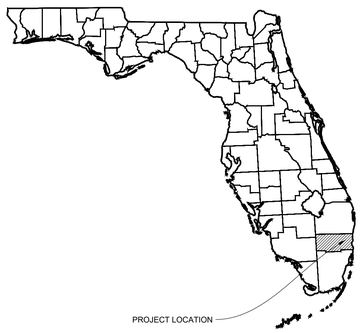
NW 9TH AVENUE

(POWERLINE ROAD CROSSWALK LIGHTING PROJECT)

PREPARED FOR

CITY OF WILTON MANORS



PREPARED FOR:
CITY OF WILTON MANORS
LOCATION:
WILTON MANORS, FLORIDA
SECTION 28, TOWNSHIP 49S, RANGE 42E

PROJECT TEAM

OWNER:
CITY OF WILTON MANORS
2020 WILTON DRIVE
WILTON MANORS, FL 33305
(954) 390-2100

CIVIL ENGINEER:
KIMLEY-HORN & ASSOCIATES
STEFANO F. VIOLA, P.E.
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL 33324
(954) 535-5100
STEFANO.VIOLA@KIMLEY-HORN.COM

UTILITY PROVIDERS

WATER, SEWER, STORM:
CITY OF OAKLAND PARK
CONTACT: CHRIS LIPS
5100 NE 12TH TER.
OAKLAND, FL 33334
(954) 828-5875

WATER, SEWER:
CITY OF FORT LAUDERDALE
CONTACT: CRAIG BARRETT
100 N ANDREWS AVE.
FORT LAUDERDALE, FL 33301
(954) 828-5875

FIBER:
CROWN CASTLE FIBER
1500 CORPORATE DR.
CANONSBURG, PA 15317
(800) 654- 3110

WATER AND SEWER:
CITY OF WILTON MANORS
CONTACT: C/O WILTON MANORS
2020 WILTON DR.
WILTON MANORS, FL 33305
(954) 390-2190

COMCAST:
CONTACT: RICHARD DAVIDSON
6565 NOVIA DR.
DAVIE, FL 33317
(786) 586-8505

FPL - BROWARD
CONTACT: JOEL BRAY
2455 PORT WEST BLVD CRS/PDC
BUILDING-A, RIVIERA BEACH, FL 33407
(386) 586-6403

GAS:
TECO PEOPLES GAS SOUTH FLORIDA
CONTACT: JOAN DOMNING
8416 PALM RIVER RD.
TAMPA, FL 33619
(813) 275-3783
JDOMNING@TECOENERGY.COM

AT&T:CONTACT: DINO FARRUGGIO
6628 LAKESIDE RD.
WEST PALM BEACH, FL 33411
(561) 683-2729

CITY OF WILTON MANORS CITY OFFICALS

SCOTT NEWTON	MAYOR
PAUL ROLLI	VICE MAYOR
MIKE BRACCHI	COMMISSIONER
CHRIS CAPUTO	COMMISSIONER
GARY RESNICK	COMMISSIONER
LEIGH ANN HENDERSON	CITY MANAGER

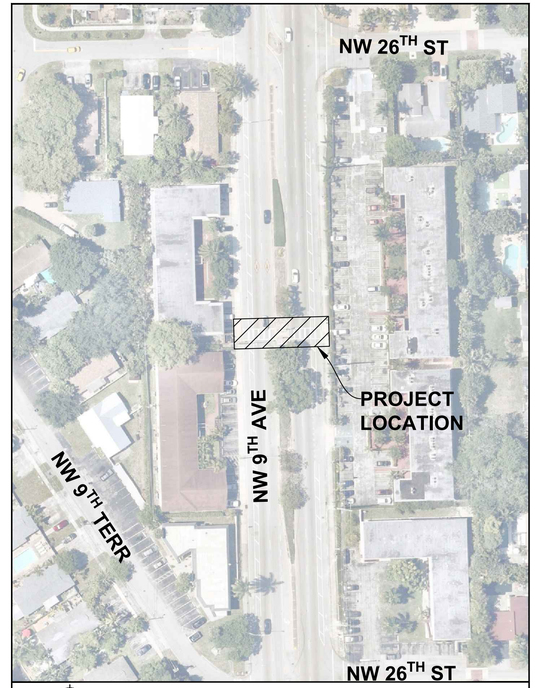
ALL ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Sheet List Table	
Sheet Number	Sheet Title
C000.0	COVER SHEET
C100.0	GENERAL NOTES
C200.0	ROADWAY PLAN
C201.0	ROADWAY DETAILS

THE PUBLIC ROADWAY(S) INDICATED IN THESE PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS & HIGHWAYS – STATE OF FLORIDA."

ATTENTION, THESE PLANS MAY HAVE REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE TAKEN INTO ACCOUNT WHEN OBTAINING SCALED DATA.



PROJECT LOCATION

PROJECT
NW 9TH AVENUE (IRWL IMPROVEMENTS)

PROJECT NUMBER
143310020
PROJECT LOCATION
WILTON MANORS, FLORIDA

PREPARED FOR:
WILTON MANORS Island City

PREPARED BY:
Kimley»Horn

8201 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324
PHONE: 954–535–5100 FAX: 954–739–2247
WWW.KIMLEY–HORN.COM REGISTRY No. 696

