

BOROUGH OF WEST CONSHOHOCKEN LANDSCAPE REQUIREMENTS CHART

ZONING

113-39. DEVELOPMENT REGULATIONS.

G.12.(c) A high-intensity buffer as defined in SALDO of 10 feet along the perimeter of the tract boundary shall be required. The buffer area shall not be included as part of the ten-percent open space requirement.

SUBDIVISION AND LAND DEVELOPMENT

102-19. ALLEYS DRIVEWAYS AND PARKING AREAS.

C.3. PARKING AREA. Parking lot landscaping shall be provided according to the requirements of § 102-36 herein.

102-36. LANDSCAPING; BUFFERING; STREET TREES; PRESERVATION OF EXISTING VEGETATION.

A. PARKING LOT LANDSCAPING

(2) All parking lots with 10 or more stalls shall be landscaped according to the following regulations:

(e) Planting islands shall be a minimum of nine by 18 feet in area, underlain by soil (not base course material), mounded at no more than a slope of 4:1, nor less than a slope of 12:1, and shall be protected by curbs, wheel stops or bollards. Each planting island shall contain one shade tree plus shrubs and/or groundcover to cover the entire area.

1 PLANTING ISLAND = 1 TREE

(3) All parking lots shall be screened from public roads and from adjacent properties as required in § 102-36D(4) herein.

C. STREET TREES

(1) Street trees shall be required:

a. Along all existing streets when they abut or lie within the proposed subdivision or land development.

b. Along all proposed streets.

c. Trees shall be located so as not to interfere with the installation and maintenance of sidewalks and utilities. Trees shall be planted a minimum distance of three feet from curbs and sidewalks, 15 feet from overhead utilities and six feet from underground utilities.

d. Trees shall be planted at a ratio of one tree per 40 linear feet of frontage or fraction thereof.

Trees shall be distributed along the entire frontage of the property, although they need not be evenly spaced.

- MOIR AVE. = 76' / 40' = 2 TREES
- MARIA ST. = 60' / 40' = 2 TREES
- JOSEPHINE AVE. 255' / 40' = 6 TREES
- PRIVATE DRIVE 320' / 40' = 8 TREES

(3) e. Trees shall comply with the requirements of § 102-36F herein.

The use of tree species selected from the List of Recommended Plant Materials is encouraged.

D. BUFFERS AND SCREENS

(3) Property line buffer requirements.

(a) Property line buffers shall be required for the following types of development, and as otherwise specified in Chapter 113. Zoning: (c) The amount and type of plant material required shall be determined by the intensity of the proposed land use and the adjacent existing land use or zoning district for vacant land, according to Table 1 herein.

TABLE 1: REQUIRES A HIGH INTENSITY BUFFER

(e) Plant material quantities and types. For every 100 linear feet of property line to be buffered, the following minimum quantities and types of plant material shall be required:

- [3] High-intensity:
- a. Five Evergreen Trees.
 - b. Two ornamental trees.
 - c. One canopy trees.
 - d. Ten shrubs.

585' OF BUFFER REQUIRED

- 685' / 100' = 5.85
- 5.85 x 1 = 6 CANOPY TREES
- 5.85 x 2 = 12 ORNAMENTAL TREES
- 5.85 x 5 = 28 EVERGREEN TREES
- 5.85 x 10 = 59 SHRUBS

(4) Site element screens.

(a) Site element screens shall be required in all proposed land developments around the following site elements, when these are located partially or fully within 100 feet of a property line or existing road right-of-way:

- 1. Parking lots

(c) The type of site element screen shall be determined by the site element and the adjacent existing land use or zoning district for vacant land, according to Table 2 herein.

