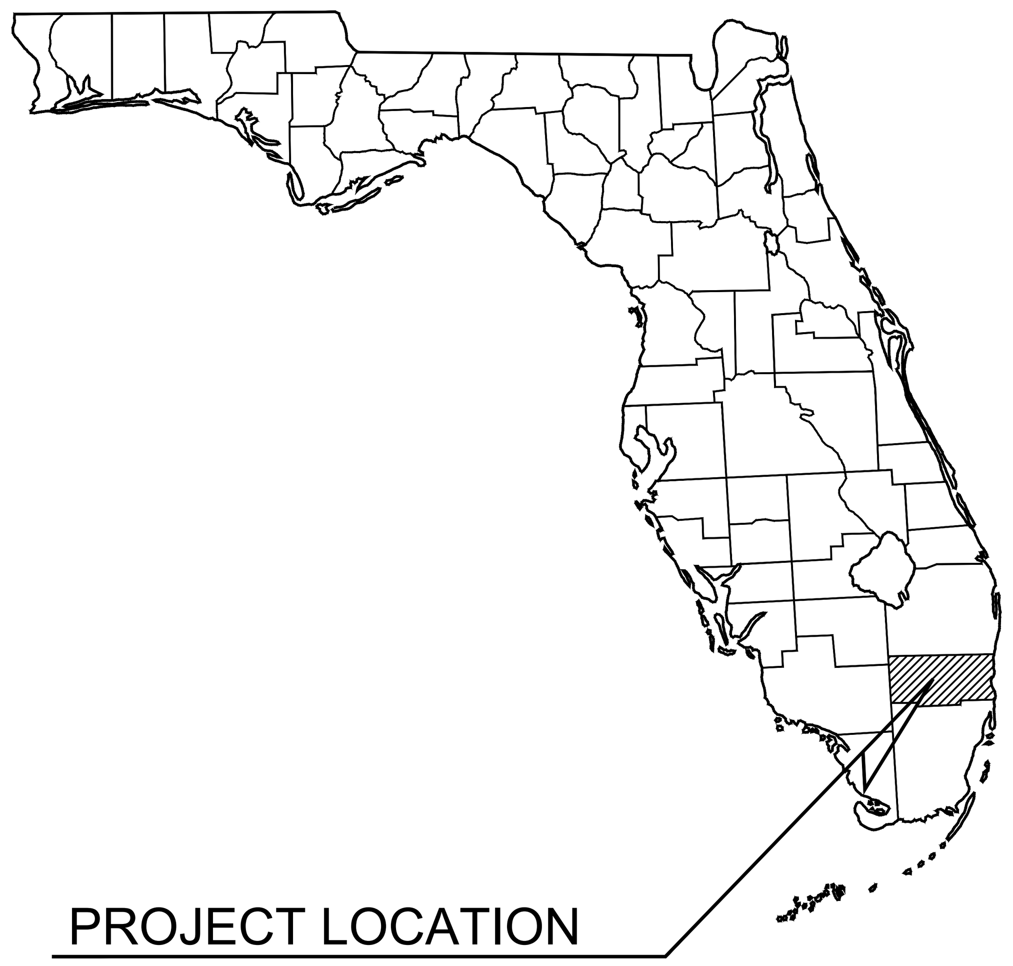


PROJECT LOCATION
BROWARD COUNTY

CIVIL ENGINEERING SET
FOR
ABUNDANT LIFE CHURCH

7955 ROYAL PALM BLVD., MARGATE FL, 33063
BROWARD COUNTY
JULY 2025

PROGRESS SET

PROJECT TEAM:

OWNER/DEVELOPER:
SEAN THOMAS
ABUNDANT LIFE CHURCH
7955 ROYAL PALM BLVD
MARGATE, FL, 33063

ARCHITECT:
SPACE DESIGN
108 SOUTH BROADWAY
EDMOND, OKLAHOMA, 73034
(405) 310-8866
CONTACT: THOMAS SMALL

SURVEYOR:
PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD SUNRISE,
FLORIDA 33351
(954) 572-1777
CONTACT: JOHN F. PULICE

LANDSCAPE:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100

CIVIL:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100
CONTACT: AARON MACKEY, P.E.

LIST OF CONTACTS:

ENGINEERING DIVISION
901 NW 66TH AVENUE SUITE A
MARGATE, FL 33063
(954) 972-0828

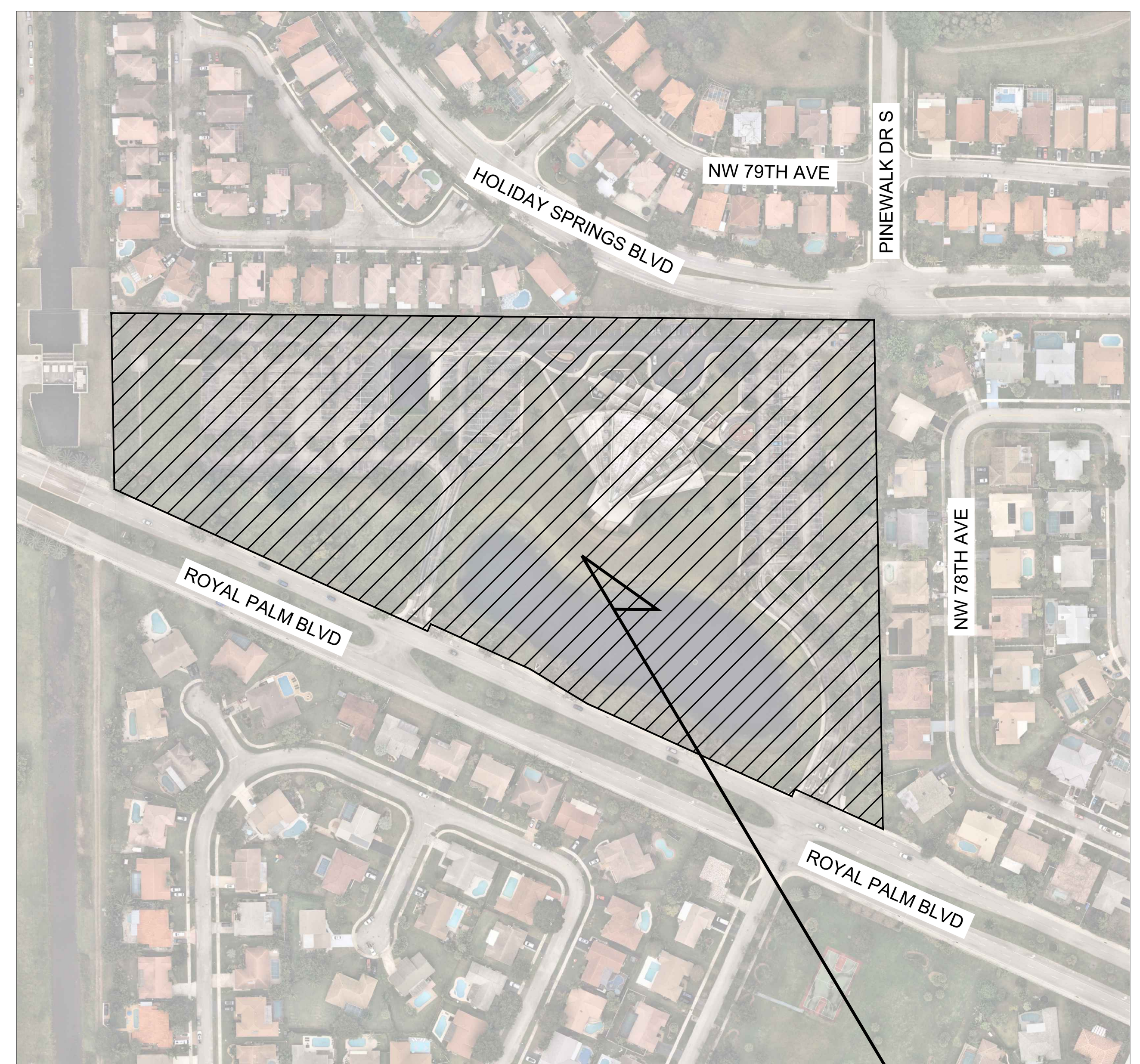
FIRE PROTECTION:
CITY OF MARGATE FIRE DEPARTMENT
1835 BANKS ROAD
MARGATE, FL 33063
(954) 971-4561

BROWARD COUNTY ENVIRONMENTAL PERMITTING DIVISION
1 N UNIVERSITY DR SUITE 203
PLANTATION, FL 33324
(954) 519-1260

BUILDING DEPARTMENT:
CITY OF MARGATE BUILDING DEPARTMENT
901 NW 66TH AVE B
MARGATE, FL 33063
(954) 970-3004

LEGAL DESCRIPTION

PARCEL "A", "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY FLORIDA.



VICINITY MAP

GRAPHIC SCALE IN FEET
0 100 200 400
SCALE: 1"=200'

NORTH

SUBJECT PROPERTY
7955 ROYAL PALM BLVD , MARGATE FL, 33063,

CIVIL ENGINEER:

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C-0	COVER SHEET
G-01	GENERAL NOTES
D-01	EROSION CONTROL & DEMOLITION PLAN
SP-01	OVERALL SITE PLAN
SP-02	MASTER PARKING PLAN
C-01	HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN
SP-03	PAVING GRADING & DRAINAGE PLAN
SP-04	PAVING GRADING & DRAINAGE PLAN
CS-01	CROSS SECTIONS
CWS-01	WATER & SEWER PLAN
D-02	EROSION CONTROL& DEMOLITION DETAILS
C-02	HORIZONTAL CONTROL, SIGNAGE & MARKING DETAILS
SP-05	PAVING & GRADING DETAILS
SP-06	DRAINAGE DETAILS
SL-01	PHOTOMETRICS PLAN
SL-02	PHOTOMETRICS DETAILS
SL-03	PHOTOMETRICS DETAILS
TD-01	TREE DISPOSITION PLAN
TD-02	TREE DISPOSITION PLAN
LP-01	LANDSCAPE PLAN
LP-02	LANDSCAPE PLAN
LP-03	LANDSCAPE DETAILS
LP-04	LANDSCAPE NOTES
IRR-01	IRRIGATION PLAN
IRR-02	IRRIGATION PLAN
IRR-03	IRRIGATION DETAILS
IRR-04	IRRIGATION NOTES
IRR-05	IRRIGATION NOTES
L-400	HARDSCAPE PLAN

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

ISSUED FOR DEVELOPMENT REVIEW COMMITTEE (DRC) - NOT FOR CONSTRUCTION JULY 23, 2025

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

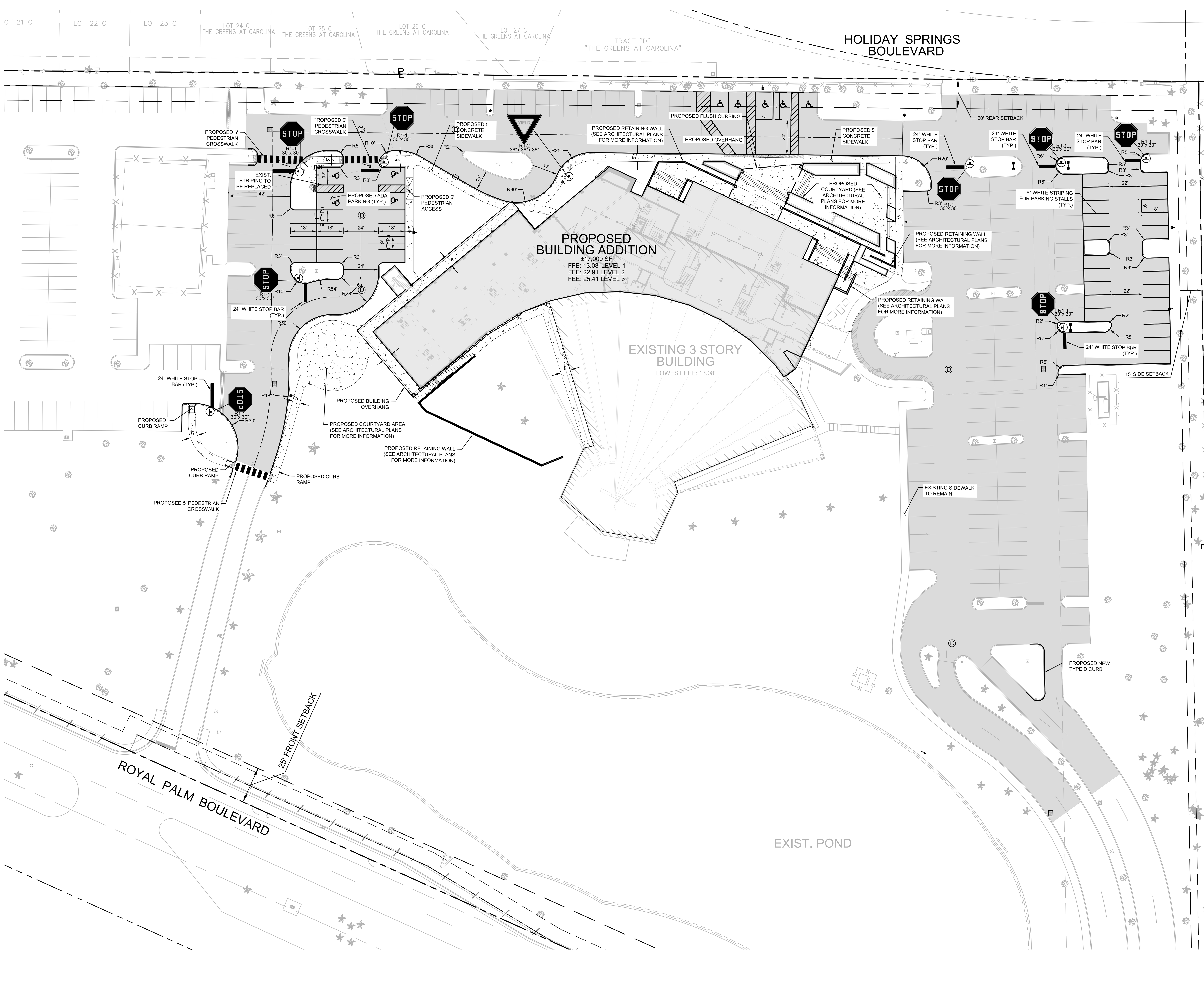
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT
143788000
DATE
7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

COVER SHEET

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-0



LEGEND

R/W — ℄	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-05 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

REVISIONS | No. | DATE | BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

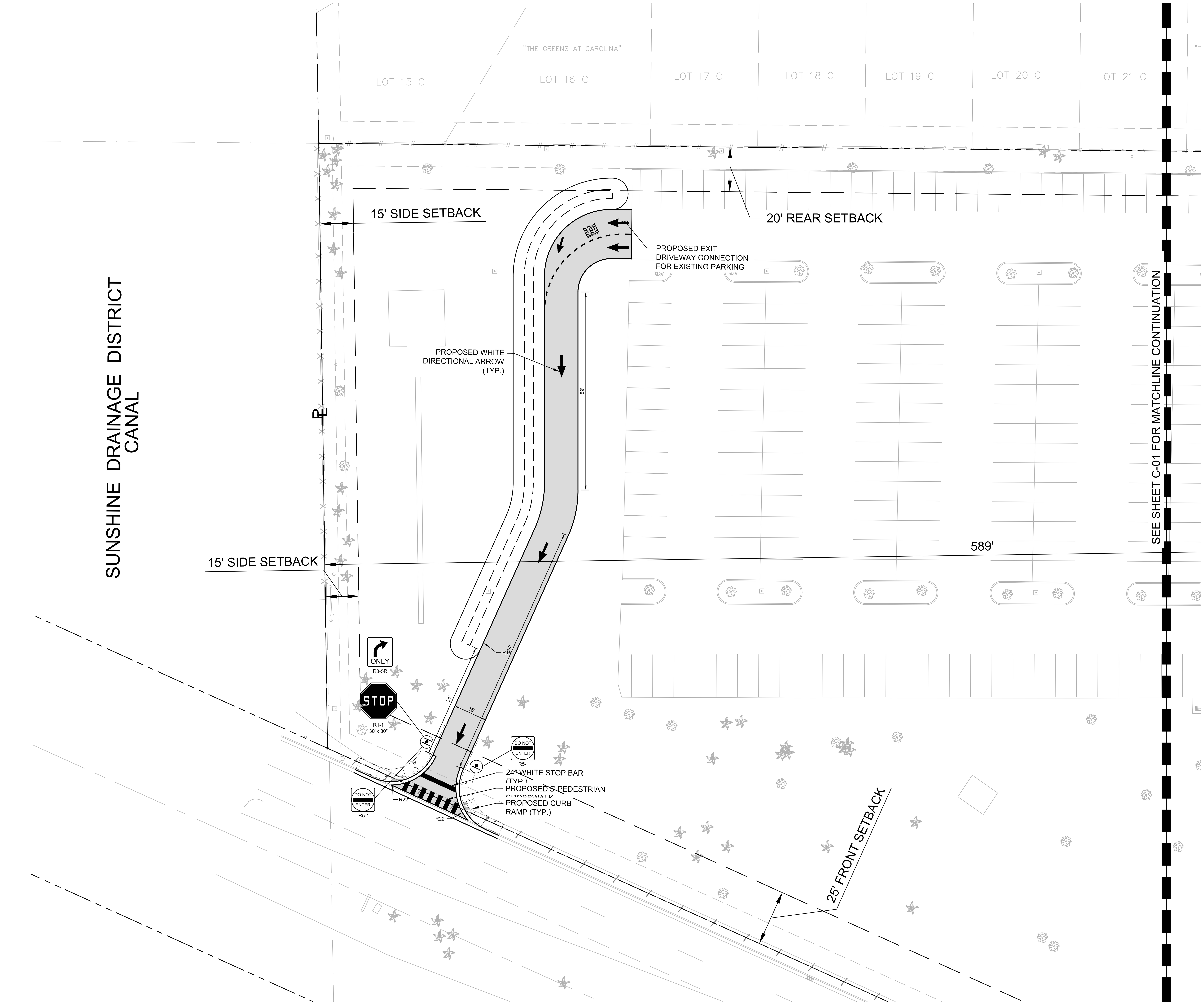
RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-01



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- PROP. ROAD CENTERLINE
- PROP. SIGN
- EXIST. SIGN
- ASPHALT PAVEMENT SEE SHEET SP-06 FOR DETAIL
- PROP. CONCRETE SIDEWALK
- PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING

SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 2/6/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

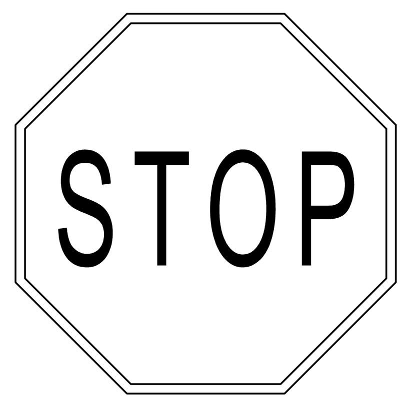
HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

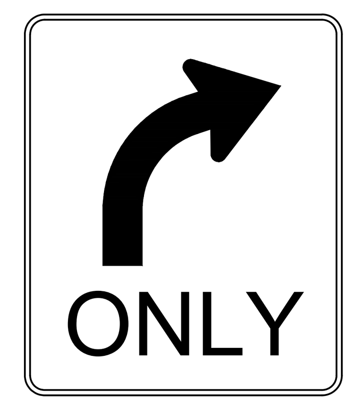
SHEET NUMBER
C-02

R1-1



R5-1

R3-5R



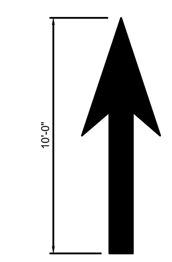
R6-1R

SIGNAGE

NOT TO SCALE

NOTES:

1. ARROWS SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE ARROWS ARE TO BE PAINTED RETROREFLECTIVE WHITE.
3. OPEN ARROWS SHALL CONSIST OF A 4" PERIMETER STRIPE.

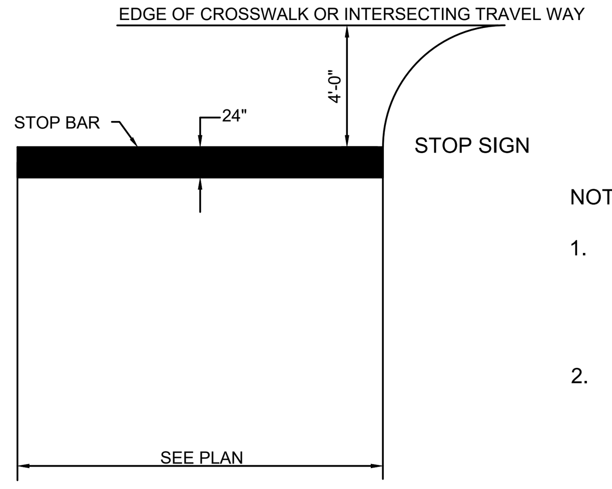


SOLID ARROW MARKINGS

USED AT EXITS FROM THE PARKING LOT TO PUBLIC STREETS

PAVEMENT MARKINGS

NOT TO SCALE

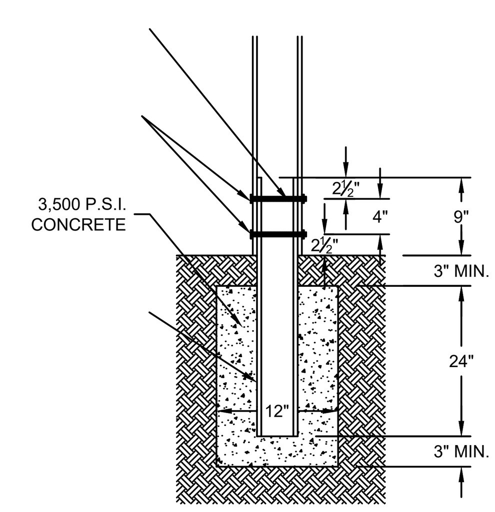


NOTE:

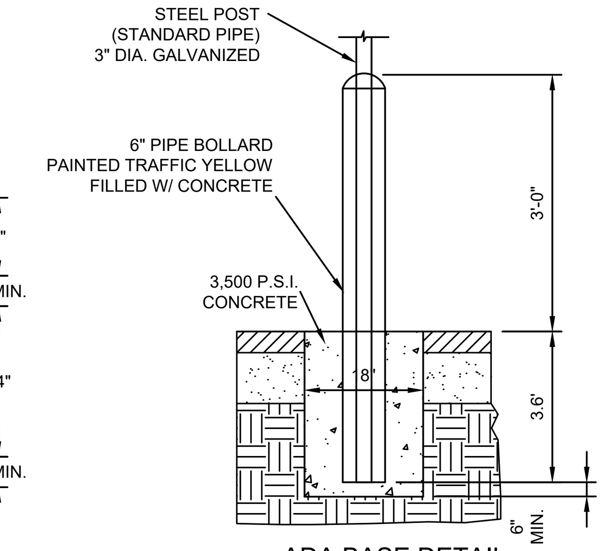
1. LINES SHALL BE APPLIED IN ACCORDANCE WITH SECTIONS 3B.16 AND 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE BARS ARE TO BE PAINTED WHITE RETROREFLECTIVE.

TYPICAL STOP BAR MARKING

NOT TO SCALE



BASE DETAIL IN LAWN OR LANDSCAPED AREAS



ADA BASE DETAIL IN PAVED AREAS

TYPICAL SIGN BASE

NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

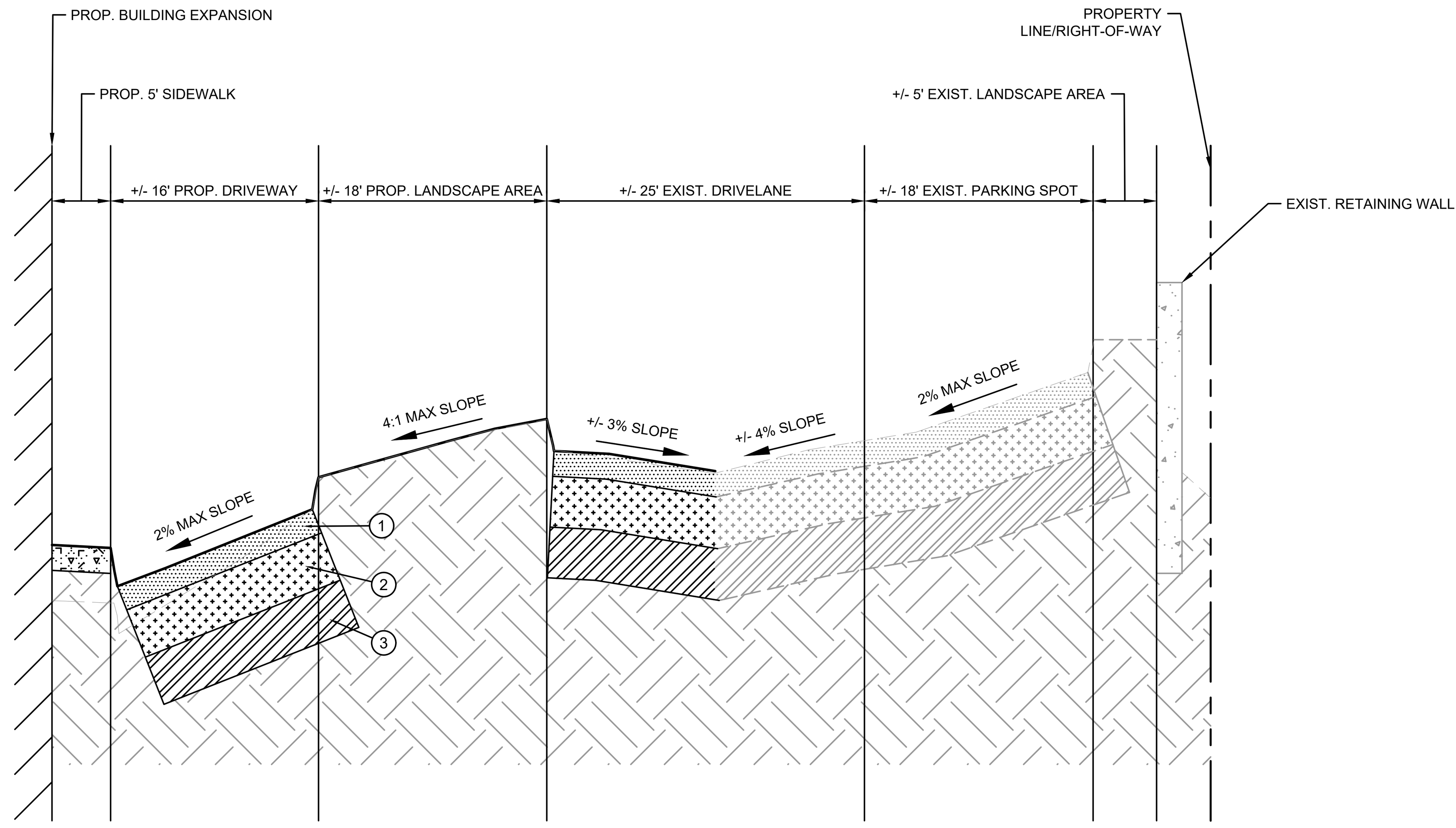
KHA PROJECT 143788000	DATE 7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

HORIZONTAL CONTROL, SIGNANGE & MARKING DETAILS

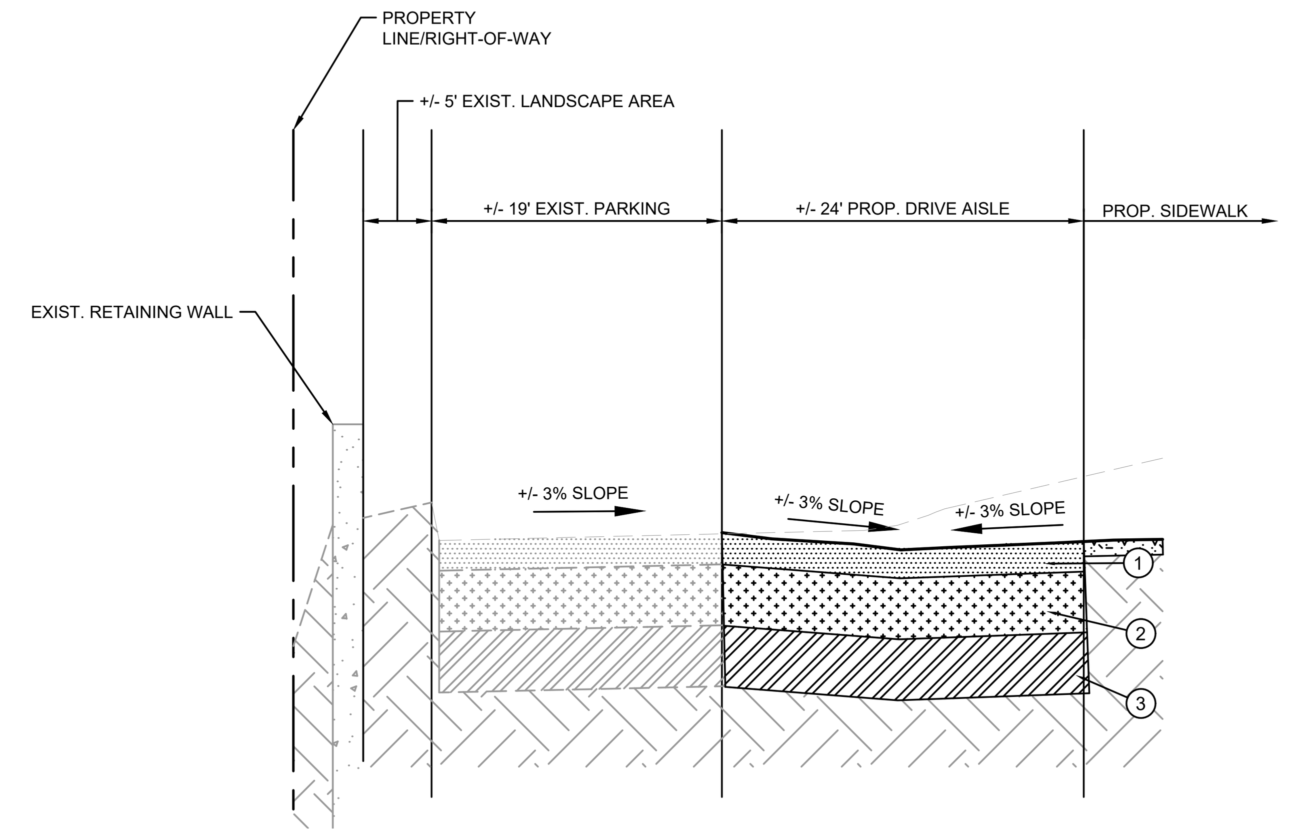
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

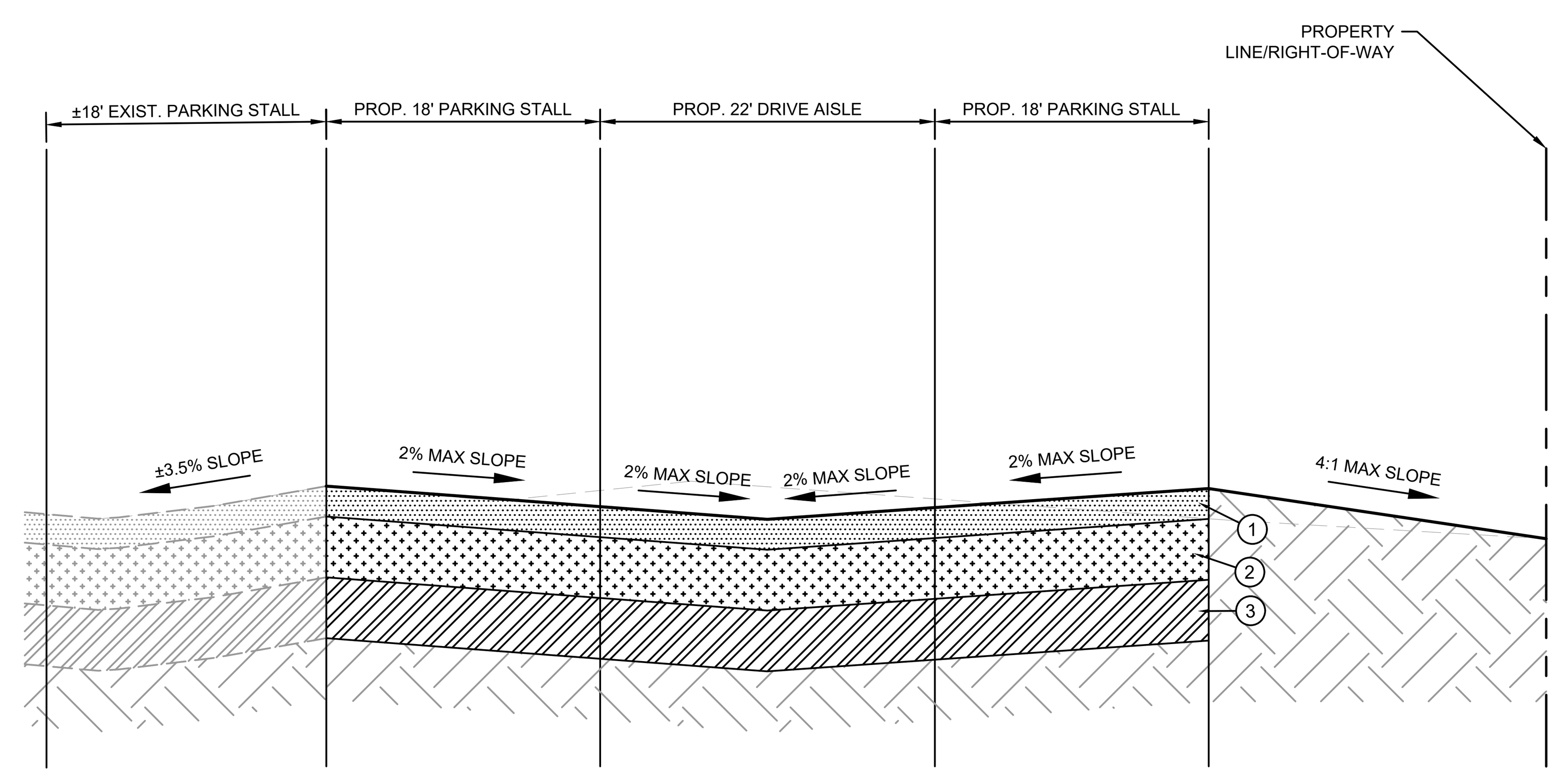
SHEET NUMBER
C-02



A
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



B
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



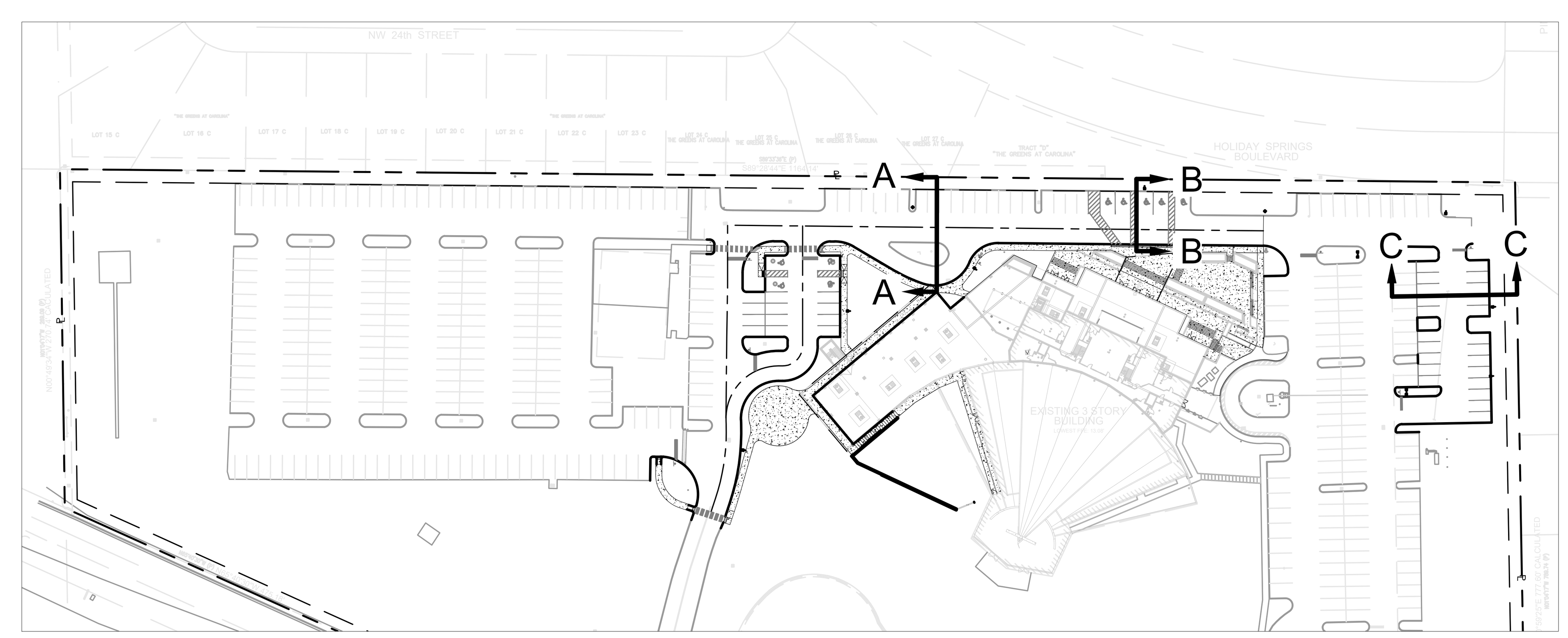
C
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE

LEGEND:

1 FULL DEPTH PAVEMENT
2" SP-12.5 OR S-1 ASPHALTIC CONCRETE SURFACE
COURSE (1500 MARSHALL STABILITY) ABOVE BASE

2 PROP. 8" CRUSHED CONCRETE BASE (LDR 100) COMPACTED TO A MIN. OF
98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-135)

3 PROP. 12" STABILIZIED SUB BASE (LBR 40) COMPACTED TO A MIN. OF
98% OF MAX. DENSITY PER AASHTO T-180 MODIFIED PROCTOR



KEY MAP:

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

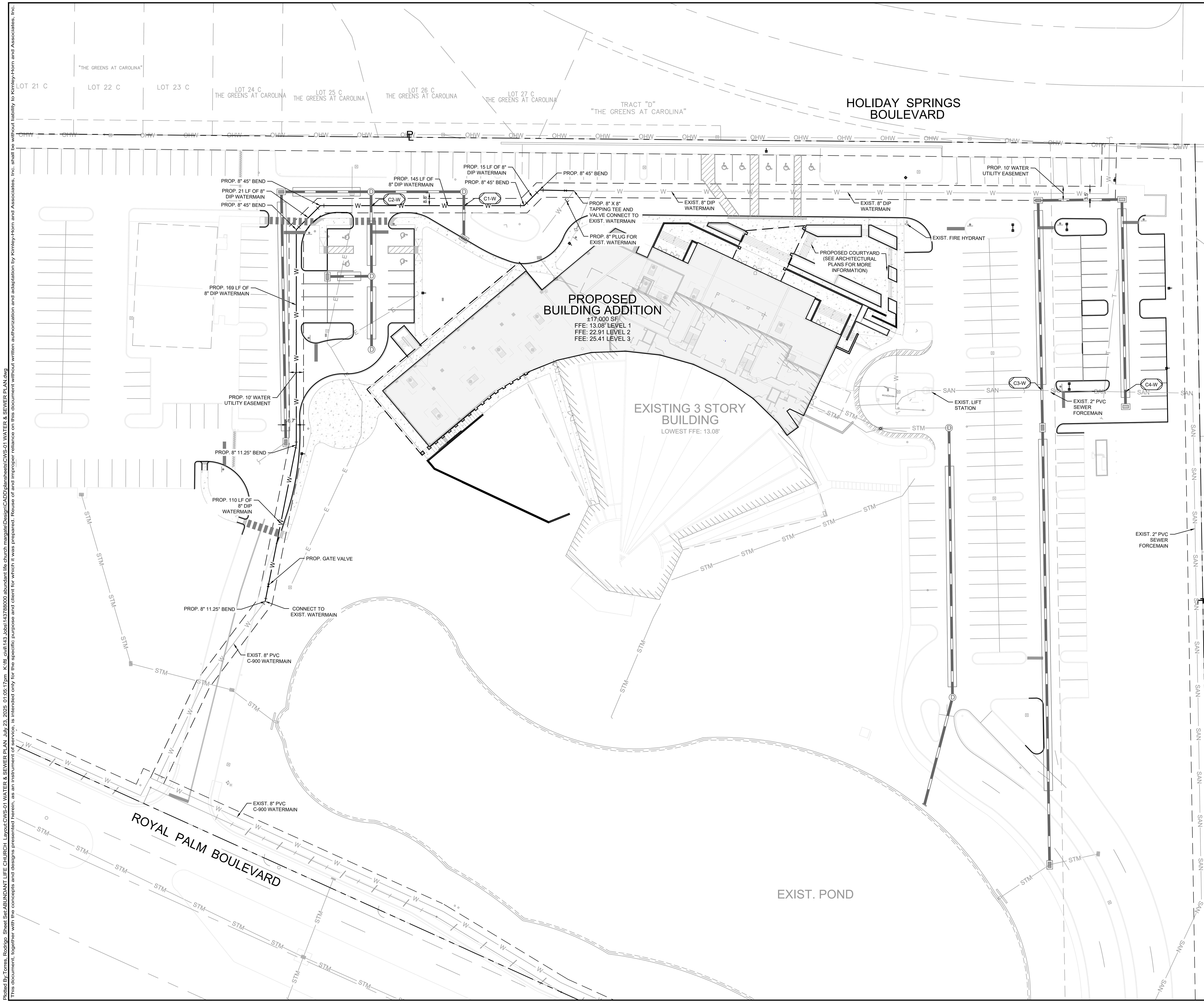
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

CROSS SECTIONS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
CS-01



NORTH

GRAPHIC SCALE IN FEET

0 15 30 60

LEGEND

R/W — PL	PROPERTY LINE
	EXIST. RIGHT OF WAY
	EXIST. ROAD CENTERLINE
W	PROP. WATER LINE
	PROP. RIGHT OF WAY
SAN	EXIST. SANITARY SEWER LINE
W	EXIST. WATER LINE
	PROPOSED BUILDING ADDITION
	PROP. UTILITY EASEMENT

UTILITY CROSSING TABLE

C1-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 13.83' WATER TOP: 8.59' STORM BOT: 9.09' CLEARANCE: 0.50'
C2-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 12.53' WATER TOP: 7.00' STORM BOT: 7.50' CLEARANCE: 0.50'
C3-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 12.25' SEWER BOT: 9.25' STORM TOP: 7.82' CLEARANCE: 1.73'
C4-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 11.66' SEWER BOT: 8.66' STORM TOP: 8.17' CLEARANCE: 0.49'

NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO NOTIFY ENGINEER OF ANY CONFLICTS.
2. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
4. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY THE POWER LINES.
5. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
6. ALL PIPES SHALL BE LAID IN DRY TRENCH. ALL MUCK OR UNSUITABLE MATERIALS IN TRENCHES, INLETS OR MANHOLES SHALL BE REMOVED.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

WATER & SEWER PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

CWS-01

SHEET NUMBER
CWS-02

CHURCH SITE IMPROVEMENTS

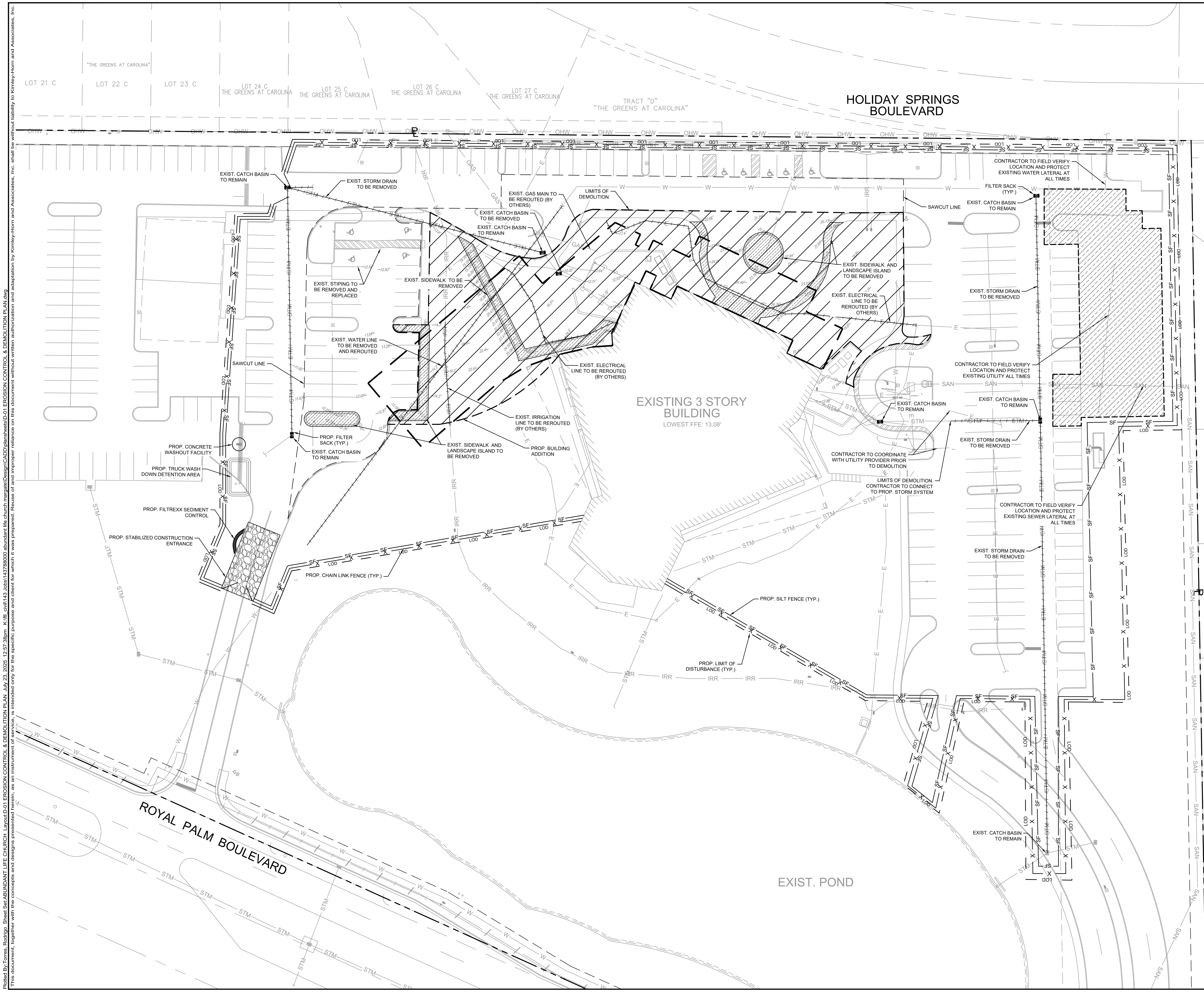
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

WATER & SEWER DETAILS

KHA PROJECT	143788000
DATE	5/19/2025
SCALE	AS SHOWN
DESIGNED BY	RR
DRAWN BY	KH
CHECKED BY	ARM

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

No.	REVISIONS	DATE	BY



LEGEND

R/W	PROPERTY LINE
SF	SILT FENCE
X	CONSTRUCTION FENCE
LOD	LIMITS OF DISTURBANCE
	UTILITY TO BE REMOVED
	FILTER SACK
	EXISTING SIDEWALK, CURB, AND LANDSCAPE ISLANDS TO BE REMOVED
	LIMITS OF DEMOLITION
	PROPOSED BUILDING ADDITION

DEMOLITION NOTES:

1. ALL DEMOLITION SHALL BE WITHIN THE LIMITS OF DEMOLITION UNLESS OTHERWISE NOTED.
2. CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
3. PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN.
4. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
5. REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF SITE IN A LEGAL MANNER.
6. LOCATE EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES IN AREAS OF WORK IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING DEMOLITION OPERATION.
7. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING DEMOLITION, CONSULT PROJECT ENGINEER AND UTILITY OWNER FOR IMMEDIATE ACTION.
8. DEMOLISH AND COMPLETELY REMOVE FROM SITE, MATERIAL INDICATED ON PLAN OR NOTES.
9. THE USE OF EXPLOSIVES IS NOT PERMITTED.
10. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.
11. CONTRACTOR IS TO PROVIDE APPROVED EROSION CONTROL/SEDIMENTATION BARRIERS TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL AS NEEDED ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE.
12. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF DEMOLITION SHALL BE RE-LANDSCAPED AND IRRIGATION SYSTEMS REPAIRED TO PREVIOUS WORKING CONDITIONS.
13. ALL UTILITIES LOCATED WITHIN THE LIMITS OF DEMOLITION SHALL BE REMOVED TO THE LIMITS OF DEMOLITION AND/OR R/W AND CAPPED (WHERE APPLICABLE) UNLESS OTHERWISE NOTED.
14. ALL EXISTING CURBING AND ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION SHALL SAW CUT AND REMOVED UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO FIELD VERIFY PRESENCE OF ALL ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION.
16. CONTRACTOR IS TO OBTAIN PROPER PERMITS PRIOR TO DEMOLITION OF EXISTING STRUCTURES.
17. CONTRACTOR TO INSTALL SAFETY FENCE AND PROPERLY SIGN/MARK AROUND WORK AND STAGING AREA TO PREVENT PEDESTRIAN TRAFFIC FROM ENTERING.
18. CONTRACTOR SHALL PROVIDE ADEQUATE MAINTENANCE OF TRAFFIC AROUND WORK AND STAGING AREA.
19. ALL STRIPING TO BE REMOVED SHALL BE HYDROBLASTED.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

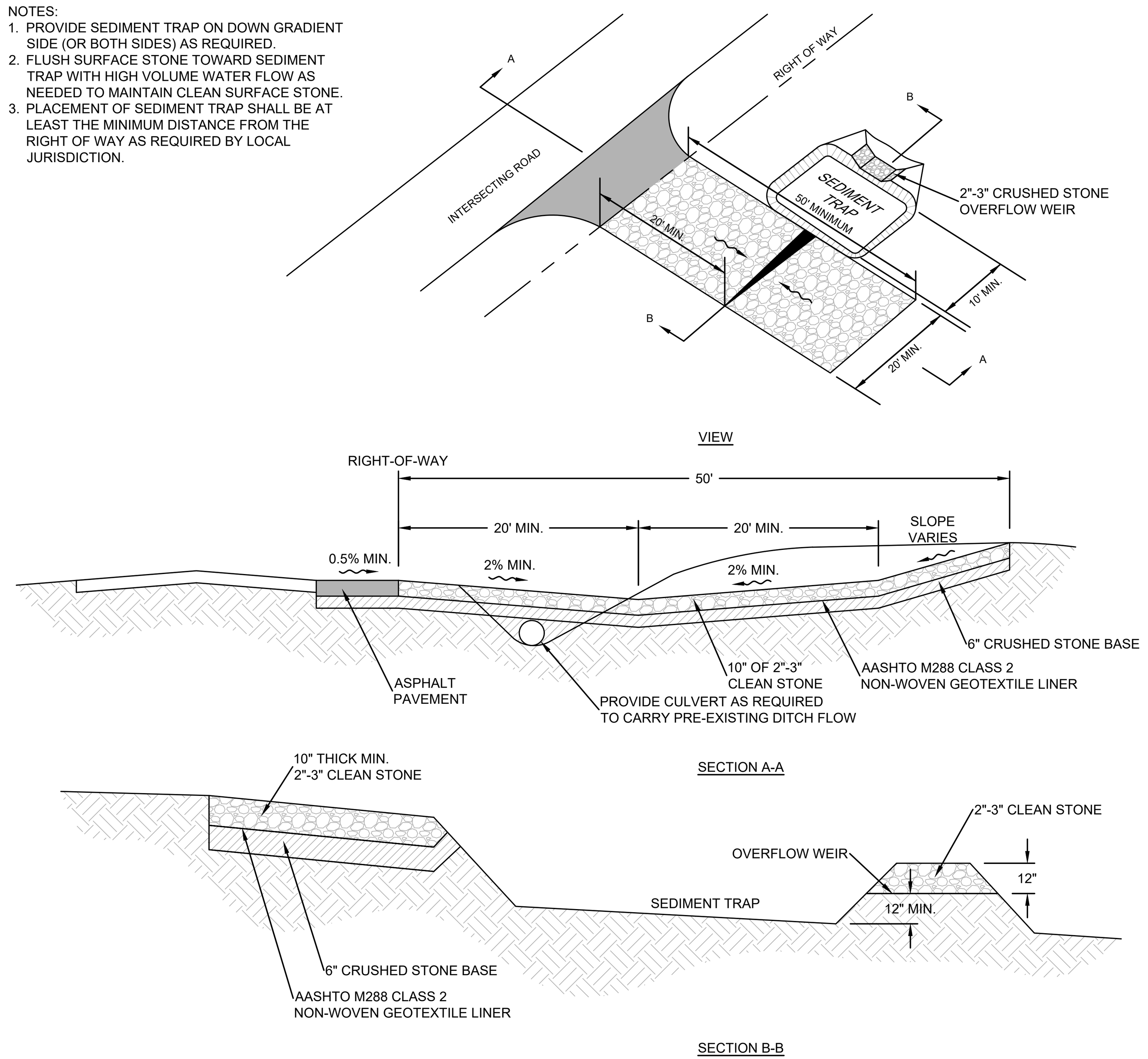
EROSION CONTROL & DEMOLITION PLAN

CHURCH SITE IMPROVEMENTS

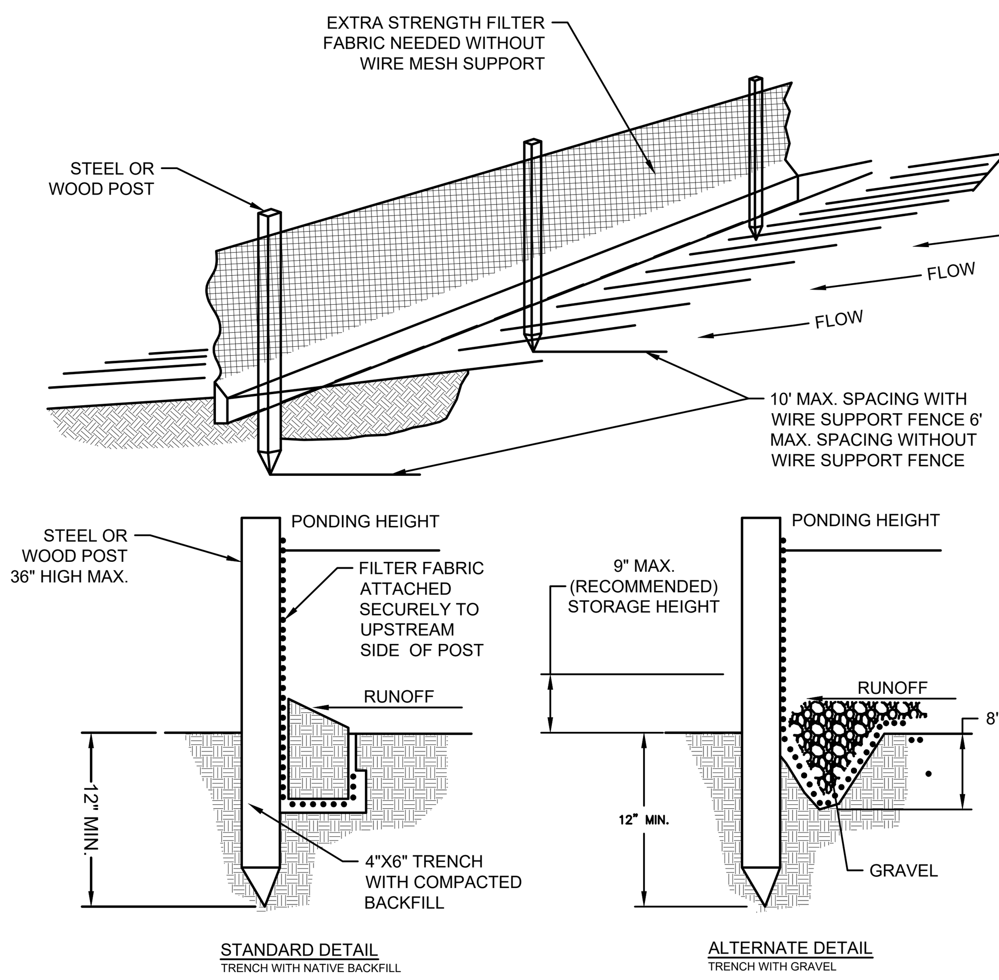
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
D-01

NOTES:
1. PROVIDE SEDIMENT TRAP ON DOWN GRADIENT SIDE (OR BOTH SIDES) AS REQUIRED.
2. FLUSH SURFACE STONE TOWARD SEDIMENT TRAP WITH HIGH VOLUME WATER FLOW AS NEEDED TO MAINTAIN CLEAN SURFACE STONE.
3. PLACEMENT OF SEDIMENT TRAP SHALL BE AT LEAST THE MINIMUM DISTANCE FROM THE RIGHT OF WAY AS REQUIRED BY LOCAL JURISDICTION.

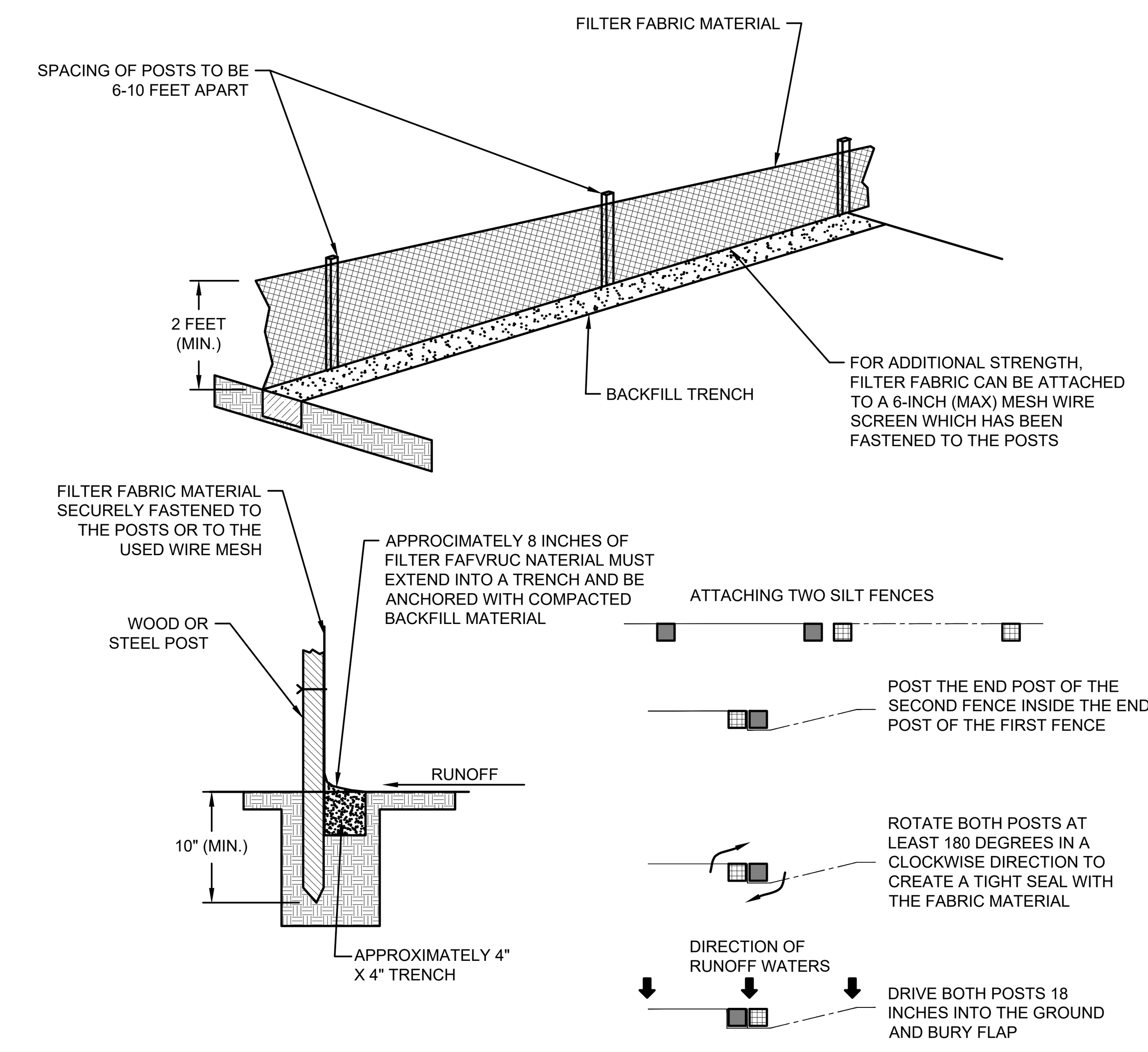


CONSTRUCTION ENTRANCE
NOT TO SCALE

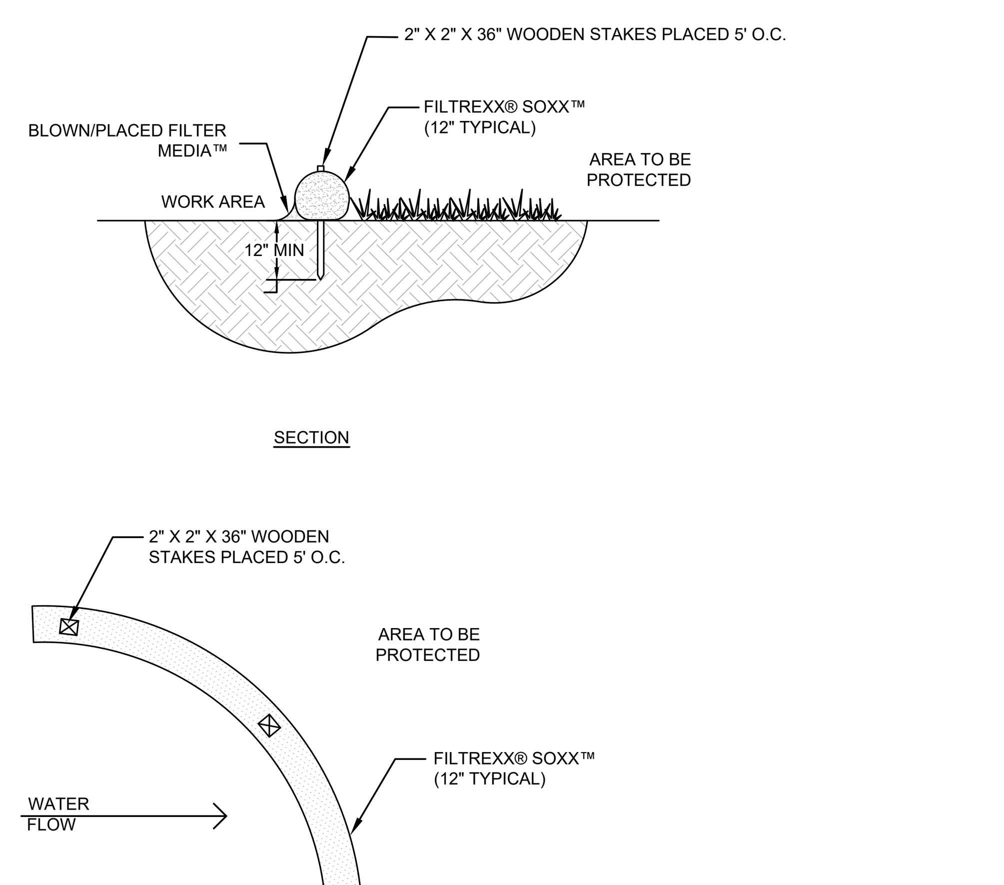


NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE DETAIL
NOT TO SCALE



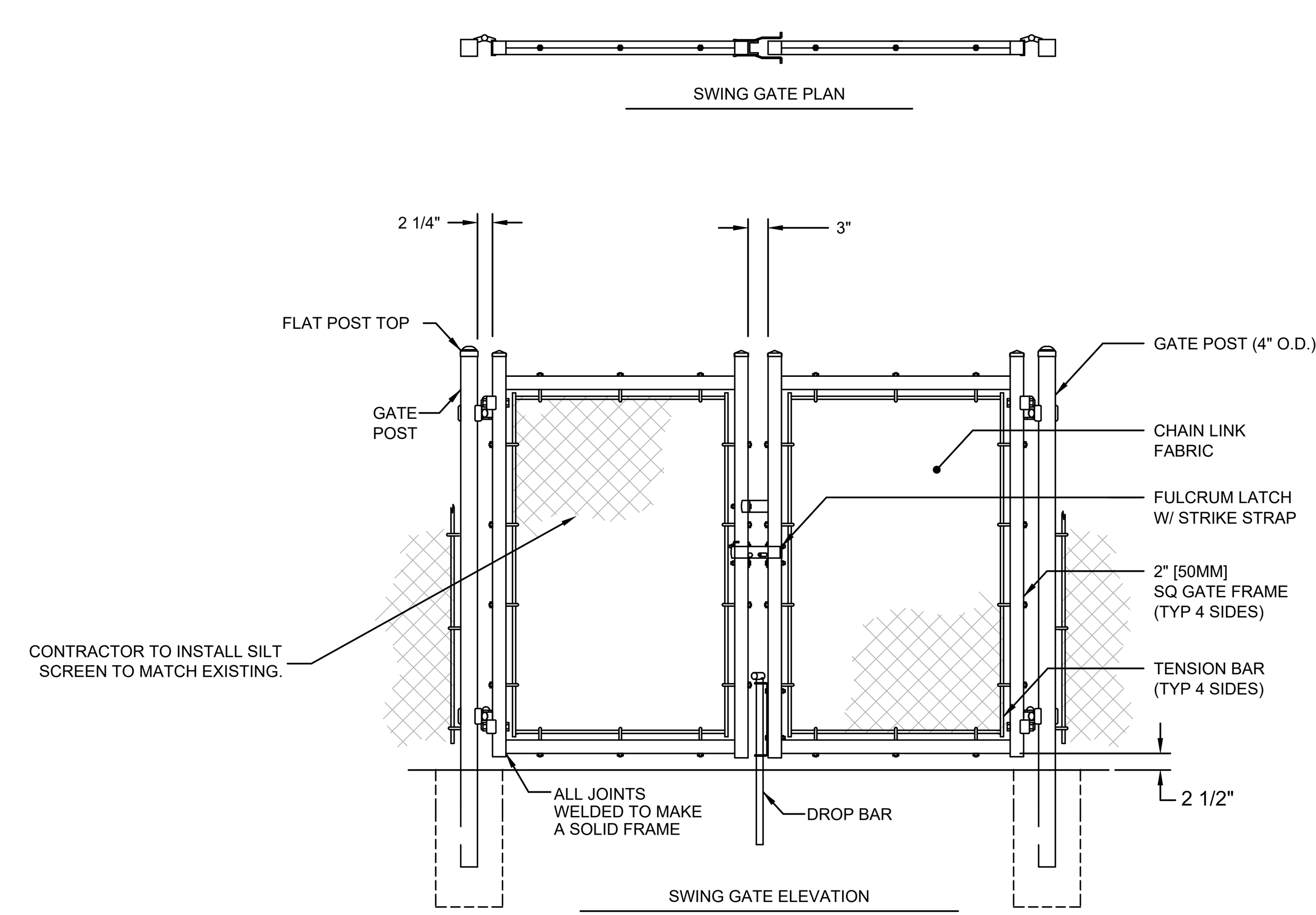
SILT FENCE INSTALLATION DETAIL
NOT TO SCALE



NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

CONTRACTOR MAY USE SILT FENCE OF FILTREXX SOXX AS APPROPRIATE

FILTREXX SEDIMENT CONTROL
NOT TO SCALE



GATE NOTES:
1. GATE MATERIAL SHALL MATCH EXISTING GATES/FENCE.
2. BRACING SHALL BE PROVIDED.
3. GATES ARE MANUALLY OPERATED.

(FIRE DEPARTMENT ACCESSIBLE)

TEMPORARY 24" WIDE SWING GATES
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

EROSION CONTROL & DEMOLITION DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
D-02

I. GENERAL NOTES AND SPECIFICATIONS:

1. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE FLORIDA BUILDING CODE, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS AND SPECIFICATIONS AND ALL OTHER LOCAL, STATE AND FEDERAL REQUIREMENTS.

2. LOCATIONS, SIZE AND MATERIAL OF EXISTING UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS. NEITHER THE DEVELOPER, CLIENT, OWNER NOR THE ENGINEER OF RECORD GUARANTEES THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HORIZONTALLY AND VERTICALLY LOCATE AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL PHYSICALLY FIELD VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

3. ALL EXISTING UNDERGROUND OR ABOVEGROUND UTILITY PIPES, CABLES, DUCTS, EQUIPMENT, DEVICES, ETC. WITHIN OR OUTSIDE THE PROJECT CONSTRUCTION LIMITS WHICH ARE DAMAGED OR DISRUPTED AS A RESULT OF THE CONTRACTOR'S OPERATION, SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. REGARDLESS OF WHETHER THEY WERE SHOWN OR NOT SHOWN ON THE PLANS OR LOCATED OR NOT BY THE OWNER'S REPRESENTATIVE, THE UTILITY COMPANY, SUNSHINE STATE ONE-CALL OF FLORIDA, ETC.

4. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING ANY CONSTRUCTION WORK.

5. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

6. ALL DEFECTIVE WORK NOT ACCEPTED BY THE ENGINEER OF RECORD, BY THE OWNER'S REPRESENTATIVE, OR BY ANY GOVERNMENTAL PERMITTING REGULATORY AGENCY SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

7. ALL STAGING AREAS SHALL BE PROPERLY FENCED AND SECURED BY THE CONTRACTOR.

8. ALL AREAS WHICH ARE BEING EXCAVATED SHALL BE PROPERLY PROTECTED AND BARRICADED BY THE CONTRACTOR. ALL TRENCH WORK SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 C.F.R.S. 1926.650 SUBPART P AND THE FLORIDA TRENCH SAFETY ACT.

9. ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT, CURB AND GUTTERS, CURBS AND WALKS, SOD, LANDSCAPING, FENCE, ETC. DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER OR CLIENT.

10. TEMPORARY ASPHALT PAVEMENT SHALL BE APPLIED TO ALL TRENCHES, WITHIN AN EXISTING PAVED RIGHT 0F WAY, AT THE END OF EACH WORKDAY. PLATING MAY BE USED WITH THE RIGHT-OF-WAY OWNER'S PRIOR CONSENT.

11. PROVIDE FILL TO ENSURE THAT THE FINISH GRADE (INCLUDING SOD) IN LANDSCAPE AREAS ARE AT LEVEL OF CURBS AND/OR EDGE OF SIDEWALKS.

12. WHERE NEW GRADES BLEND INTO EXISTING GRADES IN LANDSCAPE AREAS PROVIDE A UNIFORM TRANSITION. PROTECT ALL EXISTING PAVEMENT AND LANDSCAPE AREAS THAT ARE TO REMAIN.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER AND SEWER SERVICE DURING THE CONSTRUCTION OF THE TIE-IN CONNECTION OF ALL PROPOSED WATER OR SANITARY SEWER SYSTEMS, TO ANY EXISTING WATER OR SANITARY MAINS AND SERVICE LINES. ABANDONMENT SHALL NOT OCCUR UNTIL THE PROPOSED WORK HAS BEEN APPROVED AND ACCEPTED FOR OPERATION BY THE ENGINEER OF RECORD AND THE LOCAL PUBLIC WORKS DEPARTMENT. ALL EXISTING FIRE HYDRANTS SHALL BE RECONNECTED TO THE PROPOSED WATER MAIN. PUBLIC WORKS DEPARTMENT FIELD OPERATIONS WILL COORDINATE WITH ENGINEER OF RECORD IF AN EXISTING FIRE HYDRANT SHALL BE REPLACED AS NEEDED OR REQUIRED.

14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE PUBLIC HEALTH AND ENSURE JOB SAFETY. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY & HEALTH AGENCY (OSHA) STANDARDS AND FEDERAL, STATE AND LOCAL GOVERNMENT SAFETY REQUIREMENTS.

15. THE CONTRACTOR SHALL ENSURE THAT OVERFLOWS OR RAW SEWAGE SPILLS DO NOT OCCUR DURING CONSTRUCTION OF PROPOSED SANITARY SEWER TIE-IN CONNECTIONS.

16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT STORM WATER POLLUTION PREVENTION AND EROSION CONTROL MEASURES AND PRACTICES DURING CONSTRUCTION IN ACCORDANCE WITH THE EROSION CONTROL PLAN/DETAILS AND THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT FOR CONSTRUCTION ACTIVITIES REQUIREMENTS.

17. CONTRACTOR SHALL ENSURE THAT ALL STORM WATER RUN-OFF WITHIN THE CONSTRUCTION AREA IS CONTAINED ON-SITE.

18. WHEN POWER POLES ARE ADJACENT TO ANY PROPOSED UTILITY, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION. THE SHORING AND SUPPORT METHODS SHALL BE APPROVED BY THE UTILITY COMPANY'S ENGINEERING DEPARTMENT.

19. DUE TO FEDERAL REGULATIONS, THE CONTRACTOR MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES AND MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE WITHIN THE PROJECT AREA.

20. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING SITE IMPROVEMENTS, FEATURES AND CONDITIONS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE FOLLOWING TOPOGRAPHIC BOUNDARY SURVEY SPECIFICALLY PREPARED FOR THIS PROJECT:

TITLE: "BOUNDARY AND TOPOGRAPHIC SURVEY"
DATE: 03/21/2023
ADDRESS: PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
(954) 572-1777

21. ALL ELEVATIONS SHOWN ARE BASED ON THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD88).

22. ALL UTILITY CONNECTIONS TO THE BLDG. SHALL BE CONSTRUCTED AND CAPPED OR PLUGGED FIVE FEET FROM THE PROPOSED BUILDING. CONTRACTOR SHALL PERFORM TIE-INS TO THE BUILDING. THE COST ASSOCIATED WITH THE TAPPING/PLUGGING OF THE UTILITIES SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.

23. CONTRACTOR SHALL COORDINATE WORK WITH OTHER UTILITY AND BUILDING TRADES WORKING ON THIS OR ADJACENT PROJECTS.

24. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF THE EXISTING SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL SHORING, SHEETING AND/OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING CONSTRUCTION ACTIVITIES. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

25. AFTER LOCATING AND VERIFYING EXISTING UTILITY TIE IN POINTS, CONTRACTOR IS TO VERIFY THAT DESIGN COMPONENTS SUCH AS, BUT NOT LIMITED TO, PERCENT SLOPE, INVERT, TAP LOCATIONS, PIPE RUNS, INFRASTRUCTURE DEPTH, ETC. WILL STILL BE IN ACCORDANCE WITH THE ENGINEERING PLANS.

26. IF IT SHOULD BECOME NECESSARY TO STOP WORK FOR INDEFINITE PERIODS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE OR DETERIORATION OF THE WORK ALREADY PERFORMED.

II. PRE-CONSTRUCTION RESPONSIBILITIES:

1. 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.

2. CONTRACTOR MUST CONTACT THE ARCHITECT/ENGINEER OF RECORD TO ARRANGE FOR A PRE-CONSTRUCTION MEETING, A MINIMUM 2 BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

3. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA (1-800-432-4770) AND ALL KNOWN EXISTING UTILITY OWNERS AT LEAST 2 BUSINESS DAYS BEFORE DIGGING TO ALLOW FOR FIELD LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES IN THEIR EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

4. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.

5. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO ARRANGE FOR ANY REMOVAL, RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.

III. OBSERVATIONS AND TESTING:

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF PERFORMING ALL CIVIL RELATED TESTS. UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH TESTING UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO WITNESS THE TESTS.

2. THE ENGINEER OF RECORD WILL REQUIRE THAT THE FOLLOWING TESTS BE PERFORMED WITH ACCEPTABLE RESULTS:

A. SANITARY SEWAGE COLLECTION SYSTEM:
   I. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE
   II. INFILTRATION/EXFILTRATION TEST UP TO THE CONNECTING MANHOLE
   III. PRESSURE TEST AS REQUIRED BY DRER
B. STORM DRAINAGE-(EXFILTRATION TRENCH DEPTH)
   I. EXFILTRATION TRENCH DEPTH
   II.LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE (IF APPLICABLE)
C. DRAINAGE WELL SPECIFIC CAPACITY TEST.
D. WATER SYSTEM-(PRESSURE TEST AND BACTERIOLOGICAL TEST)
E. SUBGRADE - SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK.
F. LIME ROCK BASE - SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT. (FLAT BOARDING ALSO REQUIRED.)
G. ASPHALT PAVEMENT
H. FINAL WALK-THROUGH INSPECTION - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPLICABLE REGULATORY AGENCIES FOR INSPECTION REQUIREMENTS.
I. CONCRETE FORMWORK AND ADA SLOPE VERIFICATIONS.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE FOLLOWING EVENTS:

A. PRIOR TO PLACING BALLAST ROCK WITHIN EXFILTRATION TRENCH AND PIPE RUNS TO MEASURE DEPTH AND WIDTH, AS WELL AS DIRECTIONS RESPECTIVELY.
B. PRIOR TO BACKFILLING WATER MAINS AND SERVICES
C. PRIOR TO BACKFILLING SANITARY SEWER MAINS AND SERVICES
D. AFTER COMPACTION OF LIMEROCK BASE AND PRIOR TO PLACEMENT OF FIRST LIFT OF ASPHALT
E. AFTER 2ND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS
F. INSTALLING CONNECTIONS TO EXISTING WATER AND SEWER MAINS/SERVICES AFTER SECOND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS.
G. AT SUBSTANTIAL COMPLETION
H. FINAL INSPECTION UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH THESE ACTIVITIES, UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO PERFORM AN INSPECTION.

