

Landscape Data

Vehicular Use Area Landscaping Adjacent to R.O.W. (East Buffer)

Sec. 22-187(4)
Trees Required = 10' Wide Landscape Strip with 1 Tree/300 s.f.
320 l.f. x 10' = 3,200 s.f. / 300 = 11 Trees
Provided = 12 Trees (11 Trees + 3 Palms @ 3 Palms = 1 Tree)
Shrubs Required = Continuous Hedge @ 2' o.c.
250 l.f. / 2' o.c. = 160 Shrubs
Provided = 160 Shrubs

Vehicular Use Area Landscaping to Adjacent Property (North & South Buffer)

Sec. 22-187(6)
Trees Required = 10' Wide Landscape Strip with 1 Tree/200 s.f.
1,690 l.f. x 10' = 16,900 s.f. / 200 = 85 Trees
Provided = Existing Vegetation*
Shrubs Required = Continuous Hedge @ 2' o.c.
1,690 l.f. / 2' o.c. = 845 Shrubs
Provided = Existing Vegetation*
* Existing vegetation to remain and credited toward buffer requirement until any future development in that area occurs.

Interior Vehicular Use Area

Sec. 22-187(7)
Required = 1 s.f. of interior landscaping per
15 s.f. of vehicular use area (81,922 s.f./15 = 5,461 s.f.)
Landscape Area Provided = 12,050 s.f.

NOTE: Vehicular Use Area includes grass parking for overall VUA calculation. The grass parking area is not included as part of the Landscape Area Provided calculation, but the terminal and interior islands are included.

Trees Required = 1 Tree/100 s.f. of interior landscape area
81,922 s.f./15 = 5,461 s.f. / 100 = 55 Trees
Provided = 55 Trees