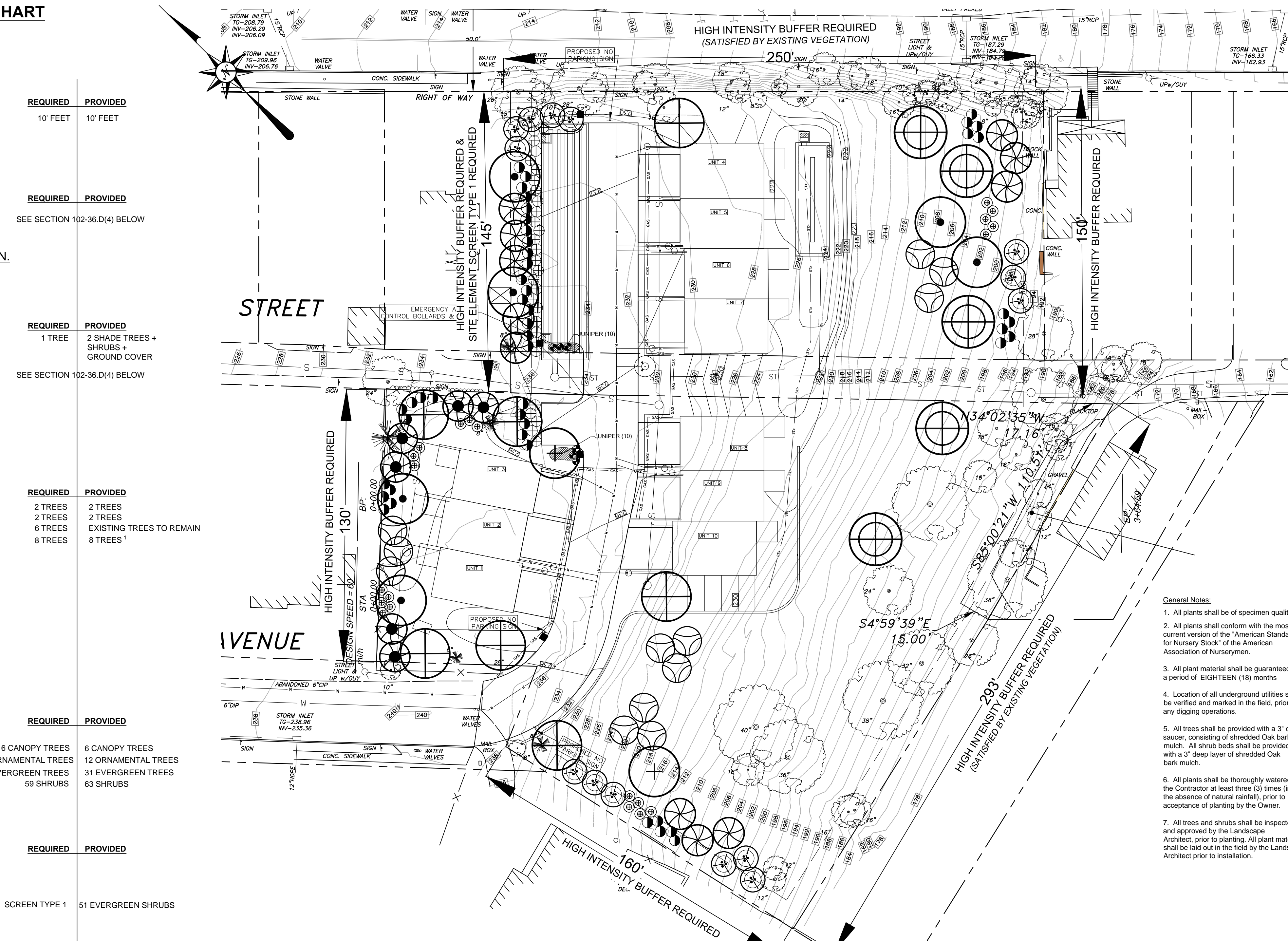
(f) Screen types and design criteria. The following types of screens shall be used where specified in Table 2.

TABLE 2: REQUIRES SCREEN TYPE 1

- 10 Parking Spaces - Shrubs to be placed 3' on center

REQUIRED TOWNSHIP PLANT SCHEDULE				
Quantity	Symbol	Scientific Name	Common Name	Planting Size
102-36.A. PARKING LOT LANDSCAPING				
2	+	Gleditsia triacanthos, inermis	Thornless honeylocust	2.5" cal. min., 12-14' ht., B&B
6	●	Buxus x 'Green Velvet'	Green Velvet Boxwood	18-24" ht.
20	▨	Juniperus horizontalis	Blue Rug Juniper	3 gallon
102-36.C. STREET TREES.				
7	⊕	Quercus imbricaria	Shingle Oak	2.5" cal. min., 12-14' ht., B&B
5	⊕	Quercus phellos	Willow Oak	2.5" cal. min., 12-14' ht., B&B
102-36.D.3. PROPERTY LINE BUFFER				
6	⊙	Acer saccharum	Sugar Maple	2.5" cal. min., 12-14' ht., B&B
11	⊗	Picea abies	Norway Spruce	8-10' ht., 4-5' sp., B&B
6	⊗	Picea omorika	Serbian Spruce	8-10' ht., 4-5' sp., B&B
12	⊗	Magnolia virginiana	Sweetbay Magnolia	8-10' ht., B&B (M.S.)
14	⊗	Thuja x 'Green Giant'	Green Giant Arborvitae	8-10' ht., B&B (M.S.)
47	⊙	Viburnum 'Pragense'	Prague Viburnum	24-36" ht., 24-36" sp., min. Cont.
29	⊕	Ilex crenata 'Steads'	Steads Holly	24-36" ht., 24-36" sp. min Cont.
21	⊕	Ilex verticillata	Winterberry Holly	24-36" ht., 24-36" sp. min Cont.
18,760 SF		Seeding (See recommended seeding types)		

NOTE: ALL DISTURBED AREAS ARE TO BE FINE GRADED, RAKED AND SEEDED. CONTRACTOR IS TO VERIFY SEEDING QUANTITY PRIOR TO BID.