4. SHOULD THE CONTRACTOR FAIL TO GIVE THE ENGINEER OF RECORD ADVANCE NOTICE OF TESTING AND INSPECTIONS AS SPECIFIED ABOVE, THE ENGINEER SHALL RESERVE THE RIGHT TO REFUSE ISSUANCE OF ANY CERTIFICATIONS OF COMPLETION AND FINAL INSPECTIONS, AND RESERVES THE RIGHT TO RECOMMEND THAT ANY CONTRACT AMOUNTS STILL HELD IN RETAINAGE NOT BE RELEASED. CITY INSPECTOR REPORTS SHALL NOT BE ACCEPTED AS A SUBSTITUTE FOR THE ENGINEER'S PRESENCE AT THE TESTING AND INSPECTION INTERVALS SPECIFIED ABOVE.

IV. SHOP DRAWINGS:

1. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS:

A. DRAINAGE STRUCTURES, INCLUDING CATCH BASINS, WELL BOXES, PUMPS, MANHOLES/INLET FRAMES/GRATES, BAFFLES, ETC.
B. ALL DRAINAGE PIPES.
C. TRENCH DRAINS.
D. EXFILTRATION FILTER FABRIC
E. ALL WATER AND SEWER SYSTEM COMPONENTS
F. ASPHALT PAVEMENT MIX DESIGN
G. LIMEROCK MATERIAL
H. CONCRETE MIX FOR PAVEMENT
I. MATERIAL SUBSTITUTION REQUESTS
J. EROSION CONTROL MATERIALS
K. FILL MATERIAL

2. ALL PRECAST STRUCTURAL DRAWINGS MUST BE SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED ENGINEER OF RECORD STATING THAT THE STRUCTURE(S) MEETS THE H20 LOAD RATING REQUIREMENTS. STRUCTURAL SHOP DRAWINGS WILL BE REJECTED AND NOT REVIEWED IF NOT SEALED BY A FLORIDA LICENSED ENGINEER. IN ADDITION, SOME CITIES, COUNTIES, STATE AND/OR NATIONAL REGULATORY AGENCIES REQUIRE THEIR OWN INDIVIDUAL REVIEW AND APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY SHOP DRAWING APPROVALS AS REQUIRED.

V. TEMPORARY FACILITIES:

1. TEMPORARY FACILITIES

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY, DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION, IF APPLICABLE.

C. CONTRACTOR SHALL OBTAIN THE ENGINEERING DESIGN AND PERMIT FOR SUCH FACILITIES AT THE CONTRACTOR'S SOLE COST.

2. TRAFFIC REGULATION

A. THE CONTRACTOR SHALL PROVIDE ALL MAINTENANCE OF TRAFFIC DURING CONSTRUCTION. TO INCLUDE BUT IS NOT LIMITED TO WARNING SIGNALS, SIGNS, LIGHTS AND FLAG PERSONS AS NECESSARY WITHIN PUBLIC RIGHT-OF-WAYS IN ACCORDANCE WITH THE LOCAL PUBLIC WORKS DEPARTMENT.

B. 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 AT ALL TIMES. SPECIAL PRECAUTION IS TO BE TAKEN IN PATHS OF EGRESS.

C. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE LOCAL PUBLIC WORKS DEPARTMENT.

VI. PROJECT CLOSE OUT:

1. CLEANING UP

A. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER AND THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN. UPON FINAL CLEANUP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH, AND THE PAVED AREAS SHALL BE BROOMED AND PRESSURE CLEANED.

B. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

C. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS AND ANY OTHER IMPROVEMENTS REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION WHICH EXISTED PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

D. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE 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 THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION. ANY ADVERSE EFFECTS OR BUILDUP IN PUBLIC INFRASTRUCTURE WILL BE CLEANED AND REDUCED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.

E. ALL DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATED MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENGINEER OF RECORD. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.

2. ALL PROPERTY MONUMENTS OR PERMANENT SURVEY REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

3. PROJECT RECORD DOCUMENTS

A. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS. PRIOR APPROVAL FROM THE ENGINEER OF RECORD IS REQUIRED FOR SAID FACILITIES.

B. AT THE COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL SUBMIT THREE (3) SIGNED & SEALED AS-BUILT DRAWINGS, SIGNED & SEALED BY A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. ADDITIONAL AS-BUILT DRAWINGS REQUIRED BY THE CITY, COUNTY, STATE AND/OR FEDERAL REGULATORY AGENCIES SHALL ALSO BE SUBMITTED ONCE REQUIRED. THE AS-BUILT DRAWINGS SHALL INDICATE LOCATION, SIZE, ELEVATION, MATERIAL, ETC., OF ALL WORK COMPLETED UNDER THIS CONTRACT AND OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.

VII. STORM DRAINAGE:

1. WHEN EXISTING MANHOLE RINGS, CATCH BASIN GRATE AND FRAMES, VALVE BOXES, PULL BOXES OR OTHER UTILITY CASTINGS ARE ENCOUNTERED WITHIN THE PROPOSED LIMITS OF WORK THE CONTRACTOR SHALL FIELD ADJUST THE EXISTING RING AND FRAME, GRATE AND FRAME, VALVE BOXES OR PULL BOXES TO MATCH THE PROPOSED ELEVATION. SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE INDICATED.

3. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE DOUBLE WALLED SMOOTH INTERIOR PIPE AND SHALL MEET THE REQUIREMENTS OF AASHTO M294 TYPE S, MPT AND ASTM D2321, D3212, F1417, F477, F667 OR AS NOTED ON THE CONSTRUCTION DRAWINGS.

4. CONTRACTOR SHALL VACUUM CLEAN AND REMOVE ALL SILT, SEDIMENT AND DEBRIS FROM ALL OF THE EXISTING AND PROPOSED DRAINAGE STRUCTURES AND PIPE NETWORK WITHIN THE PROJECT LIMITS PRIOR TO FINAL ACCEPTANCE OF DRAINAGE SYSTEM. ALL COST OF SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

5. ALL DRAINAGE WORK SHALL CONFORM TO THE GOVERNING JURISDICTIONAL AGENCY REGULATIONS AND STANDARDS

6. UNLESS OTHERWISE SPECIFIED ON THE PLANS, MINIMUM COVER OVER ALL STORM DRAINAGE PIPE SHALL BE 36-INCHES. CONTRACTOR SHALL AVOID ALL UNNECESSARY CROSSINGS BY HEAVY CONSTRUCTION EQUIPMENT DURING CONSTRUCTION.

7. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL CATCH BASINS, MANHOLES, FRAMES AND GRATES, RINGS AND COVERS, WITHIN PRIVATE PROPERTY, SHALL BE DESIGNED TO WITHSTAND AN AASHTO AND XDOT H20 LOAD RATING AND SHALL BE OBTAINED FROM PLAN SPECIFIED MANUFACTURERS OR APPROVED EQUIVALENT MANUFACTURER.

VIII. EARTHWORK AND PAVING:

1. ALL UNDERGROUND UTILITY WORK SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF SUB BASE. ANY SUBGRADE RE-WORK DUE TO UNDERGROUND INFRASTRUCTURE INCONSISTENCIES WILL BE DONE AT THE CONTRACTOR'S EXPENSE.

2. PROPOSED ASPHALT PAVEMENT SHALL BE CONNECTED TO EXISTING AS PER STANDARD DETAILS. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS ON NEW SIDEWALK OR NEW PAVEMENT.

3. SAW CUT EXISTING CONCRETE WALKS, CURB AND GUTTERS, AND ASPHALT OR CONCRETE PAVEMENT CAREFULLY AND IN A STRAIGHT LINE WHERE UNDERGROUND WORK IS REQUIRED. WHERE PROPOSED ASPHALT OR CONCRETE PAVEMENT, CURB, SIDEWALK, ETC. WILL MEET AN EXISTING LOCATION CUT CONCRETE WALKS, CONCRETE PAVEMENT, CURB AND GUTTERS AT NEAREST EXISTING JOINT.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

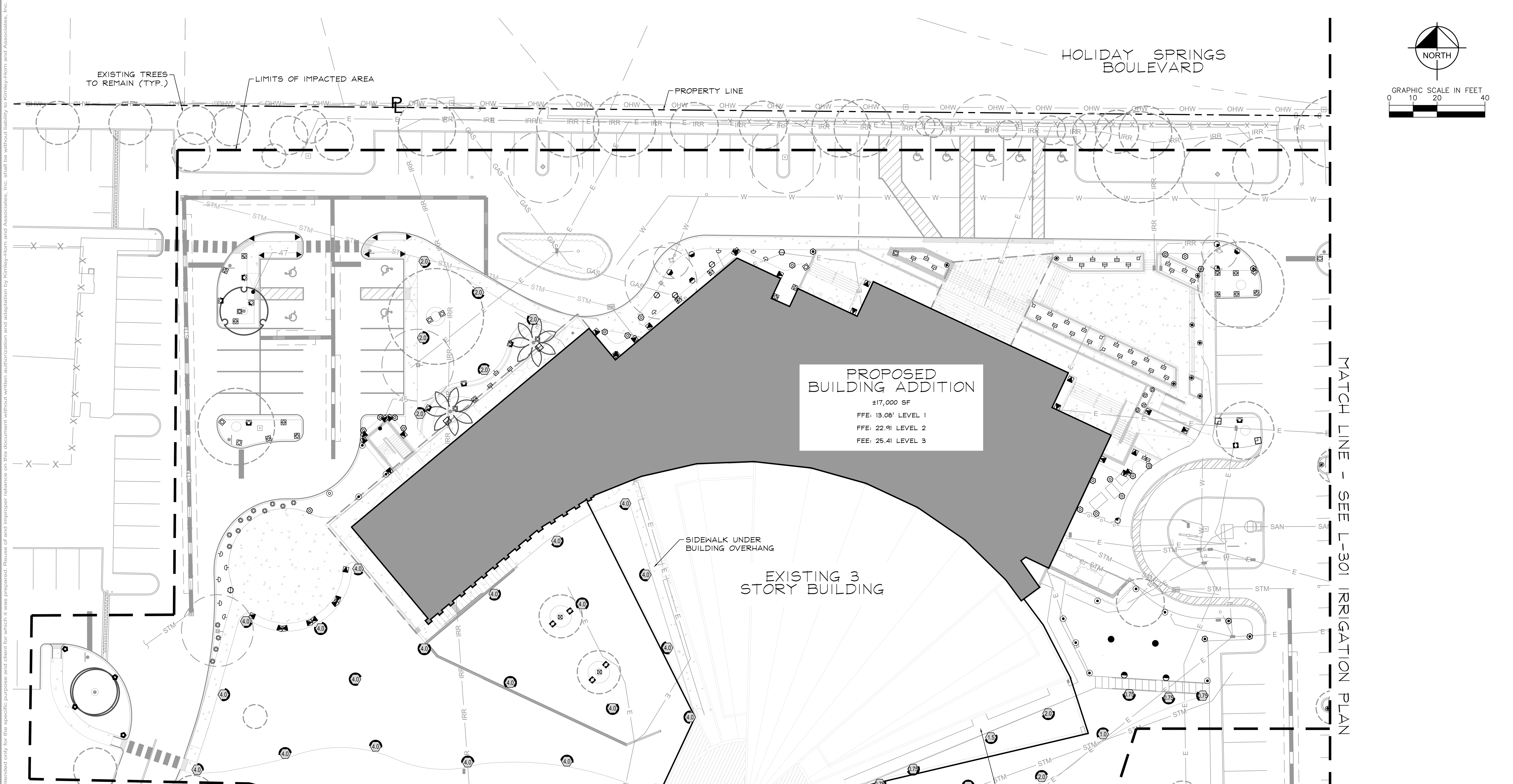
RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

GENERAL NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
G-01



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
	Rain Bird 1804-PRS-1400 Flood

SYMBOL	MANUFACTURER/MODEL
0.75	Rain Bird 3504-PC 0.75
1.0	Rain Bird 3504-PC 1.0
1.5	Rain Bird 3504-PC 1.5
2.0	Rain Bird 3504-PC 2.0
4.0	Rain Bird 3504-PC 4.0

Valve Callout
Valve Number
Valve Flow
Valve Size

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

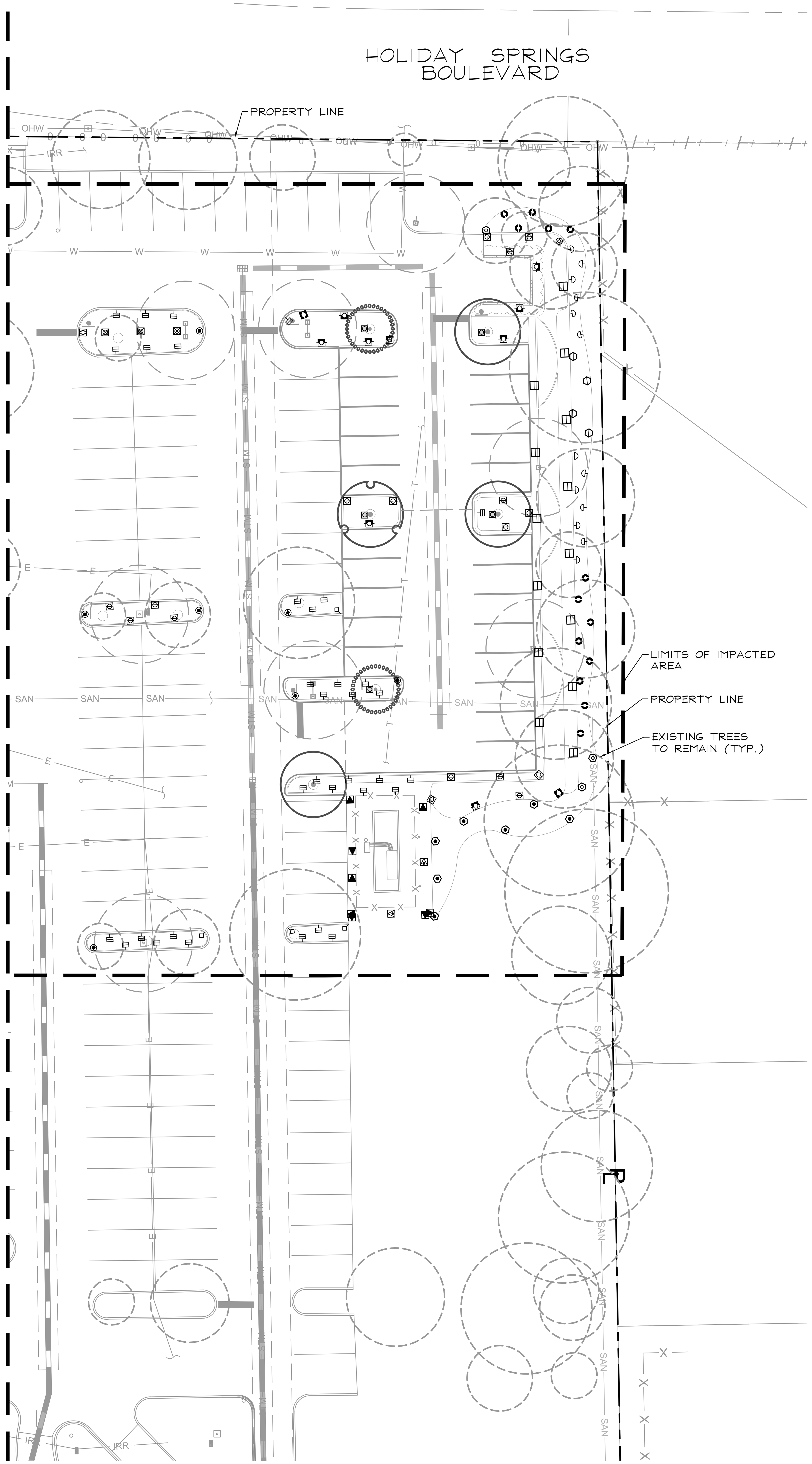
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-01



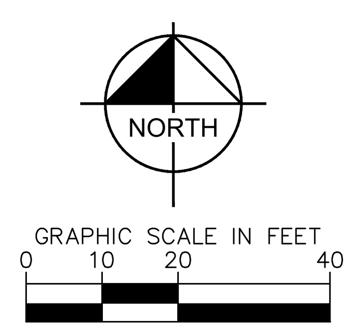
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	8	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	22	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	9	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	7	30
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	4	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	76	30
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	44	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	77	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	32	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	17	30
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	18	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	39	30
1401 1402 1404	Rain Bird 1804-PRS-1400 Flood Flood Bubbler 4in. popup with pressure regulating device. Install w/ PA-80 adapter.	8	20

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
0.75	Rain Bird 3504-PC 0.75 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	6	25	0.54	15'
1.0	Rain Bird 3504-PC 1.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	2	25	0.77	20'
1.5	Rain Bird 3504-PC 1.5 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	1	25	1.06	23'
2.0	Rain Bird 3504-PC 2.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	9	25	1.4	27'
4.0	Rain Bird 3504-PC 4.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	21	25	2.97	31'

Valve Callout
- Valve Number
- Valve Flow
- Valve Size

PLAN IS DIAGRAMMATIC. CONTRACTOR SHALL INSTALL ALL IRRIGATION EQUIPMENT IN LANDSCAPE OR TURF AREAS WITHIN PROJECT LIMITS.



IRRIGATION SYSTEM NOTES

1. CONTRACTOR SHALL REFER TO THE IRRIGATION DETAILS, IRRIGATION SCHEDULE, SPECIFICATIONS AND ALL CONTRACT DOCUMENTS FOR FURTHER AND COMPLETE INSTRUCTIONS.
2. IRRIGATION QUANTITIES ARE PROVIDED FOR CONVENIENCE. IN THE EVENT OF QUANTITY DISCREPANCIES THE DRAWING SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING.
3. ANY SUBSTITUTIONS FOR SPECIFIED IRRIGATION EQUIPMENT MUST BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL FIELD ADJUST LOCATION OF IRRIGATION EQUIPMENT AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR INTERFERE WITH EXISTING ABOVE GROUND ELEMENTS. ALL FIELD ADJUSTMENTS SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
5. CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LIMITS OF WORK AND EXISTING CONDITIONS AND VERIFY ALL INFORMATION. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IN WRITING WITHIN SEVEN CALENDAR DAYS OF NOTICE TO PROCEED.
6. IRRIGATION PLAN IS DIAGRAMMATIC. EQUIPMENT SHOWN ON IMPERVIOUS SURFACES IS FOR GRAPHIC CLARITY UNLESS OTHERWISE NOTED. CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITHIN LANDSCAPE AREAS IN PROPERTY LIMITS.

THE IRRIGATION SYSTEM IS DESIGNED TO OPERATE WITH A SOURCE PROVIDING xx GPM AT xx PSI.

SPRAY HEAD DESIGN PRESSURE: 30 PSI
BUBBLER DESIGN PRESSURE: 30 PSI
ROTOR DESIGN PRESSURE: 25 PSI

SLEEVE SIZE SCHEDULE (SCH 40)

PIPE SIZE (or combination of pipe sizes)	SLEEVE SIZE
1"	2"
1½"	4"
2"	4"
3"	6"
4"	8"
6"	12"

Sunshine811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

REVISIONS		
No.	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

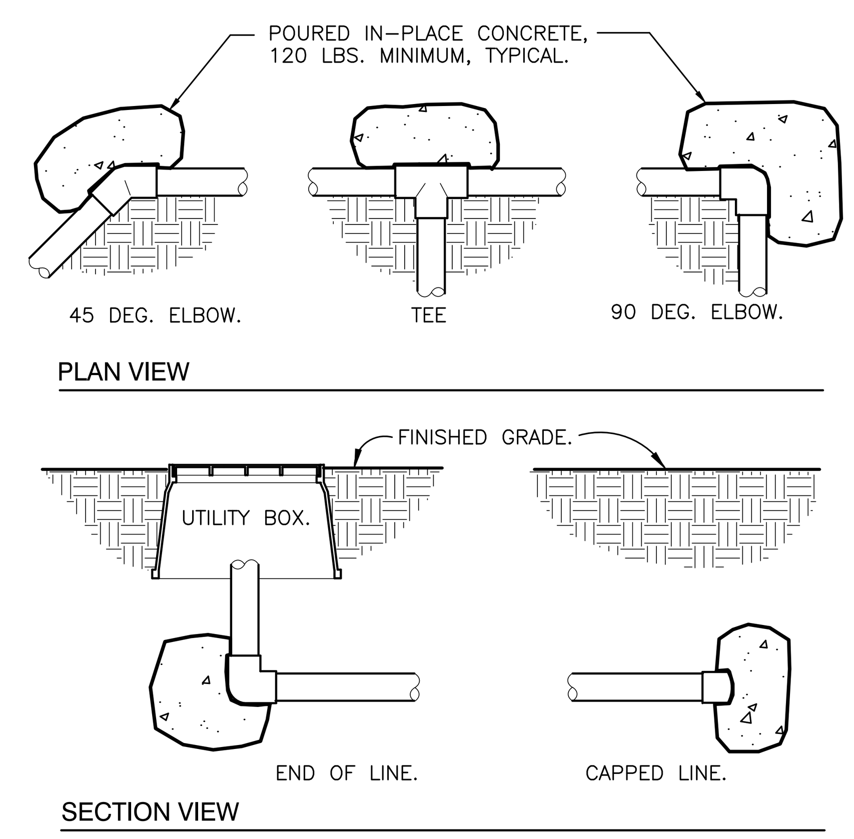
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

KHA PROJECT
143788000
DATE
07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

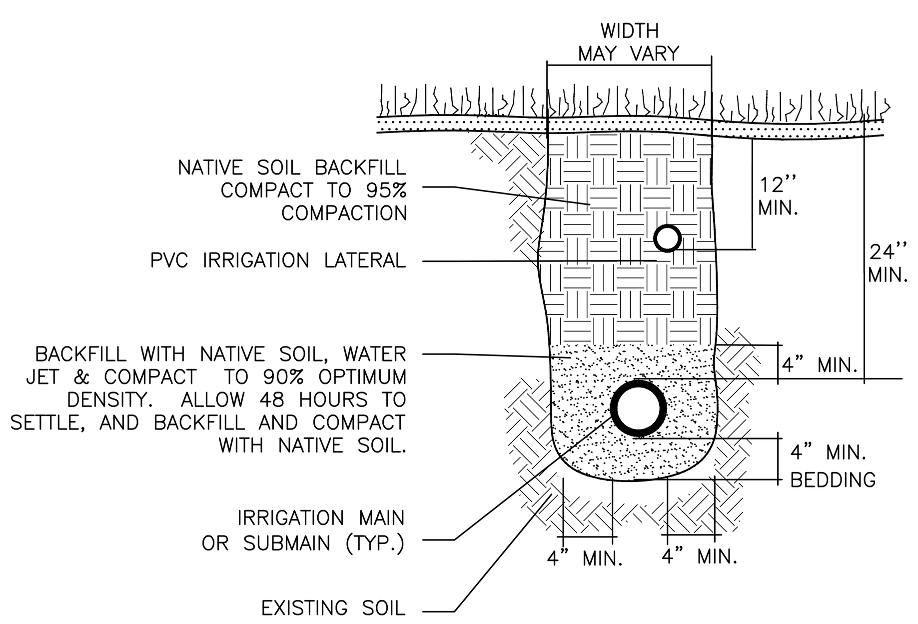
IRRIGATION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

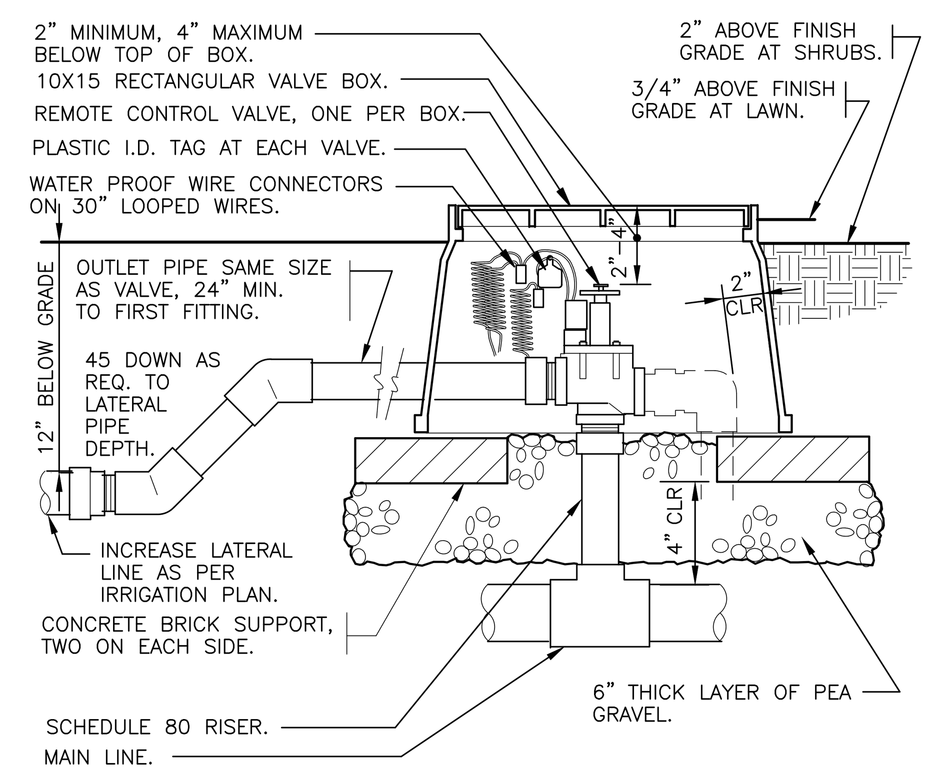
SHEET NUMBER
IRR-02



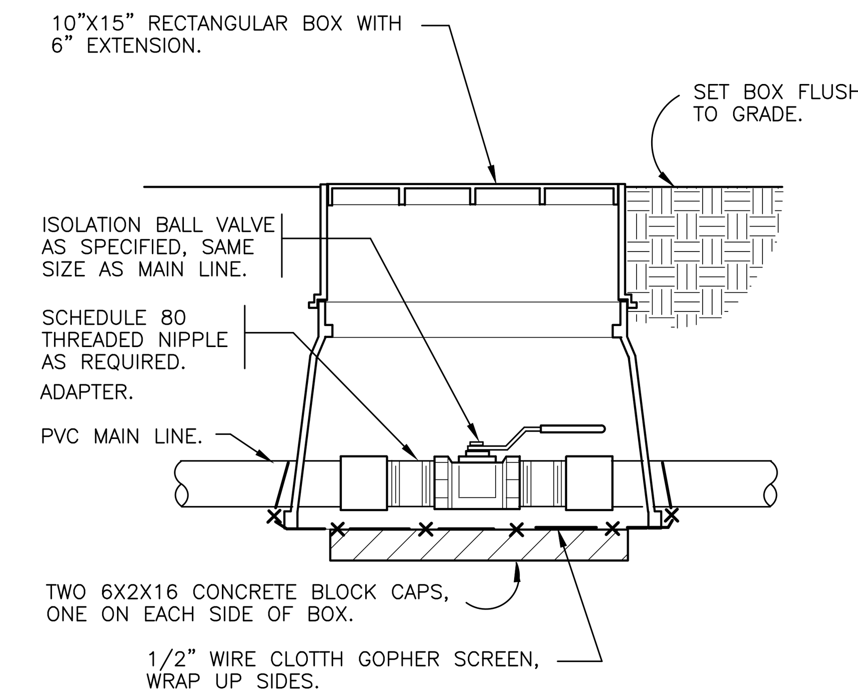
1 THRUST BLOCKING
3/4" = 1'-0" 32 8409.76-01



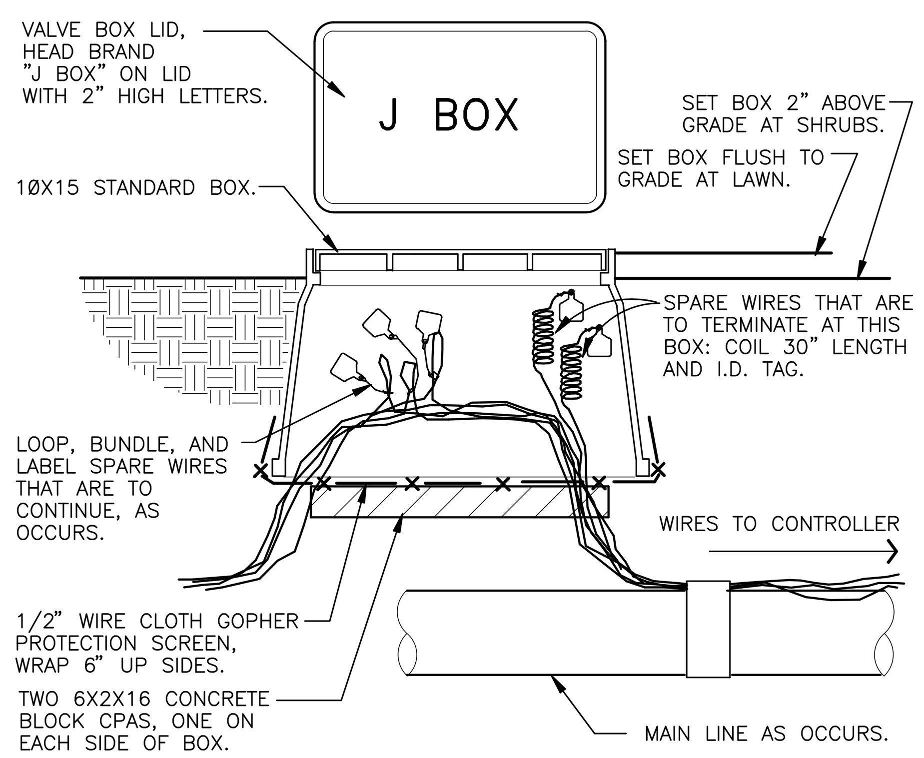
2 TRENCHING DETAIL
NOT TO SCALE 32 8409.76-03



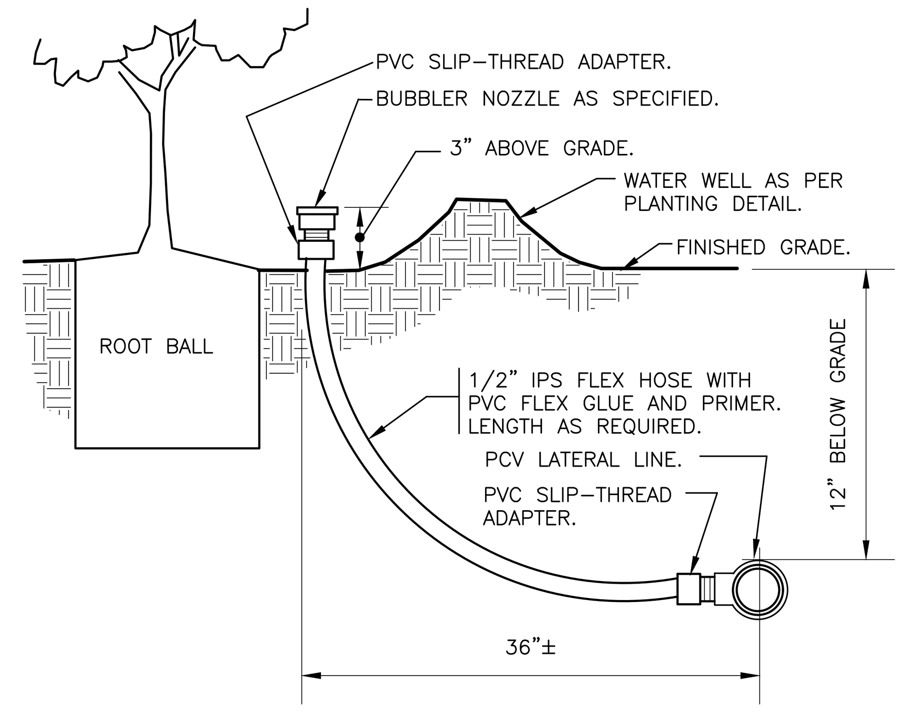
3 ELECTRIC REMOTE CONTROL VALVE
1 1/2" = 1'-0" 32 8406.13-01



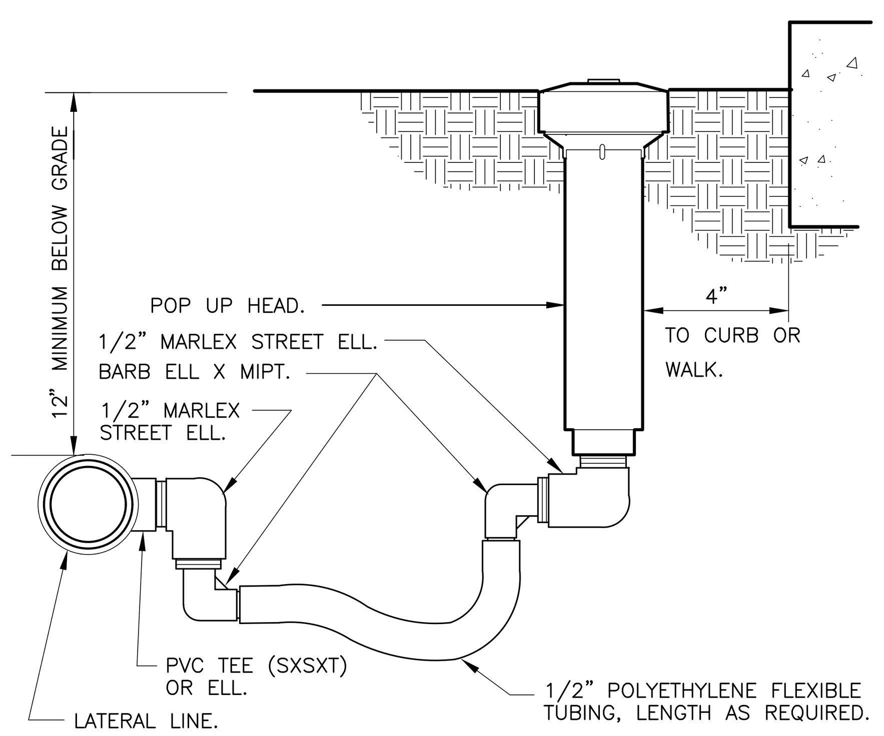
4 BRASS BALL ISOLATION VALVE
1 1/2" = 1'-0" 32 8406.33-02



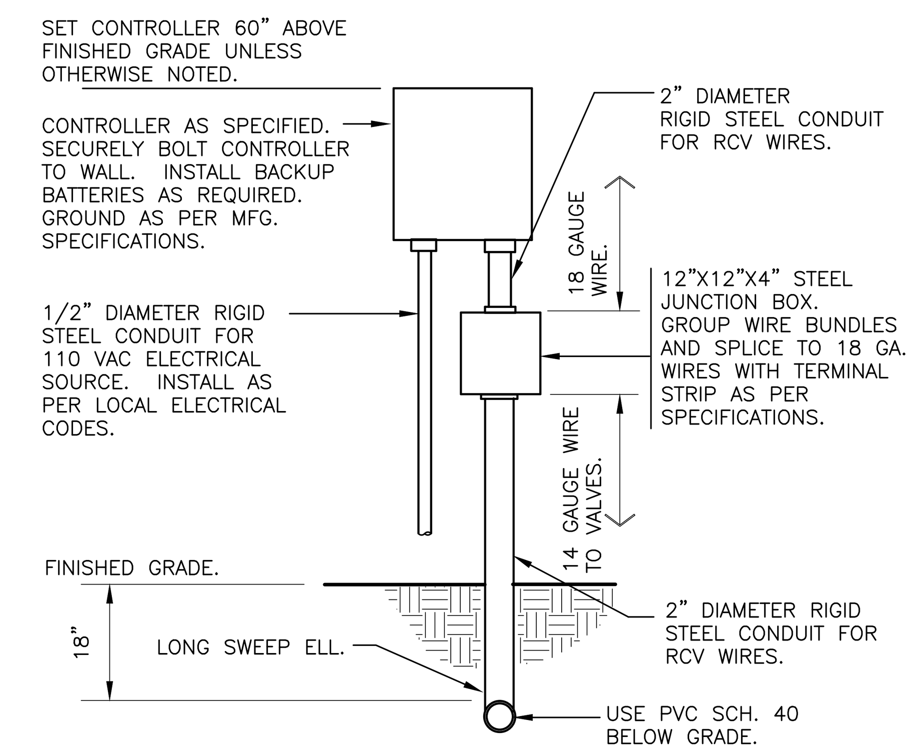
5 WIRE BUNDLE JUNCTION BOX
1 1/2" = 1'-0" 32 8409.79-01



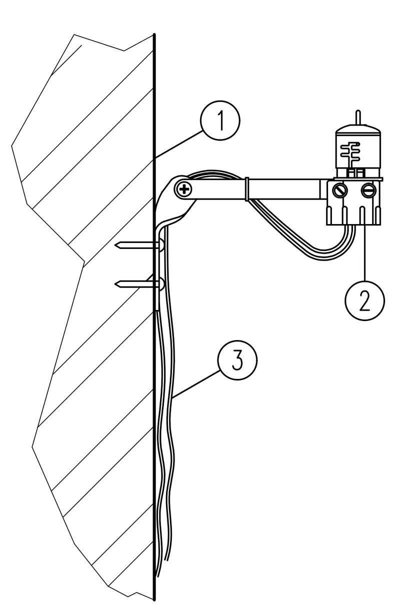
6 BUBBLER ON FLEX HOSE RISER
3" = 1'-0" DETAIL-FILE



7 POP-UP SPRAY FLEX ASSEMBLY
3" = 1'-0" 32 8403.13-02



8 WALL MOUNT CONTROLLER
1" = 1'-0" 328409.13-02



1 EXTERIOR WALL (SEE NOTE)

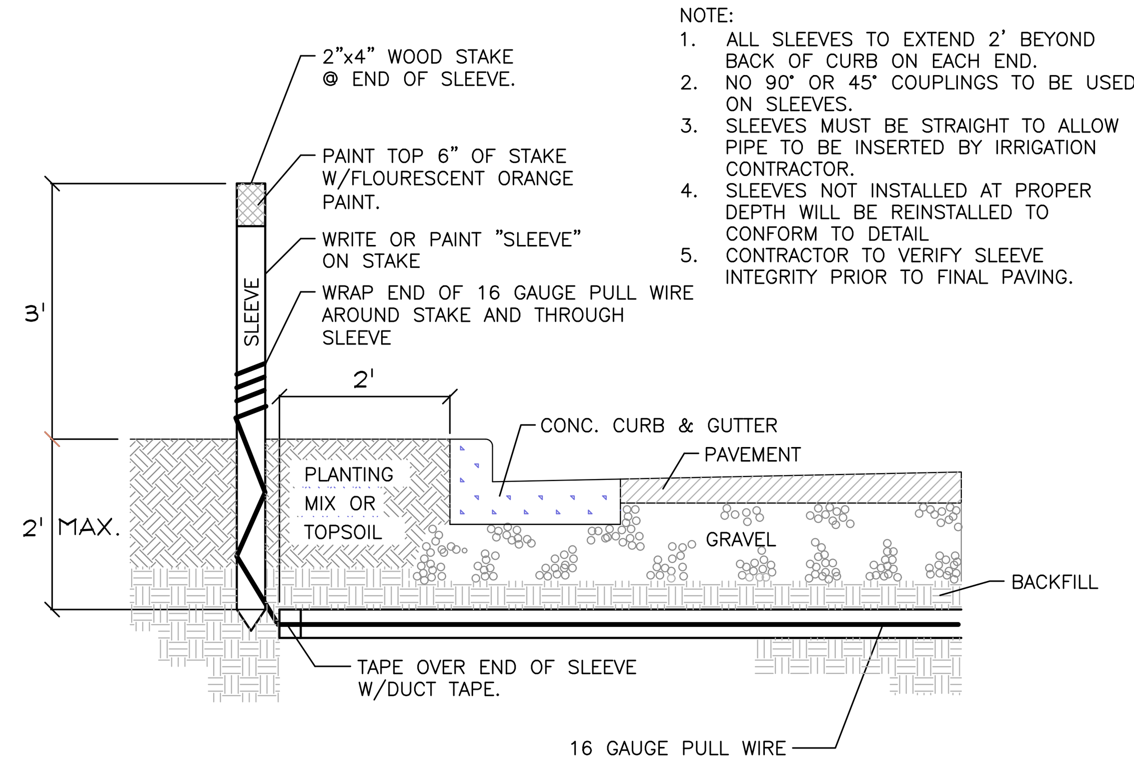
2 MODEL MINI-CLIK

3 RUN LEAD WIRES TO CONTROLLER

NOTE:
MOUNT SENSOR ON SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY. COORDINATE MOUNTING WITH OWNER AND ARCHITECT.