No.	REVISIONS	DATE	BY

DATE: 12/23/2025

BID PLANS

BID PLANS - NOT FOR CONSTRUCTION

GENERAL NOTES

I. APPLICABLE CODES

A. GENERAL

1. ALL WORK FOR THIS PROJECT SHALL BE COMPLETED WITHIN AND FROM EXISTING RIGHT OF WAY.
2. COUNTY IN THESE NOTES REFERS TO THE BROWARD COUNTY, CITY IN THESE NOTES REFERS TO THE CITY OF WILTON MANORS. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.
3. THE FDOT INDICES REFERRED TO IN THE DRAWINGS AND NOTES REFERS TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND FDOT DESIGN STANDARDS LATEST EDITION.
4. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST STANDARDS, CODES, REGULATIONS AND SPECIFICATIONS OF THE CITY, COUNTY, STATE, AND FEDERAL CODES WHERE APPLICABLE.
5. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, ORDINANCES AND REGULATIONS.
6. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATIONS BOOKLET THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION TO THE ENGINEER.
7. ALL HANDICAP ACCESSIBLE ACCESS TO CONFORM WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND LOCAL, STATE, AND FEDERAL CODES, LATEST EDITIONS.
8. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL APPLICABLE CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.
9. CONTRACTOR TO OBTAIN ENGINEERING PERMIT
10. RADII DIMENSIONS AND ELEVATIONS ARE TO BE EDGE OF PAVEMENT AND FINISH GRADE UNLESS NOTED OTHERWISE.
11. IF ABANDONED GAS, WATER, AND SEWER SERVICE LATERALS ARE ENCOUNTERED DURING EXCAVATION, THE SECTION IN THE EXCAVATED ENVELOPE WILL BE REMOVED AND THE STUB ON THE SIDE CONNECTED TO THE MAIN WILL BE CAPPED, PLUGGED OR OTHERWISE SEALED.
12. CONTRACTOR TO MAINTAIN ACCESS TO BUSINESS AND RESIDENTIAL LOCATIONS BY NORMAL MEANS AND METHODS, I.E. TEMPORARY STEEL PLATES, LIMEROCK, ETC. ALL ASSOCIATED COST TO BE INCLUDED IN M.O.T. PAY ITEM.
13. CONTRACTOR SHALL NOTIFY BROWARD COUNTY TRAFFIC ENGINEERING DIVISION 72 HOURS PRIOR TO WORK WITHIN COUNTY RIGHT-OF-WAY.
14. ITEMS IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES PAVEMENT AND BASE AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE UNLESS THE ITEMS ARE TO BE REUSED ON THE PROJECT
15. EXCESS MATERIAL REMOVED BY THE CONTRACTOR WILL BE DISPOSED OF IN AREAS PROVIDED BY THE CONTRACTOR.
16. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE SITE CONDITIONS OF THE PROJECT AND FULLY SATISFY THEMSELVES OF BOTH THE SURFACE AND SUBSURFACE CONDITIONS AND BASE THEIR PRICING ACCORDINGLY. GEOTECHNICAL REPORT IS INCLUDED IN THE CONTRACT DOCUMENTS.
17. CONTRACTOR SHALL PRESERVE ALL STREET SIGNS, BENCHES, TRAFFIC CONTROL SIGNS, LANDSCAPING, ETC. WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REINSTALL OR DELIVER SAID PUBLIC PROPERTY TO THE OWNER.
18. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF ANY SPECIAL EQUIPMENT SHORING, SHEETING OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING EXCAVATION OF SUBSOIL MATERIAL OR DURING THE FILLING OF ANY AREA, OR FOR ANY AREA, OR FOR ANY OPERATION DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
19. APPARENT ERRORS, DISCREPANCIES, OR OMISSIONS ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
20. THE AMOUNT OF EACH OF THE MATERIALS PROVIDED IS THE ESTIMATED AMOUNT REQUIRED TO COMPLETE THE JOB. THESE QUANTITIES ARE ESTIMATED ONLY AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETE THE JOB IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. SHOULD ADDITIONAL MATERIALS BE REQUIRED THEY WILL BE PAID FOR AT THE CONTRACT UNIT PRICES AS DESCRIBED IN THE BID DOCUMENTS.
21. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT REMAIN IN PLACE.
22. ALL ROAD CROSSINGS ARE OPEN CUT UNLESS OTHERWISE NOTED ON THE DRAWINGS.
23. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OF AS DIRECTED BY THE ENGINEER.
24. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT WITHOUT OBTAINING WRITTEN PERMISSION FROM THE OWNER.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION ACCIDENTALLY OR PURPOSELY, CAUSED TO ANY IRRIGATION SYSTEMS, PRIVATE OR PUBLIC WITHIN THE PROJECT LIMITS. THE COSTS TO REPLACE, REMOVE OR MODIFY IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES SHALL BE CONSIDERED INCIDENTAL TO AND SHALL BE INCLUDED IN THE OTHER ITEMS OF RELATED WORK. ALL COSTS DUE TO DAMAGE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS OF EXISTING PAVEMENT, PIPES, CONDUITS, CURBS, CABLES, TREES, SOD, LANDSCAPE ITEMS, ETC. WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF THEIR SUBCONTRACTORS. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., PRIOR TO BEGINNING WORK IN ANY AREA.
27. CONTRACTOR IS RESPONSIBLE TO REMOVE AND REINSTALL ALL BRICK OR PAVER DRIVEWAYS IMPACTED BY CONSTRUCTION, REPAIR OR REPLACE ALL ASPHALT, CONCRETE, OR STAMPED CONCRETE DRIVEWAYS IMPACTED BY CONSTRUCTION. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED AS PART OF THE OVERALL BID.
28. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL (DETERMINED BY THE ENGINEER OF RECORD) TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.
29. CONTRACTOR SHALL ADJUST ALL EXISTING SURFACE FEATURES SUCH AS EXISTING FRAMES, GRATES, MANHOLE COVERS, UTILITY VALVE BOXES, MONITORING WELLS, ETC. TO MATCH PROPOSED GRADES.
30. ALL INSTALLATIONS WITHIN BROWARD COUNTY JURISDICTION RIGHTS OF WAY SHALL BE IN CONFORMITY WITH THE BROWARD COUNTY HIGHWAY CONSTRUCTION & ENGINEERING DIVISION "MINIMUM STANDARDS."
31. ALL INSTALLATIONS WITHIN THE CITY OF WILTON MANORS JURISDICTION RIGHTS OF WAY SHALL BE IN CONFORMITY WITH THE CITY OF WILTON MANORS HIGHWAY CONSTRUCTION & ENGINEERING DIVISION "MINIMUM STANDARDS."
32. THE CITY OF WILTON MANORS SHALL RECEIVE A COPY OF ALL REQUIRED, AS-BUILTS, AND SHOP DRAWINGS OF THE PROJECT.

B. CONSTRUCTION SAFETY

1. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED.

II. PRECONSTRUCTION RESPONSIBILITIES

A. GENERAL

1. CONTRACTOR TO PERFORM SITE VISIT PRIOR TO BID SUBMITTAL FOR THE PROJECT.
2. UPON RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE THE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, AND THE ENGINEER OF RECORD, AND HOLD THE MANDATORY PRE-CONSTRUCTION CONFERENCE AFTER ISSUANCE OF THE CONTRACT'S "NOTICE TO PROCEED" BUT BEFORE THE ACTUAL CONSTRUCTION DATE. CONTRACTOR MAY NOT BEGIN WORK BEFORE ACTUAL CONSTRUCTION DATE.
3. THE CONTRACTOR SHALL OBTAIN A SUNSHINE CERTIFICATION NUMBER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
4. PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
5. EXISTING UTILITY LOCATION SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH IT FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
7. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
8. EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER.
9. ALL EXISTING UTILITIES, INCLUDING BUT NOT LIMITED TO DRAINAGE CLEANOUTS, WATER METERS, ELECTRICAL METERS, AND IRRIGATION MAINS, IMPACTED BY SIDEWALK CONSTRUCTION SHALL BE MODIFIED/RELOCATED AS NECESSARY. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY.
10. ELEVATION OF EXISTING UTILITIES SHALL BE ADJUSTED AS NECESSARY.
11. THE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR TWO (2) BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
12. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
13. ALL AREAS DAMAGED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO PAVEMENT MARKINGS, ASPHALT, SWALE, SIDEWALK, AND DRIVEWAYS, SHALL BE RESTORED, AT THE CONTRACTOR'S EXPENSE, TO ORIGINAL CONDITION.
14. CONTRACTOR TO MAINTAIN DRAINAGE FLOW.

IV. SHOP DRAWINGS

A. GENERAL

1. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD. PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS, AND SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S PLANS OR SPECIFICATIONS.

V. TEMPORARY FACILITIES

A. TEMPORARY UTILITIES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY TO ITS EMPLOYEES AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.

B. TRAFFIC REGULATION

1. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MUTCD. A MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE GOVERNMENTAL ENGINEERING DIVISION HAVING JURISDICTION FOR THE SECTION OF ROADWAY BEFORE STARTING WORK IN THE PUBLIC RIGHT-OF-WAY.
2. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
3. NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION OF THE CITY.

C. TEMPORARY FACILITIES

1. THE CONTRACTORS ON-SITE EQUIPMENT, STOCK PILED MATERIAL, AND SUPPLIES SHALL BE KEPT IN A SECURE, FENCED AND LOCKED LOCATION WHEN CONTRACTOR IS NOT SUPERVISING THE STAGING OR LAY DOWN AREA.
2. STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON ABUTTING PRIVATE PROPERTY OR PUBLIC RIGHT-OF-WAY WITHOUT APPROVAL FROM THE CITY OF WILTON MANORS.
3. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY STREET LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION PROJECT LIMITS AT ALL TIMES TO AT LEAST THE SAME LIGHTING INTENSITY LEVELS AS WAS EXISTING PRIOR TO THE START OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION AND MAINTAINING LIGHTING TO BE INCLUDED IN M.O.T. PAY ITEM.
4. THE CONTRACTOR SHALL COORDINATE SELECTION AND REVIEW OF ANY PROPOSED STAGING AREAS ASSOCIATED WITH THIS PROJECT WITH THE CITY OF WILTON MANORS (954) 390-2100).

