 3 x 3 TMT Tension 4 x 3 TMT Tension 4 x 5 TMT Tension 4 x 8 ANZ Acorn Finial BAL Ball Finial CAP Flat Cap

FINISH BLS Black Gloss Smooth DBS Dark Bronze Matte Textured GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PFS Platinum Silver Smooth WHT White Matte Textured WWS White Gloss Smooth WVT Verde Green Textured CC Custom Color

OPTIONS GFI 20 Amp GFCI Receptacle and Cover EMT Extra Hatches CDP 3" Cooping CDP 7 1/2" Cooping CDP 2" Cooping VMD 2nd mode vibration damper LA8 Lead Anchor Bolts

DESCRIPTION 1 Single optic location using long lead as per page 3 (Optim. Orientation) 2 Specify pole top

CONSTRUCTION (CONTINUED)

- Component-resistant wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 15A or higher. 15A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components
- Optional 7-pin ANSI C36.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C36.41 external wireless control devices
- Surge protection: 20KA
- LifeShield® Circuit Breaker (Patent Pending)

CONTROLS (CONTINUED)

- In addition, Viper can be specified with SiteSync™ wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application

CERTIFICATIONS

- DLX (DesignLights Consortium) Qualified. Please refer to the DLX website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 9750
- 3S rated for ANSI C36.31 high vibration applications with MAF mounting
- This product qualifies as a "designated country construction material" per FAR 23.225-11 Buy American Construction Materials under Trade Agreements effective 04/23/2020. See Buy.American.Solutions.com

WARRANTY

- 5 year warranty
- See J.H.Commercial.and.Industrial.Outdoor.Lighting.Warranty for additional information

KEY DATA

Lumen Range	4,045 - 16,716
Wattage Range	39 - 136
Efficacy Range (LPW)	100 - 124
Reported Life (Hours)	L70>60,000
Input Current Range (Amps)	0.3 - 1.1

2 PARKING LOT LIGHT DETAIL SECTION, NTS

revisions	date	revisions	date
Revised per Initial Staff Comments	11/17/2019	Revised per Engineering Base Plan Changes	11/17/2020
Revised per Engineering Base Plan Changes	4/29/2020	Revised per Engineering Base Plan Changes	8/16/2022
Revised per Engineering Base Plan Changes	9/9/2020		