9 RAIN SENSOR
3" = 1'-0"

NOTE:
1. ALL SLEEVES TO EXTEND 2' BEYOND BACK OF CURB ON EACH END.
2. NO 90° OR 45° COUPLINGS TO BE USED ON SLEEVES.
3. SLEEVES MUST BE STRAIGHT TO ALLOW PIPE TO BE INSERTED BY IRRIGATION CONTRACTOR.
4. SLEEVES NOT INSTALLED AT PROPER DEPTH WILL BE REINSTALLED TO CONFORM TO DETAIL.
5. CONTRACTOR TO VERIFY SLEEVE INTEGRITY PRIOR TO FINAL PAVING.



10 IRRIGATION SLEEVING
NTS

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

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

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-03

UNDERGROUND IRRIGATION SYSTEM

PART I: GENERAL

1.01 SCOPE

A. The work covered by this specification shall include the furnishing of all labor, materials, tools and equipment necessary to perform and complete the installation of an automatic irrigation system as specified herein and as shown on the drawings and any incidental work not shown or specified which can reasonably be determined to be part of the work and necessary to provide a complete and functional system.

B. The work covered by this specification also includes all permits, federal, state and local taxes and all other costs, both foreseeable and unforeseeable at the time of construction.

C. No deviation from these specifications, the accompanying drawings, or agreement is authorized or shall be made without prior written authorization signed by the Owner or his duly appointed representative.

1.02 QUALITY ASSURANCE

A. Installer Qualifications: A firm specializing in irrigation work with not less than five (5) years of experience in installing irrigation systems similar to those required for this project.

B. Coordination: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.

C. Inspection of Site: The Contractor shall acquaint himself with all site conditions, including underground utilities before construction is to begin. Contractor shall coordinate placement of underground materials with contractors previously working underground in the vicinity or those scheduled to do underground work in the vicinity. Contractor is responsible for minor adjustments in the layout of the work to accommodate existing facilities.

D. Protection of Existing Plants and Site Conditions: The Contractor shall take necessary precautions to protect site conditions to remain. Should damages be incurred, this Contractor shall repair the damage to its original condition at his own expense. Any disruption, destruction, or disturbance of any existing plant, tree, shrub, or turf, or any structure shall be completely restored to the satisfaction of the Owner and his representatives, solely at the Contractor's expense.

E. Protection of Work and Property: The Contractor shall be liable for and shall take the following actions as required with regard to damage to any of the Owner's property.

1. Any existing building, equipment, piping, pipe coverings, electrical systems, sewers, sidewalks, roads, grounds, landscaping or structure of any kind (including without limitation, damage from leaks in the piping system being installed or having been installed by Contractor) damaged by the Contractor, or by his agents, employees, or subcontractors, during the course of his work, whether through negligence or otherwise, shall be replaced or repaired by Contractor at his own expense in a manner satisfactory to Owner, which repair or replacement shall be a condition precedent to Owner's obligation to make final payment under the Contract.

2. Contractor shall also be responsible for damage to any work covered by these specifications before final acceptance of the work. He shall securely cover all openings into the systems and cover all apparatus, equipment and appliances, both before and after being set in place to prevent obstructions on the pipes and the breakage, misuse or disfigurement of the apparatus, equipment or appliance.

3. All trenching or other work under the leaf canopy of any and all trees shall be done by hand or by other methods so that no branches are damaged in any way.

   Buildings, walks, walls, and other property shall be protected from damage. Open ditches left exposed shall be flagged and barricaded by the Contractor by approved means. The Contractor shall restore disturbed areas to their original condition.

4. The Contractor shall be responsible for requesting the proper utility company to stake the exact location of any underground lines including but not limited to electric, gas, telephone service, water, and cable.

   The Contractor shall take whatever precautions are necessary to protect these underground lines from damage. In the event damage does occur, all damage shall be completely repaired to its original condition, at no additional cost to the Owner.

5. The Contractor shall request the Owner, in writing, to locate any private utilities (i.e., electrical service to outside lighting) before proceeding with any excavation. If, after such requests and necessary staking, private utilities which were not staked are encountered and damaged by the Contractor, they shall be repaired by the Owner at no cost to the Contractor. If the Contractor damages staked or located utilities, they shall be repaired at the Contractor's expense.

F. Codes and Inspections: The entire installation shall comply fully with all local and state laws and ordinances and with all established codes arrange for all necessary inspections and shall pay all fees and expenses in connection with same, as part of the work under this Contract. Upon completion of the work, he shall furnish to the "Owner" all inspection certificates customarily issued in connection with the class of work involved.

G. The Contractor shall keep on his work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Owner, or Owner's representative.

H. The superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.

I. The Owner's Landscape Architect or designated individual shall have full authority to approve or reject work performed by the Contractor. The Owner's Authorized Representative shall also have full authority to make field changes that are deemed necessary.

J. Final Acceptance: Final acceptance of the work may be obtained from the Owner upon the satisfactory completion of all work. Acceptance by the Landscape Architect and/or Owner in no way removes the Contractor of his responsibility to make further repairs, corrections and adjustments to eliminate any deficiencies which may later be discovered.

K. Guarantee: All work shall be guaranteed for one year from date of final acceptance against all defects in material, equipment and workmanship to the satisfaction of the Owner. Repairs, if required, shall be done promptly at no cost to the Owner.

1. The guarantee shall also cover repair of damage to any part of the premises resulting from leaks or workmanship, to the satisfaction of the Owner. The Contractor shall not be responsible for work damaged by others. Repairs, if required, shall be done promptly. The guarantee shall state the name of the Owner, provide full guarantee terms, effective and termination date, name and license number of Contractor providing guarantee, address, and telephone number. It shall be signed by the chief executive of the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.

2. If, within ten (10) days after mailing of written notice by the Owner to the Contractor requesting repairs or replacement resulting from a breach of warranty, the Contractor shall neglect to make or undertake with due diligence to make the same, the Owner may make such repairs at the Contractor's expense; provided, however, that in the case of emergency where, in the judgment of the Owner, delay would cause serious loss or damage, repairs or replacement may be made without notice being sent to the Contractor, and Contractor shall pay the cost thereof.

L. The Contractor shall provide full, 100% irrigation coverage in all areas designed with proposed plantings, in accordance with the site's governing permitting requirements and as designed.

M. On-site Observation: At any time during the installation of the irrigation system by the Contractor, the Owner or Landscape Architect may visit the site to observe work underway. Upon request, the Contractor shall be required to uncover specified work as directed by the Owner or material, workmanship or method of installation not meet the standards specified herein, the Contractor shall replace the work at his own expense.

N. Workmanship: All work shall be installed by qualified, skilled personnel, proficient in the trades required, in a neat, orderly, and responsible manner with recognized standards of workmanship. The Contractor shall have had considerable experience and demonstrated ability in the installation of sprinkler irrigation systems of this type.

1.04 SUBMITTALS

All materials shall be those specified and/or approved by the Landscape Architect.

A. Product Data: After the award of the Contract and prior to beginning work, the Contractor shall submit for approval by the Owner and Landscape Architect, two copies of the complete list of materials, manufacturer's technical data, and installation instructions which he proposes to install.

B. Commence no work before approval of material list and descriptive material by the Landscape Architect.

C. Record Drawings: The Contractor shall record on reproducibles, all changes that may be made during actual installation of the system. Provide controller sequencing and control valve locations.

1. Immediately upon installation of any piping, valves, wiring, sprinklers, etc., in locations other than shown on the original drawings or of sizes other than indicated, the Contractor shall clearly indicate such changes on a set of blueline prints. Records shall be made on a daily basis. All records shall be neat and subject to the approval of the Owner.

2. The Contractor shall also indicate on the record prints the location of all wire splices, original or due to repair, that are installed underground in a location other than the controller pedestal, remote control valve box, power source or connection to a valve-in-head sprinkler.

3. These drawings shall also serve as work progress sheets. The Contractor shall make neat and legible notations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for review and shall be kept in a location designated by the Owner's Representative.

4. Progress payment request and record drawing information must be approved by Landscape Architect before payment is made.

5. If in the opinion of the Owner or his representative, the record drawing information is not being properly or promptly recorded, construction payment may be stopped until the proper information has been recorded and submitted.

6. Before the date of the final site observation and approval, the Contractor shall deliver one set (copies) of reproducible record drawing plans and notes to the Landscape Architect. Record drawing information shall be approved by the Landscape Architect prior to submittal to Owner for final payments, including retentions.

D. Operations and Maintenance Manuals: The Contractor shall prepare and deliver to the Owner, or his designated representative within ten (10) calendar days prior to completion of construction, a hard cover binder with three rings containing the following information:

1. Index sheet stating the Contractor's address and business telephone number, list of equipment with name(2) and address(es) of local manufacturer's representative(s).

2. Catalog and parts sheets on every material and equipment installed under this Contract.

3. Complete operating and maintenance instruction on all major equipment. Include initial controller schedule and recommended schedule after establishment period.

4. Demonstrate to and provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Owner, or his designated representative at the conclusion of the project that this service has been rendered.

1.05 EXPLANATION OF DRAWINGS

A. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings and sleeves which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the work and plan his work accordingly, furnishing such offsets, fittings and sleeves as may be required to meet such conditions.

B. The drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features. Deviations shall be brought to the Landscape Architects attention.

C. All work called for a on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

D. The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been known in engineering. Such obstructions or differences should be brought to the attention of the Landscape Architect. In the event that notification is not performed, the Contractor shall assume full responsibility for any revision necessary.

E. If, in the opinion of the Landscape Architect, the labor furnished by the Contractor is incompetent, unskilled, or unreliable, his equipment inadequate, improper or unsafe, or if the Contractor shall fail to continuously and diligently execute the construction, the Landscape Architect or Owner shall, in writing, instruct the Contractor to remove all such causes of noncompliance and the Contractor shall promptly comply.

F. The Contractor shall be responsible for full and complete coverage of all irrigation areas. The Landscape Architect shall be notified of any necessary adjustments at no additional cost to the Owner. Any revisions to the irrigation system must be submitted and answered in written form, along with any change in Contract price. Layout may be modified, if necessary to obtain coverage. Spacing not to exceed 60% of the diameter.

PART II: PRODUCTS

2.01 MATERIALS

Material and equipment shall be supplied by the Contractor. No substitutions shall be allowed without the prior written approval of the Owner/Landscape Architect. The Contractor shall inspect all materials and equipment prior to installation, and defective materials shall be replaced with the proper materials and equipment. Those items used in the installation found to be defective, improperly installed or not as specified, shall be removed and the proper materials and equipment installed in the proper manner, as interpreted by the Owner/Landscape Architect. The Contractor shall remove all damaged and defective pipe and equipment from the site.

2.02 PIPING

A. General Provisions: All materials throughout the system shall be new and in perfect condition unless otherwise directed by the Landscape Architect.

B. Polyvinyl Chloride Pipe (PVC): (Where indicated on plan, use non-potable purple piping.)

1. Laterals: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220. All lateral piping less than 3" in diameter shall be Class 200 SDR-21.

2. Main Line Under Pressure: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220, Schedule 40 with belled end for solvent weld connection.

3. Pipe Markings: All PVC pipe shall bear the following markings:
   - o Manufacturer's Name
   - o Nominal Pipe Size
   - o Schedule or Class
   - o Pressure Rating of PSI
   - o NSF (National Sanitation Foundation) Approval
   - o Date of Extrusion

2.04 PVC JOINTS

Joints in PVC pipe smaller than 3" shall be solvent welded in accordance with the recommendations of the pipe manufacturer; the solvent cleaner and welding compound furnished with the pipe.

2.05 THREADED CONNECTIONS

A. Threaded PVC connections shall be made up using Teflon tape only.

B. Connection between mainline pipe fittings and automatic or manual control valves shall be made using Schedule 80 threaded fittings and nipples.

2.06 SOLVENT CEMENT

A. General: Provide solvent cement and primer for PVC solvent weld pipe and fittings recommended by the manufacturer. Pipe joints for solvent weld pipe to be belled end. Pipe joints for gasketted pipe to be intrical ring type. Insert gaskets will not be accepted.

B. Thrust Blocks: Main line piping 3" or greater in diameter shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations or, in the absence of specified recommendations by the pipe manufacturer. 3000 PSI concrete thrusts shall be properly installed at tees, elbows, 45's, crosses, reducers, plugs, caps and valves.

2.07 PIPE AND WIRE SLEEVES

A. Sleeves to be installed:

1. The Contractor shall install irrigation system pipe and wire sleeves conforming to the following:

   a. All pipe sleeves shall extend a minimum of 36" beyond the edges of pavement.

   b. All pipe sleeves to be installed beneath future/existing road surfaces shall be PVC pipe Schedule 40 or jack and bore steel pipe as per FDOT specifications, and as shown on plans.

   c. All irrigation system wires shall be sleeved seperately from main or lateral lines.

   d. All pipe sleeves shall be installed at the minimum depth specified for main lines, lateral lines, and electric wire.

   e. Contractor shall coordinate all pipe sleeve locations and depths prior to initiating installation of the irrigation system.

2.08 SPRINKLER HEADS

A. Spray Sprinklers: The sprinkler shall be a fixed spray type designed for in-ground installation. The nozzle shall elevate 6" (or as designated on plan) when in operation. The body of the sprinkler shall be constructed of non-corrosive heavy duty Cycolac. A filter screen shall be in the nozzle piston. All sprinkler parts shall be removable through the tip of the unit by removal of a threaded cap.

Riser mounted spray shall be as indicated on the plans. The sprinkler shall consist of a nozzle and body. The body of the riser-mount sprinkler shall be constructed of non-corrosive materials. A cone strainer shall be a separate part with the nozzle assembly to allow for easy flushing of the sprinkler. Maximum working pressure at the base of the sprinkler shall be 40 PSI.

(continued...)

REVISIONS	
No.	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 14378800
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

IRRIGATION NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-04

2.09 AUTOMATIC CONTROL VALVE

The automatic remote control valves shall be as specified on the plans, or approved equal.

2.10 GATE VALVES

A. Gate valves for 3/4" through 2-1/2" shall be of brass or bronze construction, solid wedge, IPS threads, non-rising stem with wheel operating handle, for a continuous working pressure of 150 PSI.

B. Gate valves for 3" and larger: Iron body, brass or bronze mounted AWWA gate valves, with a clear waterway equal to the full nominal diameter of the valve, rubber gasket for a continuous working pressure of 150p PSI. Valve shall be equipped with a square operating nut.

2.11 VALVE BOXES

A. For gate valves, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

B. For control valves 3/4" through 2", the drip valve assemblies, use AMETEK #10-181-014 box with #10-181-015 locking lid, or sized as necessary to effectively house the equipment

C. For control wiring splices, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

2.12 IRRIGATION WIRING

A. Wiring used for connecting the electric control valves to the controllers shall be Type UF, 600 volt, single strand, solid copper with PVC insulation 4/64" thick. Size shall be 14 gauge, red for "hot" or lead wires, and common wire to be 14 gauge, white in color.

B. Contractor shall perform an ohm test on ground to assure adequate protection against surges and indirect lightning strikes.

2.13 MISCELLANEOUS MATERIALS

A. Drainage Backfill: Cleaned gravel or crushed stone, graded from 1" maximum to 3/4" minimum.

B. Metalized Underground Tape: The detectable, underground utility marking tape shall consist of a minimum: 5 mil (0.005") overall thickness; five-ply composition; ultra-high molecular weight, 100% virgin polyethylene; acid, alkaline and corrosion resistant; with no less than 150 pounds of tensile break strength per 6" width; color-code impregnated with color stable, lead-free, organic pigments suitable for direct burial. Tapes utilizing reprocessed plastics or resins shall not be acceptable. The detectable, underground utility marking tape shall have a 35 gauge (0.0035") solid aluminum foil, core encapsulated within a 2.55 mil (0.00255") polyethylene backing and a 0.6 mil (0.006") PET cover coating. The laminate on each side shall consist of a 0.75 mil (0.00075") layer of hot LPDE, poly-fusing the "sandwich" without use of adhesives.

2.14 AUTOMATIC CONTROL SYSTEM

An Independent Station Controller: Furnish a solid state controller, as specified on the plans. Each station shall be capable of timing from zero (0) minute to 99 minutes per station in one (1) minute increments.

Each station shall be capable of operating two (2) 7VA electric valve-in-head solenoids.

The stand-alone controller shall have two (2) possible programs.

The stand-alone controller shall provide global percentage increase/decrease (water budget) for all stations simultaneously, from ten (10) to two hundred (200) percent, in ten (10) percent increments.

All stations shall be able to be turned on/off manually buy operating timing mechanism or by manual switch at station output.

The stand-alone controller shall incorporate an integral MOV surge protection into the terminal block for each of its 24 VAC field wire outputs. Controller power input wires will also incorporate surge protection.

The control panel shall provide continuous display time. It shall have alphanumeric displays of descriptive English menus and legend identifiers with cursor selection of function and precision value adjustment by rotary dial input.

The stand-alone controller shall be UL listed and FCC approved.

The stand-alone controller shall have 117 VAC, 60 Hz input, 26.5 VAC, 60 Hz output for operating 24 VAC solenoids.

The stand-alone controller cabinet shall be a lockable and weather-resistant outdoor cabinet. Mount as noted on plans.

The controller shall be equipped with lightening protection, by the Contractor, on both the primary (120v) and each secondary (24v) circuit. The controller circuits shall be grounded to a copper clad grounding rod located at each controller.

The controller shall be equipped for a water conservation device. as specified.

PART III: EXECUTION

3.01 INSPECTION

The Contractor shall examine the areas and conditions under which landscape irrigation system is to be installed and notify the Landscape Architect in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect.

3.02 PREPARATION

The Contractor shall provide sleeves to accommodate piping under walks or paving. The Contractor shall coordinate with other trades and install to accurate levels prior to paving work. Cutting and patching of paving and concrete will not be permitted. The Contractor shall maintain all warning signs, shoring, barricades, flares and red lanterns, as required by any local codes, ordinances or permits.

3.03 TRENCHING AND BACKFILLING

A. Excavation: The Contractor shall stake out the location of each run of pipe, sprinkler heads, sprinkler valves and isolation valves prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space or backfilling and tamping. Trenches for pipe shall be cut to required grade lines, and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of the trenches shall be free of rock or other sharp edged objects. Minimum cover shall be as follows:

Pipe and Wire Depth

Pressure Mainline	18" at top of pipe from Finish Grade
Lateral Piping (rotor)	12" at top of pipe from Finish Grade
Lateral Piping (pop-up)	12" at top of pipe from Finish Grade
Control Wiring	Side of main Line

B. Minimum Clearances: All pipelines shall have a minimum clearance of six inches from each other and from lines of other crafts. Parallel lines shall not be installed directly over one another. No lateral line shall be installed in the main-line trench.

3.04 INSTALLATION OF PIPING

A. PVC Pipe and Joints: The Contractor shall not install solvent wild pipe when air temperature is below 40ø F. Installation shall be in accordance with the manufacturer's instructions.

1. Only the solvent recommended by the pipe manufacturer shall be used. All PVC pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer, and it shall be the Contractor's full responsibility to make arrangements with the pipe manufacturer for any field assistance that may be necessary. The Contractor shall assume full responsibility for the correct installation.

3.05 BACKFILLING PROCEDURES

Initial backfill on PVC lines shall be pulverized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. The Contractor shall coordinate the location of trees and shrubs with the routing of lines and final head locations.

A. Backfill and Compaction: The Contractor shall leave trenches slightly mounded to allow for settlement after the backfilling is completed. The Contractor shall clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required.

The Contractor shall carefully backfill excavated materials approved for backfilling, consisting of earth, loam, sand, and other approved materials, free of rock and debris over 1" in size. Backfill shall be compacted to original density of surrounding soil without dips, sunken areas, or irregularities.

The Contractor shall conform to DOT requirements for methods and required compaction percentages, for roads and paving.

The Contractor shall hand place the first 6" of backfill (or to top of pipe) and have it walked on so as to secure the position of the pipe and wire.

No wheel rolling will be allowed. The Contractor shall remove rock or debris extracted from backfill materials and dispose of offsite. The Contractor shall fill any voids left in backfill with approved backfill materials.

B. Existing Lawns: Where trenching is required across existing lawns, uniformly cut strips of sod 6" wider than trench. The Contractor shall remove sod in rolls of suitable size for handling and keep moistened until replanted. The Contractor shall replant sod within 48 hours after removal, roll and water generously. The Contractor shall resod any areas not in healthy condition equal to adjoining lawns 10 days after replanting.

C. Seeded Area: Trenching will be required across existing seeded areas, primarily roadway edging. The Contractor shall conform to the requirements of seeding, Section 02930 for the reseeding of the disturbed trench area.

D. Pavements: Jack and bore or directional bore piping under paving materials as per local regulatory codes. No cutting and patching of pavement will be permitted.

3.06 VALVES

A. Isolation Valves: Shall be sized corresponding to adjacent pipe size. Specified valve boxes shall be installed flush with finish grade in such a manner that surface forces applied to their exposed area will not be transmitted to the piping in which the valve is installed nor any other piping, wiring or other lines in the vicinity of said valves.

B. Gate Valves: Install where shown, in valve boxes.

C. Electric Control Valves: Shall be installed in specified valve boxes. The valve shall have 6" of 3/4" pea gravel installed below the bottom of the valve. If the valve box does not extend to the base of the valve, a valve box extension shall be installed. Electric control valves shall be installed where shown and grouped together where practical. The Contractor shall place no closer than 24" to walk edges, bikeway edges, buildings and walls. The Contractor shall adjust the valve to provide flow rate or rated operating pressure required for each sprinkler circuit.

3.07 CONDUIT AND SLEEVES

A. Conduit and Sleeves for Control Wiring and Main/Lateral Pipe: The Contractor shall provide and install where necessary. Contractor shall coordinate locations of previously installed sleeving with the General Site Contractor.

The Contractor shall coordinate installation of sleeves with work of other disciplines.

3.08 CONTROLS

A. The Contractor shall connect electric control valves to controllers in a clockwise sequence to correspond with station settings beginning with Stations 1, 2, 3, etc. Automatic controllers shall be provided and installed by the Contractor as noted on the drawings. All zones will be labeled on the controller.

B. Controllers shall be equipped with lightning protection and grounded to a standard 5/8" copper clad steel ground rod driven a minimum of 8' into the ground and clamped.

C. The electrical service to the controllers shall be performed by an electrical subcontractor in compliance with NEC requirements.

3.09 CONTROL WIRE

A. Control wiring between the controller and electric valves shall be buried in main line trenches or in separate trenches. Electrical connection at valve will allow for pigtail so solenoid can be removed from valve with sufficient slack to allow ends to be pulled 12" above ground for examination and cleaning.

B. An expansion loop shall be provided at every valve at 100' o.c. Expansion loop shall be formed by wrapping wire at least eight times around a 3/4" pipe and withdrawing pipe.

C. The wire shall be bundled and taped every ten feet. The wire shall be laid in the trench prior to installing the pipe being careful to install wire beneath and 6" to the side of the main pipe line.

D. Electrical connections to electric control valves shall be made with Rainbird Pen-Tite or Techdel GT-3-GEL - Tite connectors or equal.

Power Connections: Electrical connections to power and signal wires shall be made using 3M 82-A2 power cable splice kits.

3.10 SPRINKLER HEADS

A. General Provisions:

1. Sprinkler heads shall be installed as designated on the shop drawings. Heads shall be installed on flexible PVC. Top to be flush with finish grade or top of curb.

2. Spacing of heads shall not exceed the maximum indicated on the shop drawings (unless directed by the Landscape Architect). In no case shall the spacing exceed the maximum recommended by the manufacturer.

B. Head Types:

1. Pop-up- Rotary Sprinkler Heads: Shall be installed on flex joint and be set with top of head flush with finish grade. Heads installed at curb shall have 6" to 10" between perimeter of head and concrete. Heads placed at edge of pavement having no curb shall be installed 24" from edge of pavement.

2. Spray Pop-up Sprinkler Heads: Shall be installed on flexible PVC and be set with top of head flush with finished grade. Sprinkler heads placed adjacent to curbs will be installed 9" from concrete. Sprinkler heads placed adjacent to pavement having no curb shall be installed 24" from the edge of pavement.

3.11 COMPLETION

A. Flushing: Before sprinkler heads are set, the Contractor shall flush the lines thoroughly to make sure there is no foreign matter in the lines.

The Contractor shall flush the main lines from dead end fittings for a minimum of five minutes under a full head of pressure.

B. Testing: The Contractor shall notify Landscape Architect and Owner forty-eight (48) hours in advance of testing.

Prior to backfilling of main line fittings, Contractor shall fill the main line piping with water, in the presence of the Owner/Landscape Architect, taking care to purge the air from it by operating all the sprinkler control valves one or more times and/or such other means as may be necessary. A small, high pressure pump or other means of maintaining a continuous water supply shall be connected to the main line and set so as to maintain 100 PSI in the main line system for two (2) hours without interruption. When this has been accomplished and while the pressure in the system is still 100 PSI, leakage testing shall be performed in accordance with AWWA Standard C-600. Pressure readings shall be noted and make up water usage shall be recorded. Should the rate of make up water usage indicate significant leakage, the source of such leakage shall be found and corrected and the system then retested until the Owner/Landscape Architect is satisfied that the system is reasonably sound. Lateral line testing shall be conducted during the operating testing of the system by checking visually the ground surface until no leaks in this portion of the system are evident. Leaks shall be repaired or paid for by the Contractor at any time they appear during the warranty period.

C. Adjustment and Coverage of System: Coordinate pressure testing with adjustments and coverage test of system so both may occur at the same time. The Contractor shall balance and adjust the various components of the system so that the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

3.12 WARRANTY

A. The Contractor shall fully warrant the landscape irrigation system for a period of one (1) year after the written final acceptance and will receive a written confirmation from the Landscape Architect that the warranty period is in effect.

B. During the warranty period, the Contractor will enforce all manufacturer's and supplier's warranties as if made by the Contractor himself. Any malfunctions, deficiencies, breaks, damages, disrepair, or other disorder due to materials, workmanship, or installation by the Contractor and his suppliers shall be immediately and properly corrected to the proper order as directed by the Owner and/or Landscape Architect.

C. Any damages caused by system malfunction shall be the responsibility of the Contractor who shall make full and immediate restoration for said damages.

No. | REVISIONS | DATE | BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

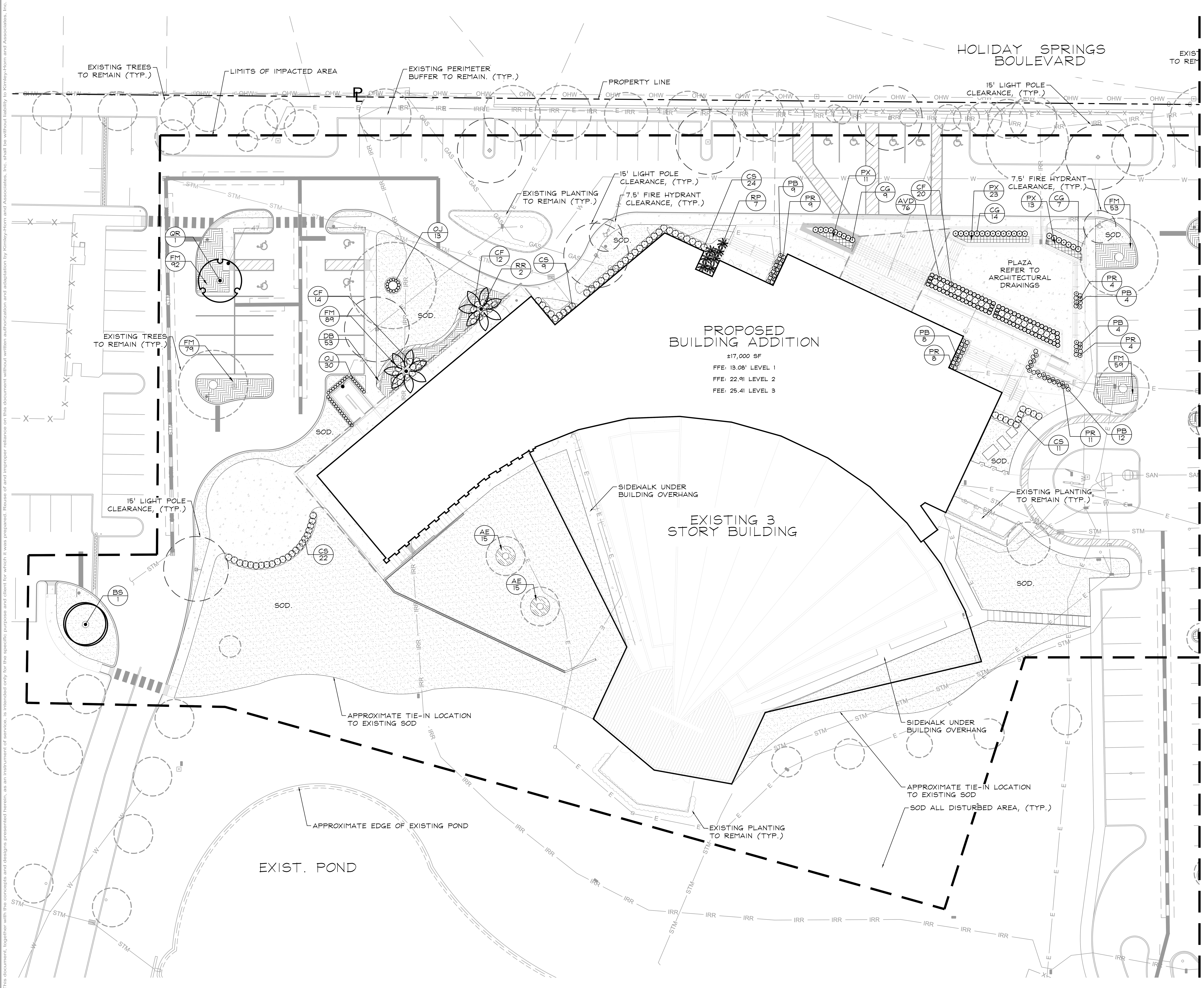
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

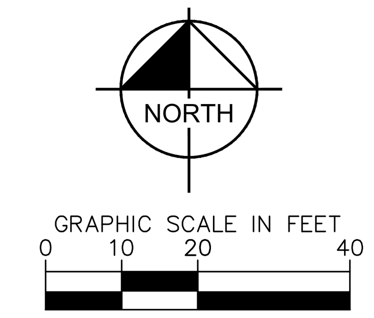
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-05





PLANT SCHEDULE

CODE	COMMON NAME
TREES	
BS	Gumbo Limbo
CE	Silver Buttonwood
QR	Southern Live Oak
QV	Southern Live Oak
PALM TREES	
RR	Royal Palm
SHRUBS	
AVD	Dwarf Variegated Ginger
CF	Red Sister Ti Plant 3 PPP Shade Grown
CG	Gold Dust Croton 3 PPP
CS	Small Leaf Clusia
OJ	Mondo Grass
PB	Butterfly Series Star Cluster
PR	Ruby Glow Star Cluster
RP	Lady Palm Shade Grown. 7 Stems min.
SHRUB AREAS	
AE	Cast Iron Plant Shade Grown
AZ	Variegated Shell Ginger
FM	Green Island Ficus
HN	Dwarf Firebush
MCA	Pink Muhly Grass
GROUND COVERS	
DB	Blueberry Flax Lily
PX	Xanadu Philodendron
SOD	St. Augustine Grass

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No. REVISIONS DATE BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

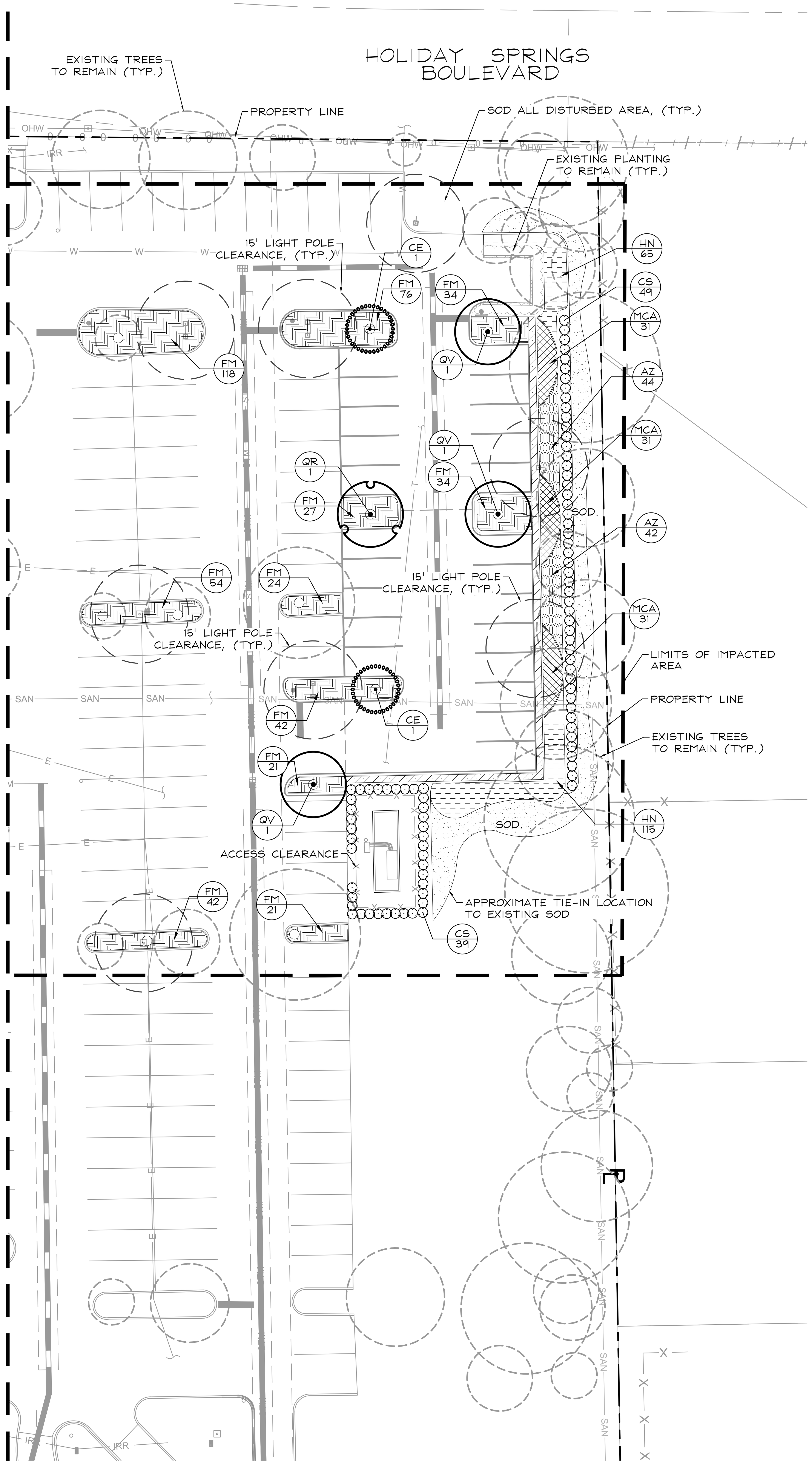
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

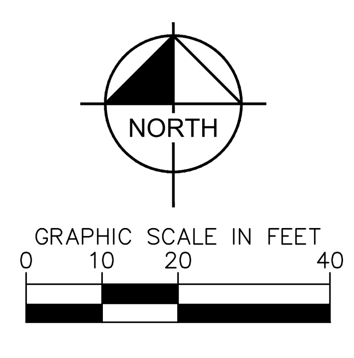
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-01





PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	QTY
TREES							
BS	Bursera simaruba	Gumbo Limbo	F.G.	3" Cal.	15' HT X 6' SPR	Yes	1
CE	Conocarpus erectus f. sericeus	Silver Buttonwood	F.G.	3" Cal.	12' HT x 5' SPR	Yes	2
QR	Quercus virginiana	Southern Live Oak	Relocated				2
QV	Quercus virginiana	Southern Live Oak	F.G.	3" Cal.	15' HT X 6' SPR	Yes	3
PALM TREES							
RR	Roystonea regia	Royal Palm	F.G.		22' OA	Yes	2

