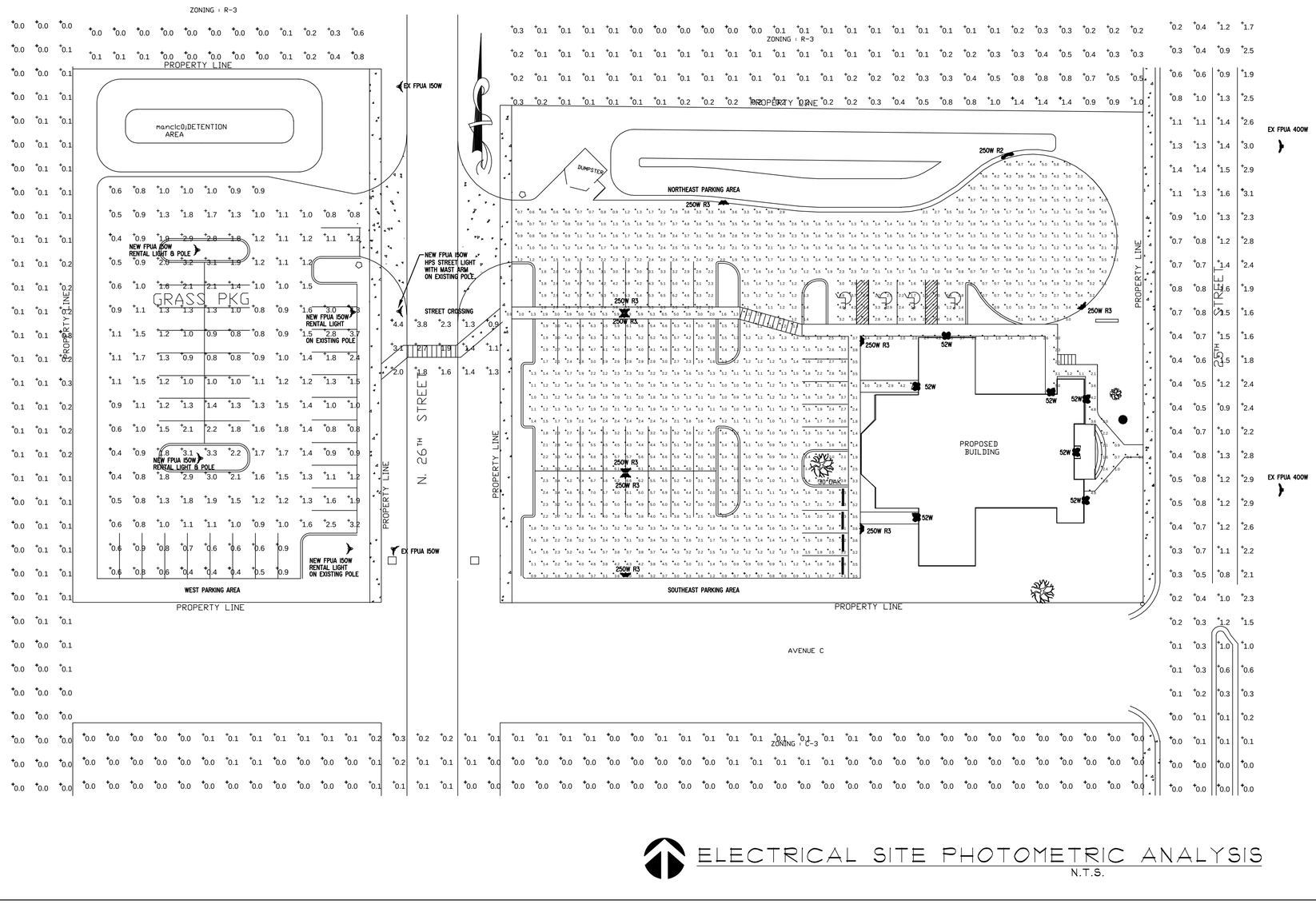



ELECTRICAL SITE PHOTOMETRIC ANALYSIS

N.T.S.

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. THIS PLAN PROVIDES AN AVERAGE 2.1 FOOT-CANDLES ON THE STREET CROSSING AND AN AVERAGE OF 2.8 FOOT-CANDLES ON THE SIDEWALKS EAST OF 26TH STREET. A UNIFORMITY RATIO OF 2.3:1 WAS ACHIEVED ON THE STREET CROSSING AND 9.3:1 WAS ACHIEVED ON THE SIDEWALKS EAST OF 26TH STREET, WHICH CONFORMS WITH THE CODE MAXIMUM LIMIT OF 10:1 FOR SIDEWALKS.