VI. PROJECT CLOSEOUT

A. CLEANING UP

1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH, THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN.
2. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER OR THOSE OF ITS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL OR BETTER TO THE EXISTING CONDITION IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THIS END, THE CONTRACTOR SHALL DO ALL NECESSARY HIGHWAY OR DRIVEWAY, WALK AND LANDSCAPING WORK, SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
3. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.
4. UPON COMPLETION OF THE PROPOSED DRAINAGE WORK, THE CONTRACTOR SHALL CLEAN THE NEW SYSTEM, REMOVE ALL POLLUTION CONTROL DEVICES FROM THE NEW AND EXISTING SYSTEM, AND CLEAN THE EXISTING STRUCTURES AND DRAINAGE SYSTEM AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING OF ALL OF THE EXISTING DRAINAGE SYSTEM AFFECTED BY THE CONSTRUCTION WITHIN THE RIGHT-OF-WAY UPON COMPLETION OF THE PROJECT.

B. PROJECT RECORD DOCUMENTS

1. THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF WORK ITEMS COMPLETED.
2. PRIOR TO THE PLACEMENT OF ANY ASPHALT OR CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER "AS-BUILT" PLANS (SIGNED AND SEALED BY A FLORIDA CERTIFIED PROFESSIONAL LAND SURVEYOR) SHOWING LIMEROCK BASE GRADES, ALL DRAINAGE AND WATER IMPROVEMENTS. PAVING OPERATIONS SHALL NOT COMMENCE UNTIL THE ENGINEER HAS REVIEWED THE "AS-BUILTS."
3. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR SUB-GRADE SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING BASE MATERIAL.
4. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR LIMEROCK SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PLACING ASPHALT.
5. ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO SATISFY THE ENGINEER THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.
6. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD COMPLETE SETS OF "AS-BUILT" CONSTRUCTION DRAWINGS (SIGNED AND SEALED BY A FLORIDA CERTIFIED PROFESSIONAL LAND SURVEYOR) AS REQUIRED FOR SUBMITTAL AND APPROVAL. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
7. ALL "AS-BUILT" INFORMATION ON ELEVATIONS OF WATER, SEWER, PAVING, AND DRAINAGE SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR.
8. AS-BUILT INFORMATION ON THE WATER SYSTEM SHALL INCLUDE LOCATIONS OF ALL VALVES, FITTINGS, FIRE HYDRANTS, WATER SERVICES AND TOP OF PIPE ELEVATIONS AT ALL FITTINGS AND AT A MINIMUM OF 100' SPACING.
9. THE COST OF SIGNED AND SEALED AS-BUILTS AND CADD FILES SHALL BE INCLUDED IN THE COST OF THE OVERALL BID.

VIII. PAVING

A. GENERAL

1. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF THE LIMEROCK BASE AND PRIOR TO THE PLACEMENT OF THE PAVEMENT. ALL REPAIRS TO EXISTING PAVEMENT SHALL RECEIVE SAW-CUT EDGES PRIOR TO RELAYING ASPHALT. ALL EXISTING PAVEMENT, LIMEROCK AND SUB-GRADE THAT IS AFFECTED AND NOT PART OF THE CONSTRUCTION PROJECT SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.

B. MATERIALS

1. LIMEROCK BASE MATERIAL SHALL HAVE A MINIMUM OF 70% CARBONATES (CALCIUM AND MAGNESIUM) WITH A MINIMUM LBR OF 100.
2. PRIME COAT SHALL BE APPLIED AT THE RATE OF 0.25 GAL/YD SQ. AND TACK COAT SHALL MEET FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS.
3. SURFACE COURSE SHALL BE EQUAL TO FDOT TYPE SP 12.5 & FC 9.5 ASPHALTIC CONCRETE.

IX. SIGNING AND MARKING

1. ALL PAVEMENT MARKING AND SIGNING SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), BROWARD COUNTY DEPARTMENTS OF TRANSPORTATION AND PUBLIC WORKS, FDOT, AND CITY OF WILTON MANORS STANDARDS.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. CONTRACTOR SHALL PAINT MARKINGS THEN AFTER 14 DAY CURING PERIOD PLACE THERMOPLASTIC PAVEMENT MARKINGS.
3. ONE BI-DIRECTIONAL YELLOW REFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED AT 40' INTERVALS ON EACH SIDE OF DOUBLE YELLOW STRIPES.
4. BI-DIRECTIONAL AMBER/AMBER REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED AT 1' INTERVALS AT ALL BULLNOSES.
5. BI-DIRECTIONAL WHITE/RED REFLECTIVE PAVEMENT MARKERS SHALL BE PROVIDED AT 20' INTERVALS ALONG SOLID WHITE LINES (NOT ON EDGE OF PAVEMENT OR BIKE LANE LINES).
6. REFLECTIVE PAVEMENT MARKERS SHALL BE CLASS B MARKERS MANUFACTURED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 706-001 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
7. ALL SIGNING SHALL BE FABRICATED USING TYPE XI SHEETING, AS PER BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS (CURRENT EDITION).
8. ALL PAVEMENT MARKINGS AND SIGNING DAMAGED DURING CONSTRUCTION. SHALL BE RESTORED TO BROWARD COUNTY DEPARTMENTS OF TRANSPORTATION AND PUBLIC WORKS.
9. EXISTING MARKINGS SHALL BE REMOVED BY WATER BLASTING ONLY.
10. SEE SIGNING AND MARKING DETAILS FOR ADDITIONAL INFORMATION.
11. ALL EXISTING SIGNALIZATION EQUIPMENT TO REMAIN IS ASSUMED TO BE IN GOOD WORKING ORDER UNLESS CITY IS NOTIFIED IN WRITING PRIOR TO START OF CONSTRUCTION. ANY SUBSEQUENT DAMAGE TO THE SIGNAL EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