CODE	BOTANICAL NAME	COMMON NAME	CONT	O.C.	SIZE	NATIVE	QTY
SHRUBS							
AVD	Alpinia zerumbet 'Variegata Dwarf'	Dwarf Variegated Ginger	Cont.	24" O.C.	24" HT" X 24" SPR.	Florida Native	76
CF	Cordyline fruticosa 'Red Sister' 3 PPP Shade Grown	Red Sister Ti Plant	Cont.	24" O.C.	36" HT	Yes	46
CG	Codiaeum x 'Gold Dust' 3 PPP	Gold Dust Croton	Cont.	30" O.C.	30" HT	Yes	30
CS	Clusia guttifera	Small Leaf Clusia	Cont.	18" O.C.		Yes	154
OJ	Ophiopogon japonicus	Mondo Grass	Cont.	12" O.C.	18" HT. X 18" SPR.	Yes	43
PB	Pentas lanceolata 'Butterfly'	Butterfly Series Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	37
PR	Pentas lanceolata 'Ruby Glow'	Ruby Glow Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	36
RP	Rhapis excelsa Shade Grown. 7 Stems min.	Lady Palm	25 gal	As Shown	5' HT		7
SHRUB AREAS							
AE	Aspidistra elatior Shade Grown	Cast Iron Plant	Cont.	24" O.C.	15' HT. x 15' SPR.	Florida Friendly	30
AZ	Alpinia zerumbet 'Variegata'	Variegated Shell Ginger	Cont.	36" O.C.	24"x24"	Florida Friendly	86
FM	Ficus microcarpa	Green Island Ficus	Cont.	24" O.C.	18" HT. X 18" SPR.	Florida Friendly	907
HN	Hamelia nodosa	Dwarf Firebush	Cont.	24" O.C.	24" HT. X 24" SPR.	Yes	180
MCA	Muhlenbergia capillaris	Pink Muhly Grass	Cont.	30" O.C.	30" HT. x 30" SPR.	Yes	93
GROUND COVERS							
DB	Dianella tasmanica 'Blueberry'	Blueberry Flax Lily	Cont.	18" O.C.	12" HT	Florida Friendly	238
PX	Philodendron x 'Xanadu'	Xanadu Philodendron	Cont.	24" O.C.	18" X HT. X 18" SPR.	Florida Friendly	47
SOD	Stenotaphrum secundatum	St. Augustine Grass	Sod				± 6,577

City of Margate Code Compliane Chart

	Required	Provided
Section 40.704 - LANDSCAPING		
40.704.E.1.a - Materials, installation and irrigation requirements.		
A minimum of 50% of all required landscaping shall be South Florida native species	✓	✓
40.704.E.1.b - Materials, installation and irrigation requirements.		
Trees shall be planted at a Minimum of 12' Height and 2" DBH	✓	✓
Palm shall not exceed 25% of the requiered shade tree	✓	✓
40.704.G.1 - Required landscaping adjacent to other perimeters		
one (1) shade tree along the common property line for every for every seventy-five (75) linear feet or fractional part thereof. Impacted East {Property Buffer: 196 LF / 75 = 3	3	Satisfied with Existing Trees
40.704.H.1.g - Parking area and pedestrian zone interior landscaping		
There shall be one (1) shade tree and three (3) shrubs per two hundred (200) square feet, or fraction thereof, of interior landscaping in the VUA minus the landscape islands	✓	✓

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

LANDSCAPE PLAN

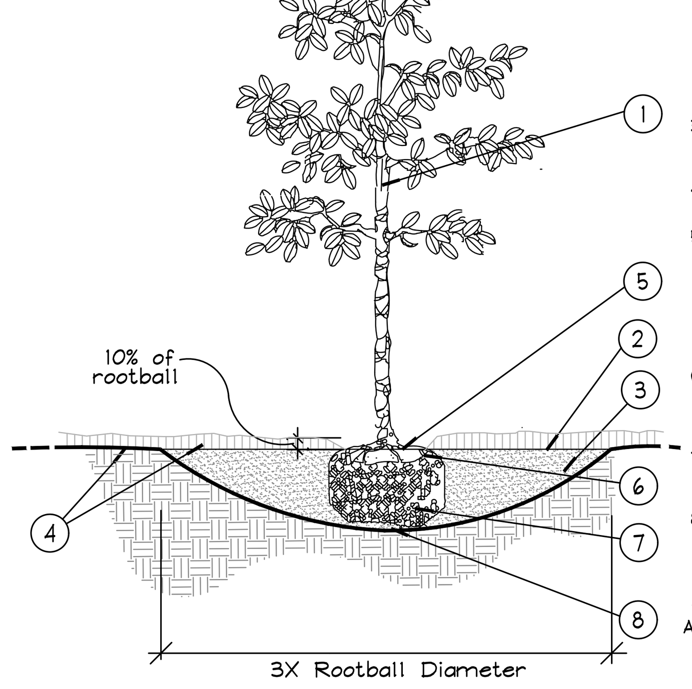
Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT	143788000
DATE	07/17/2025
SCALE	AS SHOWN
DESIGNED BY	NS
DRAWN BY	NS
CHECKED BY	TCH

No.	REVISIONS	DATE	BY

SHEET NUMBER
LP-02



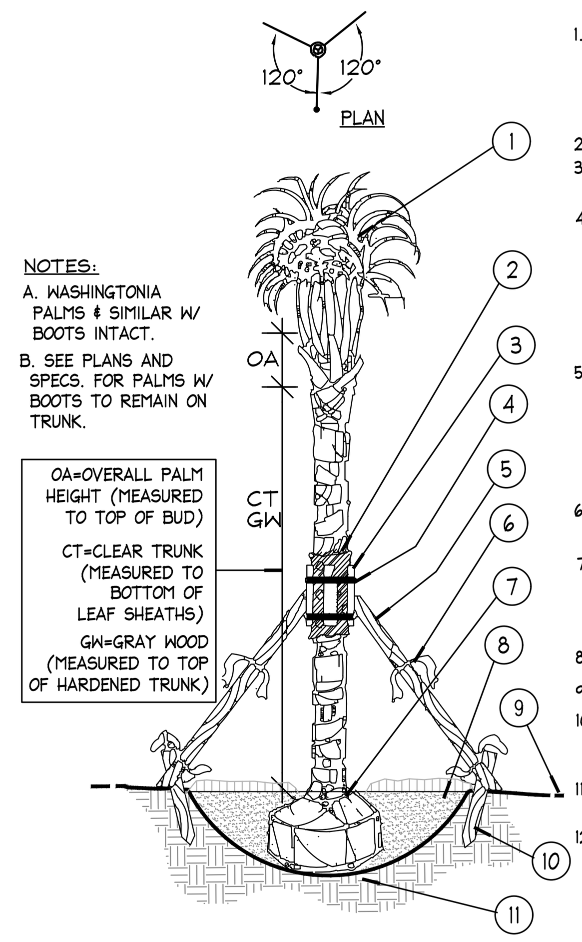
1. TRUNK
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW/ WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. B & B OR CONTAINER (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
7. REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL.
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

A Tree Planting
SECTION — NTS



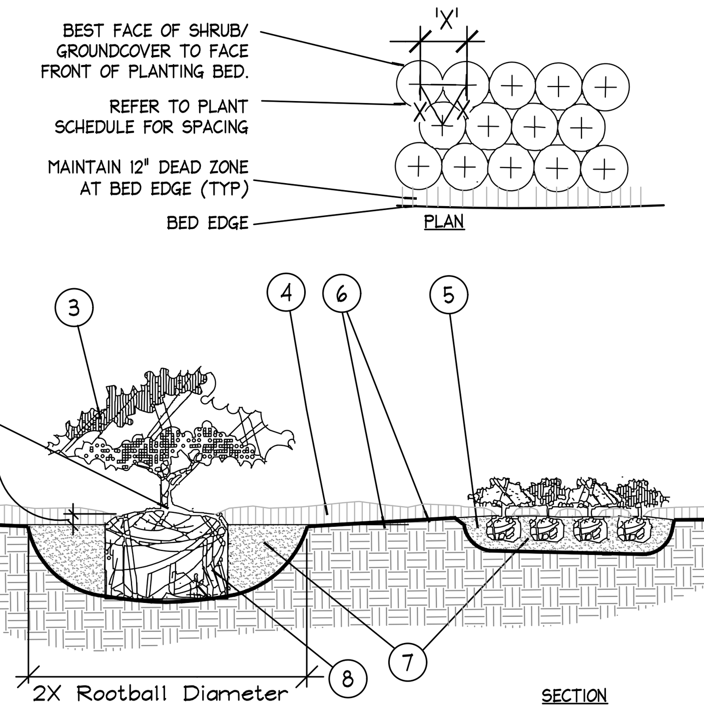
NOTES:

A. WASHINGTONIA PALMS & SIMILAR W/ BOOTS INTACT.
B. SEE PLANS AND SPECS. FOR PALMS W/ BOOTS TO REMAIN ON TRUNK.

1. MINIMUM OF NINE (9) GOOD PALM FRONDS; PRUNE AND TIE FRONDS WITH HEMP TWINE. SABAL PALMS TO BE SELECTIVELY "HURRICANE CUT", LEAVING ONLY NEWLY-EMERGING GROWTH.
2. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
3. FIVE (5) 18"L, 2X4 WOOD BATTENS. UNTREATED, #2
4. SECURE BATTENS WITH TWO (2) 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED PROPORTIONATELY TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
5. THREE (3) 8'L 2X4 SUPPORTS. NAIL (DRILL AND NAIL IF NECESSARY) TO BATTENS AND 2" X 4" STAKES. PALMS SHALL BE PLUMB VERTICALLY UNLESS OTHERWISE NOTED.
6. PROVIDE FLAGGING AT MIDPOINT AND BASE OF SUPPORTS.
7. TOP-MOST ROOT SHALL BE VISIBLE AT THE SURFACE OF THE ROOTBALL, SLIGHTLY ABOVE SURROUNDING GRADE.
8. 3" SPECIFIED MULCH
9. FINISH GRADE
10. 24"L (MIN.) 2X4 P.T. WOOD STAKES, NAIL TO SUPPORT POLES
11. PREPARED PLANTING SOIL AS SPECIFIED
12. ALTERNATE PALM ANCHORING SYSTEMS MAY BE SUBSTITUTED UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

B Palm Planting and Staking
SECTION — NTS

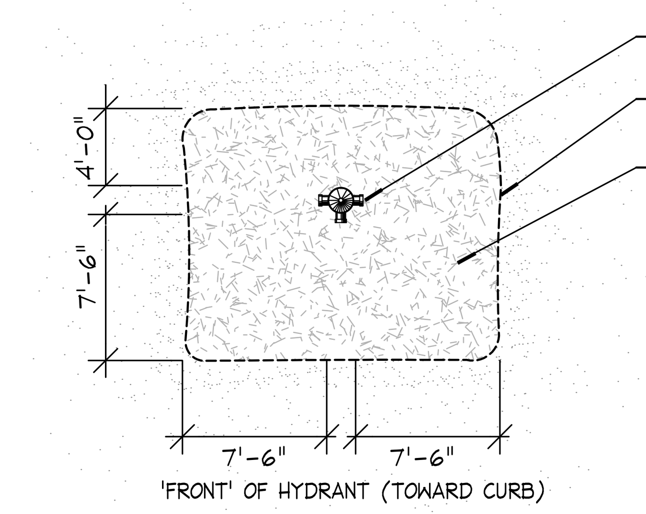


NOTES:

1. FIND POINT WHERE TOPMOST ROOT EMERGES FROM TRUNK WITHIN 2" OF SURFACE. CLEAR EXCESS SOIL IF NECESSARY.
2. TOP 10% OF SHRUB AND GROUNDCOVER ROOTBALLS TO BE PLANTED ABOVE THE LANDSCAPE GRADE. DO NOT COVER EXPOSED 10% ON SIDES WITH SOIL.
3. PRUNE ALL LIKE SHRUBS WITHIN A PLANTED MASS TO ACHIEVE A UNIFORM MASS/HEIGHT.
4. 3" MINIMUM MULCH AS SPECIFIED - DO NOT COVER ENTIRE SHRUB ROOTBALL OR CREATE 'WATER RINGS' ONLY COVER SIDES OF ROOTBALL WITH MULCH
5. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
6. FINISHED GRADE (SEE GRADING PLAN).
7. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUNDCOVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
8. SCARIFY ROOTBALL SIDES AND BOTTOM.

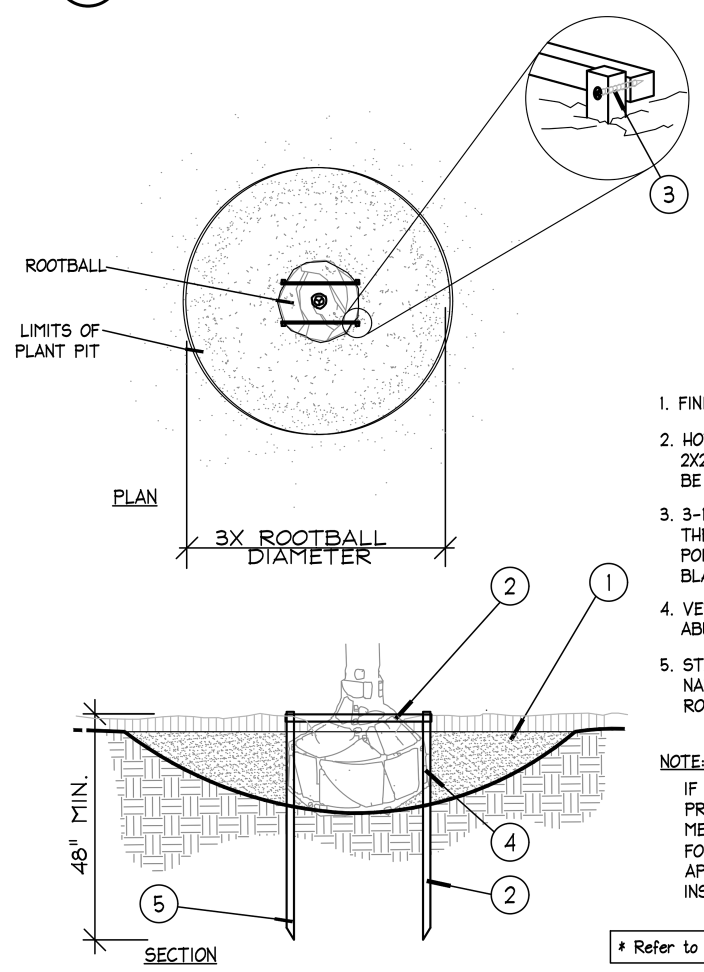
* ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

C Shrub / Groundcover Planting
PLAN/SECTION — NTS



1. FIRE HYDRANT
2. NO PLANT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. PROVIDE A MULCH, 3" DEPTH MIN., SURROUNDING AREA INDICATED.

D Fire Hydrant Clear Zone
PLAN — NTS



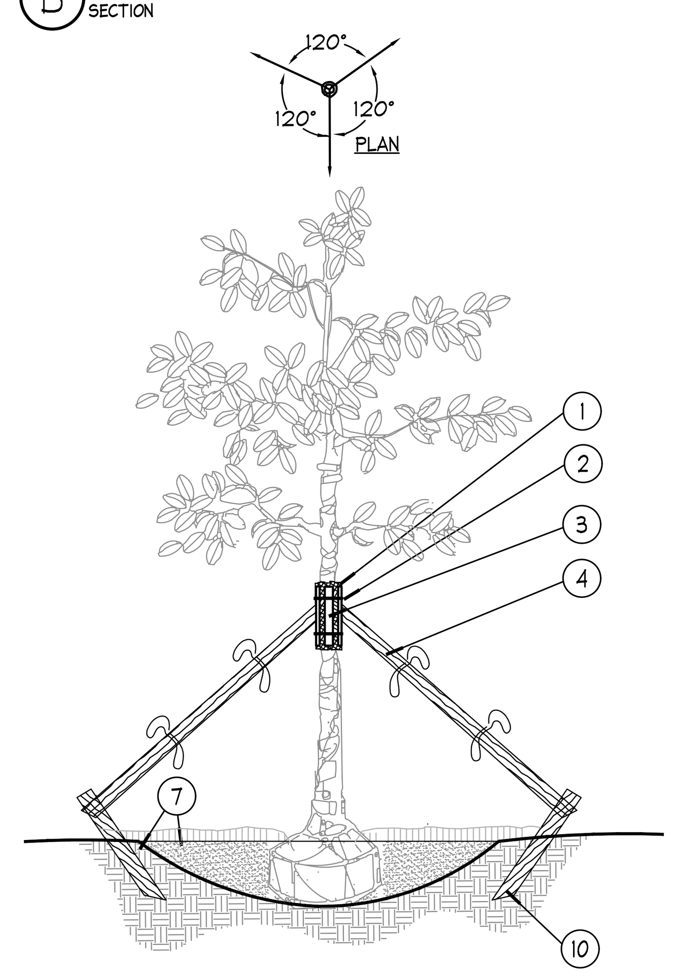
1. FINISH GRADE
2. HORIZONTAL 2X2 SCREWED TO 2X2 STAKE. ALL WOOD SHALL BE #2 UNTREATED.
3. 3-1/2" DRYWALL SCREW, THREAD SIZE 12, SHARP POINT, FULL THREAD, BLACK PHOSPHATE FINISH
4. VERTICAL STAKES SHALL ABUT SIDE OF ROOTBALL
5. STAKES TO EXTEND INTO NATIVE SOIL BY 1-1/2 X THE ROOTBALL DEPTH MIN.

NOTE:

IF SPATIAL REQUIREMENTS PRECLUDE STAKING WITH THIS METHOD, SUBMIT ALTERNATE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLING PLANT.

* Refer to details B and D for planting

E Staking - up to 65 gal. or B&B to 3-1/2" Cal.
PLAN/SECTION — NTS



1. FIVE (5) LAYERS OF BURLAP TO PROTECT TRUNK
2. TWO STEEL BANDS TO SECURE BATTENS
3. FIVE 2 X 4 X 18"L WOOD BATTENS
4. THREE (3) 2" X 8' LODGE POLES. DRILL, USING GALVANIZED SCREWS, TO BATTENS AND 2" X 4" STAKES. NO SCREWS SHALL PENETRATE TREE. FLAG AT MIDPOINT AND AT BASE.
10. 2" x 4" x 3' (MIN), P.T. WOOD STAKES BURIED 3" BELOW FINISHED GRADE.
7. FINISHED GRADE (SEE GRADING PLAN)

NOTES:

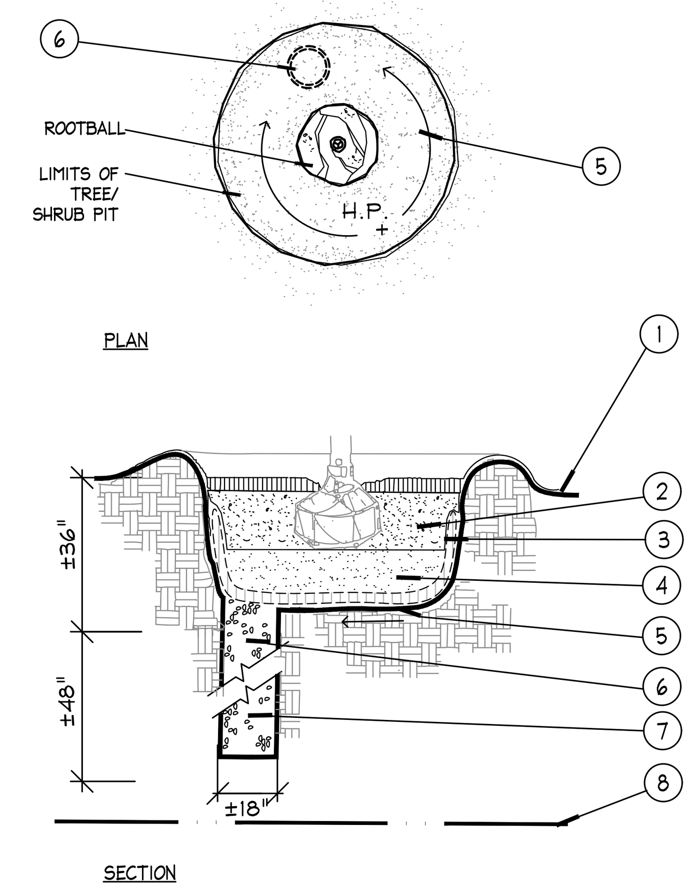
A. ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. ALTERNATE TREE ANCHORING SYSTEMS MAY BE SUBSTITUTED FOR WOOD STAKING SYSTEM UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

D. RUBBER HOSE/WIRE SYSTEMS ARE NOT ALLOWED.

* Refer to details B and D for planting

F Large Tree Staking - 100 Gal + or B&B 4" +
SECTION — NTS



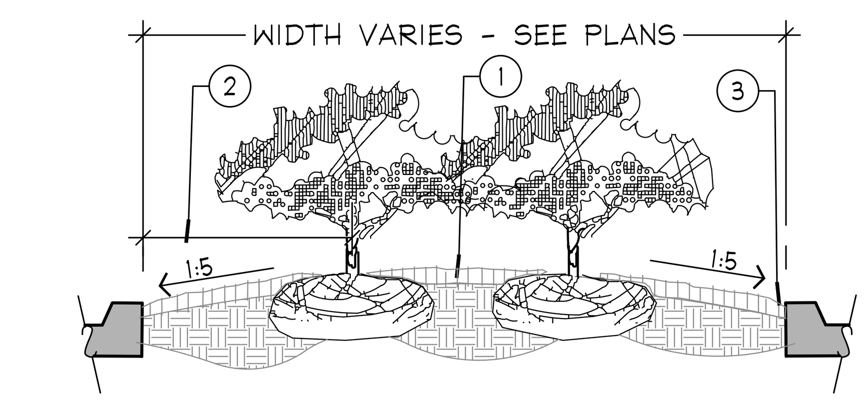
1. FINISH GRADE
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER
4. 12" CLEAN SAND, COMPACTED. ADJUST LAYER THICKNESS SO TOP OF ROOTBALL IS AT LEAST 1" ABOVE FINISHED GRADE.
5. SLOPE BOTTOM TO DRAIN
6. ±18"ϕ AUGURED HOLE PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
7. BACKFILL WITH 1/2" - 3/4" GRAVEL.
8. WATER TABLE. (DEPTH VARIES)

NOTE:

FOR A PARKING ISLAND PLANTING SITUATION, CONTRACTOR TO BACKFILL ENTIRE LENGTH OF PLANTING AREA TO WITHIN 6" OF BACK OF CURB OR EDGE OF PAVEMENT.

REFER TO NOTE 0.3 OF WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

G Poor Drainage Condition
PLAN/SECTION — NTS

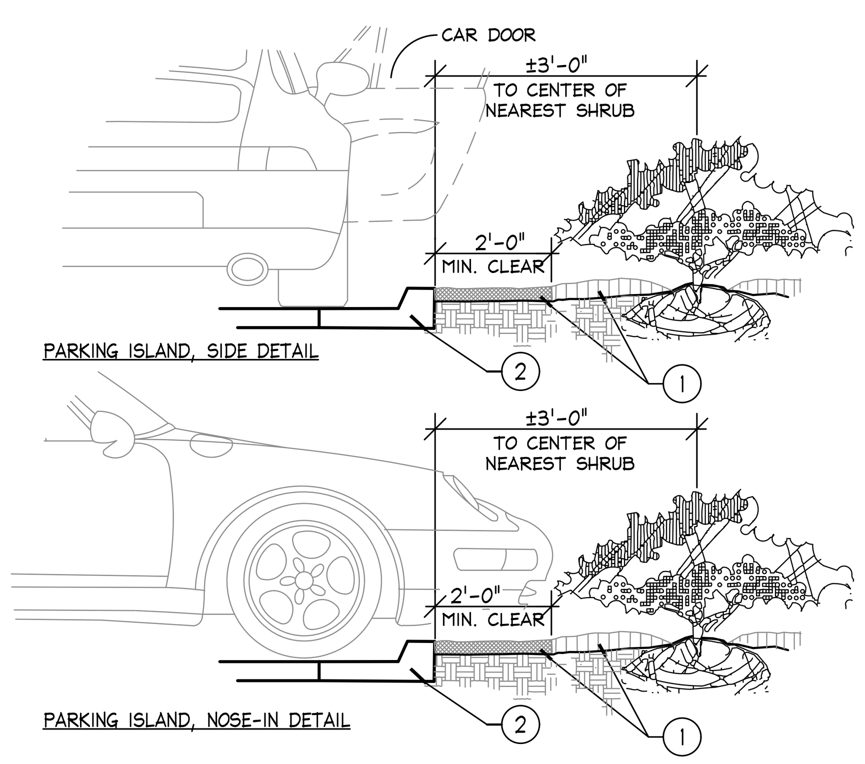


PLANTER ISLAND NOTES

1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS. SEE DETAIL 'I' FOR PLANTER MEDIANS ADJACENT TO PARKING SPACES.
3. 1" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

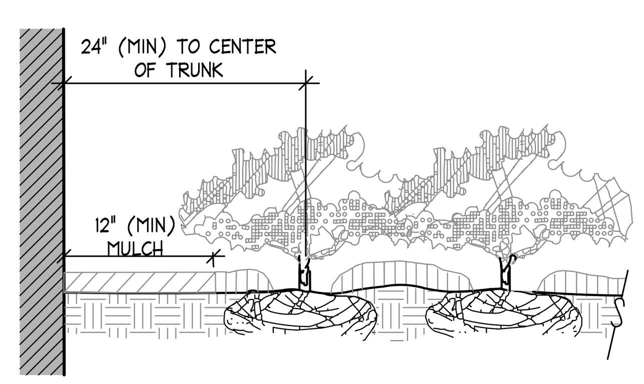
- EXCAVATE CONTINUOUS 36" DEEP (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.
- PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).
- ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

H Planted Parking Lot Islands / Medians
SECTION — NTS



1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP.
   NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE
2. CURB OR PARKING LOT EDGE, BY OTHERS

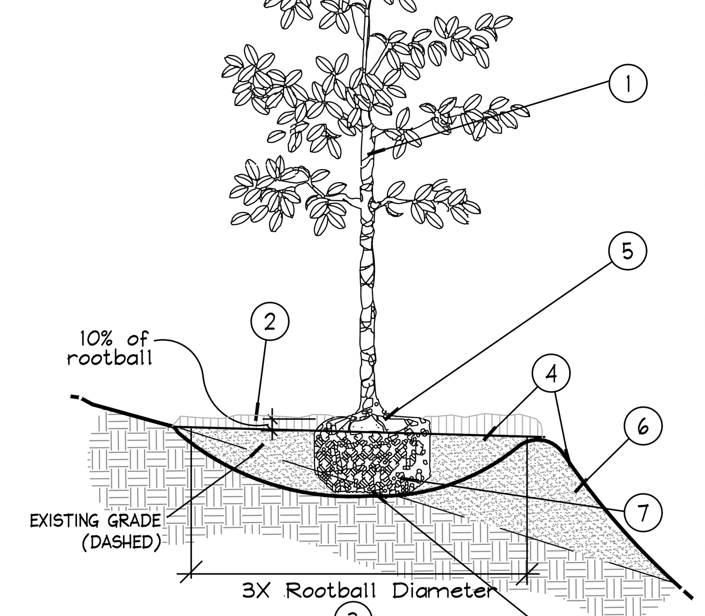
I Parking Space/Curb Planting
SECTION — NTS



NOTES

* CLEAR ZONE: 24" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.

J Plantings Adjacent to Buildings
SECTION — NTS



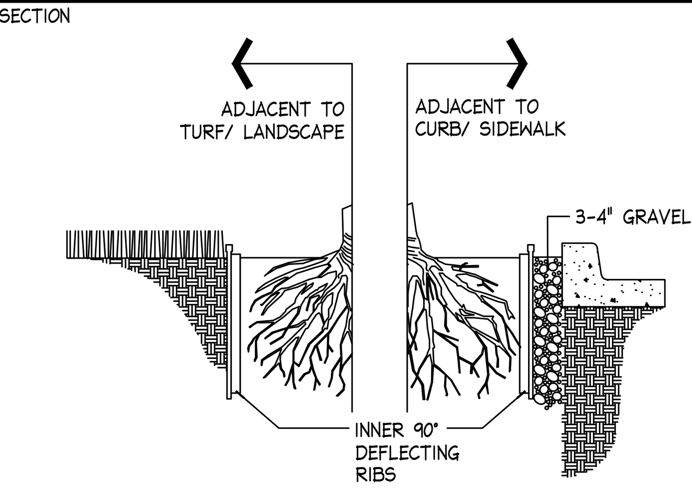
1. TREES, PALMS, AND LARGE SHRUBS (15 GAL OR GREATER) SHALL BE PLANTED IN SIMILAR MANNER
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW/ WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. BERM SOIL SO THAT TOP OF BERM IS JUST BELOW THE TOP 10% OF THE TOP OF THE ROOTBALL. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE.
7. B & B OR CONTAINER REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL. (SEE SPECIFICATIONS FOR OTHER ROOT BALL REQUIREMENTS)
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

K Planting on a Slope
SECTION — NTS



LINEAR APPLICATION

ROOT BARRIER BY: Century Root Barrier (714)632-7083
(or) DeepRoot (800)458-7668
(or approved equal)

SIZE: 36" D
MATERIAL: POLYETHYLENE WITH ULTRAVIOLET INHIBITORS
THICKNESS: .085 IN. (min.)

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. INSTALL AS REQUIRED, PER PLAN NOTES.
3. SUBMIT PRODUCT DATA FOR APPROVAL.

L Root Barrier
Barrier Detail — NTS

No.	REVISIONS	DATE	BY

Kimley»Horn
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-03

GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/ OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

D. MATERIALS

1. GENERAL

MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS' APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SUBMITTAL
MULCH	PRODUCT DATA
TOPSOIL MIX	AMENDMENT MIX/ PRODUCT DATA/ TEST RESULTS
PLANTS	PHOTOGRAPHS OF ONE (1) OF EACH SPECIES (OR TAGGED IN NURSERY) CLIENT-REQUESTED TAGGING MAY SUBSTITUTE PHOTOS. INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC.
FERTILIZER	PRODUCT DATA
INNOCULANT	PRODUCT DATA
HERBICIDE	PRODUCT DATA
STAKING/GUYING	FOR ALTERNATE TO DETAILS: SEND PRODUCT DATA, DETAIL

2. PLANT MATERIALS

A. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE

B. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 20% CLEAN FLORIDA MUCK AND 80% PARTS CLEAN SAND. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
2. <u>MUCK</u> (OR MUCKY PEAT) FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, AND OF A VERY HIGH ORGANIC CONTENT DERIVED FROM FLORIDA SOURCES; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.
3. <u>SAND</u> FOR USE IN PREPARING SOIL MIXTURE SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY THE OWNER.
4. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION <u>PRIOR TO PLANTING.</u>
5. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

F. WATER

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). TYPE OF MATERIAL: "FLORIMULCH" OR SHREDDED, STERILE EUCALYPTUS MULCH

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.
3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH <u>FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS</u>, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.
4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.
5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB- BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, FLORIDA #1 OR BETTER.
2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.
4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO LOCATE UTILITIES.
3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.
4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
5. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE , PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.
6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.
8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
13. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A-300.
14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" TO ACHEIVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
16. MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.
17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
4. SODDING

   A. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

   B. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

   C. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED - REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
6. LAWN MAINTENANCE:

   A. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

   B. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

S. MAINTENANCE (ALTERNATE BID ITEM)

CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

U. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL 7 GALLON AND LARGER PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
2. THE LIFE AND SATISFACTORY CONDITION OF ALL OTHER PLANT MATERIAL (INCLUDING SOD) INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
3. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.
4. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

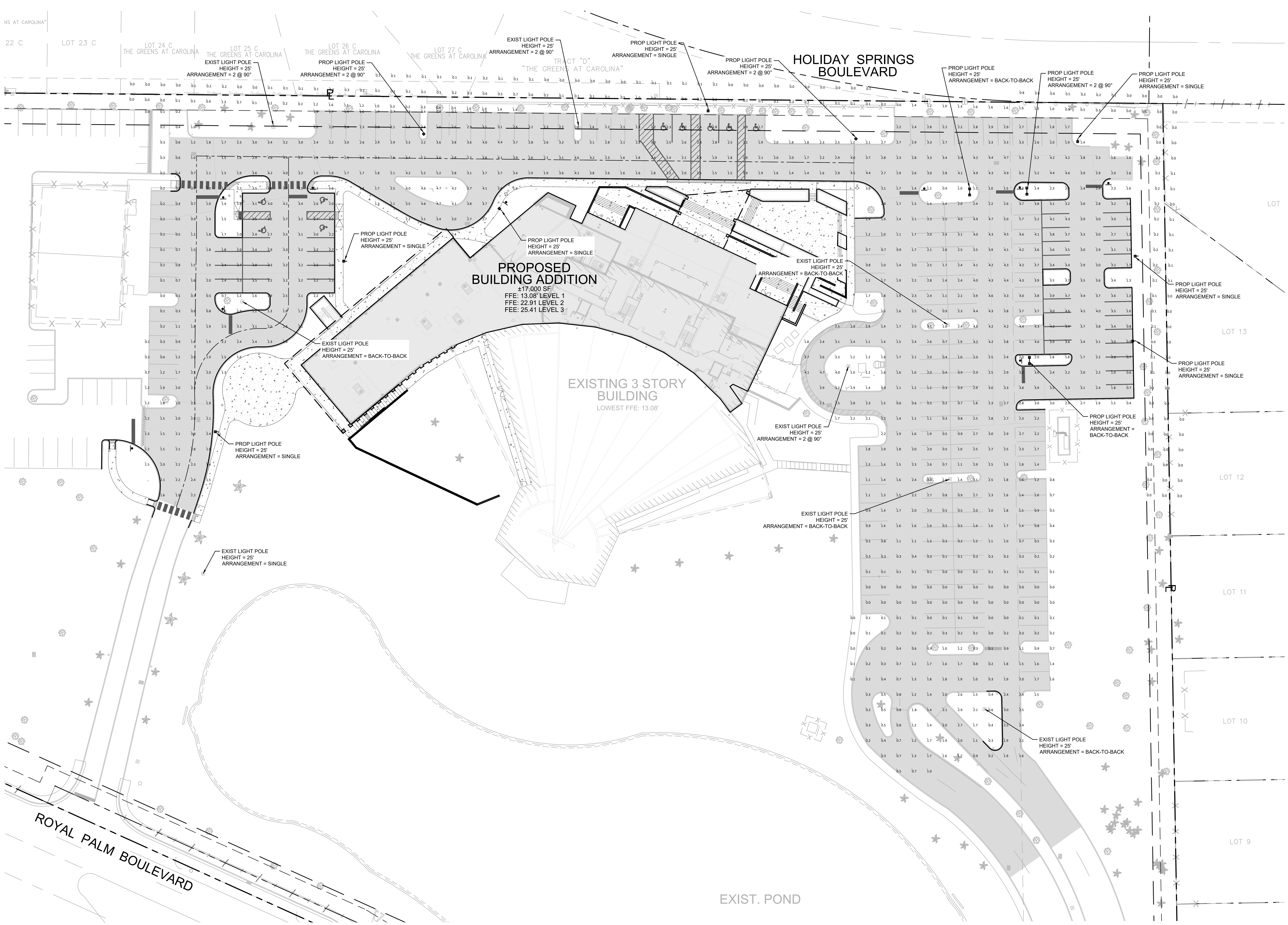
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

KHA PROJECT	143788000
DATE	07/17/2025
SCALE	AS SHOWN
DESIGNED BY	NS
DRAWN BY	NS
CHECKED BY	TCH

LANDSCAPE NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-04



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

Symbol	Description
R/W	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-05 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION
	EXIST. SITE LIGHTING
	PROP. SITE LIGHTING

NOTES:

1. EXISTING LUMINAIRES ARE ASSUMED TO BE THE ETA2 (ENTABULATURE) 54L-750 T4 BY KIM LIGHTING.
2. LOCATIONS AND ARRANGEMENTS OF EXISTING SITE LIGHTING IS BASED ON SURVEY AND FIELD OBSERVATIONS. MOUNTING HEIGHT IS ASSUMED TO BE 25-FT PER THE MAXIMUM ALLOWABLE BY CITY OF MARGATE CODE
3. PROPOSED SITE LIGHTING IS DESIGNED TO COMPLY WITH CITY OF MARGATE CODE SEC. 40.705(G) (LEVEL 1) FOR PARKING AREAS IMPACTED BY THE PROPOSED SITE IMPROVEMENTS. NON-COMPLIANT EXISTING SITE AREAS ARE NOT ADDRESSED BY THE PROPOSED SITE LIGHTING LAYOUT.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
	5	90 Degree Angle	2 @ 90 degrees	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1262.7	25
	8	Single Head	Single	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1010.16	25
	7	Back-to-Back	Back-Back	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1767.78	25

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Lot Area	Illuminance	Fc	2.03	6.1	0.0	N.A.	N.A.
Property Limits	Illuminance	Fc	0.27	1.9	0.0	N.A.	N.A.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

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

RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PHOTOMETRICS PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-01

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

Entablature®

FEATURES
- TIR Strike Optics
- Patented low profile luminaire
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Type 1, 2, 3, 4, 4W, 5W, 5QM, L, and R distributions
- 0 - 10V dimming drivers standard
- IP65 optical assembly

c UL us LISTED · BUY AMERICAN SOLUTIONS — See Certification Specifications · ida DARK SKY APPROVED — 3000K and warmer CCTs only

CONTROL TECHNOLOGY
NX LIGHTING CONTROLS · wiSCAPE™

RELATED PRODUCTS

Ouro	Pavilion	PGL8

SPECIFICATIONS

CONSTRUCTION
- One piece die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- Solid barrier wall separates optical and electrical compartments
- Double-thick wall with gussets on the support-arm mounting end
- Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- One-piece die-cast, low copper (<0 6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange
- Optional clear 1/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimete
- Optional, fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens. CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance
- One-piece extruded aluminum arm with internal bolt guides and fully radiussed top and bottom
- Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief

CONSTRUCTION (CONTINUED)
- Arm is circular cut for specified round pole
- Optional cast, low copper aluminum horizontal slip-fitter with adaptor plate to secure the luminaire to 2" IPS pipe size arms
- Optional cast aluminum wall mount plate assembly. Attaches to the wall over the junction box. Luminaire attaches to the wall plate

OPTICS
- Optical cartridge system consisting of a die cast heat sink, LED Total Internal Reflection (TIR) optics, gasket and bezel plate
- Molded silicone gasket ensures a weather-proof seal around each individual LED
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Optional BackLight Control for complete control of unwanted backlight
- IP65 Optical assembly
- Type 1, 2, 3, 4, 4W, 5W, 5QM, R, and L standard distributions
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level
- Anodized aluminum heat sink modules

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

ELECTRICAL
- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts
  DF for 208, 240, 480 Line volts

CONTROLS
- 7-pin Receptacle and Button Photocell

CERTIFICATIONS AND LISTINGS
- Listed to UL1598 and CSA C22.2#250.0-24 for wet location and 40°C ambient temperatures
- IDA approved, 3000K and warmer CCTs only
- RoHS compliant
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	4,363–20,433
Wattage Range	88.7–178.2
Efficacy Range (LPW)	46.2–128.3
Reported Life (Hours)	L70/60,000
Weight	45 lbs 20.4 kg
EPS Side View	1.8

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: ETA2-1A-750-35K8-3-CLR-SQ-UNV-BLT-7PR-SF-A4

CATALOG #

ETA2		54L-750	3K7	4		BC
Model	**Mounting**	**LED Engine**	**CCT/CRI [6]**	**Distribution**	**Lens Options**	**House Side Shield**
ETA2 Entablature 2.0 Large Fixture	1A Single Arm Mount	54L-560 54 LEDs - 11,000 Lumens	AM [1] Monochromatic Amber [1]	1 Type I	(Blank) No Lens	BC [7] Backlight Control
	1W Wall Mount	54L-750 54 LEDs - 14,000 Lumens	27K8 [2] 2700K, 80CRI	2 Type II	CLR [9] Clear Glass Lens	
	HSF Horizontal Slipfitter	81L-700 81 LEDs - 19,000 Lumens	27K9 [2] 2700K, 90CRI	3 Type III	CP [9] Clear Polycarbonate Lens	
			3K7 3000K, 70CRI	4 Type IV Forward		
			3K8 [2] 3000K, 80CRI	4W Type IV Wide		
			3K9 [2] 3000K, 90CRI	5W Type V Wide		
			35K8 [2] 3500K, 80CRI	5QM Type V Square Medium		
			35K9 [2] 3500K, 90CRI	R Corner Right		
			4K7 4000K, 70CRI	L Corner Left		
			4K8 [2] 4000K, 80CRI			
			4K9 [2] 4000K, 90CRI			
			5K7 5000K, 70CRI			
			5K8 [2] 5000K, 80CRI			
			5K9 [2] 5000K, 90CRI			

VSF 2B	UNV	BLS			
Mounting Options	**Voltage**	**Fixture Finish**	**Photocell Options**	**Fuse Options**	**Optional Entablatures**
VSF [8] Vertical Slipfitter Mount for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	UNV 120-277V	BLS Black Gloss Smooth	7PR 7-Pin Photocell Receptacle	SF Single Fuse 120, 277, 347 Line Volts	A1 Arch
SVSF [8] Vertical Slipfitter Mount square for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	347 347V	BLT Black Matte Textured	PC [10] Button Photocell	DF Double Fuse 208, 240, 480 Line Volts	A2 Broken Arch
3 Side Arm Mount 3" O.D. Pole	480 480V	DBS Dark Bronze Gloss Smooth			A3 Stepped Arch
3.5 Side Arm Mount 3.5" O.D. Pole		DBT Dark Bronze Matte Textured			A4 Stepped Brock Arch
4 Side Arm Mount 4" O.D. Pole		GTT Graphite Matte Textured			A5 Standard Entablature
5 Side Arm Mount 5" O.D. Pole		LGS Light Grey Gloss Smooth			P6 Peak
6 Side Arm Mount 6" O.D. Pole		LGT Light Grey Matte Textured			P7 Broken Peak
SQ Side Arm Mount Square Pole		PSS Platinum Silver Smooth			P8 Stepped Peak
		VGT Verde Green Matte Textured			P9 Stepped Broken Peak
		WHS White Gloss Smooth			P10 Stepped
		WHT White Matte Textured			See Page 5 for details
		Color Option			
		CC Custom Color			

Control Options	Control Accessories [3]
SCH-R Round Pole Mounted (Occupancy Sensor up to 16' to 30')	WIR-RME-L wiSCAPE 7-pin Module
SCH-S Square Pole Mounted (Occupancy Sensor up to 16' to 30')	NXOFM-1R1D-UNV NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming

Notes:
1 Turtle Friendly.
2 See Lumen Multiplier chart on Page 13 for lumen scaling factor. Consult factory for additional details.
3 Not available with other sensor or wireless control options
6 5-step MacAdam Ellipse Binning is standard. Consult factory for 3-step MacAdam Ellipse Binning
7 Not available with 5QM and 5W distributions
8 For all arm configurations, please refer to page 4. VSF/SVSF options ordered seperately.
9 Not Available with 81L-700
10 Not Available in 480V

KIMLIGHTING®

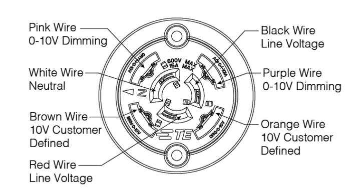
ETA2
ARCHITECTURAL AREA/SITE

SPECIFICATIONS (CONTINUED)

CONTROLS

BUTTON PHOTOCELL
- Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others

7PR
- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others
- Standard customer operation modes:
  1. Traditional on/off photoelectric control
  2. 5-pin wireless photoelectric control for added dimming feature
  3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use

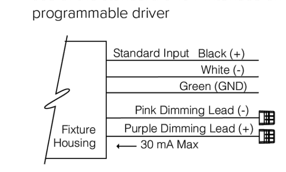


wiSCAPE™
- wiSCAPE™ wireless control modules allow an individual fixture to managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The wiSCAPE modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L
- wiSCAPE External Module,120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

NX LIGHTING CONTROLS
- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity.