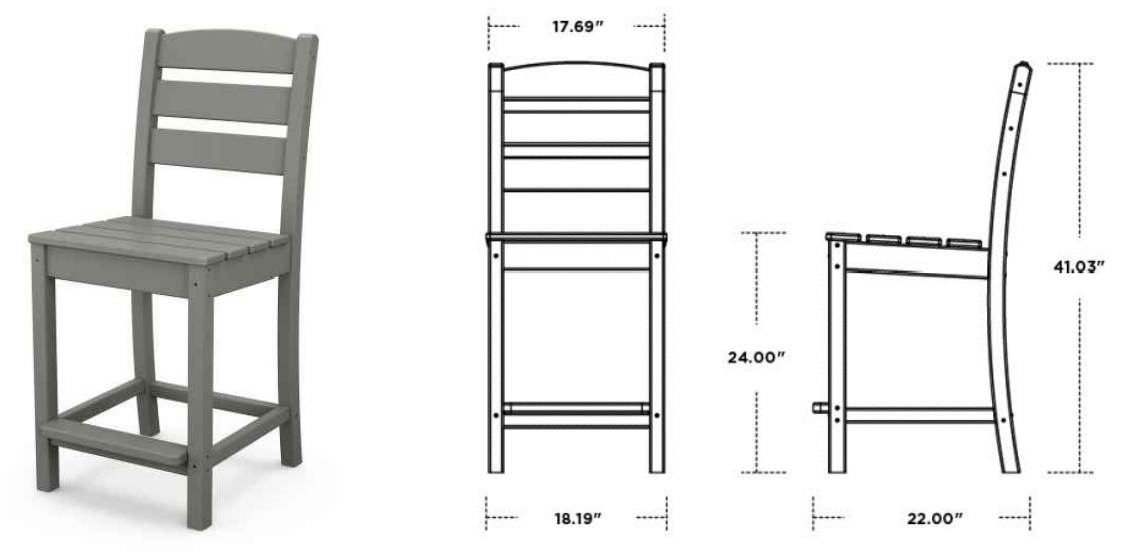
PRODUCT NOTES
POLYWOOD PWR83-T1L1

DESCRIPTION: FARMHOUSE TRESTLE 37" x 72"
COUNTER TABLE
DIMENSIONS: 37.3"W x 37"H x 72.25"D
COLOR: SLATE GREY

9 COUNTER TABLE QTY: 2
L-402 DETAIL, NTS

PRODUCT NOTES
POLYWOOD TLD101

DESCRIPTION: LAKESIDE COUNTER SIDE CHAIR
DIMENSIONS: 18.19"W x 41.2"H x 22"D
COLOR: SLATE GREY



8 COUNTER SIDE CHAIR QTY: 8
L-402 DETAIL, NTS

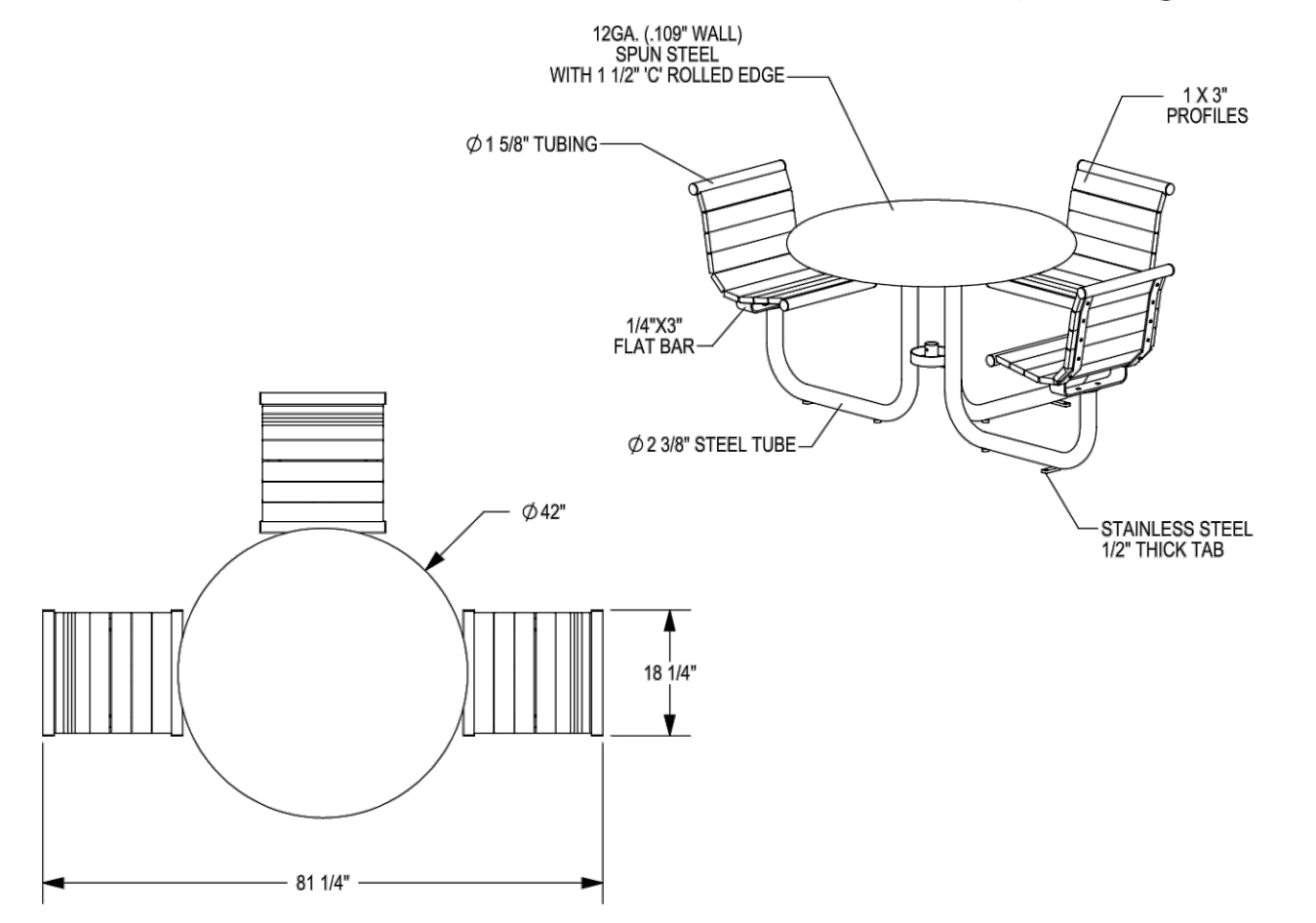
PRODUCT NOTES
POLYWOOD PWS649-1

DESCRIPTION: VINEYARD 5-PIECE ROUND FARMHOUSE SIDE CHAIR DINING SET | INCLUDES: 4 VINEYARD DINING SIDE CHAIR (VND130) & 1 x 48" ROUND FARMHOUSE DINING TABLE (RT248)
DIMENSIONS: 48"W x 29"H x 48"D (TABLE) | 19.25"W x 38.25"H x 25.5"D
COLOR: SLATE GREY



7 5-PIECE ROUND SIDE CHAIR DINING SET QTY: 3
L-402 DETAIL, NTS

THOMAS STEELE
THOMAS STEEL DIVISION
GRABER MANUFACTURING, INC.
1080 LINEX DRIVE
WALUNAKEE, WI 53597
P(800) 448-7931, P(608) 849-1080, F(608) 849-1081
WWW.MADRAX.COM, E-MAIL: SALES@MADRAX.COM



PRODUCT NOTES
THOMAS STEELE - GRT-3B-ERM-P

DESCRIPTION: GRAMERCY COURTYARD TABLE
HEIGHT OPTION: DINING
SEATS: 3 BACKED
SEAT MATERIAL: EMBOSSED RECYCLED PLASTIC MAHOGANY
TABLE MATERIAL: ROUND | POWDER COATED E-STEEL
POWDER COATED FINISH COLOR: GUNMETAL