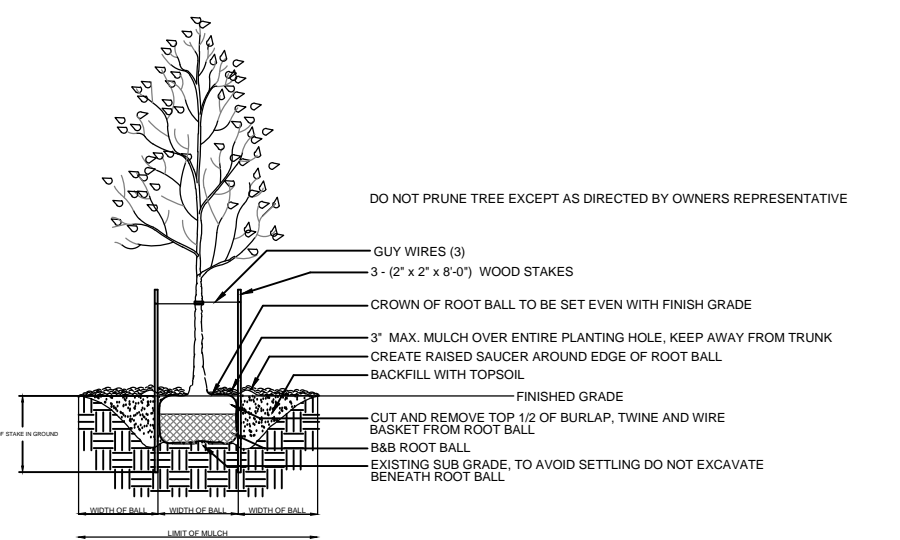
10.2-36. F. Plant materials, specifications, maintenance and guaranty. The following standards shall apply to all landscaping materials required under this chapter.

- (1) General requirements.
 - (a) The location, dimensions and spacing of required plantings should be adequate for their proper growth and maintenance, taking into account the sizes of such plantings at maturity and their present and future environmental requirements, such as wind, soil, moisture and sunlight.
 - (b) Plantings should be selected and located where they will not contribute to conditions hazardous to public safety. Such locations that would contribute to conditions hazardous to public safety include, but are not limited to, public street rights-of-way, underground and aboveground utilities, and sight triangle areas required for unobstructed views at street intersections.
- (2) Plant specifications.
 - (a) All plants shall meet the minimum standards for health, form and root condition as outlined in the most current American Association of Nurserymen (AAN) standards.
 - (b) All plant material shall be hardy within the USDA Hardiness Zone 6 applicable to West Conshohocken Borough.
 - (c) Canopy trees shall reach a minimum height and spread of 30 feet at maturity as determined by the AAN standards and shall be deciduous. New trees shall have a minimum caliper of 2 1/2 inches at planting.
 - (d) Ornamental trees or large shrubs shall reach a typical minimum height of 10 feet at maturity based on AAN standards. Trees and shrubs may be deciduous or evergreen and shall have a distinctive ornamental character, such as showy flowers, fruit, habit, foliage or bark. New ornamental trees shall have a minimum height of six feet or a caliper of 1 1/2 inches. New large shrubs shall have a minimum size of 2 1/2 to three feet at time of planting.
 - (e) Small shrubs may be evergreen or deciduous and shall have a minimum height at maturity of four feet based on AAN standards for that species. New shrubs shall have a minimum size of 18 inches at time of planting.
 - (f) Evergreen trees shall reach a typical minimum height of 20 feet at maturity based on AAN standards for that species and shall remain evergreen throughout the year. New evergreens shall have a minimum height at planting of six feet.
- (3) Maintenance.
 - (a) Required plant material shall be maintained for the life of the project to achieve the required visual effect of the buffer or screen. It shall be the ultimate responsibility of successive property owners to ensure that the required plantings are properly maintained. Dead or diseased plant material shall be removed promptly by the property owner and replaced at the next growing season.
 - (b) Safety. All sight triangles shall remain clear, and any plant material which could endanger safety, such as unstable limbs, are to be removed and the plant material replaced. It shall be the responsibility of the property owner to ensure all plantings and architectural elements are maintained to provide a safe environment.
- (c) Maintenance guidelines for the plantings are encouraged to be published by the planting plan designer to be used by grounds maintenance personnel to ensure the design's visual buffering and screening concepts are continued.
- (4) Landscape bond.
 - (a) Any tree or shrub which dies within 18 months of planting shall be replaced. Any tree or shrub shall be replaced if, within 18 months of planting or replanting, the Borough deems it not to have survived or to have grown in a manner uncharacteristic of its type. Substitutions for certain species of plants may be made only when approved by the Borough.
 - (b) The developer or landowner shall deposit with the Borough a sum of money equal to the amount necessary to cover the cost of purchasing, planting, maintaining and replacing all vegetative materials for a period of 18 months.
 - (c) This condition may be satisfied through a land development agreement with sufficient and appropriate financial guaranties.