X. MAINTENANCE OF TRAFFIC

1. TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE PROJECT TRAFFIC PLANS, THE CURRENT EDITION OF THE FDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS MINIMUM CRITERIA.
2. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ALL POTHOLES THAT DEVELOP WITHIN PROJECT LIMITS AND WILL MAINTAIN A SUPPLY OF COLD MIX ON THE PROJECT SITE TO EXPEDITE THOSE REPAIRS. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED AS PART OF THE OVERALL BID.
3. REQUEST FOR PROPOSED LANE CLOSURES OR TEMPORARY DETOURS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO ROADWAY'S MAINTAINING AGENCY TO CLOSURE OR DETAIL.
4. AT THE DISCRETION OF THE ENGINEER, IF A LANE CLOSURE CAUSES EXTENDED CONGESTION OR DELAY, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN THE CLOSED LANE(S) UNTIL SUCH TIME THAT TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.
5. THE TRAFFIC AND TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIAL ARE AVAILABLE FOR THE CONSTRUCTION IN THAT AREA.
6. THE CONTRACTOR SHALL REMOVE ANY EXISTING OR PROPOSED PAVEMENT MARKINGS THAT CONFLICT WITH THE TRAFFIC CONTROL. WHEN THE CONFLICT NO LONGER EXISTS THE CONTRACTOR SHALL RESTORE PAVEMENT MARKINGS TO THEIR ORIGINAL POSITION. REMOVAL OF EXISTING AND/OR TEMPORARY PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY FOLLOWING METHODS: BY MILLING AND ASPHALT OVERLAY, BY GRINDING AND ASPHALT OVERLAY, SAND OR WATER BLASTING, OR BY OTHER MEANS APPROVED BY THE ENGINEER. GRINDING (WITHOUT ASPHALT OVERLAY) SHALL ONLY BE PERMITTED IN NON-TRAFFIC AREAS AS DESIGNATED BY THE ENGINEER, ALL COSTS OF PAVEMENT MARKING REMOVAL, INCLUDING THE COST OF ASPHALT OVERLAY REQUIRED WHEN MILLING OR GRINDING IS USED IN TRAFFIC AREAS, SHALL BE INCLUDED. USE OF BLACK PAINT TO COVER EXISTING AND/OR TEMPORARY PAVEMENT MARKINGS IS PROHIBITED.
7. CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PROPOSED SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL. WHEN THE CONFLICT NO LONGER EXISTS, CONTRACTOR SHALL RESTORE THE SIGNS TO THEIR ORIGINAL POSITION, COST TO BE INCLUDED IN THE BID.
8. ALL EXISTING STREET NAMES AND STOP SIGNS AFFECTED BY CONSTRUCTION SHALL BE RELOCATED TO AND MAINTAINED IN A VISIBLE LOCATION FOR THE DURATION OF THE PROJECT. WHEN NO LONGER AFFECTED BY CONSTRUCTION THEY SHALL BE RESTORED TO THEIR FINAL POSITION. COST TO BE INCLUDED IN BID.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF STORMWATER FROM ROADWAYS UTILIZED FOR TRAFFIC MAINTENANCE IN A MANNER APPROVED BY THE ENGINEER. COST TO BE INCLUDED IN BID.
10. AT THE END OF EACH WORK PERIOD, ANY DROP-OFF IN THE AREA ADJACENT TO THE TRAVEL WAY SHALL BE BACKFILLED IN ACCORDANCE WITH STANDARD INDEX 102-600 OR SHALL BE OTHERWISE PROTECTED WITH TEMPORARY BARRIER AT THE CONTRACTOR'S EXPENSE.
11. CONTRACTOR SHALL NOTIFY BROWARD COUNTY DEPARTMENTS OF TRANSPORTATION AND PUBLIC WORKS 48 HOURS PRIOR TO ANY MODIFICATION AND/OR CHANGES OF AN EXISTING TRAFFIC SIGNAL (E.G TAKING THE SIGNALS OFF-LINE, REMOVING OR REPLACING LOOP ASSEMBLIES OR REARRANGING TRAFFIC SIGNAL HEADS). THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR THE NORMAL MAINTENANCE OF THE EXISTING TRAFFIC SIGNAL(S) WITHIN THE PROJECT LIMITS. COST OF REARRANGING TRAFFIC SIGNAL HEADS AND MAINTAINING TRAFFIC SIGNALS TO BE INCLUDED IN THE BID.
12. CONTRACTOR TO MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES ALONG THE PROJECT. CONTRACTOR IS TO SUBMIT A PROPOSED METHOD OF MAINTAINING ACCESS TO THESE PROPERTIES TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION. ALL COSTS WITH MAINTAINING ACCESS TO BE INCLUDED IN THE BID.
13. M.O.T TRANSITIONS AND TEMPORARY INTERSECTION CROSSOVERS WHERE CONSTRUCTION HAS CAUSED GRADE DIFFERENCES BETWEEN THE EXISTING AND NEW ROADWAYS SHALL BE CONSTRUCTED USING 1:20 SLOPE TO ACCOMMODATE VEHICULAR TRAFFIC FROM ANY DIRECTION. WORK SHALL BE DONE WITH ASPHALTIC CONCRETE TYPE "S" AND SHALL INCLUDE ASPHALT SLOPE REMOVAL WHEN NO LONGER NEEDED. ALL COST WITH MAINTAINING CROSSOVER SLOPE GRADE AND REMOVAL TO BE INCLUDED IN THE BID.
14. CONTRACTOR SHALL MAINTAIN A CONTINUOUS PEDESTRIAN WAY ON ONE SIDE OF THE ROADWAY AT ALL TIMES. PEDESTRIAN WAY SHALL HAVE SMOOTH SURFACE AND BE GRADED ON CONFORMANCE WITH THE AMERICAN DISABILITIES ACT (ADA) REQUIREMENTS. ALL COSTS TO BE INCLUDED IN THE BID.
15. AT THE END OF EACH WORK DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE, ANY DROP-OFF ADJACENT TO THE PEDESTRIAN, BICYCLE OR WHEELCHAIR TRAVEL PATHS SHALL BE BACKFILLED FLUSH THE TRAVEL PATH OR SHALL BE PROTECTED WITH BARRICADES, TEMPORARY BARRIER WALL, OR APPROVED HANDRAIL COST TO BE INCLUDED IN THE BID.
16. PEDESTRIAN, BICYCLE AND WHEELCHAIR TRAFFIC SHALL BE GUIDED AND MAINTAINED USING APPROVED WARNING LIGHTS, SIGNING AND CHANNELIZATION DEVICES. SUCH CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH FDOT SPECIFICATIONS AND MUTCD SECTIONS ON WORK ZONE TRAFFIC CONTROL. COST TO BE INSTALLED IN THE BID.
17. IF THERE ARE UNEVEN PAVEMENT SURFACES DURING CONSTRUCTION, THE VERTICAL "DROP OFF" DIFFERENCE SHALL NOT BE MORE THAN 3 INCHES IN HEIGHT BETWEEN THE ADJACENT SURFACES.
18. CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES FOR GARBAGE/SANITATION PICK-UP ALONG THE PROJECT. ALL COSTS WITH MAINTAINING ACCESS TO BE INCLUDED IN THE BID.
19. CONTRACTOR SHALL MAINTAIN CURRENT LEVELS OF ROADWAY LIGHTING WITHIN THE PROJECT LIMITS AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT. ALL COSTS WITH MAINTAINING LIGHTING TO BE INCLUDED IN THE BID.

THE FOLLOWING ITEMS ARE NOT REVIEWED OR ACCEPTED BY BROWARD COUNTY:

1. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION'S REVIEW DOES NOT INCLUDE A REVIEW AND ACCEPTANCE OF THE PROJECT'S DESIGN OR OPERATION. THESE ITEMS ARE TO BE REVIEWED AND APPROVED BY THE CITY ENGINEER.
2. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION DOES NOT REVIEW AND APPROVE, OR INSPECT AND ACCEPT THE FOLLOWING ITEMS FOR MAINTENANCE: PAVEMENT MARKINGS ON OR ADJACENT TO PAVER BRICKS, PAINTED ASPHALT, STAMPED ASPHALT OR PAVEMENT MARKINGS MADE OF PAVER BRICKS, RAISED INTERSECTIONS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED MID-BLOCK CROSSWALKS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED CROSSWALKS AND RELATED MARKINGS AND SIGNING, PAINTED/DECORATIVE CROSSWALKS, RAISED CROSSWALKS AND RELATED MARKINGS AND SIGNING, ADVANCED WARNING PAVEMENT MARKINGS FOR SPEED TABLES, BLINKER SIGNS, RECTANGULAR RAPID FLASHER BEACONS AND RELATED MARKINGS AND SIGNING, ON- STREET PARKING AND RELATED MARKINGS AND SIGNING, IN-ROAD LIGHTING AND RELATED MARKINGS AND SIGNING, GREEN BIKE LANES, FLEXIBLE DELINEATORS, DECORATIVE SIGNS AND DECORATIVE SIGN POSTS, PLANTERS, ON-SITE PAVEMENT MARKINGS AND SIGNING, OFF-SITE PAVEMENT MARKINGS AND SIGNING IN RIGHT-OF-WAY THAT IS NOT DEDICATED FOR PUBLIC USE, SIDEWALK WORK OR ASPHALT WORK.
3. THE CITY ENGINEER IS RESPONSIBLE FOR THE REVIEW AND APPROVAL OF THE DESIGN AND OPERATION OF THE PROJECT, AND FOR THE INSPECTION AND ACCEPTANCE OF THE FOLLOWING ITEMS THAT WILL BE MAINTAINED BY THE CITY: PAVEMENT MARKINGS ON OR ADJACENT TO PAVER BRICKS, PAINTED ASPHALT, STAMPED ASPHALT OR PAVEMENT MARKINGS MADE OF PAVER BRICKS, PAVEMENT MARKINGS ON OR ADJACENT TO PAINTED ASPHALT, RAISED INTERSECTIONS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED MID-BLOCK CROSSWALKS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED CROSSWALKS AND RELATED MARKINGS AND SIGNING, PAINTED/DECORATIVE CROSSWALKS, RAISED CROSSWALKS AND RELATED MARKINGS AND SIGNING, ADVANCED WARNING PAVEMENT MARKINGS FOR SPEED TABLES, BLINKER SIGNS, RECTANGULAR RAPID FLASHER BEACONS AND RELATED MARKINGS AND SIGNING, ON-STREET PARKING AND RELATED MARKINGS AND SIGNING, IN-ROAD LIGHTING AND RELATED MARKINGS AND SIGNING, GREEN BIKE LANES, FLEXIBLE DELINEATORS, DECORATIVE SIGNS AND DECORATIVE SIGN POSTS, PLANTERS, ON-SITE PAVEMENT MARKINGS AND SIGNING, OFF-SITE PAVEMENT MARKINGS AND SIGNING IN RIGHT-OF-WAY THAT IS NOT DEDICATED FOR PUBLIC USE, SIDEWALK WORK AND ASPHALT WORK.
4. ALL TRAFFIC CONTROL DEVICES MAINTAINED BY BROWARD COUNTY, THAT ARE REMOVED OR DAMAGED BY CONSTRUCTION, SHALL BE REPLACED BY CONTRACTOR USING CURRENT BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS.

RRFBs & IRWL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE PROPOSED IN-ROADWAY WARNING LIGHTS (IRWL) SYSTEM AND ITS FULL INTEGRATION INTO THE EXISTING SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) PEDESTRIAN CROSSING SYSTEM. THIS INCLUDES, BUT IS NOT LIMITED TO:

   CONNECTING THE IRWL TO THE EXISTING RRFB CONTROLLER TO ENSURE SIMULTANEOUS ACTIVATION.

   VERIFYING COMPATIBILITY WITH THE EXISTING SOLAR POWER SUPPLY AND CONTROLLER OUTPUTS.

   ENSURING ALL COMPONENTS ARE INSTALLED PER MANUFACTURER SPECIFICATIONS AND MEET APPLICABLE ELECTRICAL AND SAFETY STANDARDS.

   COORDINATING WITH THE SUPPLIER OR MANUFACTURER AS NEEDED TO ENSURE PROPER SYSTEM FUNCTIONALITY AND SYNCHRONIZATION

2. THE WIRE SAWCUT SHOWN IN THE PLANS IS SCHEMATIC IN NATURE AND INTENDED FOR GENERAL GUIDANCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FINAL ROUTING OF ALL CONDUIT AND WIRING PATHS IN THE FIELD. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR RESTORING ALL AFFECTED ELEMENTS DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PAVEMENT, STRIPING, CONCRETE, AND ANY OTHER IMPACTED SURFACES, TO THEIR ORIGINAL OR BETTER CONDITION.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

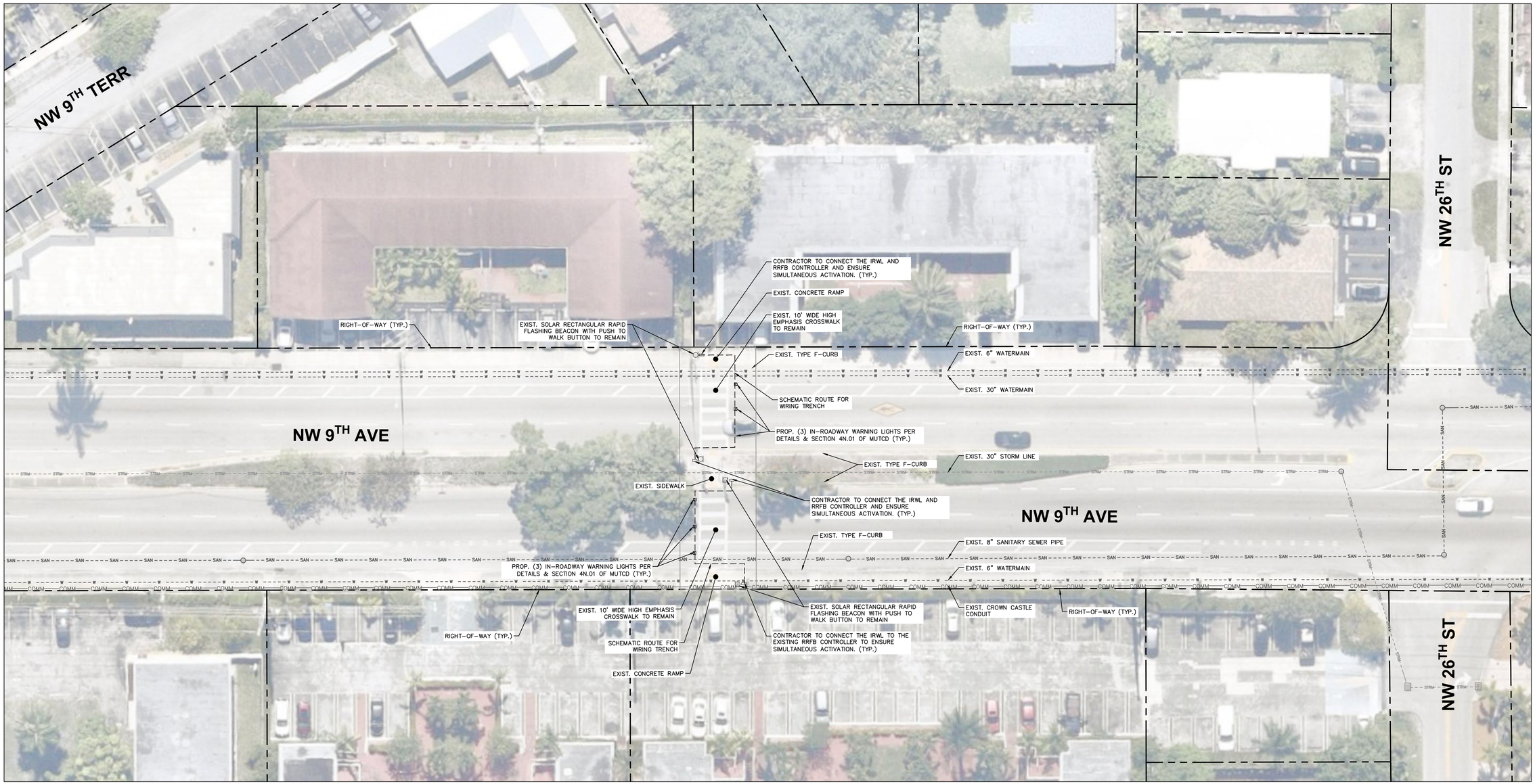
LICENSED PROFESSIONAL
STEFANO VIOLA, P.E.
FLORIDA LICENSE NUMBER 74655
DATE: 12/23/2025

KHA PROJECT 143310020
DATE OCT. 2025
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY JR
CHECKED BY SV

GENERAL NOTES

NW 9TH AVENUE
(IRWL IMPROVEMENTS)
PREPARED FOR
CITY OF WILTON MANORS
BROWARD FL

SHEET NUMBER
C100.0



LEGEND:

- EXIST. STORM LINE
- EXIST. WATERMAIN
- EXIST. SANITARY SEWER
- EXIST. COMMUNICATION CONDUIT
- PROP. WIRE SAWCUT ROUTE
- PROP. IN-ROADWAY WARNING LIGHTS
- PROPERTY LINE / ROW

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE PROPOSED IN-ROADWAY WARNING LIGHTS (IRWL) SYSTEM AND ITS FULL INTEGRATION INTO THE EXISTING SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) PEDESTRIAN CROSSING SYSTEM. THIS INCLUDES, BUT IS NOT LIMITED TO:

   CONTRACTOR IS RESPONSIBLE TO ENSURE THE EXISTING SYSTEM RRFB IS COMPATIBLE WITH IRWL. IF THE EXISTING CONTROLLER IS NOT COMPATIBLE THE CONTRACTOR WILL PROVIDE A CONTROLLER THAT ENSURE SIMULTANEOUS ACTIVATION.