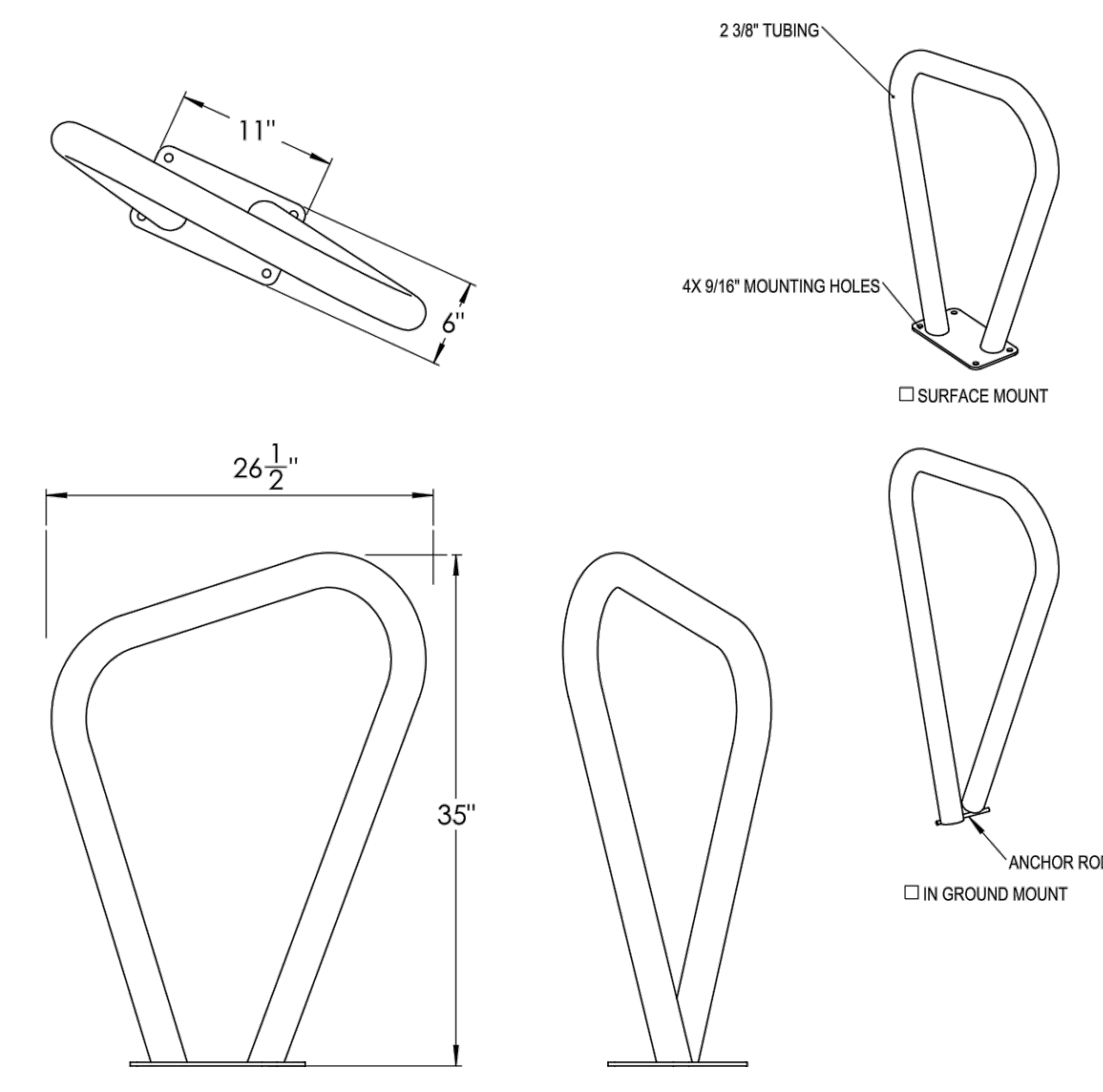
PRODUCT: GRT-3B
DESCRIPTION: GRAMERCY TABLE, 3 BACKED SEATS WOOD OR RECYCLED PROFILES
DATE: 11-12-18
ENG: SMC

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☐ UMBRELLA HOLE OPTION
ALL FASTENERS ARE STAINLESS STEEL
SOME ASSEMBLY REQUIRED
MUST BE MOUNTED TO GROUND
SITE FURNISHING IS POWDER COATED WITH TOIC POLYESTER STEEL. SURFACE PREP INCLUDES MECHANICAL AND CHEMICAL ETCHING FOLLOWED WITH A COATING TO IMPROVE ADHESION AND CORROSION RESISTANCE.

6 GRAMERCY COURTYARD TABLE QTY: 3
L-402 DETAIL, NTS

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PRODUCT NOTES
MADRAX LOFTY BIKE RACK LBR-2