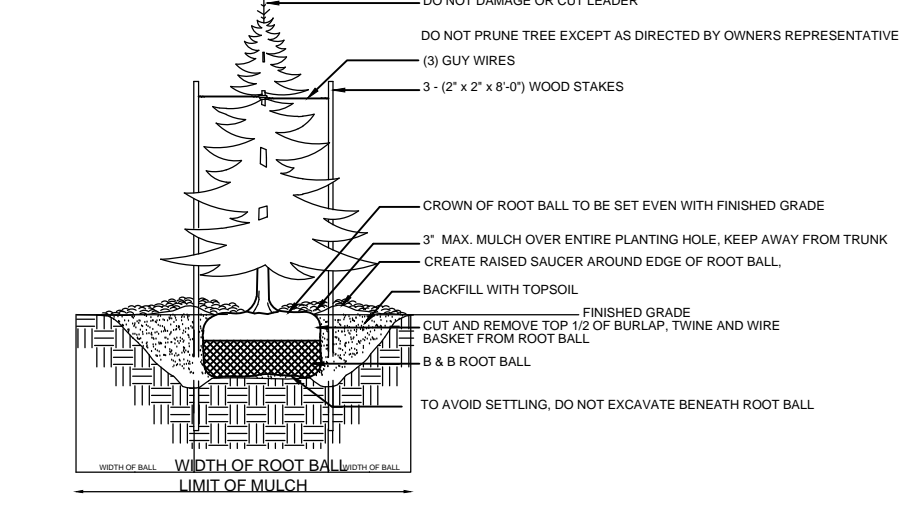
NOTE: THIS PLAN TO BE USED FOR LANDSCAPE PURPOSES ONLY.

RECOMMENDED SEEDING TYPES:

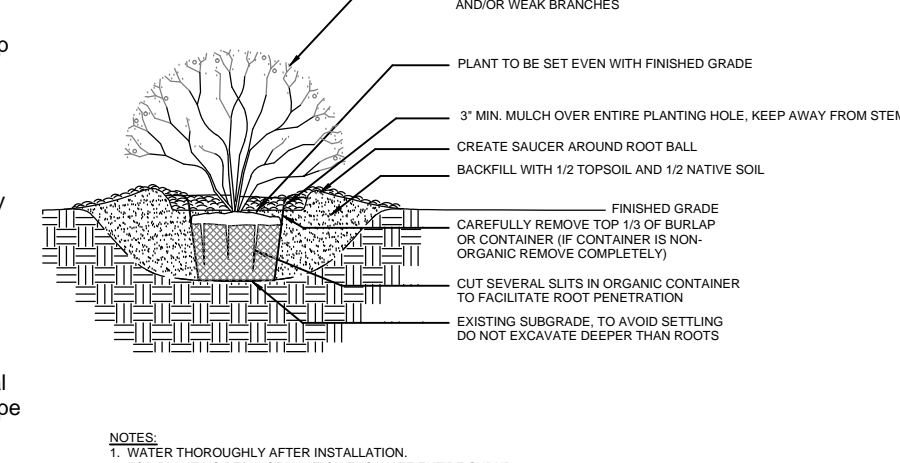
- PERMANENT SEEDING:**
- A. SEED @ 20 LBS/1000 SQ. YARDS
 - (1) BERMUDASS, PERENNIAL, 10# TOTAL WEIGHT
 - (2) PENSILVANIA BIRD, 10# TOTAL WEIGHT
 - (3) KYOGASS, PERENNIAL, 10# TOTAL WEIGHT
 - B. FERTILIZER - A SLOW RELEASE NITROGEN FERTILIZER (10-10-10) @ 100# / ACRES
 - C. MULCHING - STRAW @ 3 TONS/ACRE
 - D. LIME - AGRICULTURAL GRADE LIMESTONE @ 4 TONS/ACRE