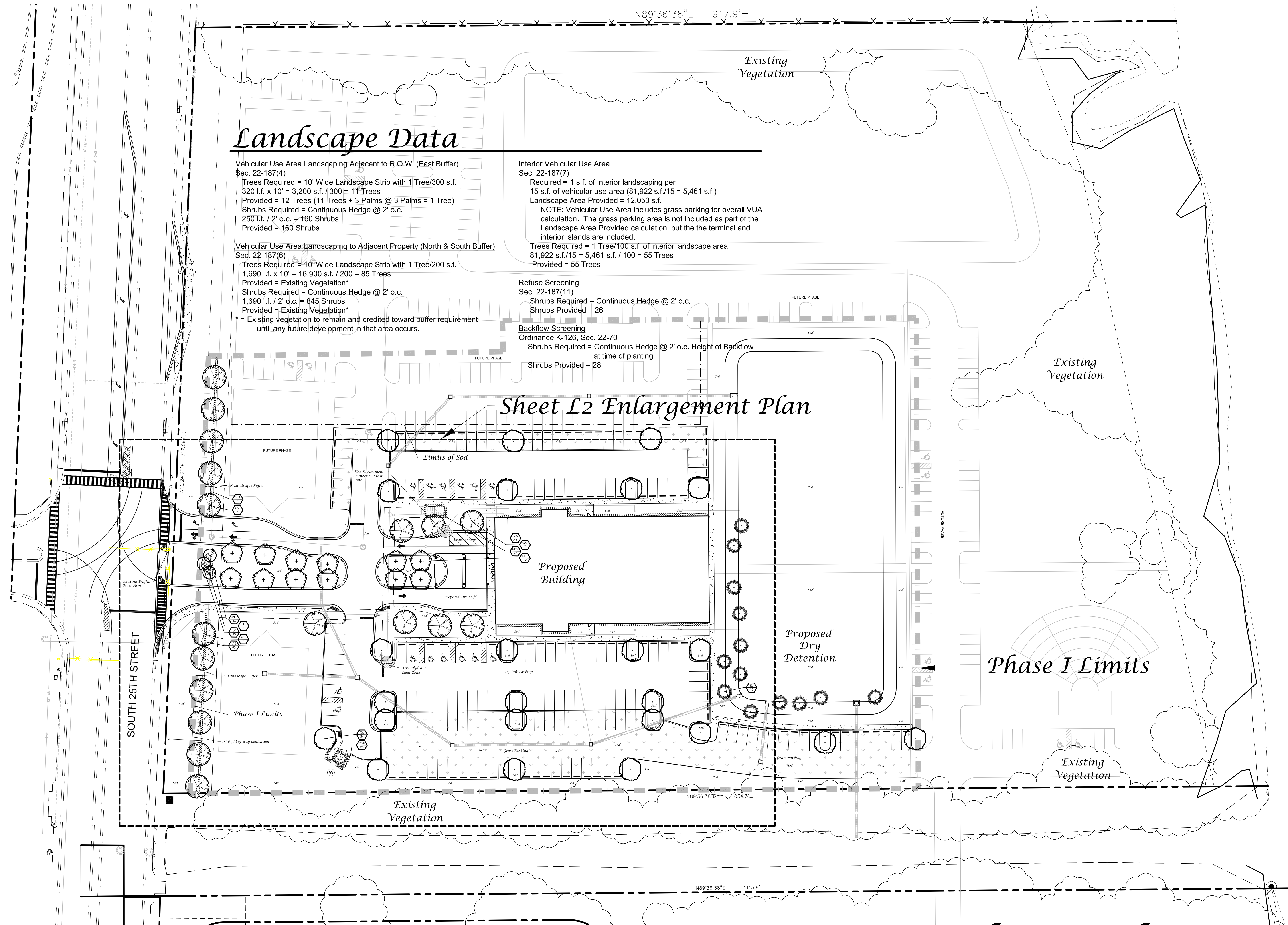
Refuse Screening

Sec. 22-187(11)
Shrubs Required = Continuous Hedge @ 2' o.c.
Shrubs Provided = 26

Backflow Screening

Ordinance K-126, Sec. 22-70