22-60

(1)b. 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 1.3 FOOT-CANDLES IN THE WEST PARKING AREA, AN AVERAGE OF 2.6 FOOT-CANDLES IN THE SOUTHEAST PARKING AREA, AND AN AVERAGE OF 2.2 FOOT-CANDLES IN THE NORTHEAST PARKING AREA.

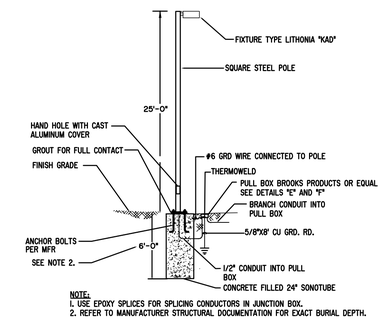
(2) THIS PLAN PROVIDES A UNIFORMITY RATIO OF 3.3 TO 1 IN THE WEST PARKING AREA, 3.7 TO 1 IN THE SOUTHEAST PARKING AREA, AND 3.7 TO 1 IN THE NORTHEAST PARKING AREA, WHICH COMPLIES WITH CODE.

(3) LIGHTING CONTROL IS BY PHOTOCELL ON FPUA RENTAL LIGHTS IN THE WEST PARKING AREA AND BY ASTRONOMIC TIME CLOCK ON THE CUSTOMER OWNED FIXTURES ON THE EAST SIDE OF 26TH STREET. THIS COMPLIES WITH CODE.

(4) MAXIMUM SPILL TO THE NORTH AND EAST OF 26TH STREET IS 1.4 FC. THIS LEVEL IS A COMBINATION OF FPUA STREET LIGHTING FROM 25TH STREET AND THE CUSTOMER FIXTURES NECESSARY TO MEET CODE ON THE EAST CIRCLE. THIS LIGHT FALLS ON A DRAINAGE CANAL. THEREFORE IT IS PROPOSED THAT THIS SPILL IS NOT OBJECTIONABLE. THE SPILL REDUCES TO 0.3FC BEFORE IT REACHES PRIVATE PROPERTY NORTH OF THE CANAL. MAXIMUM SPILL OT THE NORTH AND WEST OF 26TH STREET IS 0.8 FC. THIS IS PRIMARILY FROM THE NEARBY FPUA STREET LIGHT AND ALSO FALLS UPON THE DRAINAGE CANAL. MAXIMUM SPILL TO THE EAST IS 3.1 FC IS ONTO 25TH STREET AND IS COMBINED WITH EXISTING STREET LIGHTING. IT IS PROPOSED THAT THIS IS NOT OBJECTIONABLE. SPILL TO THE SOUTH IS 0.3 FOOT-CANDLES MAXIMUM. SPILL TO THE WEST IS ALSO 0.3 FOOT-CANDLES MAXIMUM.

THE LIGHTING PLAN USES FULL CUTOFF FIXTURES MOUNTED AT HEIGHTS OF 25 FEET ON POLES, USING R2 ROADWAY DISTRIBUTION AND R3 AREA DISTRIBUTION. THE LIGHTING PLAN ALSO INCLUDES FIXTURES MOUNTED ON THE BUILDING AT 9 FEET AND THE FRONT PORCH AT 10 FEET. FIXTURES ON THE BUILDING AND ON THE CUSTOMER POLES ARE FULL-CUTOFF TYPE. FPUA RENTAL LIGHTING IS TO BE CUTOFF COBRAHEAD FIXTURES. LIGHTING TECHNOLOGY IS HIGH-PRESSURE SODIUM, MATCHING THE STREET LIGHTING ON 26TH STREET.

THE PLAN RELIES UPON THE CITY REQUIRING FPUA TO INSTALL AN ADDITIONAL 150W HIGH-PRESSURE SODIUM ROADWAY FIXTURE ON ITS POLE AT THE CROSSING OF 26TH STREET. THIS IS POINTED OUT ON THE PLAN.




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

SITE LIGHTING POLE DETAIL

SCALE : NONE

| NO. | DATE | REVISIONS | DR | CK | APP |
|---|---|---|---|---|---|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CLIENT:
COOK & MENARD ARCHITECTURE INC.
806 DELAWARE AVE.
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34950

PROJECT NAME:
FRESH WIND FRESH FIRE CHURCH

PROJECT LOCATION:
365 N 26TH STREET
(GEORGIA AVE & 25TH STREET)
FORT PIERCE, FLORIDA

ENGINEER SEAL

TIMOTHY C. TREWYN LICENSE No 61580 STATE OF FLORIDA PROFESSIONAL ENGINEER

Timothy C. Trewyn, PE
P.E. No. 61580


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SHEET 1 OF 1

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