TYPICAL DECIDUOUS TREE PLANTING DETAIL

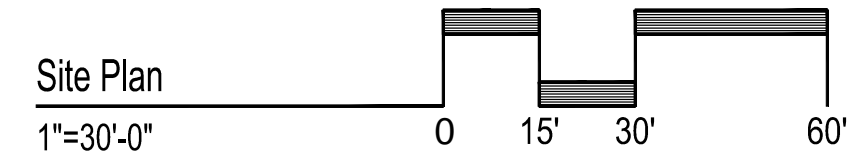


TYPICAL EVERGREEN TREE PLANTING DETAIL



TYPICAL SHRUB PLANTING DETAIL

- General Notes:**
1. All plants shall be of specimen quality.
 2. All plants shall conform with the most current version of the "American Standard for Nursery Stock" of the American Association of Nurserymen.
 3. All plant material shall be guaranteed for a period of EIGHTEEN (18) months
 4. Location of all underground utilities shall be verified and marked in the field, prior to any digging operations.
 5. All trees shall be provided with a 3" deep saucer, consisting of shredded Oak bark mulch. All shrub beds shall be provided with a 3" deep layer of shredded Oak bark mulch.
 6. All plants shall be thoroughly watered by the Contractor at least three (3) times (in the absence of natural rainfall), prior to acceptance of planting by the Owner.
 7. All trees and shrubs shall be inspected and approved by the Landscape Architect, prior to planting. All plant material shall be laid out in the field by the Landscape Architect prior to installation.

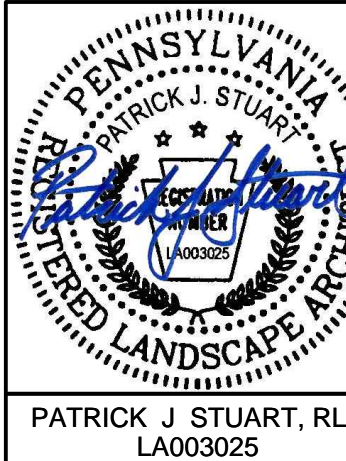


NUM.	DATE	REVISION
7	3 MAY 2016	REVISE PER 28MAR16 FINAL TWP. ENG. REVIEW LETTER
6	29 MAR 2016	RESPOND TO BOROUGH 25MAR16 REVIEW COMMENTS
5	17 FEB 2016	RESPOND TO BOROUGH 08JAN16 REVIEW COMMENTS
4	18 DEC 2015	RESPOND TO BOROUGH 13NOV15 REVIEW COMMENTS
3	07 DEC 2015	RESPOND TO MCD2 2DEC15 REVIEW COMMENTS
2	10 NOV 2015	COORDINATE PLANS WITH NPDES CALCS
1	6 NOV 2015	RESPOND TO BOROUGH AND MCD2 COMMENTS

PLAN PREPARED BY:
SITE ENGINEERING CONCEPTS, LLC
 P.O. BOX 1992
 SOUTHEASTERN, PA 19399
 P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PLAN PREPARED FOR:
L S REALTY ASSOCIATES LLC
 142 MOIR AVENUE, 143 JOSEPHINE AVE
 CONSHOHOCKEN, PA 19428
 WEST CONSHOHOCKEN BOROUGH MONTGOMERY COUNTY PENNSYLVANIA

PRELIMINARY BOROUGH LANDSCAPE PLAN
 SHEET 14 of 15
 DATE: 8 SEPTEMBER 2015
 SCALE: 1" = 30'



Specification Sheet

CONSTRUCTION

- A** Housing - Made of one piece diecast, low copper, 360 aluminum alloy. An integrate hinge system receive the LED module frame.
- B** LED module frame - Made of one piece diecast, low copper, 360 aluminum alloy. The hinge LED module frame has a safety latch for quick toolless access to internal components.
- C** Acrylic lens - Made of one piece injection moulded clear UV stabilized acrylic equipped with internal refractor prisms.
- C** Mounting arm - Consist of four arms made of moulded aluminum welded to a cylindrical moulded aluminum holder bolted to the LED module frame, fits on a Ø4" (102 mm) tenon and is fixed by six stainless steel set screws.

OPTICS

- D** LED module (29W each) - High performance LEDs, IP67 dust and water repellent case with integral heat sink and UV stabilized injection moulded polycarbonate collimator. Offers IES types II, III, IV or V photometric distributions. 170 lumen maintenance at 25°C is 70,000 hrs. Initial lumen output is 3000 lm and initial efficacy is 113 lm/W @ 700mA. Typical LED's Color temperature is 4000K standard with 5000K or 5000K optional with CRI of 70. Wattages are 29W to 87W.

ELECTRICAL COMPONENTS

- E** Electronic Class 2 dry & damp LED driver - Easily accessible, the driver is mounted on a removable heavy gauge galvanized steel tray is equipped with a weatherproof quick disconnect wiring system and is factory prewired and tested. The driver is CSA and UL approved and is environment rated dry & damp. Output voltage: 24VDC.
- IP67 rated LED quick connectors - Made of PVC, nitrile, used between electrical components for quick and easy maintenance.