   VERIFYING COMPATIBILITY WITH THE EXISTING SOLAR POWER SUPPLY AND CONTROLLER OUTPUTS.

   ENSURING ALL COMPONENTS ARE INSTALLED PER MANUFACTURER SPECIFICATIONS AND MEET APPLICABLE ELECTRICAL AND SAFETY STANDARDS.

   COORDINATING WITH THE SUPPLIER OR MANUFACTURER AS NEEDED TO ENSURE PROPER SYSTEM FUNCTIONALITY AND SYNCHRONIZATION

2. THE WIRE TRENCH SHOWN IN THE PLANS IS SCHEMATIC IN NATURE AND INTENDED FOR GENERAL GUIDANCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FINAL ROUTING OF ALL CONDUIT AND WIRING PATHS IN THE FIELD. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR RESTORING ALL AFFECTED ELEMENTS DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PAVEMENT, STRIPING, CONCRETE, AND ANY OTHER IMPACTED SURFACES, TO THEIR ORIGINAL OR BETTER CONDITION.

No.	REVISIONS	DATE	BY

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8201 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
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KHA PROJECT	143310020
DATE	OCT. 2025
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	JR
CHECKED BY	SV

ROADWAY PLANS

NW 9TH AVENUE (IRWL IMPROVEMENTS)

PREPARED FOR
CITY OF WILTON MANORS

BROWARD FL

SHEET NUMBER
C200.0

Traffic Safety Corporation
2708 47th Ave.
Sacramento, CA 95822-3806
Toll Free: 888.446.9255
Tel: 916.394.9884
Fax: 916.394.2809
Email: sales@xwalk.com
Web: www.xwalk.com

TS1200
Crosswalk System Controller
Solar Powered Model

General Description

The patented and UL Listed TS1200 is a next-generation controller designed from the ground up for superior performance, easy installation and outstanding reliability. Using state-of-the-art micro-controller technology, the TS1200 provides both standard and enhanced user selectable flash patterns:

- Standard MUTCD Pattern (50 or 60 flashes per minute)
- Seven MUTCD Compliant Enhanced Patterns
- Auto-sequencing Flash Pattern Mode

Each enhanced flash is composed of a unique pattern of pulses sent during the flash period and conforms to MUTCD requirements. The Auto-sequencing Flash Pattern Mode continuously cycles through all seven enhanced flash patterns, displaying a single pattern during each activation period.

The TS1200 is available in either an AC powered or Solar powered model. The TS1200 supports a wide range of crosswalk system configurations, and is compatible with standard activation devices (push-buttons, bollards) and standard pre-warning devices (LED flashing signs and beacons).

Why Our Crosswalk System Controller Is Better

Superior Performance

- UL Listed: UL has tested the TS1200 and determined that it meets UL's requirements. These requirements are based primarily on UL's published and nationally recognized Standards for Safety.
- Activation devices supported simultaneously: Push-buttons, Motion Sensors, and Bollards can be connected simultaneously to the same controller to activate the light fixtures.
- Manual Dimming Control Supported: Dimming fixtures can now be dimmed with the use of a knob in the controller.
- Photocell Dimming Control Supported: Dimming fixtures can be dimmed at night to reduce glare and then return to full brightness during the day.
- TSC Enhanced Flash Patterns and Auto-sequencing Flash Pattern Mode are designed to maximize pedestrian safety by increasing driver awareness and response to warning systems.
- Generation of contrasting flash patterns to crosswalk and pre-warning systems is supported by dual DC outputs.
- An activation override switch provides for continuous flashing of crosswalk during sporting and other high-traffic events.

Easy Installation

- Conveniently located, clearly labeled wiring blocks simplify field wiring and allow easy access during installation.
- LED status and digital displays allow easy verification of system operation and configuration during setup and testing.
- Controls are provided for easy onsite customization of system operation.

Outstanding Reliability

- Conformal coating material on circuits protects against moisture, dust, chemicals and temperature extremes.
- Internal components are protected by input and output surge protection, and replaceable fuses to protect against output overload conditions.
- Polycarbonate enclosure with 316 stainless steel dual locking latch mechanism provides protection from adverse weather and security from unauthorized access. NEMA 3R/4X compliant. Polycarbonate is non-corrosive and non-conductive. It is easier to modify, weighs less, and has a longer life cycle than steel enclosures.

SC-SBE-2KIT

Ordering Codes

Product Code	Model	Activation Options	Options
SC-TS1200	**- SP:** Solar Powered	**- 1:** BDL3 Push-buttons **- 2:** TC26-B Vehicle Motion Sensor **- 3:** Programmable Timer **- 4:** Photo-Sensor Bollards	**- DP:** Dimming with Photocell
SC-SBE-2KIT	Solar Battery Enclosure Assembly includes enclosure for 2 batteries & Charger Controller Assembly (SS10L-12V).		

Notes:
1. Please contact TSC to discuss any modifications or additions to the controller system.
2. Pole Mounting Bracket Kit (SC-626005) supports U-bolts for pipe sizes 2" to 4" and 6" to 8". U-bolts and pipe not included.
3. With dimming option, photocell can be bypassed if dimming needs to be done manually.
4. UL labeled controllers only available for shipment to U.S. and Canada.
5. Shipping dimensions: 15" x 15" x 10" (38cm x 38cm x 25cm). Shipping weight: 11 lb. (5 kg)

Solar Panel	Qty.
SL-PANEL65-HPM: Solar Panel 65W	
SL-PANEL90-HPM: Solar Panel 90W	
SL-PANEL130-SPM: Solar Panel 130W	
SL-PANEL140-SPM: Solar Panel 140W	

Battery	Qty.
SL-8G24: Solar Gel Battery 73.6AH@20h	
SL-8G31: Solar Gel Battery 97.6AH@20h	

Standard configuration: 90W Solar Panel, (2) SL-8G31 Solar Batteries. Please contact TSC to discuss any modifications or additions to the controller system.

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Web: www.xwalk.com

TS-400
Self-Cleaning, Bi-Directional Fixture
In-Roadway Warning Lighting Systems

General Description

The TS-400 fixture is designed as a cost effective solution for In-Roadway Warning Lighting Systems where snowplows are not employed. The TS-400's outstanding durability and low maintenance design makes it ideal for applications where after installation costs must be minimized. The use of Highbright LED energy efficient technology provides superior visibility and energy efficiency, making the TS-400 ideal for solar power applications. The Bi-directional design of the TS-400 allows backlighting of pedestrians in the crosswalk, further improving pedestrian safety.

The TS-400 is typically used in crosswalk applications, but is often used in school zone or railroad crossing, lane control for bridges and tunnels, wrong way warning, and toll booth or toll way lead-on applications.

All In-Roadway Warning Lighting System components are available from TSC. A typical installation would include a set of fixtures, a control system, one or more activation devices such as a pedestrian push button station or pedestrian detection pad, and flashing LED crossing signs.