Shrubs Required = Continuous Hedge @ 2' o.c. Height of Backflow at time of planting
Shrubs Provided = 28

Sheet L2 Enlargement Plan



Landscape Plan



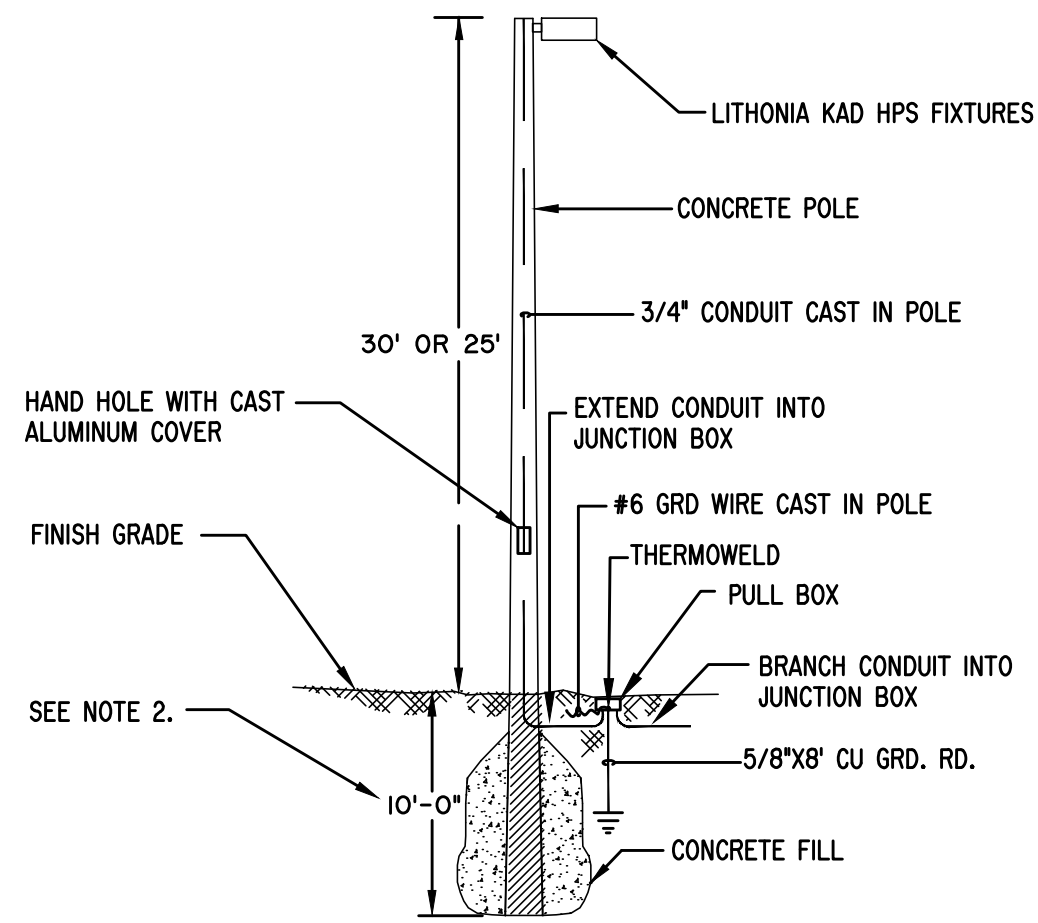
North
Scale: 1" = 20'