FINISH

- All surfaces are chemically treated against corrosion through a multistage lamination process. The polyester powder finish is applied by a thermotropic process offering an excellent protection conforming to ASTM G7, D2247 and B-117/D-1654 standards. Standard colors are textured black, bronze and white and smooth silver finish. Consult Lumenpulse's "Color Selection Guide" for others.

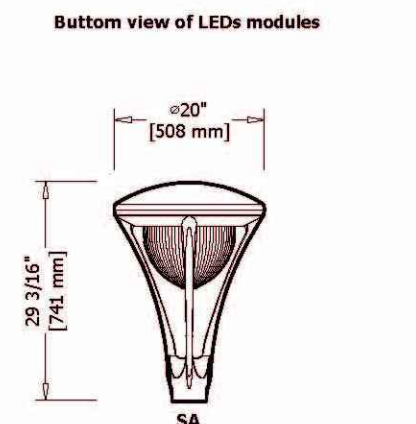
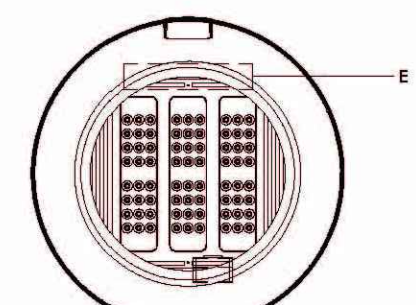
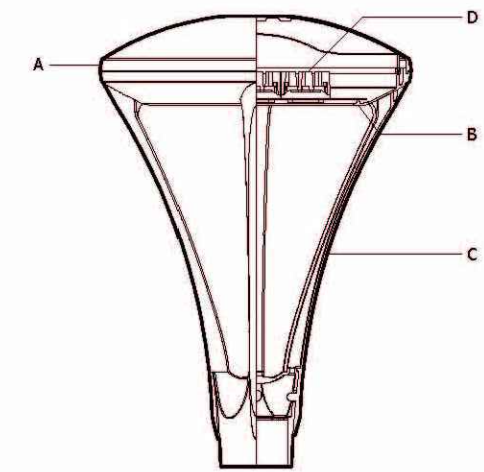
HARDWARE

- All exterior hardware is made of stainless steel.

WARRANTY

- This product has a **five year limited warranty** on the finish and against any manufacturing defect. The driver and its components are covered by the manufacturer's warranty.
- The PURE luminaire series is CSA and ANSI/UL certified and designed for use in wet locations.

lumenarea™ pure-v P100V



Weight: 31.5 lb (14.3 kg) EPA: 0.79 sq ft with SA 1.10 sq ft

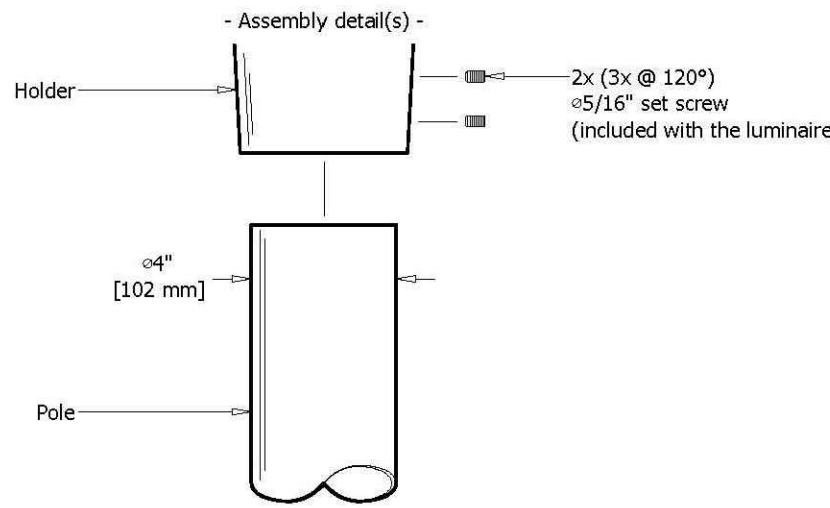


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Montreal (Quebec) Canada F. 514.937.6299 info@lumenpulse.com
www.lumenpulse.com



Specification Sheet

lumenarea™ pure-v P100V



Specification guide :