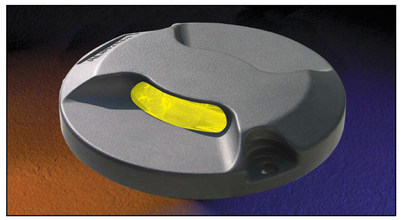
Why Our TS-400 Is Better

Outstanding Durability

- Corrosion resistant anodized aluminum body stands up to traffic wear and weather.
- High static load rating (44,000 lb.) reduces likelihood of damage from heavy vehicles.

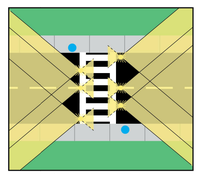
Superior Visibility and Energy Efficiency

- Bi-directional design improves visibility of pedestrians in crosswalk.
- Highbright LEDs produce a brightness level of over 600,000 candela per meter squared making them clearly visible in daytime and under the worst weather conditions.
- Highbright 12 Volt LEDs consume only 3 watts/fixture making them ideal for energy efficient solar power applications.



Low Maintenance

- Re-usable design reduces the cost, effort and time during resurfacing of the road.
- Self-cleaning lens design reduces build-up of dirt and need for frequent cleaning.
- Pressurized light cavity keeps moisture out and reduces the frequency of replacement.
- Pre-focused optics eliminates the requirement of field adjustments.
- Long life LEDs (Average rated life of 10 years) reduces frequency of replacement.



Application: Two Way, One Lane Each Way

Ordering Codes

Fixture	Directional	Beam	LED Color	Lamp	Options
TS-400	**BI**	**Narrow/Narrow**	___ / ___	**L:** 12V LED Array **LP:** 120V/240V LED 50/60hz	**D:** Dimming
TS-420	**BI**	**Wide/Wide**	___ / ___		
TS-450	**BI**	**Wide/Narrow**	___ / ___		
TS-401	**UNI**	**Narrow**	____		
TS-421	**UNI**	**Wide**	____		

Notes:
1. LED Color: Y = Yellow, R = Red, X = Blank (Specify both lens).
2. Standard fixture operating voltage is 12 VDC. Fixtures may also be operated from 24 VDC in certain applications. Operation at 24 VDC requires driver modification.
3. The self-cleaning feature will be effective only if fixture is installed on level ground.
4. TSC supports legacy fixtures with Halogen LA-008844 (Special Order).
5. Base Cans (BA-725-5-2), Base Can Extensions (BA-725-EX-XX), Spacers (BA-725-SP-XX) and Gaskets (BA-725-GSK) are available for the TS-400 Fixture.
6. Power consumption is 3 watts per fixture.
7. Female Connector (CO-10519302) is available for power source hook-up.
8. Fixture repair package available (LA-008114-KIT), includes LED Array, LED Driver, and Gaskets, plus factory installation, testing and burn-in.
9. Dimming option will only work with the TS1200 and TS1250 controllers.

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TS1200
Crosswalk System Controller
Solar Powered Model

b. Solar modules shall be able to be securely mounted to the top of a 4.5" O.D. pole assembly, or attached to larger diameter poles with a side pole mount structure that has been specifically designed to hold solar modules. All of the necessary hardware to install the modules to the mounts, and the mounts to the pole, shall be included in the bid. Security hardware for securing the module to the mount shall be included along with any special tools required for the hardware. Mounts made of steel will be powder coated or hot dip galvanized. Aluminum module mounts can be either powder coated or feature a mill finish.

13. **System Batteries:**
    a. The system shall come equipped with the number and type of batteries detailed in the sizing report. The battery type shall be a sealed, maintenance-free, valve-regulated design. The battery shall be a Gel or Absorbed Glass Mat (AGM) type, to suspend the electrolyte making it immobile.
    b. Gel batteries using a thixotropic gel to suspend the electrolyte, shall also be considered an acceptable alternate.
    c. Acceptable battery sizes that can be accommodated shall include either one or two batteries, up to group size 31.
14. **General Specifications:** Solar power supplies provided for use with in-pavement crosswalk systems shall be designed to act as a stand-alone power source for the system. Any response to bid shall require a specification report containing the following data:
    a. Site information shall take into account average monthly solar insolation at a 45° tilt angle, average monthly temperature at the site, and latitude and longitude of the nearest city/town.
    b. In the event that no data point exists for the given city/town where the installation will be done, sizing shall be prepared for the nearest data point available around the installation site featuring similar geographical and/or climatic conditions.
    c. Load tabulation shall be included to detail the number, type and duty cycle of all loads in the system.
    d. The report shall include the type of solar module to be used by model and manufacturer.
    e. Type of battery shall be provided by model and brand name. Projected days of autonomy shall be provided with the battery information. The system shall support a minimum autonomy of 5 days, unless otherwise specified by the customer.
    f. The worst case array to load ratio shall also be provided. Minimum acceptable array to load ratio for the solar system shall be 1.05 or greater in December when using the maximum power draw for the loads.
    g. A system derating factor shall be included in the sizing report component sizing calculations to cover any losses from solar panel output mismatch, dirt/dust accumulation on panels, aging and losses due to system wiring. Losses may appear as a combined derating factor, but a thorough description of the sources of all losses accounted for shall be provided. Failure to provide a sizing report shall be considered non-responsive and result in disqualification, in which case the bid will be rejected.
15. **Warranty:** The crosswalk system controller shall be warranted against defects in workmanship and materials for one year from date of shipment and is eligible for TSC's 5-Year Limited System Warranty. Excluded from the TSC warranty are the solar array and battery. These components are covered under the warranty of their respective manufacturer.

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TS-400
Self-Cleaning, Bi-Directional Fixture
In-Roadway Warning Lighting Systems

How to Specify the TS-400 Family of Self-Cleaning Bi-Directional Fixtures

The fixture shall be model TS-4xx-YYL1/YXL1 as marketed by Traffic Safety Corporation or approved equal. In order to be considered equal, the alternate fixture shall satisfy the following requirements.

Construction – The fixture shall have bi-directional and uni-directional capability, have a modular design comprised of 6 major parts with the top and bottom castings of high tensile strength aluminum alloy. The top and bottom casting shall be sealed by means of a flat gasket. The fixture shall have a smooth shaped face projecting not more than 0.64" when installed in the factory provided mounting base. The fixture shall incorporate a self-cleaning design with an outward sloping light channel to promote drainage and facilitate maintenance. Diameter shall not exceed 8" and all mounting hardware shall be stainless steel. Fixture will operate on 12 VDC and be furnished pre-wired with a waterproof 90P plug.

Durability – Fixture shall withstand a static load of 44,000 lb. without sustaining permanent deformation or cracking of materials. Leads, gaskets, etc. shall be rated to withstand 300 degrees F.

LED/Light Cavity – The fixture's light beam shall be refractor controlled and pre-focused to simplify maintenance. The refractors shall be molded high performance optical grade glass and formed to provide a sealed fit within the fixture. High density silicone rubber gaskets shall be used to provide a proper seal. There will be two hardened glass refractors per fixture, one aimed at 0 degrees and the other aimed at 180 degrees, to be installed parallel to roadway center line. To prevent moisture intrusion, each fixture shall be installed with a Schrader valve to facilitate verification that the entire assembly is sealed at the time of installation and to allow for re-testing during maintenance. Two refractor beam spread options shall be provided – 60 degrees and 10 degrees, as well as the capability to operate in a uni-directional mode through the use of a blank plate. The glass refractor pointed towards the inside of the crosswalk shall normally have a beam angle of 60 degrees. To facilitate early onset of the driver's awareness of the crosswalk, the outboard facing refractors shall normally have beam angle of 10 degrees, except on curves were a 60 degree beam may be more desirable. In some cases it may be desirable to utilize the fixture in a uni-directional mode and a blank may be inserted in place of one of the refractors.