Job No.	12-1002
Drawn By	JWS
Submittal Dates	10-15-2012 11-27-2012 11-13-2015

Revision Dates	
City Comments	11-27-2012
New Base	11-12-2015

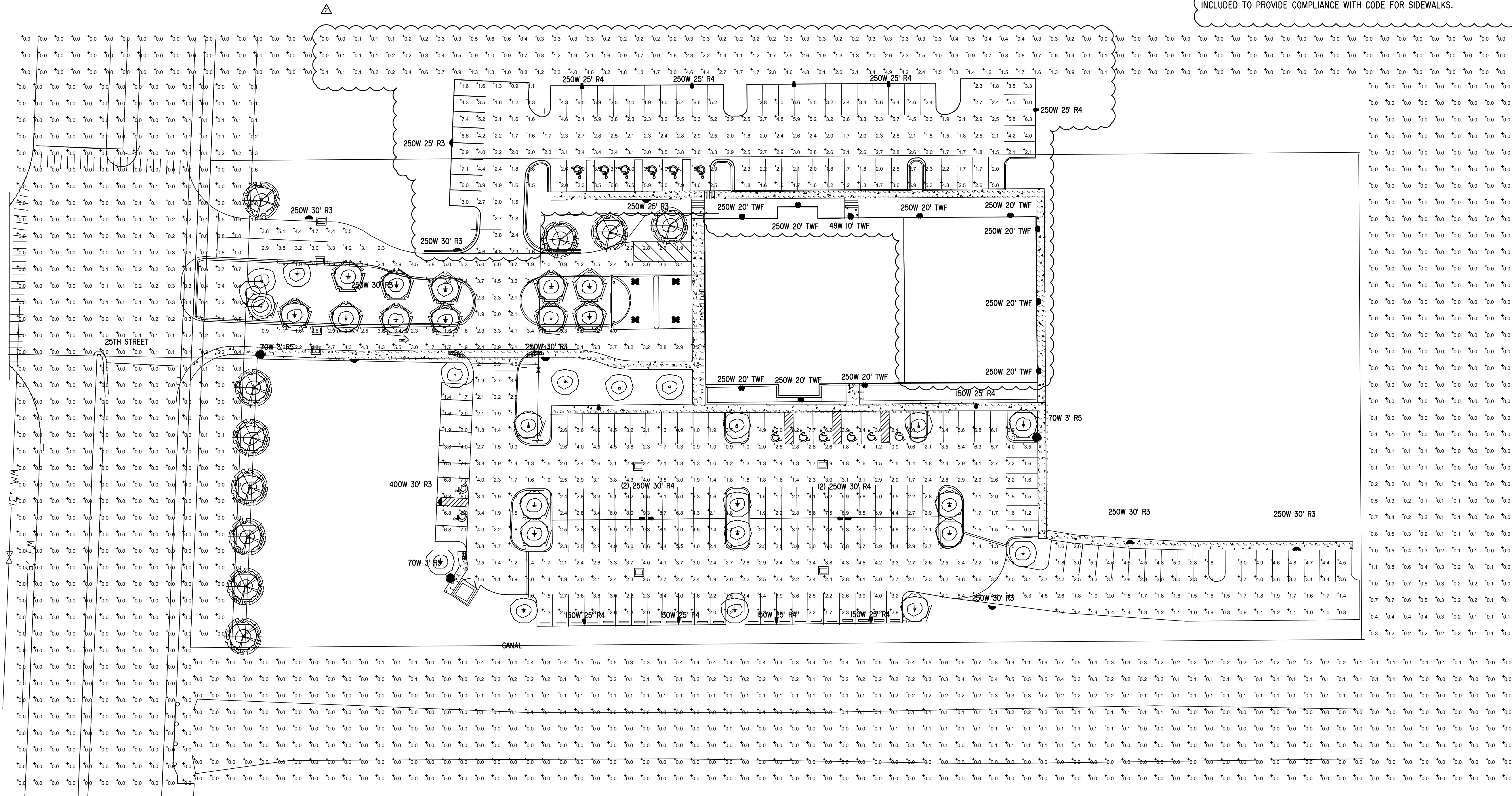
These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.