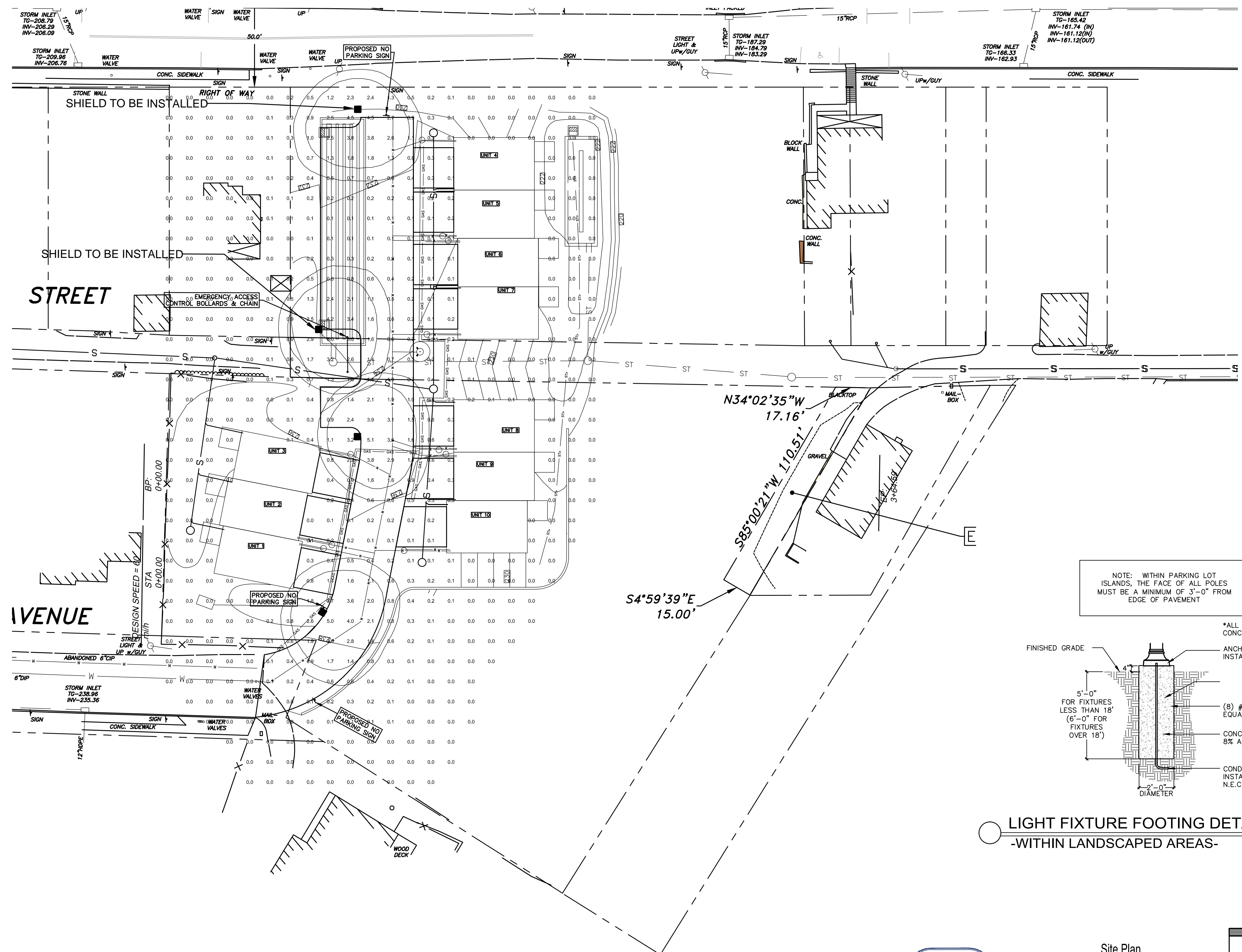
IES distribution	Wattage	Voltage	Color	Other components
IES distribution	87L	120	E12	CW/SA
LED module	29L	120	A11 Standard Colors	Optional
LES	58L	120	B11 Textured bronze	WW 3000K color temperature
LEA	87L	120	G11 Textured grey blue	CW 5000K color temperature
LES			H11 Textured blue	SA Small acrylic lens
			J11 Textured dark turquoise	
			J21 Textured turquoise	
			K11 Textured forest green	
			K21 Textured dark forest green	
			K31 Textured dark green	
			K42 Free textured dark green	
			M11 Textured red	
			M21 Textured burgundy	
			X11 Free textured patina	
			CC Custom color	

WARRANTY NOTICE: Lumenpulse assumes no responsibility for problems that may occur when combining third party products with Lumenpulse.