DIMMING:
- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver



- Modular wiring harness in the service area provides user access to the dimming circuitry
- Dimming circuitry compatible with 0-10V, user-defined control devices
- Optional factory programmed dimming profile

POLE MOUNTED

ROUND POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'

SCH-R
- Round Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for round pole mounting. Pole diameter needed. Pole to be drilled in the field with provided installation instructions
- Ordering Example: SCH-R4[1]/277[2]/BL[3]

SQUARE POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'

SCH-S
- Square Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for square pole mounting
- Ordering Example: SCH-S/277[2]/BL[3]

ASTRODIM
- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times

OPTIONAL FUSING:
- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- High temperature fuse holders factory installed inside the fixture housing
- Fuse is included

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

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

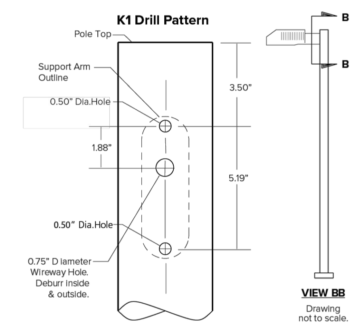
Configuration			EPA
	1A	1 Arm Side Mount	1.8
	1W	Single Wall Mount	n/a
	HSF	Horizontal Slipfitter	n/a

VSF/SVSF Configuration			
	1A		3T
	2B		3Y
	2L		4C

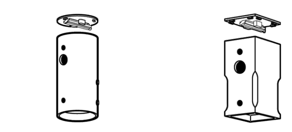
MOUNTING OPTIONS

SUPPORT ARM:
- Die-cast, low copper aluminum alloy, with splice access cover
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief
- The arm adapter is square or circular cut for specified pole size and shape
- For field wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment

Fixture Drilling Instructions:
For AR, CC, CCS, and ET Fixtures



OPTIONAL VERTICAL SLIP-FITTER (VSF/SVSF):
- Internally accessible slip-fitter attaches to a 2-3/8" x 4" long tenon and allows hands-free wiring and maintenance
- Available for round and square poles



- For VSF arm configurations, please use 4". Mounting option on fixture ordering configuration. The optional VSF/SVSF will need to be ordered separately.
- SVSF use square configuration.

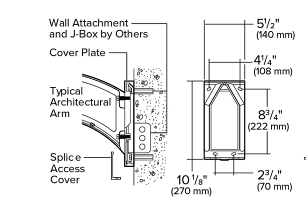
Ordering example for round:
- 2 A/ETA2/54L-500/35K8/3/CLR/**4.00**/UNV/BLT
- 1 VSF-2B

Ordering example for square:
- 2 1A/ETA2/54L-500/35K8/3/CLR/**SQ**/UNV/BLT
- 1 SVSF-2SB

VSF	SVSF
VSF-1A	SVF-1A
VSF-2B	SVF-2B
VSF-2L	SVSF-2L
VSF-3T	SVSF-3T
VSF-3Y	SVSF-3Y
VSF-4C	SVSF-4C

WALL MOUNT

1W
- A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color
- Optional Wall Mount: (CC is illustration the same for all site area?)
- Optional, cast aluminum mounting plate attaches to a wall over a junction box and the speed mount is bolted to the cover plate. To complete the wiring, the luminaire assembly slides over the mounting plate.



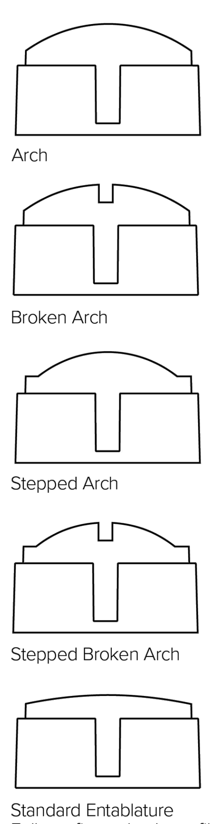
KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

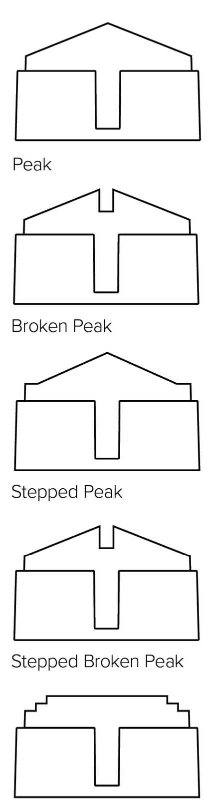
OPTIONAL ENTABLATURES

ARCHED ENTABLATURES



Arch Cat. No. **A1**
Broken Arch Cat. No. **A2**
Stepped Arch Cat. No. **A3**
Stepped Broken Arch Cat. No. **A4**
Standard Entablature Follows fixture body profile Cat. No. **A5**

PEAKED ENTABLATURES



Peak Cat. No. **P6**
Broken Peak Cat. No. **P7**
Stepped Peak Cat. No. **P8**
Stepped Broken Peak Cat. No. **P9**
Stepped Cat. No. **P10**

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS

NO LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	3000K B	3000K U	3000K G	3000K lm/w	4000K 70CRI Lumen	4000K B	4000K U	4000K G	4000K lm/w	5000K 70CRI Lumen	5000K B	5000K U	5000K G	5000K lm/w
54	11,000	560	1	10664	1	0	1	120.2	10802	1	0	1	121.7	11380	1	0	1	128.3
			1-BC	6020	0	0	0	67.8	6098	0	0	0	68.7	6424	0	0	1	72.4
			2	9651	2	0	2	108.8	9776	2	0	2	110.2	10299	2	0	2	116.1
			2-BC	5304	0	0	1	59.8	5373	0	0	1	60.6	5660	0	0	1	63.8
			3	9901	1	0	2	111.6	10029	1	0	2	113.0	10566	1	0	2	119.1
			3-BC	5426	0	0	2	61.2	5496	0	0	2	61.9	5791	0	0	2	65.3
			4	10301	1	0	2	116.1	10435	1	0	2	117.6	10994	1	0	2	123.9
			4-BC	7046	0	0	2	79.4	7138	0	0	2	80.4	7520	0	0	2	84.8
			4W	9545	1	0	2	107.6	9669	1	0	2	109.0	10186	1	0	2	114.8
			4W-BC	5724	0	0	2	64.5	5798	0	0	2	65.3	6108	0	0	2	68.8
			5W	9561	3	0	2	107.7	9685	3	0	2	109.1	10203	3	0	2	115.0
			5QM	10254	3	0	1	115.6	10387	3	0	1	117.1	10943	3	0	1	123.3
			R	10021	2	0	2	112.9	10151	2	0	2	114.4	10695	2	0	2	120.5
			L	10021	1	0	2	112.9	10151	1	0	2	114.4	10695	1	0	2	120.5
	14,000	750	1	14256	1	0	1	112.9	14441	1	0	1	114.4	15213	1	0	1	120.5
			1-BC	8048	0	0	1	63.7	8152	0	0	1	64.6	8588	0	0	1	68.0
			2	12901	2	0	2	102.2	13069	2	0	2	103.5	13768	2	0	2	109.0
			2-BC	7090	0	0	1	56.2	7183	0	0	1	56.9	7567	0	0	2	59.9
			3	13236	2	0	2	104.8	13407	2	0	2	106.2	14125	2	0	2	111.9
			3-BC	7254	0	0	2	57.4	7348	0	0	2	58.2	7741	0	0	2	61.3
			4	13771	1	0	3	109.1	13950	1	0	3	110.5	14696	1	0	3	116.4
			4-BC	9420	0	0	2	74.6	9542	0	0	2	75.6	10052	0	0	2	79.6
			4W	12760	2	0	3	101.1	12926	4	0	2	102.4	13618	2	0	3	107.8
			4W-BC	7652	0	0	2	60.6	7751	0	0	2	61.4	8166	0	0	2	64.7
			5W	12781	4	0	2	101.2	12947	2	0	3	102.5	13640	4	0	2	108.0
			5QM	13708	3	0	1	108.6	13886	3	0	1	110.0	14629	4	0	1	115.9
			R	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
			L	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
81	19,500	700	1	19820	2	0	1	111.2	20077	2	0	1	112.6	21151	2	0	1	118.7
			1-BC	11188	0	0	1	62.8	11334	0	0	1	63.6	11940	0	0	1	67.0
			2	17937	2	0	2	100.6	18169	2	0	2	101.9	19142	3	0	3	107.4
			2-BC	9858	0	0	2	55.3	9986	0	0	2	56.0	10520	0	0	2	59.0
			3	18402	2	0	3	103.2	18640	2	0	3	104.6	19638	2	0	3	110.2
			3-BC	10085	0	0	2	56.6	10216	0	0	2	57.3	10762	0	0	2	60.4
			4	19146	2	0	4	107.4	19395	2	0	4	108.8	20433	2	0	4	114.6
			4-BC	13096	0	0	3	73.5	13266	0	0	3	74.4	13976	0	0	3	78.4
			4W	17741	2	0	4	99.5	17971	2	0	4	100.8	18933	2	0	4	106.2
			4W-BC	10638	1	0	2	59.7	10776	1	0	3	60.5	11353	1	0	3	63.7
			5W	17769	4	0	2	99.7	18000	4	0	2	101.0	18963	4	0	2	106.4
			5QM	19058	4	0	2	106.9	19305	4	0	2	108.3	20338	4	0	2	114.1
			R	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	3	0	3	111.5
			L	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	2	0	3	111.5

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

CLR LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	3000K B	3000K U	3000K G	3000K lm/w	4000K 70CRI Lumen	4000K B	4000K U	4000K G	4000K lm/w	5000K 70CRI Lumen	5000K B	5000K U	5000K G	5000K lm/w
54	11,000	560	1	8907	1	0	1	100.4	9023	1	0	1	101.7	9506	1	0	1	107.1
			1-BC	5028	0	0	0	56.7	5094	0	0	0	57.4	5366	0	0	0	60.5
			2	8061	1	0	2	90.8	8166	1	0	2	92.0	8603	1	0	2	97.0
			2-BC	4430	0	0	1	49.9	4488	0	0	1	50.6	4728	0	0	1	53.3
			3	8270	1	0	2	93.2	8377	1	0	2	94.4	8826	1	0	2	99.5
			3-BC	4532	0	0	1	51.1	4591	0	0	1	51.7	4837	0	0	2	54.5
			4	8605	1	0	2	97.0	8716	1	0	2	98.2	9183	1	0	2	103.5
			4-BC	5885	0	0	2	66.3	5962	0	0	2	67.2	6281	0	0	2	70.8
			4W	7973	1	0	2	89.9	8076	1	0	2	91.0	8509	1	0	2	95.9
			4W-BC	4781	0	0	2	53.9	4843	0	0	2	54.6	5102	0	0	2	57.5
			5W	7986	3	0	1	90.0	8089	3	0	1	91.2	8522	3	0	2	96.0
			5QM	8565	3	0	1	96.5	8676	3	0	1	97.8	9140	3	0	1	103.0
			R	8371	3	0	1	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
			L	8371	1	0	2	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
	14,000	750	1	11907	1	0	1	94.3	12062	1	0	1	95.5	12708	1	0	1	100.6
			1-BC	6722	0	0	1	53.2	6809	0	0	1	53.9	7174	0	0	1	56.8
			2	10776	2	0	2	85.3	10916	2	0	2	86.4	11500	2	0	2	91.1
			2-BC	5923	0	0	1	46.9	5999	0	0	1	47.5	6321	0	0	1	50.1
			3	11056	1	0	2	87.6	11199	1	0	2	88.7	11798	1	0	2	93.4
			3-BC	6059	0	0	2	48.0	6137	0	0	2	48.6	6466	0	0	2	51.2
			4	11503	1	0	2	91.1	11652	1	0	2	92.3	12276	1	0	2	97.2
			4-BC	7868	0	0	2	62.3	7970	0	0	2	63.1	8397	0	0	2	66.5
			4W	10658	1	0	2	84.4	10797	1	0	2	85.5	11375	1	0	3	90.1
			4W-BC	6391	0	0	2	50.6	6474	0	0	2	51.3	6821	0	0	2	54.0
			5W	10676	3	0	2	84.5	10814	3	0	2	85.6	11393	3	0	2	90.2
			5QM	11450	3	0	1	90.7	11598	3	0	1	91.9	12219	3	0	1	96.8
			R	11190	2	0	2	88.6	11335	2	0	2	89.8	11942	2	0	2	94.6
			L	11190	1	0	2	88.6	11335	1	0	2	89.8	11942	1	0	2	94.6

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000	DATE 7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-02

KIM LIGHTING

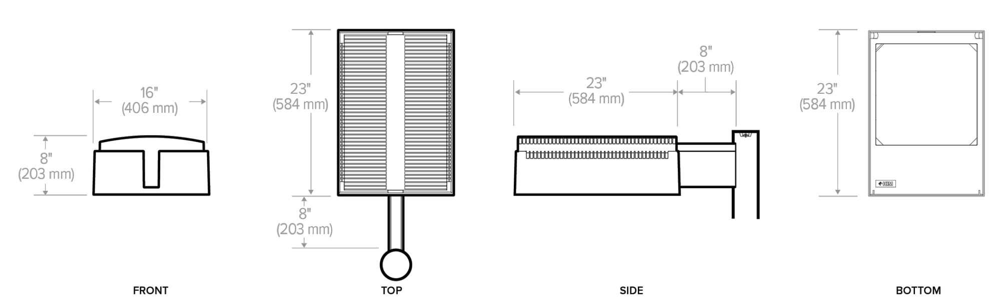
ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

PL LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
54	11,000	560	1	8772	1	0	1	98.9	8886	1	0	1	100.2	9362	1	0	1	105.5
			1-BC	4952	0	0	0	55.8	5016	0	0	0	56.5	5285	0	0	0	59.6
			2	7939	1	0	1	89.5	8042	1	0	2	90.6	8472	1	0	2	95.5
			2-BC	4363	0	0	1	49.2	4420	0	0	1	49.8	4656	0	0	1	52.5
			3	8145	1	0	2	91.8	8251	1	0	2	93.0	8692	1	0	2	98.0
			3-BC	4464	0	0	1	50.3	4522	0	0	1	51.0	4764	0	0	1	53.7
			4	8475	1	0	2	95.5	8584	1	0	2	96.7	9044	1	0	2	101.9
			4-BC	5797	0	0	2	65.3	5872	0	0	2	66.2	6186	0	0	2	69.7
			4W	7852	1	0	2	88.5	7954	1	0	2	89.6	8380	1	0	2	94.4
			4W-BC	4709	0	0	2	53.1	4770	0	0	2	53.8	5025	0	0	2	56.6
			5W	7865	3	0	1	88.6	7967	3	0	1	89.8	8393	3	0	2	94.6
			5QM	8435	3	0	1	95.1	8545	3	0	1	96.3	9002	3	0	1	101.5
			R	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
			L	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
	14,000	750	1	11727	1	0	1	92.9	11880	1	0	1	94.1	12515	1	0	1	99.1
			1-BC	6620	0	0	1	52.4	6706	0	0	1	53.1	7065	0	0	1	56.0
			2	10613	2	0	2	84.1	10751	2	0	2	85.1	11326	2	0	2	89.7
			2-BC	5833	0	0	1	46.2	5909	0	0	1	46.8	6225	0	0	1	49.3
			3	10888	1	0	2	86.2	11030	1	0	2	87.3	11620	1	0	2	92.0
			3-BC	5967	0	0	2	47.3	6045	0	0	2	47.9	6368	0	0	2	50.4
			4	11329	1	0	2	89.7	11476	1	0	2	90.9	12090	1	0	2	95.7
			4-BC	7749	0	0	2	61.4	7849	0	0	2	62.2	8270	0	0	2	65.5
			4W	10497	1	0	2	83.1	10633	1	0	2	84.2	11203	1	0	3	88.7
			4W-BC	6295	0	0	2	49.8	6376	0	0	2	50.5	6718	0	0	2	53.2
			5W	10514	3	0	2	83.3	10651	3	0	2	84.3	11221	3	0	2	88.9
			5QM	11277	3	0	1	89.3	11423	3	0	1	90.5	12034	3	0	1	95.3
			R	11021	2	0	2	87.3	11164	2	0	2	88.4	11761	2	0	2	93.1
			L	11021	1	0	2	87.3	11164	1	0	2	88.4	11761	1	0	2	93.1

DIMENSIONS



KIM LIGHTING

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-1

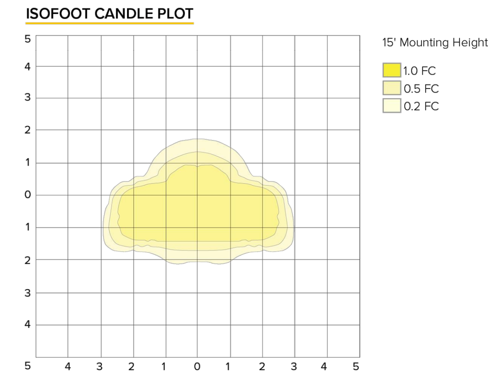
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	14440
Watts	126.27
Efficacy	114.4
IES Type	1
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12851	89.0%
Downward House Side	1589	11.0%
Downward Total	14440	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	14440	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-1-BC

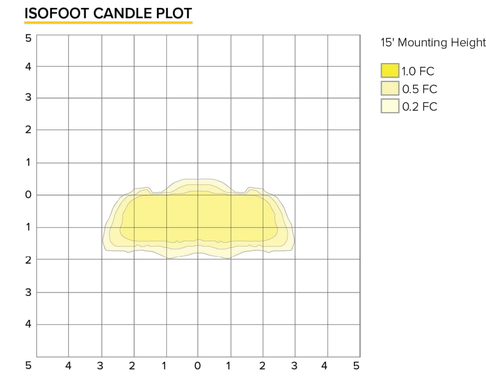
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	8151
Watts	126.27
Efficacy	64.6
IES Type	1
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8033	98.5%
Downward House Side	118	1.5%
Downward Total	8151	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	8151	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-2

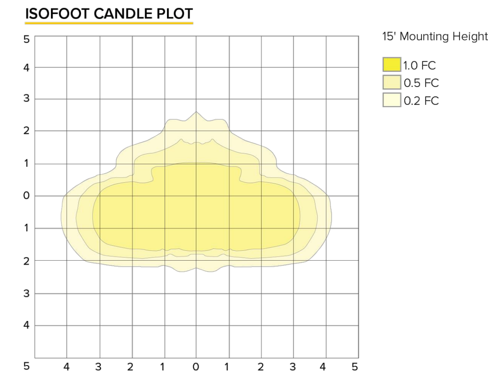
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13069
Watts	126.27
Efficacy	103.5
IES Type	2
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10825	82.8%
Downward House Side	2245	17.2%
Downward Total	13069	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13069	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-2-BC

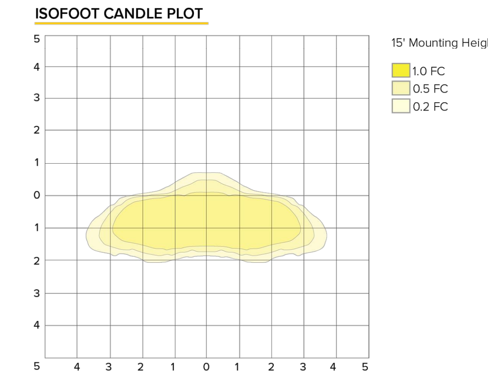
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7182
Watts	126.27
Efficacy	56.9
IES Type	2
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7019	97.7%
Downward House Side	163	2.3%
Downward Total	7182	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7182	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3

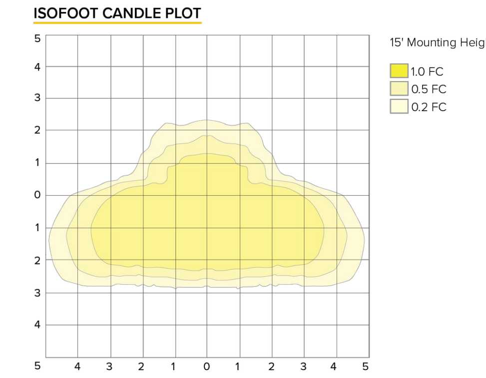
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13406
Watts	126.27
Efficacy	106.2
IES Type	3
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11502	85.8%
Downward House Side	1904	14.2%
Downward Total	13406	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13406	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3-BC

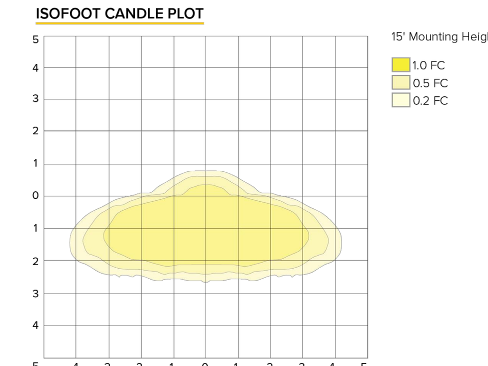
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7347
Watts	126.27
Efficacy	58.2
IES Type	3
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7108	96.7%
Downward House Side	239	3.3%
Downward Total	7347	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7347	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4

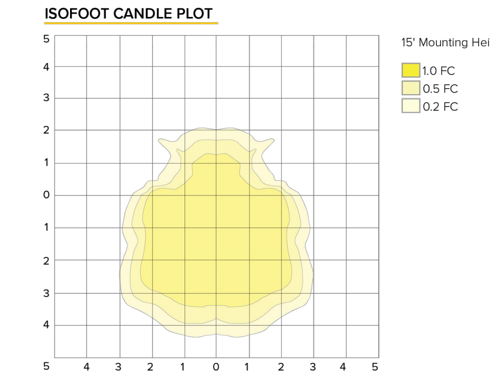
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13950
Watts	126.27
Efficacy	110.5
IES Type	4
BUG Rating	B1-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12630	87.6%
Downward House Side	1321	12.4%
Downward Total	13951	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13951	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4-BC

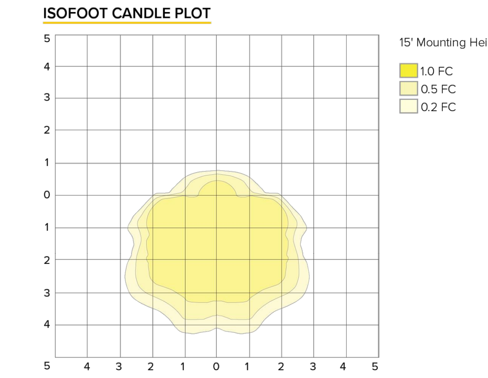
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	9542
Watts	126.27
Efficacy	75.6
IES Type	4
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	9312	87.6%
Downward House Side	231	12.4%
Downward Total	9543	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	9543	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4W

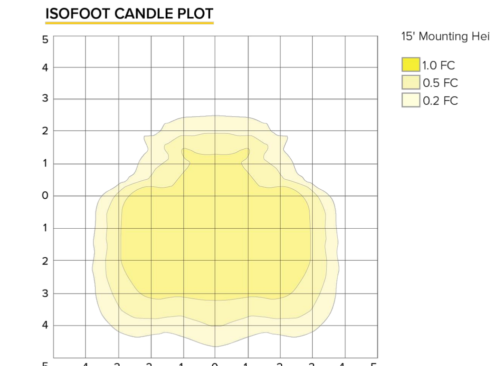
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12926
Watts	126.27
Efficacy	102.4
IES Type	4W
BUG Rating	B2-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11324	87.6%
Downward House Side	1602	12.4%
Downward Total	12926	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12926	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4W-BC

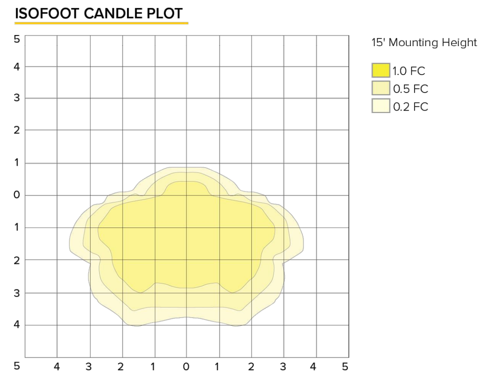
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7750
Watts	126.27
Efficacy	61.4
IES Type	4W
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7449	96.0%
Downward House Side	301	4.0%
Downward Total	7750	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7750	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5QM

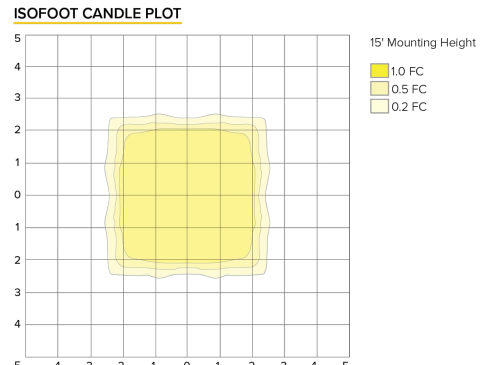
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13885
Watts	126.27
Efficacy	110.0
IES Type	5
BUG Rating	B3-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6943	50.0%
Downward House Side	6942	50.0%
Downward Total	13885	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13885	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5W

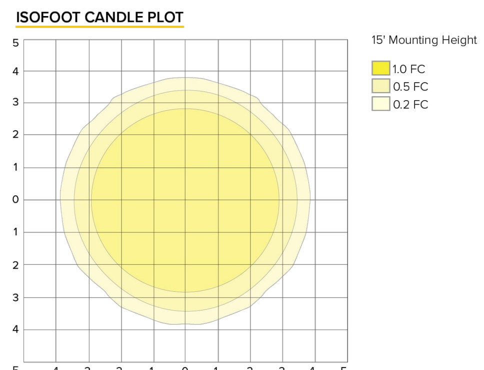
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12946
Watts	126.27
Efficacy	102.5
IES Type	5
BUG Rating	B4-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6473	50.0%
Downward House Side	6473	50.0%
Downward Total	12946	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12946	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-R

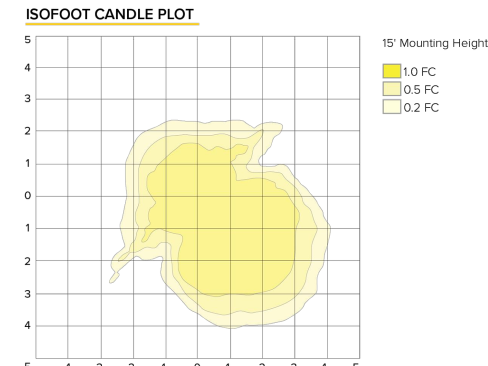
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13570
Watts	126.27
Efficacy	107.5
IES Type	R
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11231	82.8%
Downward House Side	2339	17.2%
Downward Total	13570	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13570	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-L

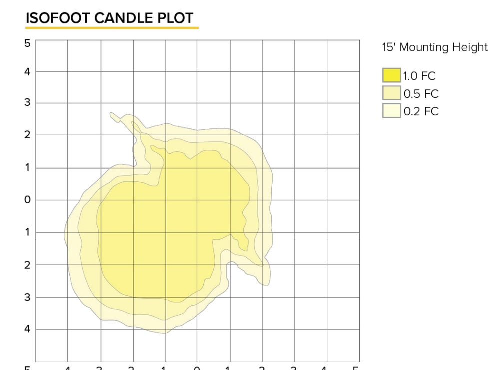
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13571
Watts	126.27
Efficacy	107.5
IES Type	L
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11523	84.9%
Downward House Side	2048	15.1%
Downward Total	13571	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13571	100%

ISOFOOT CANDLE PLOT

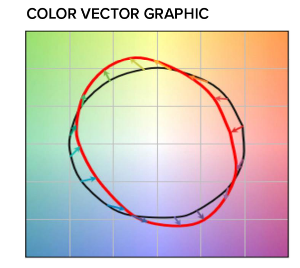


KIM LIGHTING

ETA2
ARCHITECTURAL AREA/SITE

TM-30 DATA

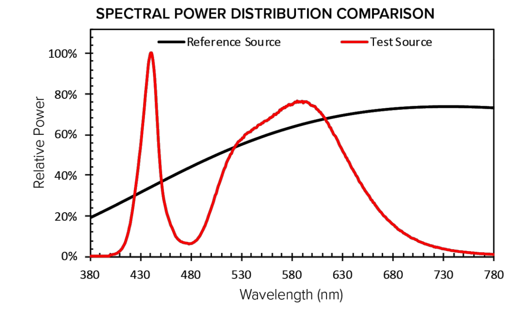
COLOR VECTOR GRAPHIC



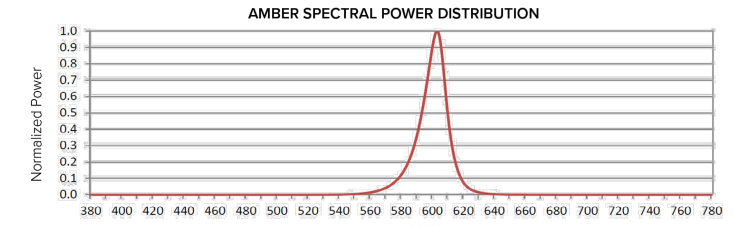
TEST SOURCE

R_f	68
R_g	99
CCT(K)	3947
D_{uv}	0.0004
x	0.3831
y	0.3793
CIE R_a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



AMBER SPECTRAL POWER DISTRIBUTION



ELECTRICAL DATA

LED Count	System Watts	Current	Line Voltage		Amps AC						Min Power Factor	Max. THD (%)	Dimming				
			VAC	Hz	120	208	240	277	347	480			Dimming Range	Source Current Out		Absolute Voltage	
														Min	Max	Min	Max
54 LEDs	88.7	560 mA	120-480	50/60	0.74	0.43	0.37	0.32	0.26	0.18	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	126.3	750 mA			1.05	0.61	0.53	0.46	0.36	0.26							
81 LEDs	178.2	700 mA			1.49	0.86	0.74	0.64	0.51	0.37							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
Ambient Temp.	0	25,000	36,000	50,000	100,000	Reported L70
25°C / 77°F	100%	94.22%	92.26%	89.84%	81.68%	>60khrs

CRI Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.9119	.7033
3500K	0.906	0.732
4000K	0.8941	.734
5000K	0.879	.7712
Scaling factor of 5000K 70CRI lumen packages		

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

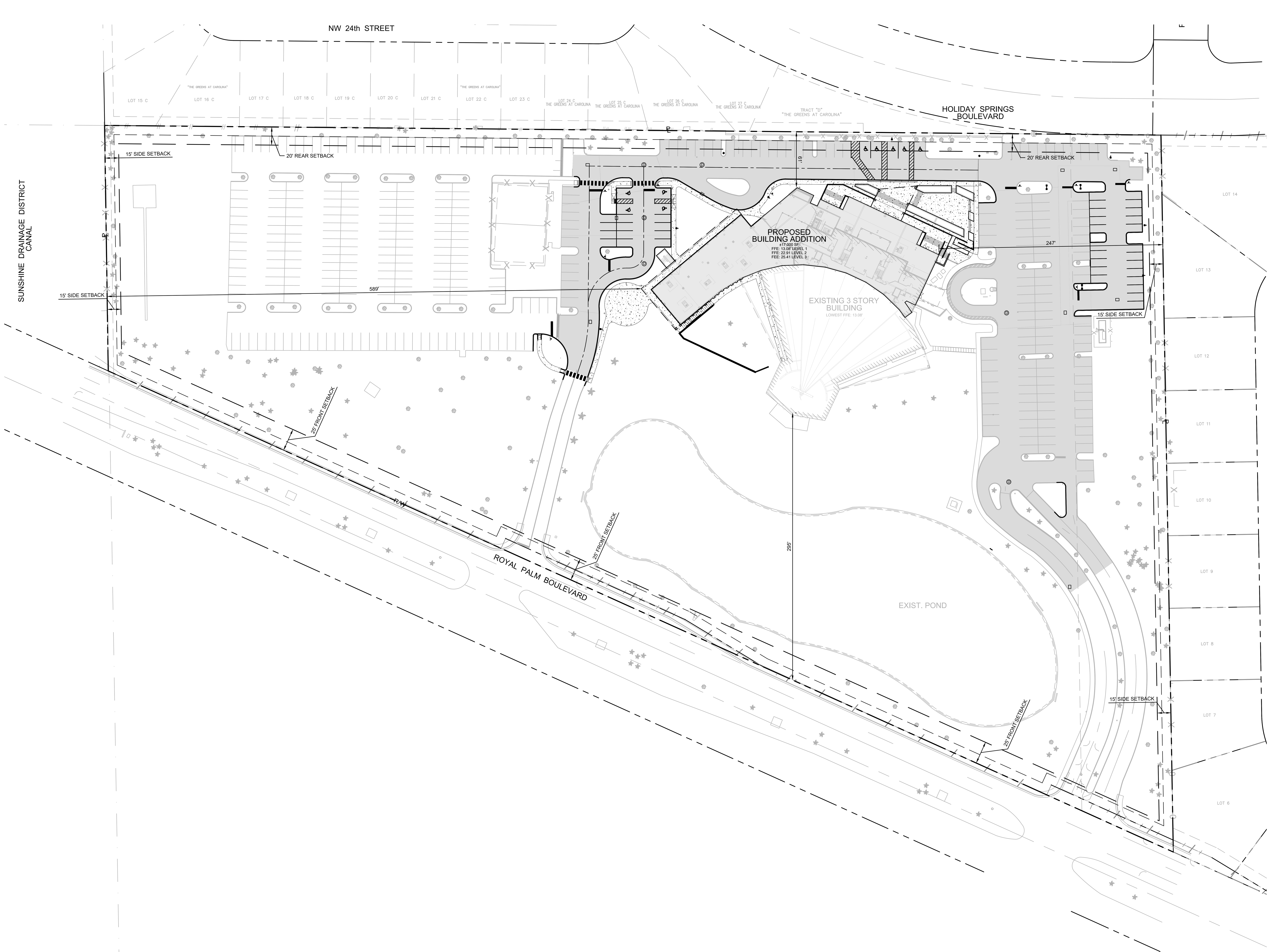
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-03



NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

R/W ℄ PROPERTY LINE
EXIST. RIGHT OF WAY
PROP. ROAD CENTERLINE
PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING

SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT
143788000

DATE
7/23/2025

SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

OVERALL SITE PLAN

CHURCH SITE IMPROVEMENTS

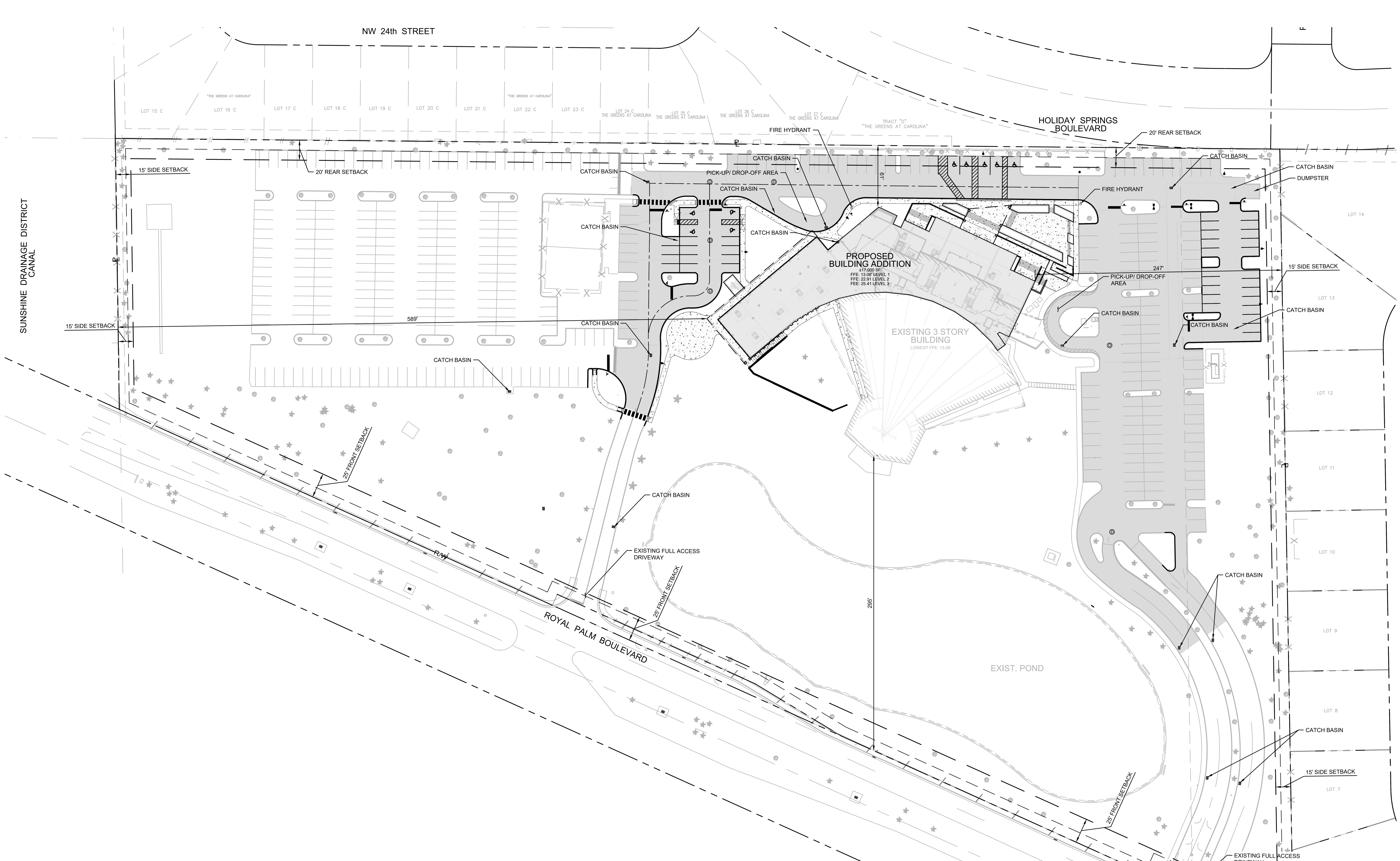
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SP-01



NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

PARKING COUNT TABLE:

EXISTING SANCTUARY TOTAL SEATS	PROPOSED SANCTUARY TOTAL SEATS
1,570	1,570
EXISTING PARKING SPACES	PROPOSED PARKING SPACES
394	395
EXISTING ADA PARKING SPACES	PROPOSED ADA PARKING SPACES
9	9
TOTAL EXISTING PARKING SPACES	TOTAL PROPOSED PARKING SPACES
403	404

REVISIONS | No. | DATE | BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

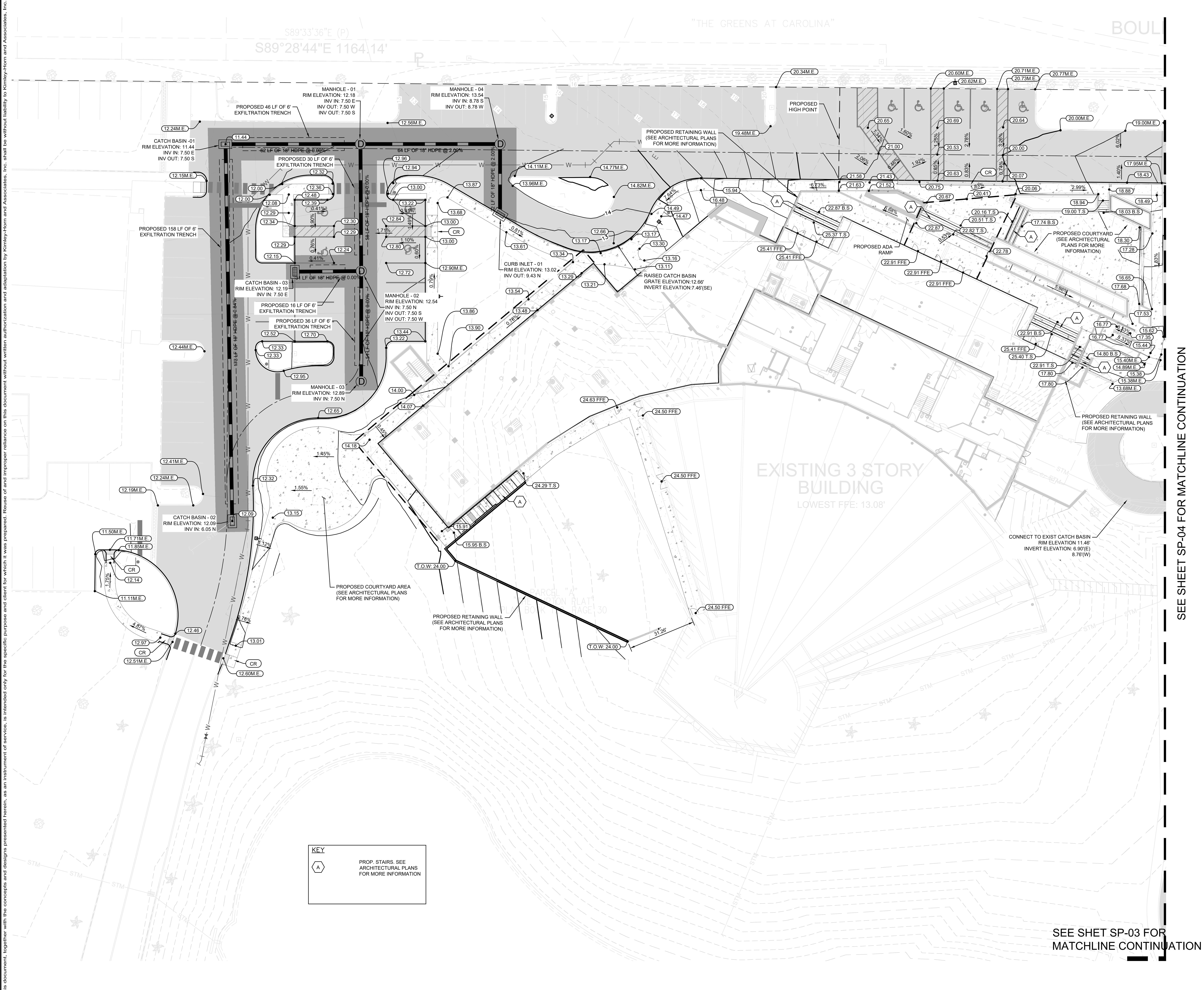
KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

MASTER PARKING PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-02



NORTH

GRAPHIC SCALE IN FEET

0 10 20 40

LEGEND

Symbol	Description
— R/W — P —	PROPERTY LINE
— — —	EXIST. RIGHT OF WAY
15.48M.E.	MATCH EXIST. ELEVATION
15.48 FFE	PROP. FINISHED FLOOR ELEVATION
15.48	PROP. SPOT ELEVATION
15.48 T.S	PROP. TOP OF STAIR ELEVATION
15.48 B.S	PROP. BOTTOM OF STAIR ELEVATION
15	PROP. CONTOURS
12.38	EXIST. ELEVATION
15	EXIST. CONTOURS
	PROP. GRADE BREAK
	PROP. FULL DEPTH PAVEMENT RESTORATION
	PROP. CONCRETE SIDEWALK
	PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
	PROP. BUILDING ADDITION
	PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.
16. REFER TO SP-03 FOR GRADING OF DRIVEWAY CONNECTION AREA

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

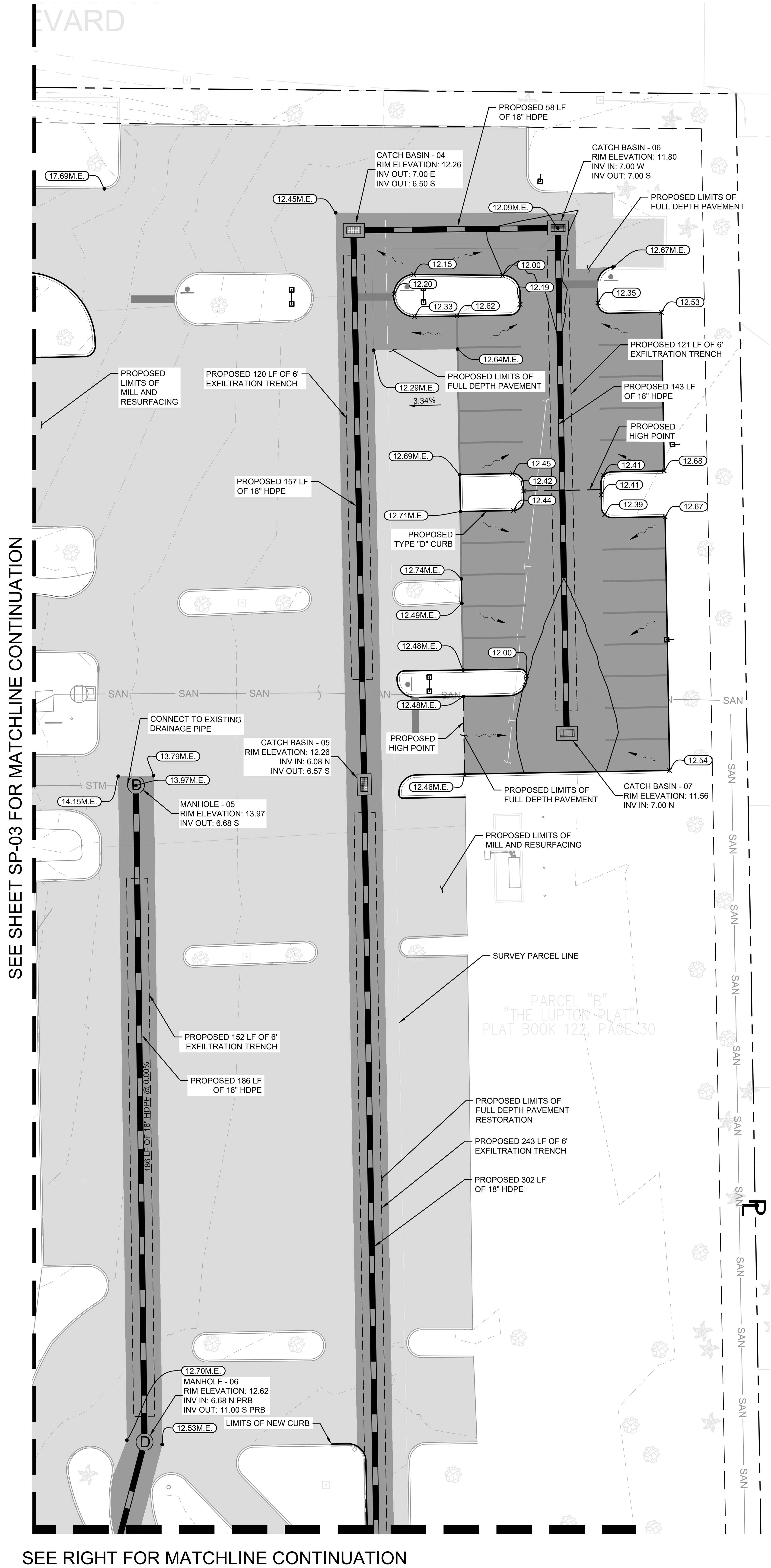
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
143788000	7/23/2025	AS SHOWN	RT	KH	ARM

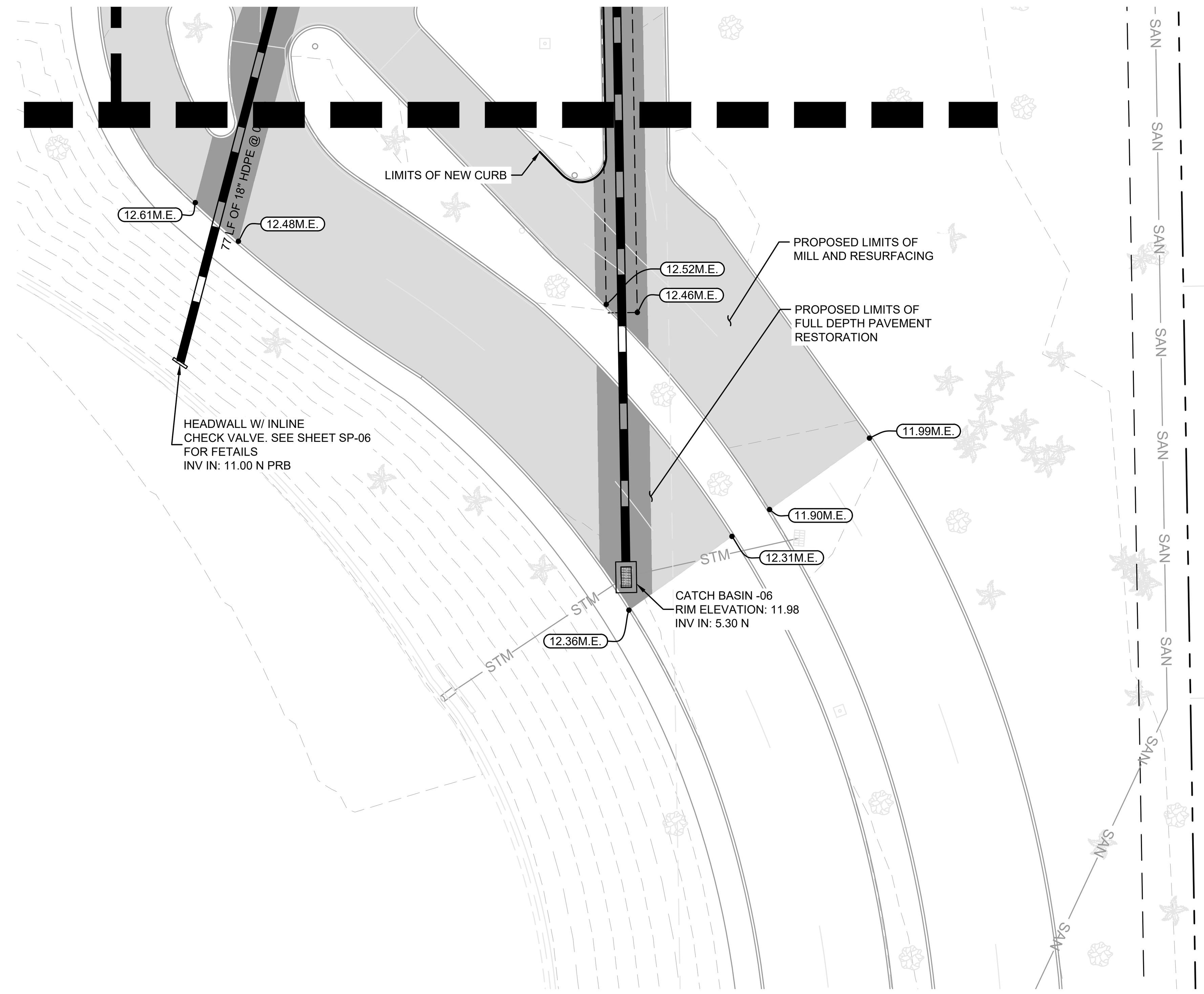
PAVING GRADING & DRAINAGE PLAN

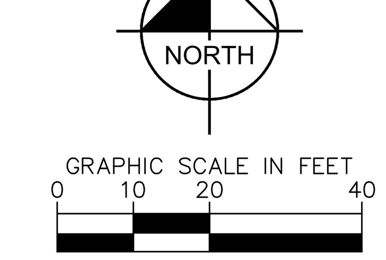
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-03



SEE LEFT FOR MATCHLINE CONTINUATION





LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- MATCH EXIST. ELEVATION
- PROP. FINISHED FLOOR ELEVATION
- PROP. SPOT ELEVATION
- PROP. TOP OF STAIR ELEVATION
- PROP. BOTTOM OF STAIR ELEVATION
- PROP. CONTOURS
- EXIST. ELEVATION
- EXIST. CONTOURS
- PROP. GRADE BREAK
- PROP. FULL DEPTH PAVEMENT RESTORATION
- PROP. CONCRETE SIDEWALK
- PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
- PROP. BUILDING ADDITION
- PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

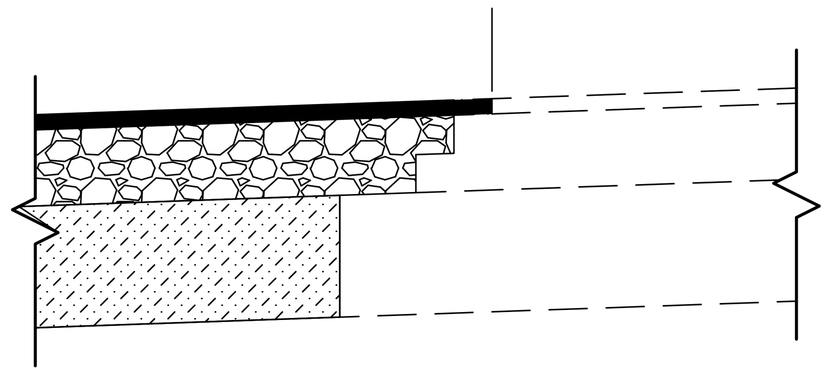
RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

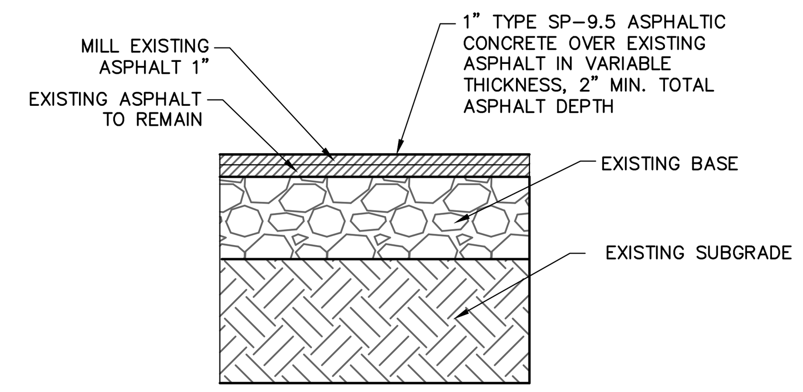
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-04



CONNECTION TO EXISTING PAVEMENT DETAIL

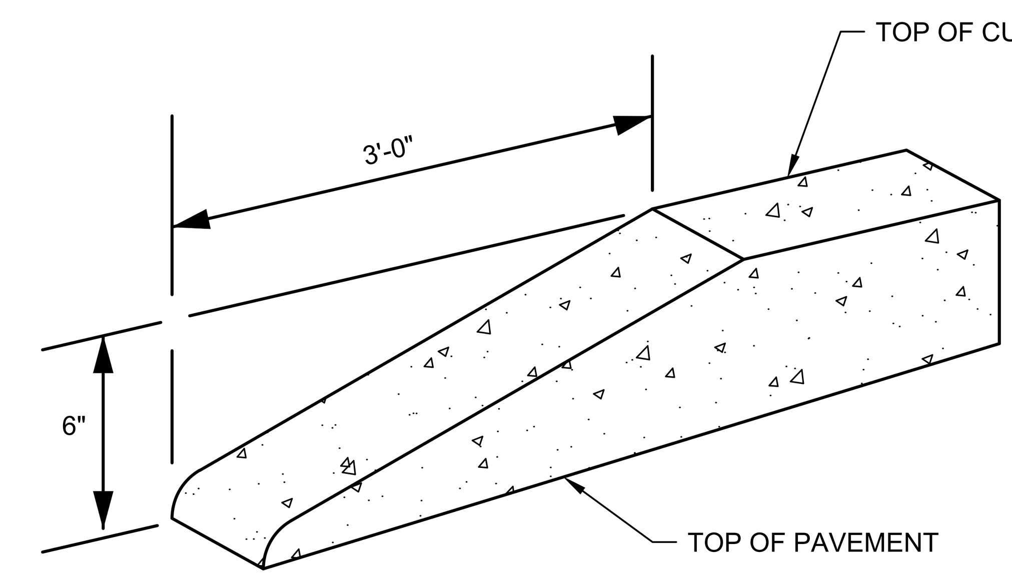
NOT TO SCALE



EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED

K-H

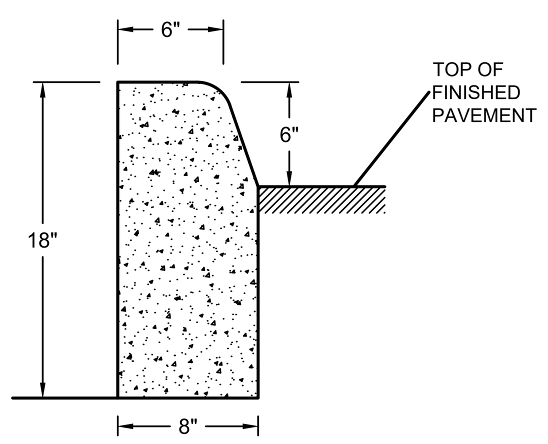
NOT TO SCALE



ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

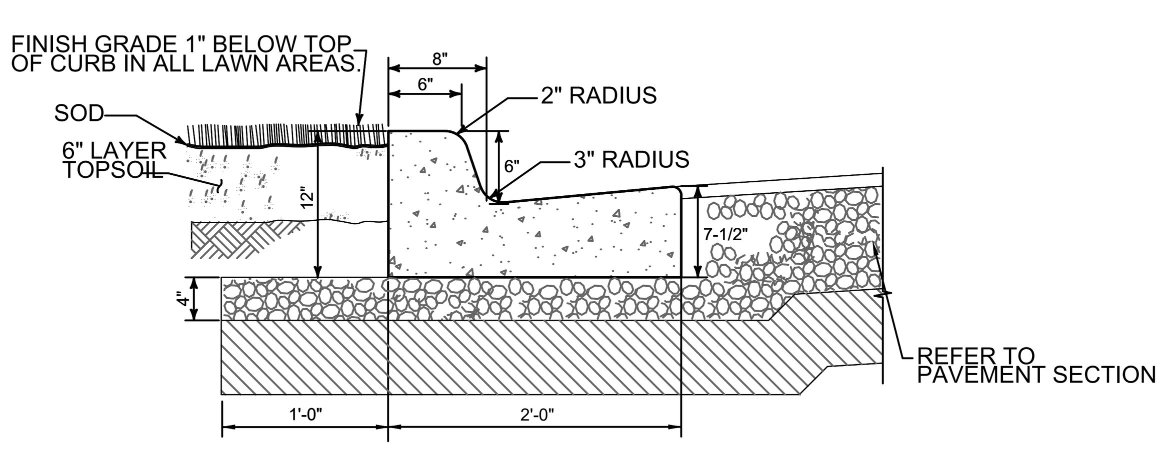
STANDARD CURB TRANSITIONS

NOT TO SCALE



TYPE 'D' CURB

AS PER FDOT INDEX 300
NOT TO SCALE

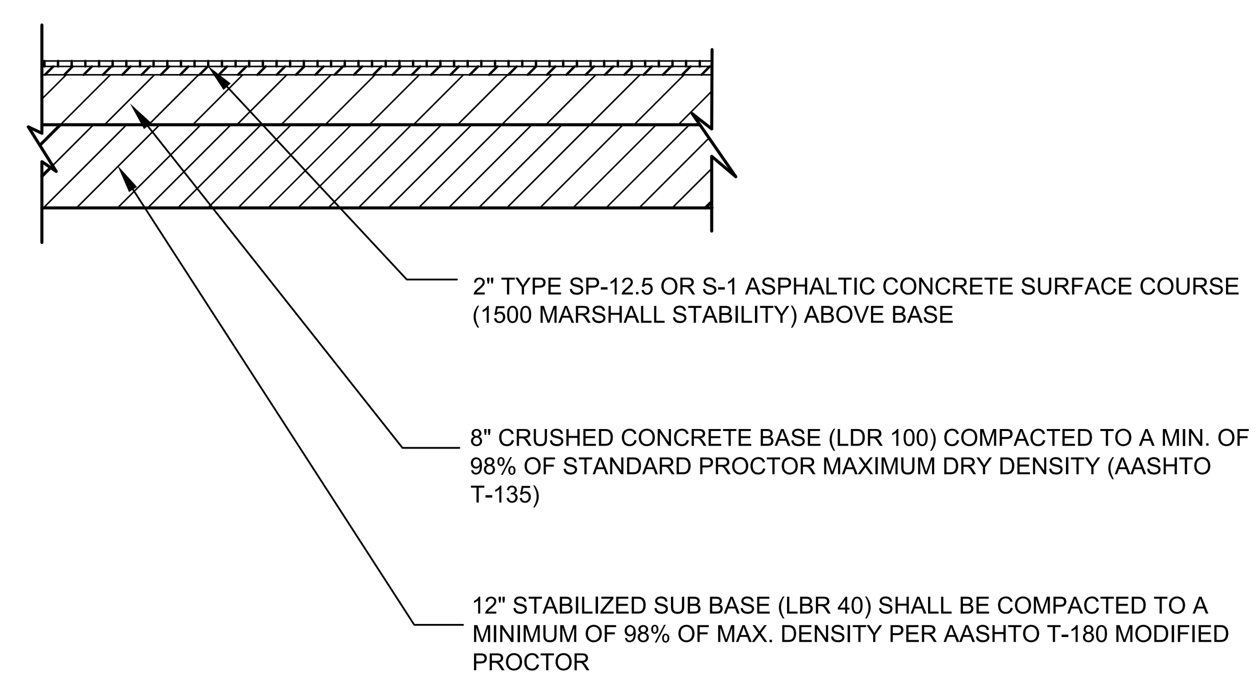


NOTES:

1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

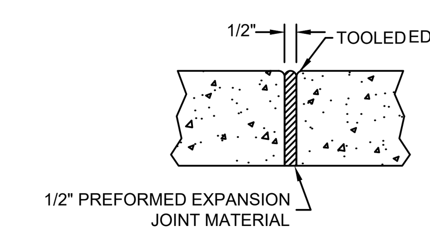
TYPE "F" CURB

NOT TO SCALE



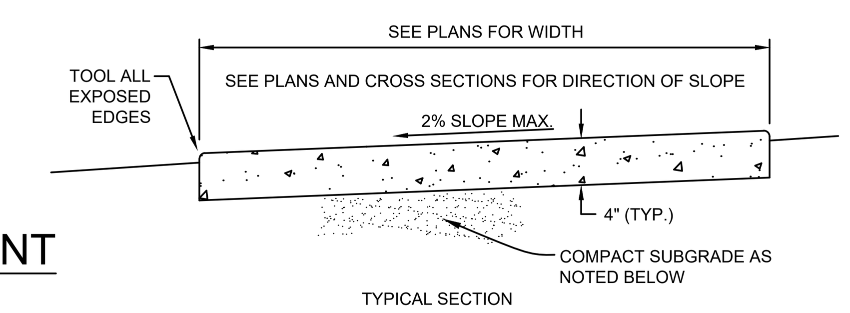
HEAVY DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE



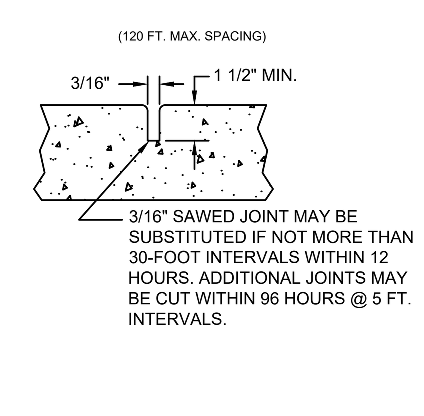
EXPANSION JOINT

NOT TO SCALE



TYPICAL SECTION

(120 FT. MAX. SPACING)



(5 FT. MAX. SPACING)

CONTRACTION JOINT

NOT TO SCALE

NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL

NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

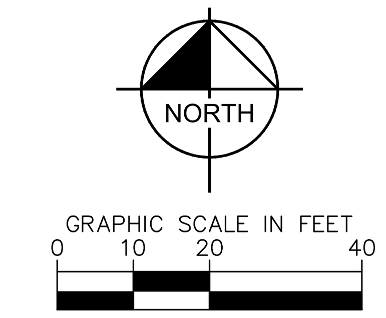
KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

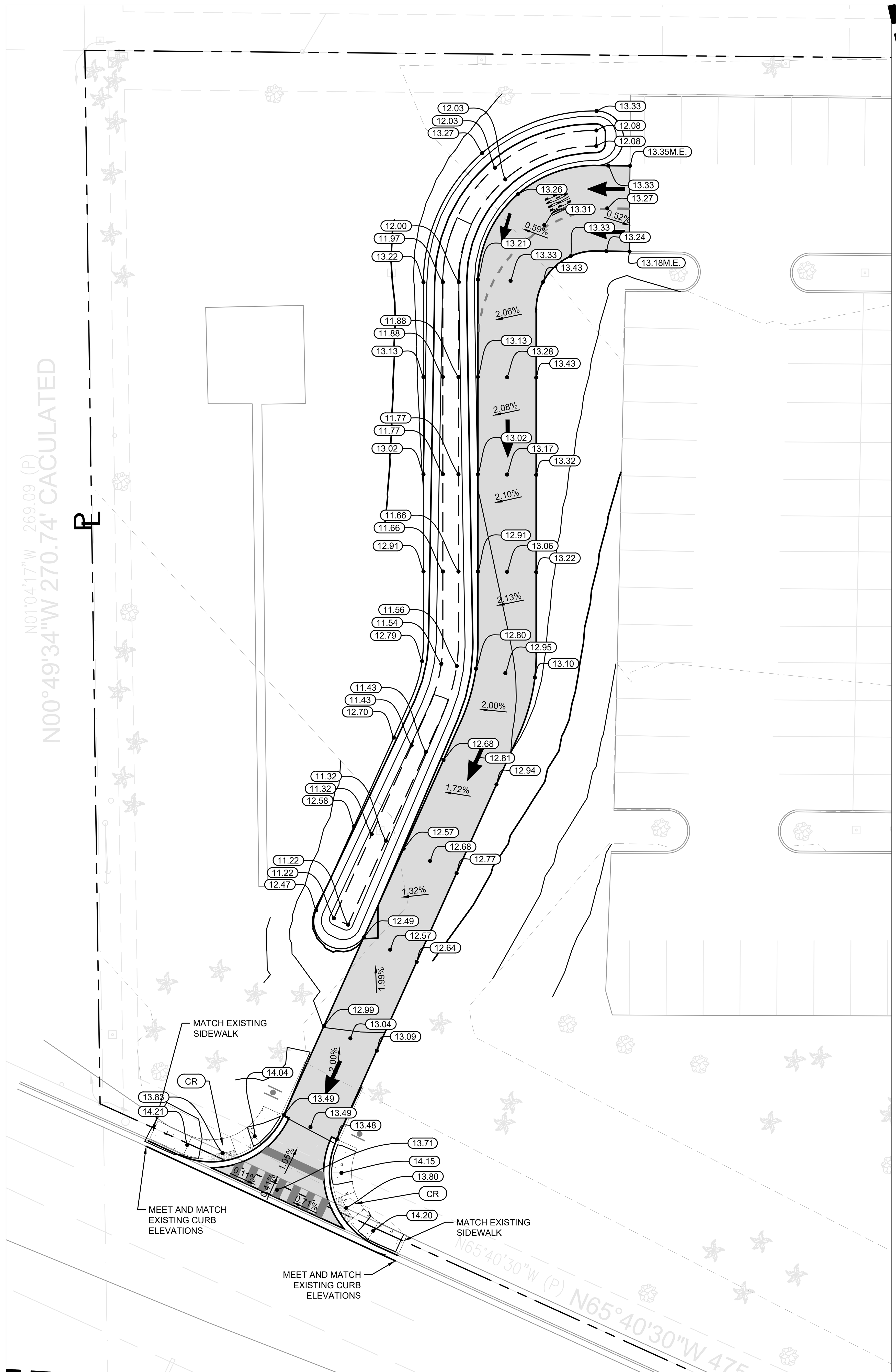
PAVING & GRADING DETAILS

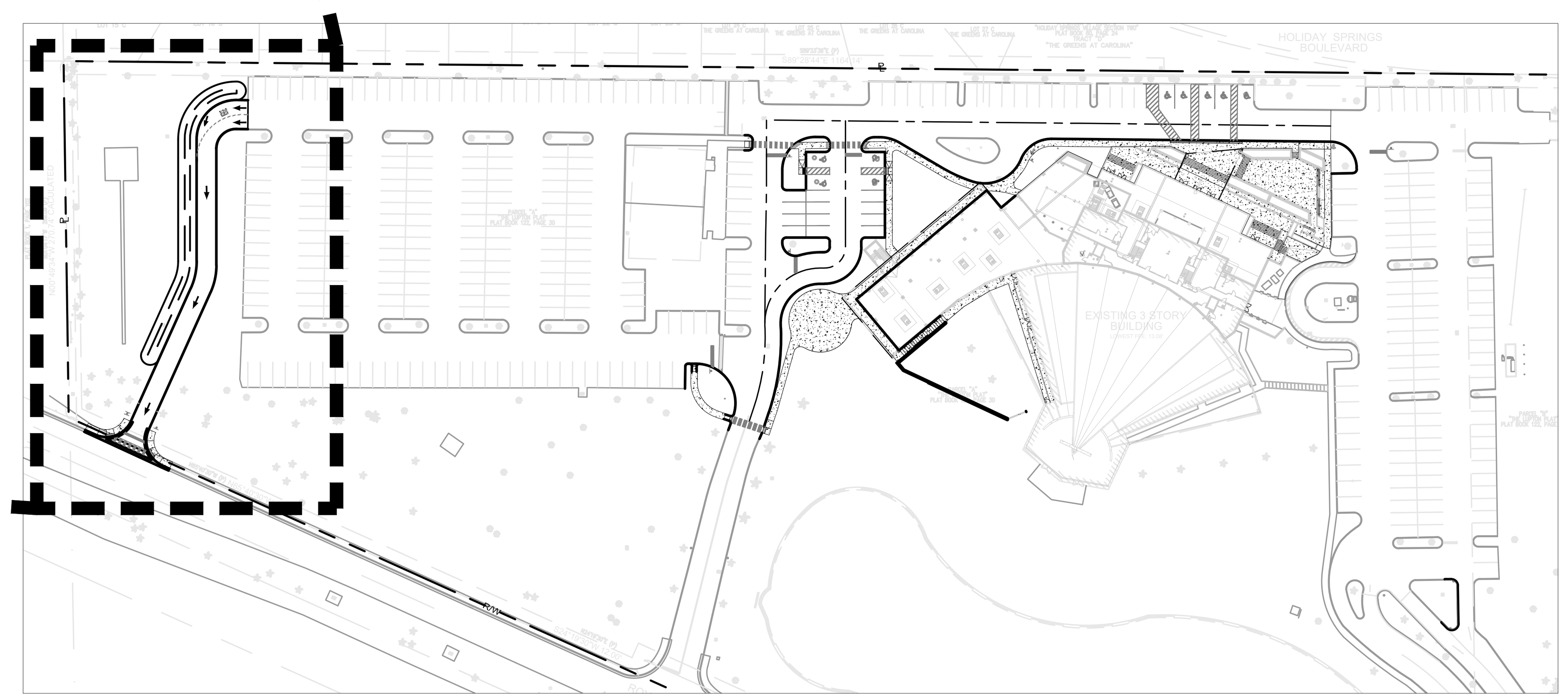
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-05







KEY MAP:

LEGEND

R/W — P —	PROPERTY LINE
	EXIST. RIGHT OF WAY
15.48M.E.	MATCH EXIST. ELEVATION
15.48 FFE	PROP. FINISHED FLOOR ELEVATION
15.48	PROP. SPOT ELEVATION
15.48 T.S	PROP. TOP OF STAIR ELEVATION
15.48 B.S	PROP. BOTTOM OF STAIR ELEVATION
15	PROP. CONTOURS
12.38	EXIST. ELEVATION
15	EXIST. CONTOURS
	PROP. GRADE BREAK
	PROP. FULL DEPTH PAVEMENT RESTORATION
	PROP. CONCRETE SIDEWALK
	PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
	PROP. BUILDING ADDITION
	PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.

2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.

3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.

4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.

5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.

7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.

8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.

9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.

10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.

11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.

12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.

13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.

14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.