NOTE:
 1. USE EPOXY SPLICES FOR SPLICING CONDUCTORS IN JUNCTION BOX.
 2. REFER TO POLE MANUFACTURER DOCUMENTATION FOR EXACT BURIAL DEPTH.

Model	Height	Beam Spread	Beam Angle	Beam Diameter	Beam Length	Beam Area	Beam Volume	Beam Weight	Beam Material
KBC	30'	120°	120°	120"	120"	120"	120"	120"	120"
KBR	25'	120°	120°	120"	120"	120"	120"	120"	120"

PHOTOMETRIC ANALYSIS NOTES:
 THIS PARKING AREA IS WITHIN THE CITY OF FORT PIERCE, AND IS SUBJECT TO LIGHTING REGULATIONS FOUND IN CHAPTER 22, ARTICLE IV, SECTIONS 22-58 AND 22-60 OF THE FORT PIERCE MUNICIPAL CODE.
 22-58
 CODE REQUIRES THE INTERIOR SIDEWALKS SHALL BE PROVIDED WITH A MINIMUM AVERAGE OF ONE FOOT-CANDLE. IES TABLE 26-27 SPECIFIES A MINIMUM OF 0.5 FOOT-CANDLES AT ANY LOCATION FOR SAFETY OF PERSONNEL. THEREFORE THIS DESIGN PROVIDES A MINIMUM 0.5 FOOT-CANDLES ON SIDEWALKS ON THE PROPERTY AND AN AVERAGE 4.4 FOOT-CANDLES ON SAME. FIXTURES NEAR THE PUBLIC RIGHT-OF-WAY WERE SELECTED TO MINIMIZE GLARE SEEN BY DRIVERS, THE INTENT OF THE DESIGN BEING TO HAVE THE LIGHT INTENSITY DIMINISH TO 0.5 FOOT-CANDLES NEAR THE WESTERLY PROPERTY LINE. A UNIFORMITY RATIO OF 5.9:1 WAS ACHIEVED, WHICH CONFORMS WITH THE CODE MAXIMUM LIMIT OF 10:1 FOR SIDEWALKS.
 22-60
 (1b). CODE REQUIRES THE OFF-STREET PARKING IN THIS CASE SHALL BE PROVIDED WITH A MINIMUM AVERAGE OF ONE FOOTCANDLE ON THE PAVEMENT. THIS PLAN PROVIDES AN AVERAGE OF 3.1 FOOT-CANDLES IN THE PARKING AREA.
 (2). THIS PLAN PROVIDES A UNIFORMITY RATIO OF 3.9 TO 1, WHICH COMPLIES WITH CODE.
 (3). LIGHTING CONTROL IS BY ASTRONOMIC TIME CLOCK. THIS COMPLIES WITH CODE.
 (4). MAXIMUM SPILL TO THE NORTH IS 4.9 FC ONTO DESIGNATED FUTURE PARKING. MAXIMUM SPILL TO THE WEST IS 1.9 FC. THIS OCCURS VERY CLOSE TO THE NEW R.O.W. LINE WITHIN THE DRIVEWAY. THEREFORE IT IS PROPOSED THIS SPILL IS NOT OBJECTIONABLE. MAXIMUM SPILL TO THE SOUTH IS 1.6 FC. UNIFORMITY AND ADEQUATE FOOT-CANDLES CANNOT REASONABLY BE PROVIDED ALONG THE SOUTH BOUNDARY OF THE PARKING LOT, WHICH IS WITHIN A FEW FEET OF THE SOUTH PROPERTY LINE, WITHOUT PLACING LIGHT POLES ALONG THAT LINE. THE PROPERTY TO THE SOUTH IS A DRAINAGE CANAL, AND IT IS PROPOSED THAT THIS SPILL IS THEREFORE NOT OBJECTIONABLE. SPILL TO THE RESIDENTIAL PROPERTY FURTHER TO THE SOUTH IS LESS THAN 0.1 FC. MAXIMUM SPILL TO THE EAST IS 1.1 FC. THIS OCCURS ON CHURCH PROPERTY TO BE IMPROVED IN THE FUTURE AND THEREFORE IT IS PROPOSED THAT THIS IS NOT OBJECTIONABLE.
 THE LIGHTING PLAN USES FIXTURES MOUNTED AT HEIGHTS OF 30 AND 25 FEET ABOVE GRADE, USING PRIMARILY R4 FORWARD THROW DISTRIBUTION TO MINIMIZE SPILL. THE LIGHTING PLAN ALSO INCLUDES FIXTURES MOUNTED ON THE BUILDING AT 20 FEET AND THE PORTA COCHERE AT 15 FEET. FIXTURES ON THE BUILDING AND ON THE CONCRETE POLES ARE FULL-CUTOFF TYPE. LIGHTING TECHNOLOGY IS HIGH-PRESSURE SODIUM. THE PHOTOMETRIC MODEL INCLUDES THE EFFECTS OF PLANNED TREES WITH TOPS AT 20 FEET, CREATING A SIGNIFICANT IMPACT ON LIGHT DISTRIBUTION. FIXTURES WERE LOCATED TO MINIMIZE SHADOWS CAST ON PARKING SPACES BY THE TREES. TWO PEDESTRIAN BOLLARDS ARE INCLUDED TO PROVIDE COMPLIANCE WITH CODE FOR SIDEWALKS.



PROJECT NAME:	MT. BETHEL CHURCH SITE PHOTOMETRIC ANALYSIS
CLIENT:	ENGINEERING, DESIGN & CONSTRUCTION, INC. 1934 TUCKER COURT FORT PIERCE, FL 34950
PROJECT LOCATION:	EAST SIDE OF 25TH STREET SOUTH OF SWEETWATER DRIVE WEST OF TEN MILE CREEK
ENGINEER SEAL:	TIMOTHY C. TREWYN LICENSE No 61580 STATE OF FLORIDA PROFESSIONAL ENGINEER Timothy C. Trewyn, PE P.E. No. 61580
SHEET TITLE:	SITE PARKING PHOTOMETRIC ANALYSIS
ISSUE DATE:	10-17-2012
DRAWN:	TCT
APPROVED:	TCT
DRAWING NUMBER:	SE-1
SHEET	1 OF 1
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