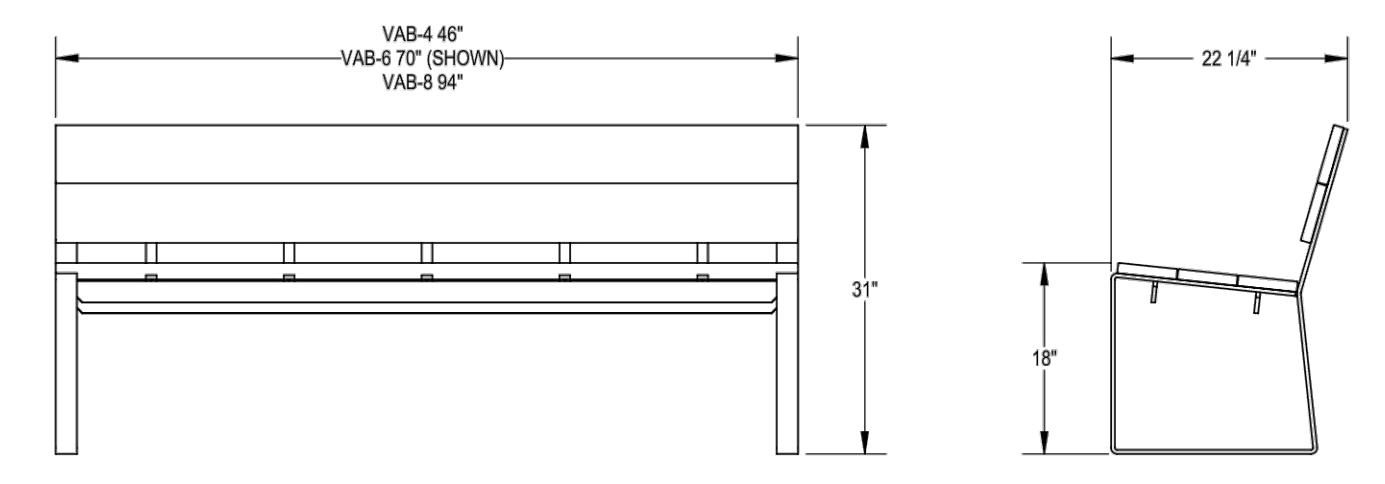
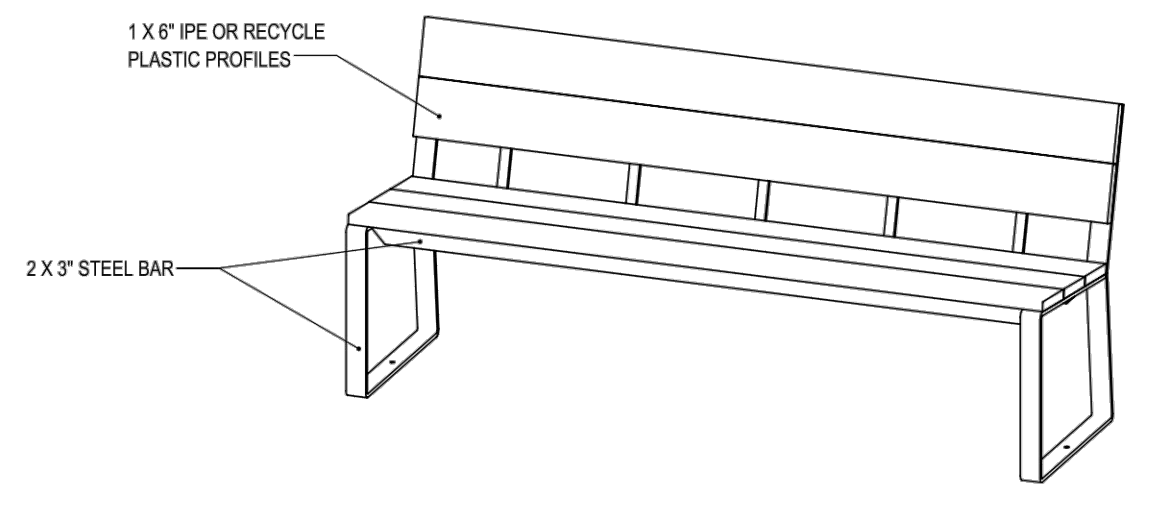
DIMENSIONS: 2-3/8" TUBE | 6"W x 26-1/2"L x 35"H
CAPACITY: 2 BIKES
MOUNTING: SURFACE MOUNTED
FINISH: POWDER COATED
COLOR: GUNMETAL

PART: LBR-2
DESCRIPTION: LOFTY BIKE RACK, 2 BIKE CAPACITY
DATE: 5-27-2020
ENG: BLW

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2 BIKE RACK QTY: 1
L-402 SPEC SHEET, NTS

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PRODUCT NOTES
THOMAS STEELE - VAB-4-ERM-P

PRODUCT: VAB-L (4,6,8)
DESCRIPTION: VILAS BACKED BENCH, IPE OR RP PROFILES
DATE: 5-21-2020
ENG: BLW

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SITE FURNISHING IS POWDER COATED WITH TOIC POLYESTER STEEL. SURFACE PREP INCLUDES MECHANICAL AND CHEMICAL ETCHING FOLLOWED WITH A COATING TO IMPROVE ADHESION AND CORROSION RESISTANCE.