Photometric Performance – The fixture shall be clearly visible in any weather condition, daytime and at night, and shall produce a yellow light using a 12 Volt, 3 watt LED array with a brightness level of more than 600,000 candela per meter squared using the 10 degree refractor option.

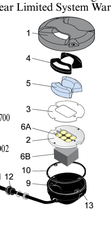
Finish – The top cover shall be natural anodized aluminum, grey in color. The bottom cover shall have a black powder coat.

Mounting Base – Fixture shall be installed in mounting base *(TSC #BA-725-5-2MR)* of high strength steel, hot dip galvanized after fabrication per ASTM-153 specifications, with a 7.25" diameter bolt circle, a 0.75" mud ring, and standard base depth of 5". The mud ring shall be detachable from the base. Mounting base without mud ring shall be made available upon request. The base shall be supplied with a plywood cover to protect the mounting flange during installation.

Warranty - Fixture shall be warranted by the manufacturer against defects in materials and workmanship for one year from date of shipment and is eligible for TSC's 5-Year Limited System Warranty.

Replacement Parts

1.	Body casting	
2.	Prism clamp	80-021380
3.	Prism clamp gasket	80-021379
4.	Prism gasket (2)	80-033071
5.	Glass prism (1 or 2 Narrow), LED Blanking prism (optional) Color filters (not shown): yellow	80-016078 80-040102 80-019157
6A.	12V LED High Bright	LA-008114
6B.	LED Driver	27-TLM4036DC-700
9.	Bottom cover	80-040101
10.	Bottom cover gasket	80-033080
11.	Fixture lead, male	TRC-10518-114-D02
12.	Cable gland assembly	80-021114/5/6
13.	Schrader (bicycle) valve	80-021327
	Legacy Halogen Parts (not shown)	
	50W 120V Halogen	LA-008084
	Glass prism (1 or 2 Wide), Halogen	80-016072
	Prism clamp gasket	80-033072
	Lamp gasket	80-033064
	Lamp retaining spring	80-032039



60° Wide Beam Light Illumination Pattern

10° Narrow Beam Light Illumination Pattern

Traffic Safety Corporation
2708 47th Ave.
Sacramento, CA 95822-3806
Toll Free: 888.446.9255
Tel: 916.394.9884
Fax: 916.394.2809
Email: sales@xwalk.com
Web: www.xwalk.com

TS1200
Crosswalk System Controller
Solar Powered Model

How to Specify the TS1200-SP Crosswalk System Controller

The system controller shall be model SC-TS1200-SP as marketed by Traffic Safety Corporation or approved equal. In order to be approved equal, the proposed device must satisfy the following requirements:

1. System controller shall support multiple MUTCD compliant regular and enhanced flash patterns, and be capable of auto-sequencing through all enhanced flash patterns, one pattern per activation period.
2. System must be UL Listed.
3. System shall support operation of multiple activation devices simultaneously.
4. System shall support both manual and photocell dimming control.
5. Output pattern operation, power limitations and output flash pattern selection:
    a. **Output A (Primary DC Power Output)**
    The actual maximum power output shall be specified in the sizing report.
    b. **Output B (Secondary DC Power Output)**
    The actual maximum power output shall be specified in the sizing report. The output flash pattern shall be selected by a set of output mode selector switches (1-4) located on the control card: 1-Same as primary; 2-In sync with primary, but non-enhanced; 3-Non-enhanced complement of primary; 4-Continuously on while primary is flashing. Notes: (a) Enhanced flash patterns cannot be used when operating in wig-wag mode. (b) Only one output mode switch can be on (closed) at a time for proper operation of the system.
    c. The combined output power of the primary and secondary DC outputs shall be specified in the sizing report.
6. System controller shall be based on an integrated, high-speed 8-bit microcontroller with non-volatile firmware and memory. All settings must be retained in the event that input power is removed.
7. **System controller shall include the following controls and indicators:**
    a. **Power LED Indicator:** A visual indicator LED shall be provided to indicate the "power on" condition.
    b. **Activation Duration Setting:** Activation duration shall be field adjustable in one-second increments, over a range of 1 to 99 seconds. Duration setting shall be displayed on a digital numeric display.
    c. **Flash Pattern Setting:** Flash pattern setting shall be field adjustable and be displayed on a digital numeric display.
    d. **Push-Button Test and LED Indicator:** System shall include an internal push-button used to activate the system during field tests. System shall include a visual indicator LED to indicate internal push-button and external activation device calls.
    e. **Override Switch:** System shall include an override switch to allow switching from manual system activation to continuous system activation.
    f. **Output LED Indicators:** System shall include visual indicator LEDs which indicate: system activation, primary output (A), and secondary output (B) status.
8. System shall support activation from standard contact-closure type push-buttons and push-buttons with audio message capability.
9. System shall provide a field selectable option to allow an activation call to be ignored, or be used to reset the cycle during an ongoing crossing cycle.
10. **System Protection:** Outputs A and B shall be protected by a replaceable fuse.
11. **System Controller Enclosure:** The system shall include a single enclosure for ease of installation. The system shall be housed in a NEMA 3R/4X compliant, polycarbonate enclosure with approximate dimensions of (14" H x 12" W x 6" D) to provide protection from adverse weather conditions. The enclosure shall be supplied with a 316 stainless steel dual locking latch mechanism for security from unauthorized access.
12. **Solar Modules and Mounting Structures:**
    a. The modules shall consist of a minimum of 36 crystalline cells in series. Cells shall feature an anti-reflective coating and a low iron glass covering. Cells shall be encapsulated to protect them from the environment. Each module shall feature a weather tight junction box for connecting the array output cable to the module terminals. Power modules greater than 60 watts shall feature a minimum warranty of 15 years for power output. Modules, 20 to 50 watts, shall feature a minimum warranty of 5 years for power output. All modules shall feature an anodized aluminum frame for mechanical support.

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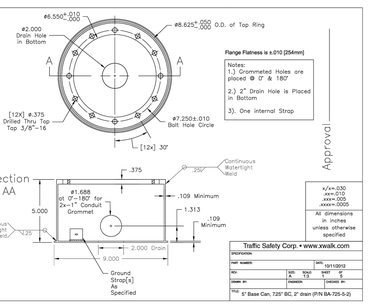
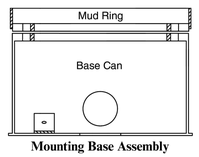
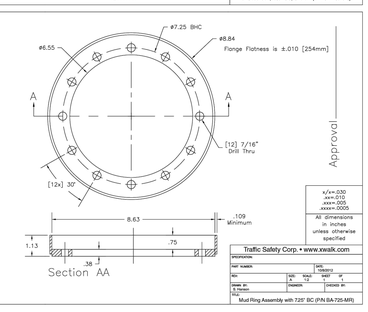
TS-400
Self-Cleaning, Bi-Directional Fixture
In-Roadway Warning Lighting Systems





Mounting Base Assembly



Kimley»Horn
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8201 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

No.	REVISIONS	DATE	BY

LICENSED PROFESSIONAL
STEFANO VIOLA, P.E.
FLORIDA LICENSE NUMBER
74655
DATE: 12/23/2025

KHA PROJECT
143310020
DATE
OCT. 2025
SCALE AS SHOWN
DESIGNED BY KHA
DRAWN BY JR
CHECKED BY SV

ROADWAY DETAILS

NW 9TH AVENUE
(IRWL IMPROVEMENTS)
PREPARED FOR
CITY OF WILTON MANORS

BROWARD FL

SHEET NUMBER
C201.0