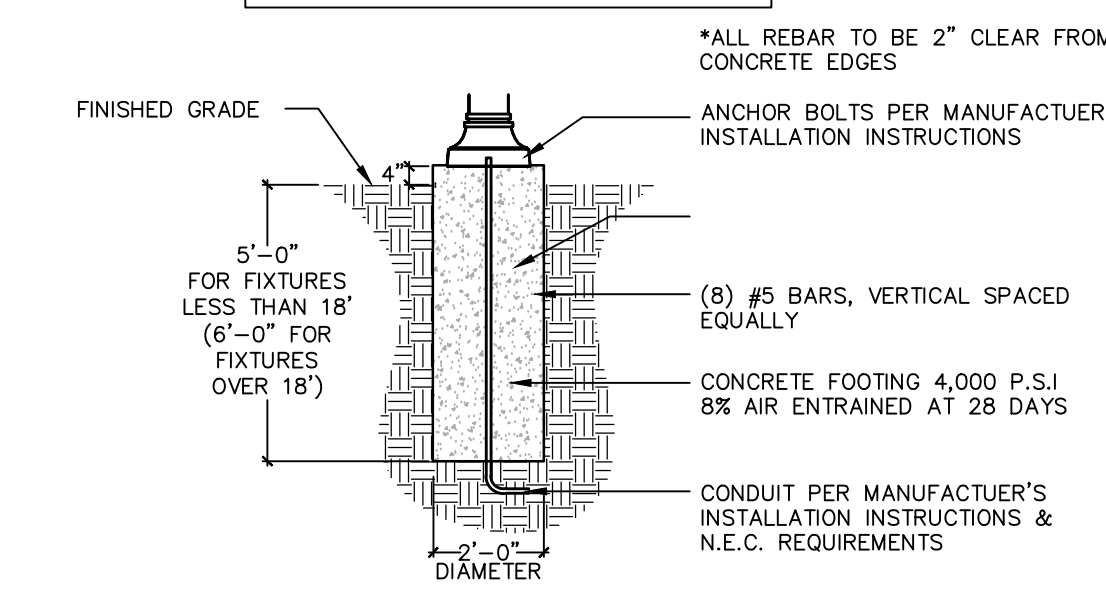
Type: **P100V** Distribution: **IES** Wattage: **87L** Voltage: **120** Color: **E12** Other components: **CW/SA**

Submitted on: Information Approval Project: _____
Distributor: _____
Your order #: _____
Representative: _____
Civ order #: _____ **For lumenpulse use.**

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1751 Richardson, Suite 1505 P.O. Box 937-3003
Montreal (Quebec) Canada F. 514.937.6299 info@lumenpulse.com
www.lumenpulse.com



NOTE: WITHIN PARKING LOT ISLANDS, THE FACE OF ALL POLES MUST BE A MINIMUM OF 3'-0" FROM EDGE OF PAVEMENT



LIGHT FIXTURE FOOTING DETAIL
-WITHIN LANDSCAPED AREAS- NOT TO SCALE

Luminaire Schedule

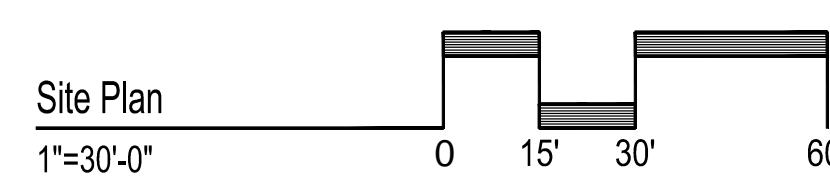
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
■	A	3	Lumenpulse Inc.	P100V-LE4-58L-120-4000K	Serie Pure V	(2 Clusters of 14 Luxeon "T" LED's) White 58W SSL c/w Mean Well Driver HLG-150H-24B @ 120.0V	1	XP100V-0LE4-058L-NW-IES	6320	0.95	54

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Site		0.1 fc	5.0 fc	0.0 fc	N/A	N/A

Note

- Fixtures Mounted at 14'
- Calculations Taken at Grade



Revision Log

NUM.	DATE	REVISION
7	3 MAY 2016	REVISE PER 28MAR16 FINAL TWP. ENG. REVIEW LETTER
6	29 MAR 2016	RESPOND TO BOROUGH 25MAR16 REVIEW COMMENTS
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P: 610-240-0450 F: 610-240-0451 E: INFO@SITE-ENGINEERS.COM

PLAN PREPARED FOR:
L S REALTY ASSOCIATES LLC
142 MOIR AVENUE, 143 JOSEPHINE AVE
CONSHOHOCKEN, PA 19428
WEST CONSHOHOCKEN BOROUGH MONTGOMERY COUNTY PENNSYLVANIA

PRELIMINARY BOROUGH LIGHTING PLAN
DATE: 8 SEPTEMBER 2015
SHEET 15 of 15
SCALE: 1" = 30'

NOTE: THIS PLAN TO BE USED FOR LIGHTING PURPOSES ONLY.