5 BACKED BENCH QTY: 1
L-402 SPEC SHEET, NTS



SEMMA

DESCRIPTION: Corner or Pillar **TEXTURE:** Split Face

PALLET OVERVIEW

Specifications per pallet	Imperial	Metric
Cubing	24 units	24 units
Approx. Weight	1,403 lbs	636 kg
Number of rows	4	
Pillar height	35 3/4 in	900 mm

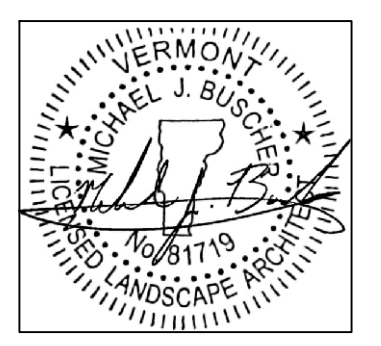
Unit dimensions	in	mm	Units/pallet
Height	5 1/2	150	24 units
Depth	10 3/4	266	12 right corners
Length	16	406	12 left corners

COMPATIBLE CAPS
See page 141 for product compatibility.

NOTES
See page 136 to 157 for more technical information.

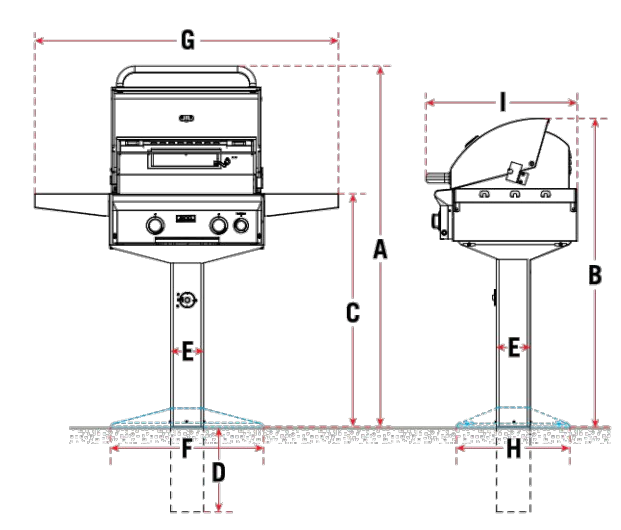


1 DOUBLE-SIDED CMU WALL QTY: 1
L-402 SPEC SHEET, NTS



PRODUCT NOTES
AMERICAN OUTDOOR GRILL 24NPL - 00SP

DESCRIPTION: 24" BURNER, L-SERIES, NATURAL GAS, PATIO POST MOUNT, NO ROTISSERIE, 1-HOUR TIMER / AUTOMATICAL SHUTOFF VALVE



POST / IN-GROUND MOUNT GRILLS SPECIFICATIONS

Grill Model	Height*				Width			Depth	
	Hood Open (A)	Hood Closed (B)	Floor to Top of Shelf (C)	Floor to bottom of extension below ground (D)	Post Base (E)	Post Shelf (F)	Post Base (G)	Post Base (H)	Max. Outer (I)
24NGT/24NGL	59"	48 1/2"	36 1/2"	18"	5 1/2"	-	51"	-	24 3/4"
24NPT/24NPL	59"	48 1/2"	37"	-	5 1/2"	26"	51"	18 1/2"	24 3/4"

*In-ground Mount grill height dimensions are approximate from ground level once installed.

PRODUCT NOTES
LA VALLE / 1591LP-FLNT

DESCRIPTION: 72" RECTANLGE NATURAL GAS FIRE TABLE, FLINT FINISH



3 72-INCH RECTANGLE FIRE PIT QTY: 1
L-402 DETAIL, NTS

4 FREESTANDING NATURAL GAS GRILL QTY: 4
L-402 SPEC SHEET, NTS