15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

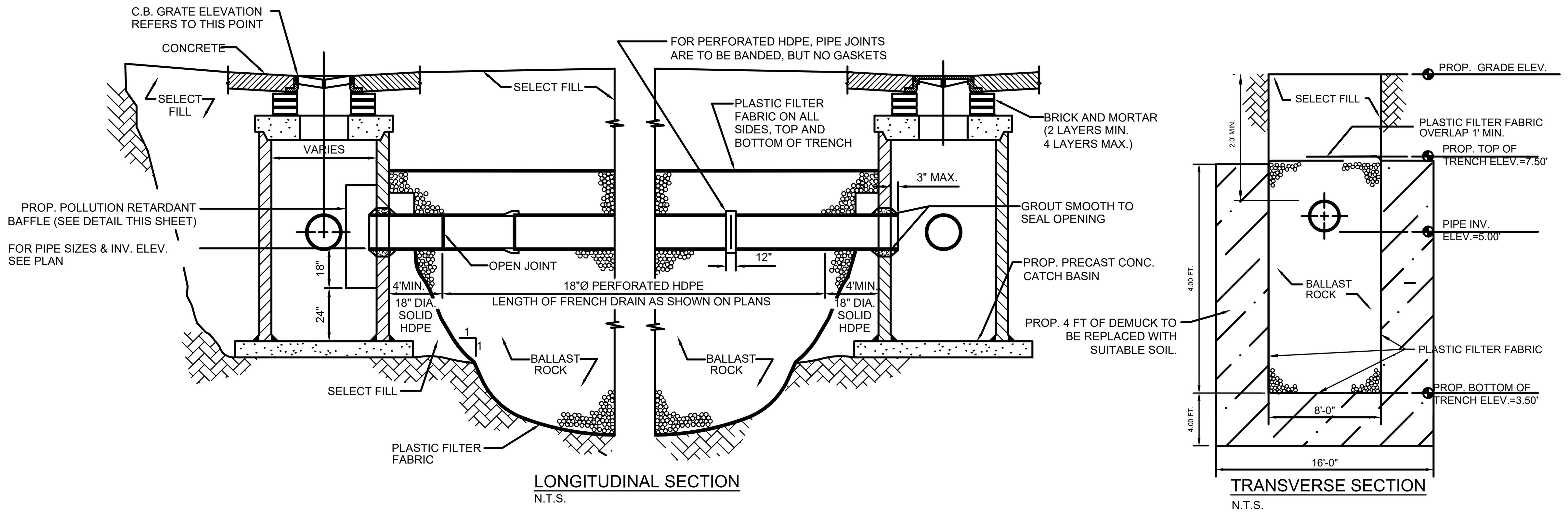
KHA PROJECT	143788000
DATE	2/6/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

CHURCH SITE IMPROVEMENTS

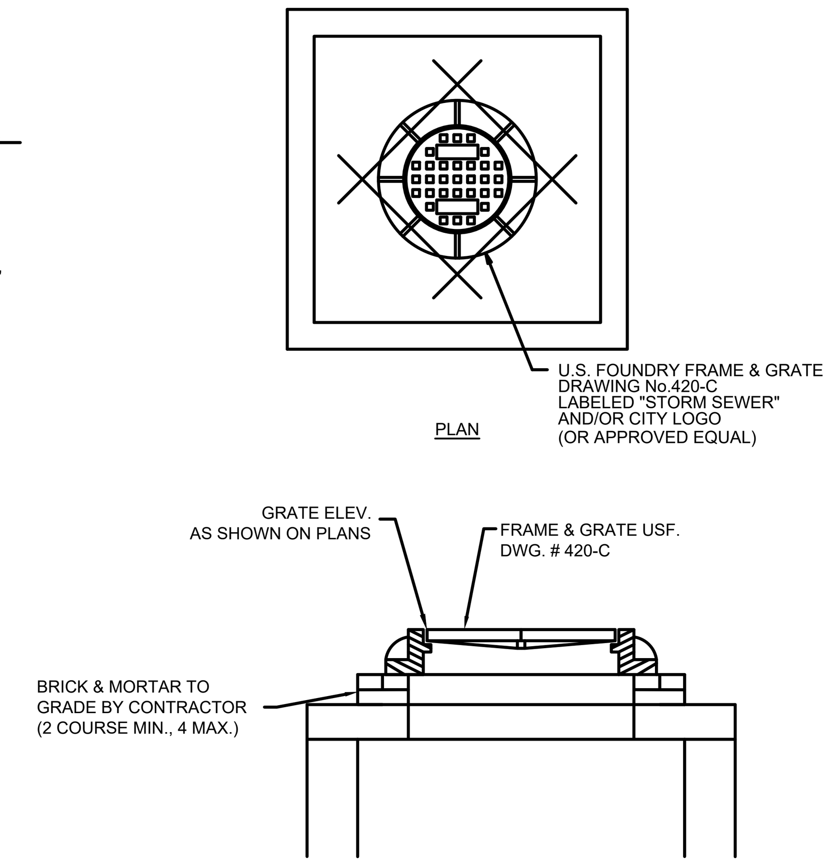
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-05

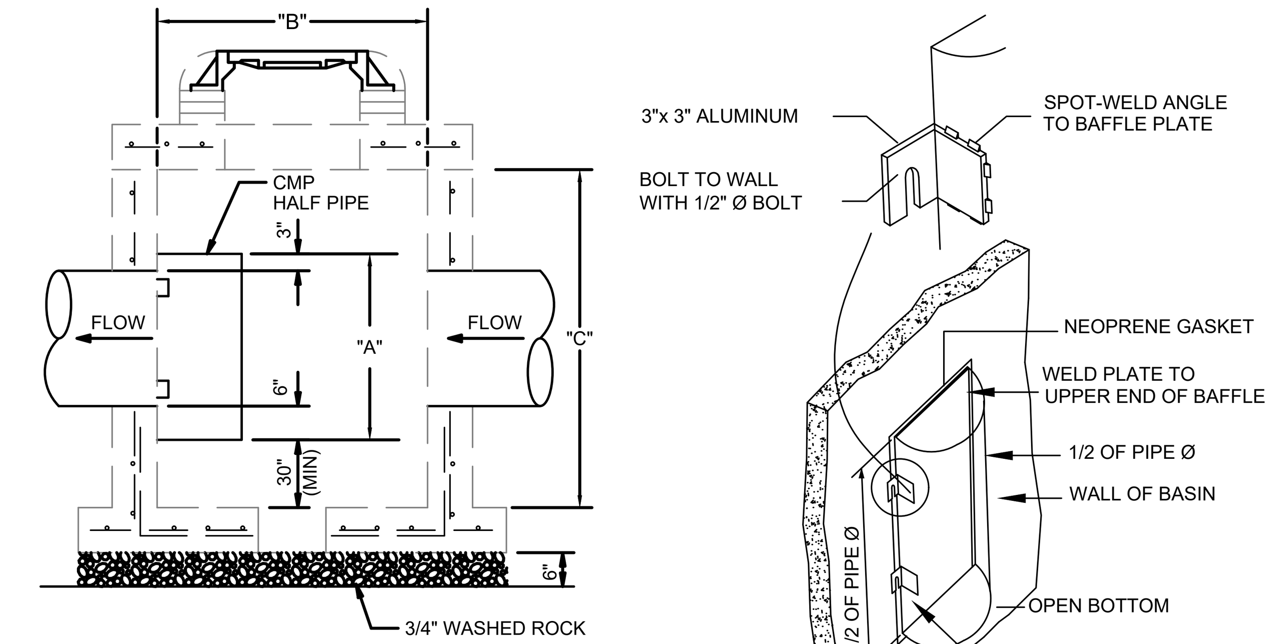


NOTES
1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

CATCH BASIN AND EXFILTRATION TRENCH DETAIL
NOT TO SCALE



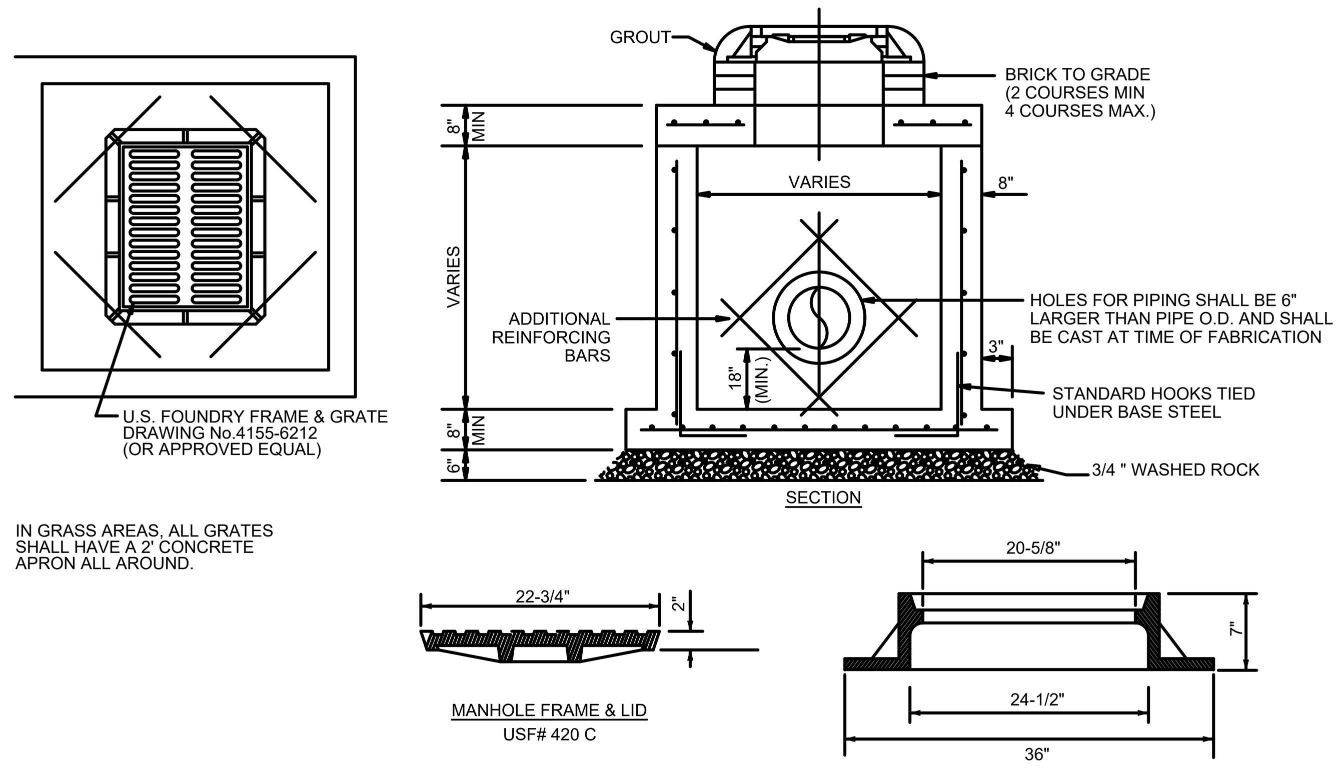
STORM MANHOLE TOP
NOT TO SCALE



NOTES:
1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

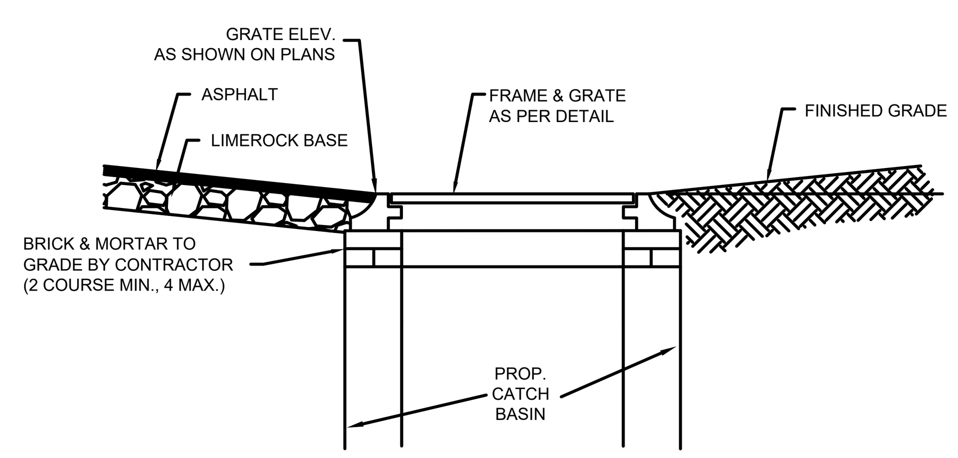
PIPE DIAMETER	BAFFLE SCHEDULE "A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

POLLUTION RETARDANT BAFFLE (PRB)
NOT TO SCALE

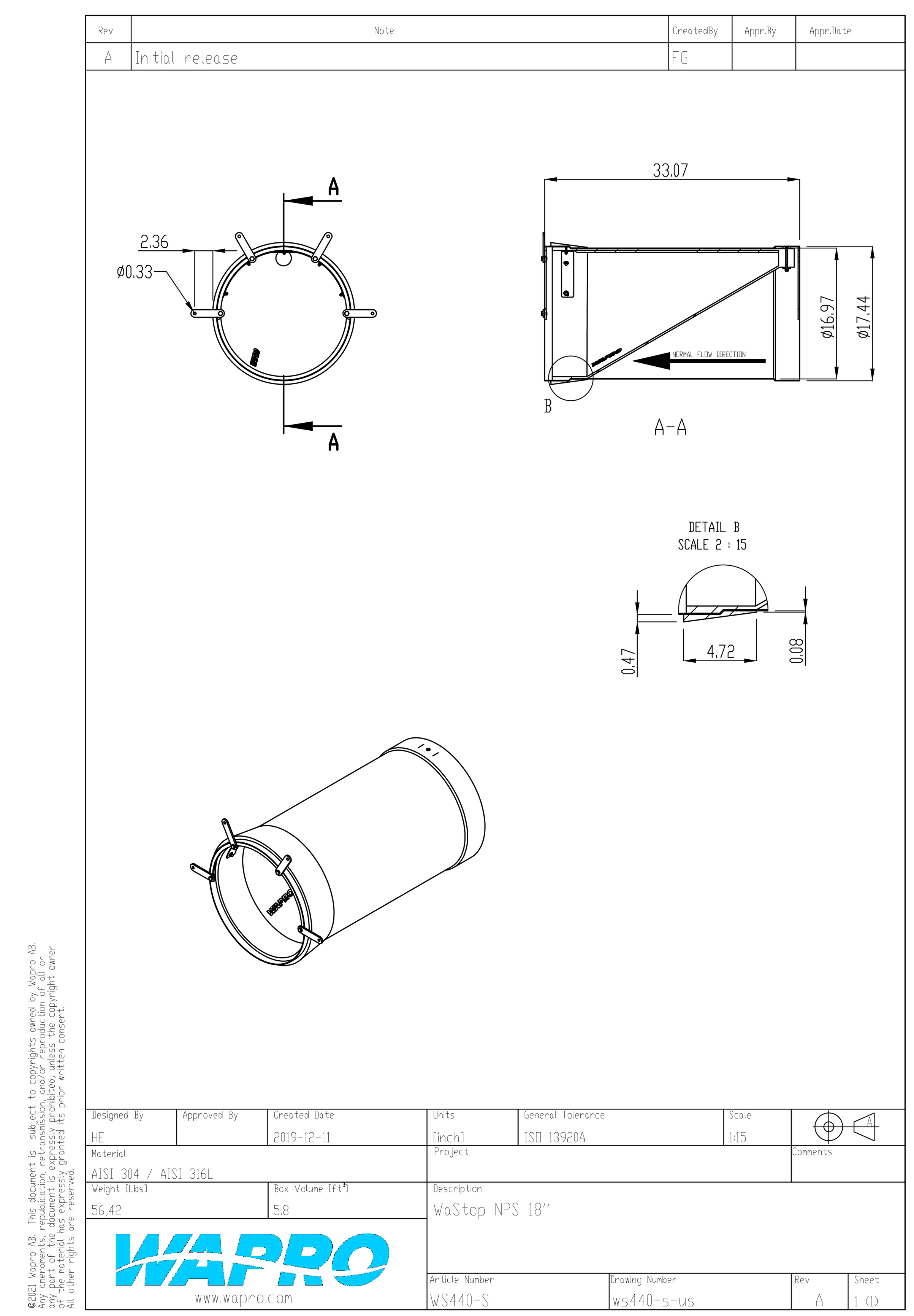


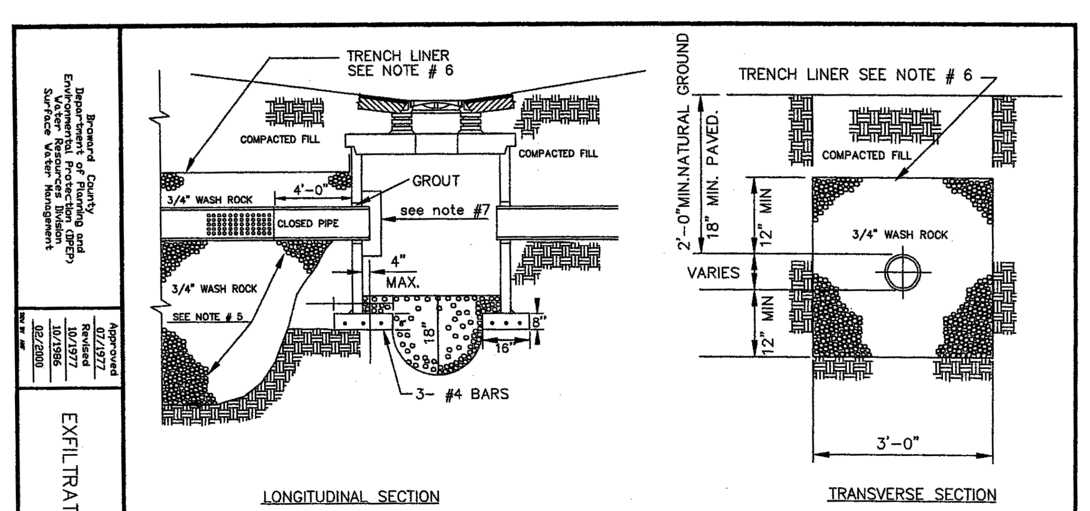
IN GRASS AREAS, ALL GRATES SHALL HAVE A 2' CONCRETE APRON ALL AROUND.

PRECAST DRAINAGE MANHOLE
NOT TO SCALE



CATCH BASIN TOP DETAIL
NOT TO SCALE





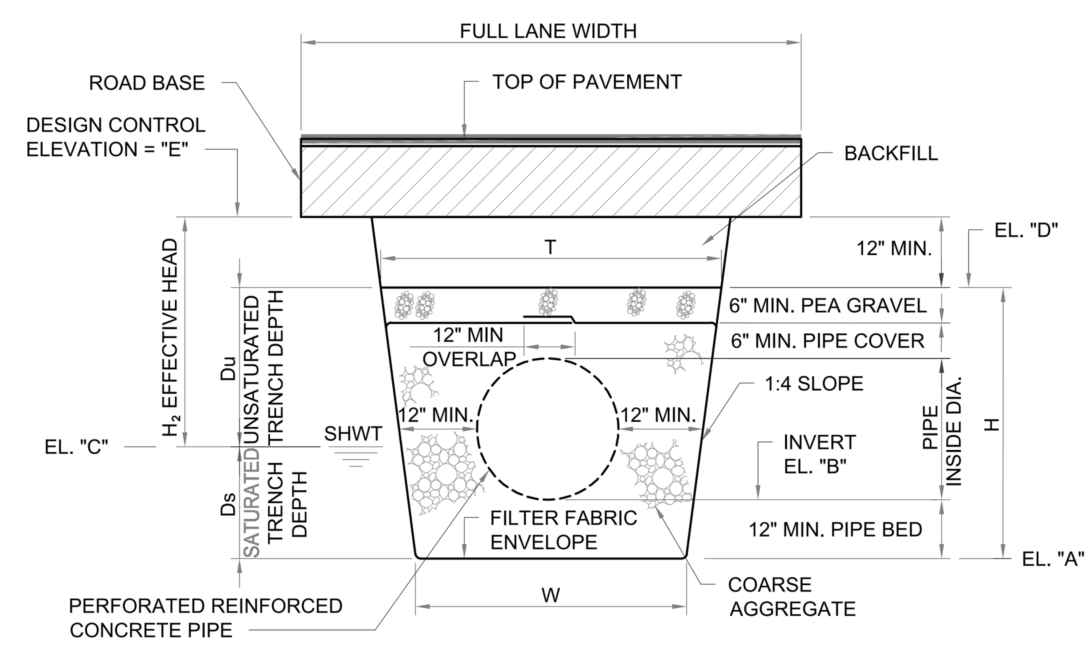
EXFILTRATION TRENCH DETAILS

NOTES:
1.– FOR CATCH BASIN SEE G.D. 7.2 AND W.M. 4.3 THRU 4.5.
2.– DRAIN FIELD MAY BE OF SLOTTED CONCRETE PIPE OR PERFORATED METAL PIPE MEETING BROWARD COUNTY SPECIFICATIONS. OTHER TYPES OF DRAIN PIPE REQUIRE WATER RESOURCES DIVISION APPROVAL.
3.– PIPE SHALL TERMINATE 2 FT FROM END OF TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
4.– COVER PIPE ENDS WITH No. 10 GALVANIZED OR ALUMINUM SCREEN, OPENING NO LARGER THAN 1/2" X 1/2".
5.– BALLAST ROCK SHALL BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
6.– SLIDES AND TOP OF TRENCH TO BE LINED WITH ONE LAYER OF PLASTIC TYPE FILTER CLOTH OR APPROVED EQUAL. OVERLAP TRENCH LINING MATERIAL A MINIMUM OF TWO FEET AT TOP OF TRENCH
7.– INSTALL BAFFLE AS REQUIRED. (SEE W.M. PLATE 4.3)

TRENCH SCHEDULE

PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE



REVISIONS			
No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

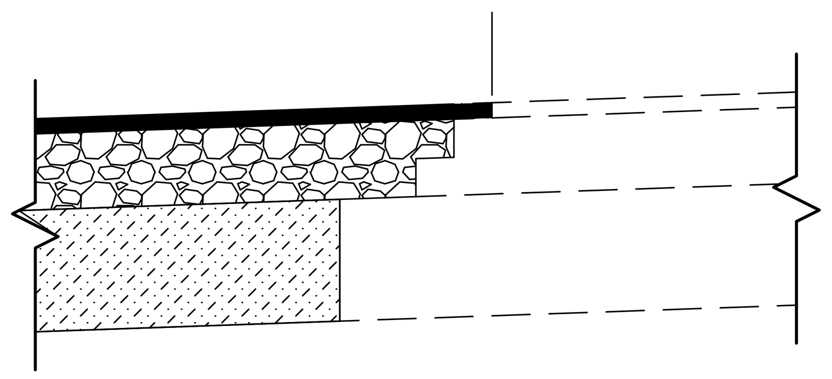
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	5/29/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

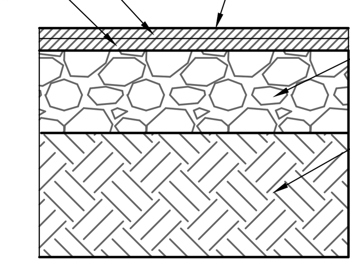
DRAINAGE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-06

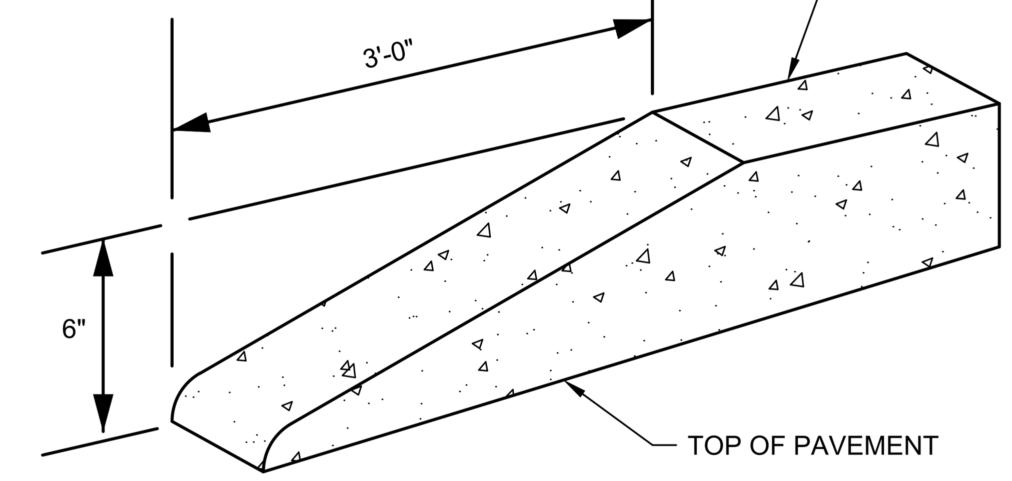


CONNECTION TO EXISTING PAVEMENT DETAIL
NOT TO SCALE



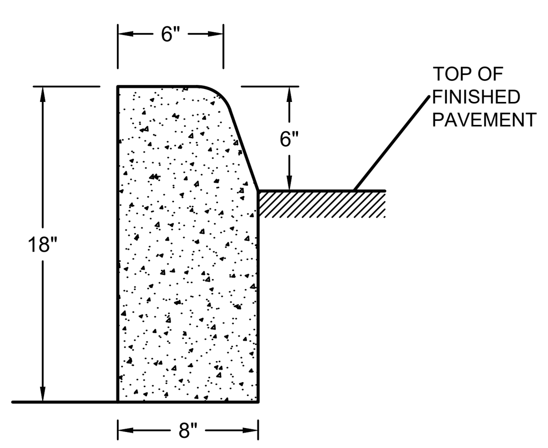
EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED
K-H

NOT TO SCALE

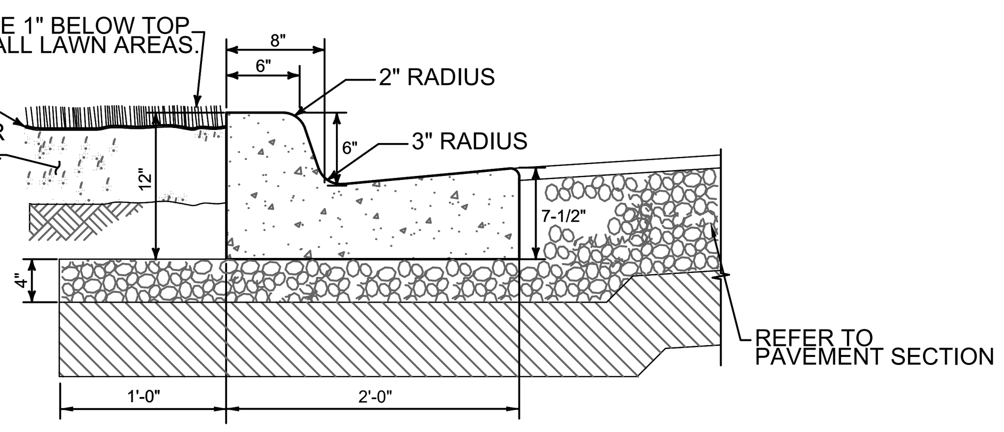


ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

STANDARD CURB TRANSITIONS
NOT TO SCALE

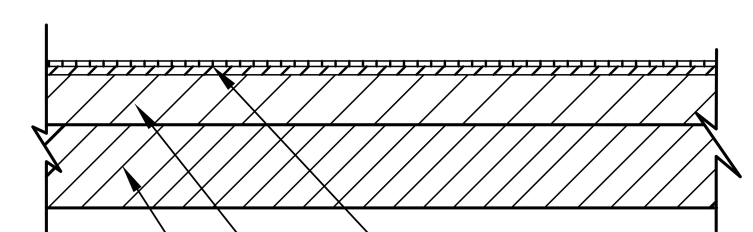


TYPE 'D' CURB
AS PER FDOT INDEX 300
NOT TO SCALE



NOTES:
1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

TYPE "F" CURB
NOT TO SCALE

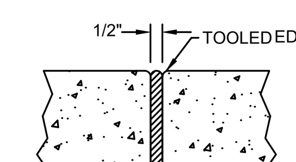


2" TYPE SP-12.5 OR S-1 ASPHALTIC CONCRETE SURFACE COURSE (1500 MARSHALL STABILITY) ABOVE BASE

8" CRUSHED CONCRETE BASE (LDR 100) COMPACTED TO A MIN. OF 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-135)

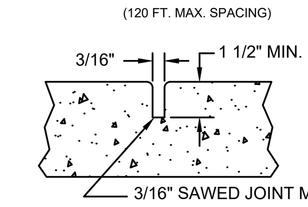
12" STABILIZED SUB BASE (LBR 40) SHALL BE COMPACTED TO A MINIMUM OF 98% OF MAX. DENSITY PER AASHTO T-180 MODIFIED PROCTOR

HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



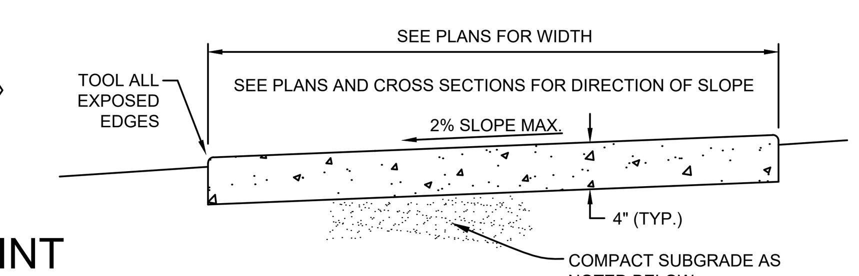
EXPANSION JOINT
NOT TO SCALE

(120 FT. MAX. SPACING)



(5 FT. MAX. SPACING)

CONTRACTION JOINT
NOT TO SCALE



TYPICAL SECTION

NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

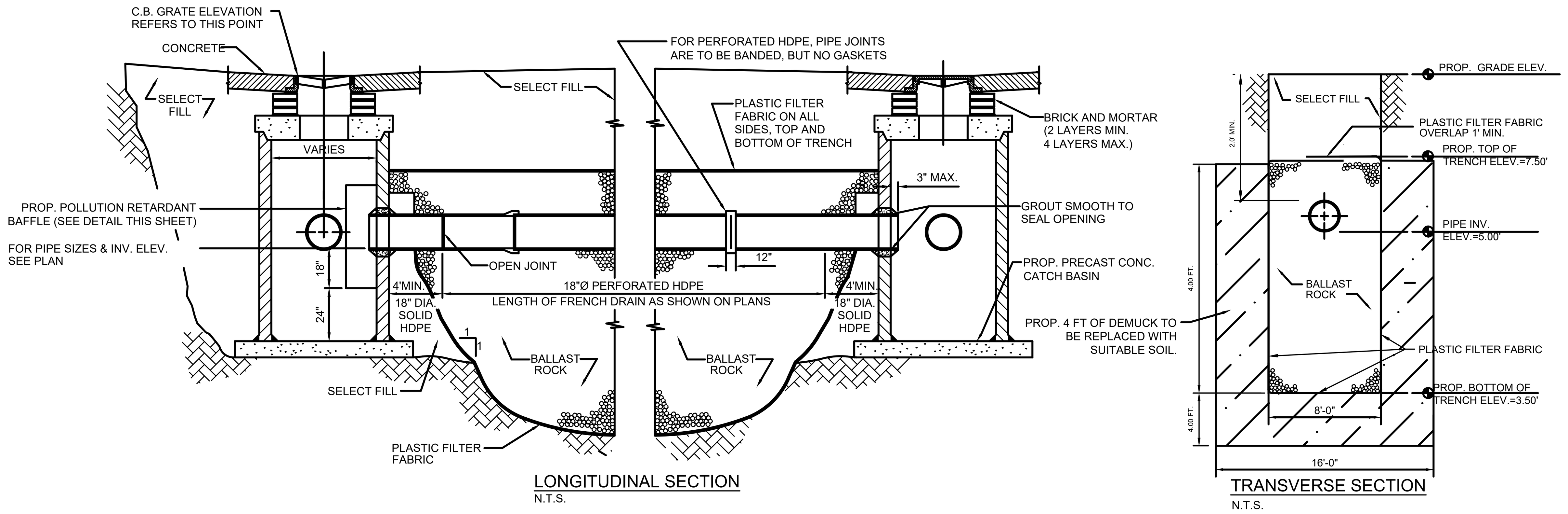
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT	143788000
DATE	2/6/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING & GRADING DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

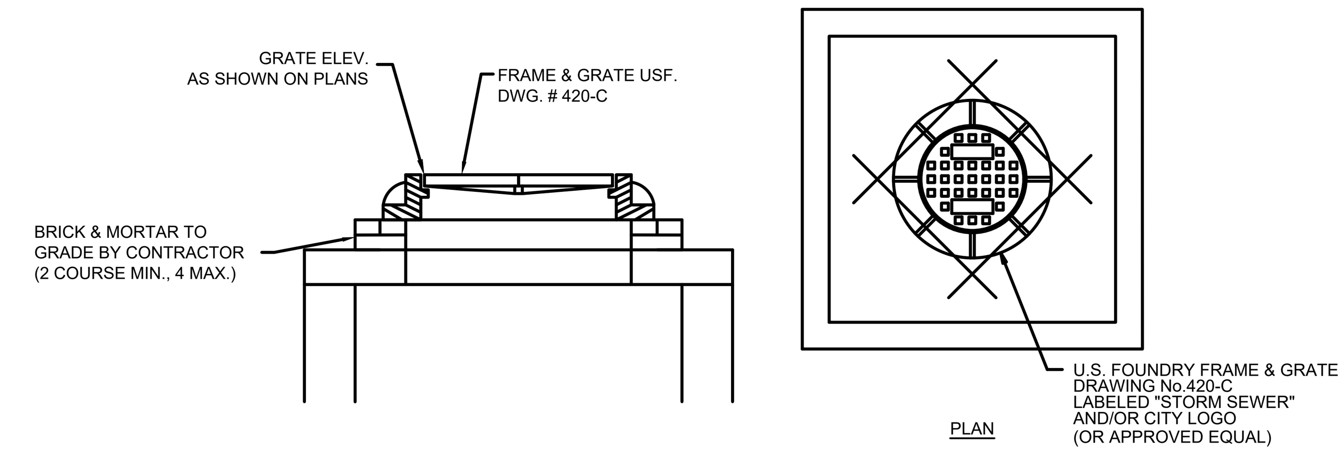
SHEET NUMBER
SP-06



NOTES
1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

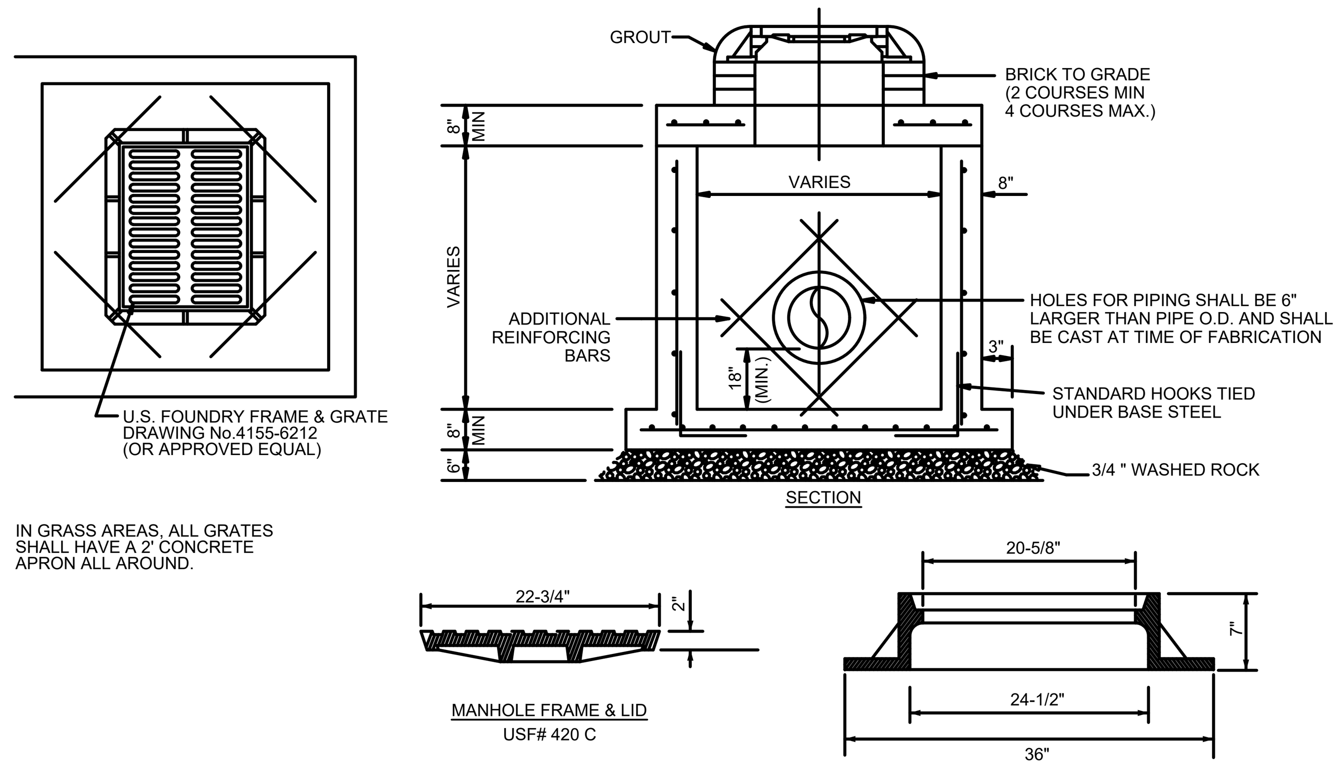
CATCH BASIN AND EXFILTRATION TRENCH DETAIL

NOT TO SCALE



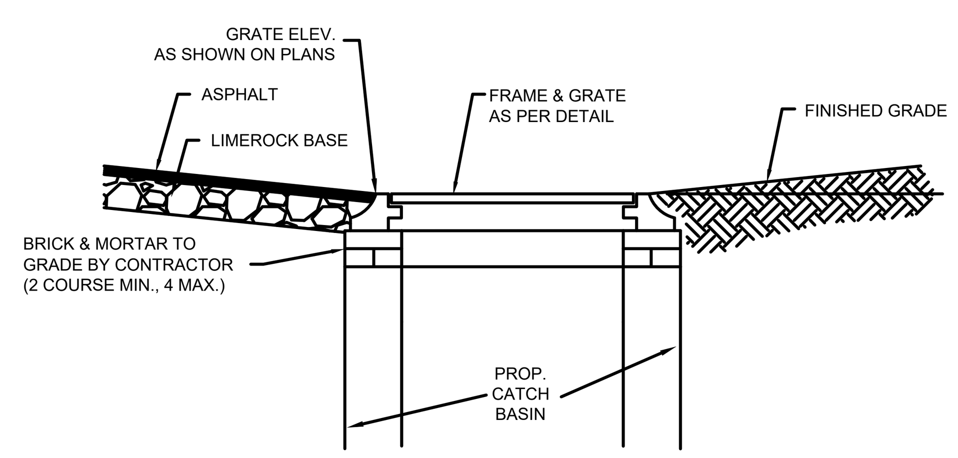
STORM MANHOLE TOP

NO TO SCALE



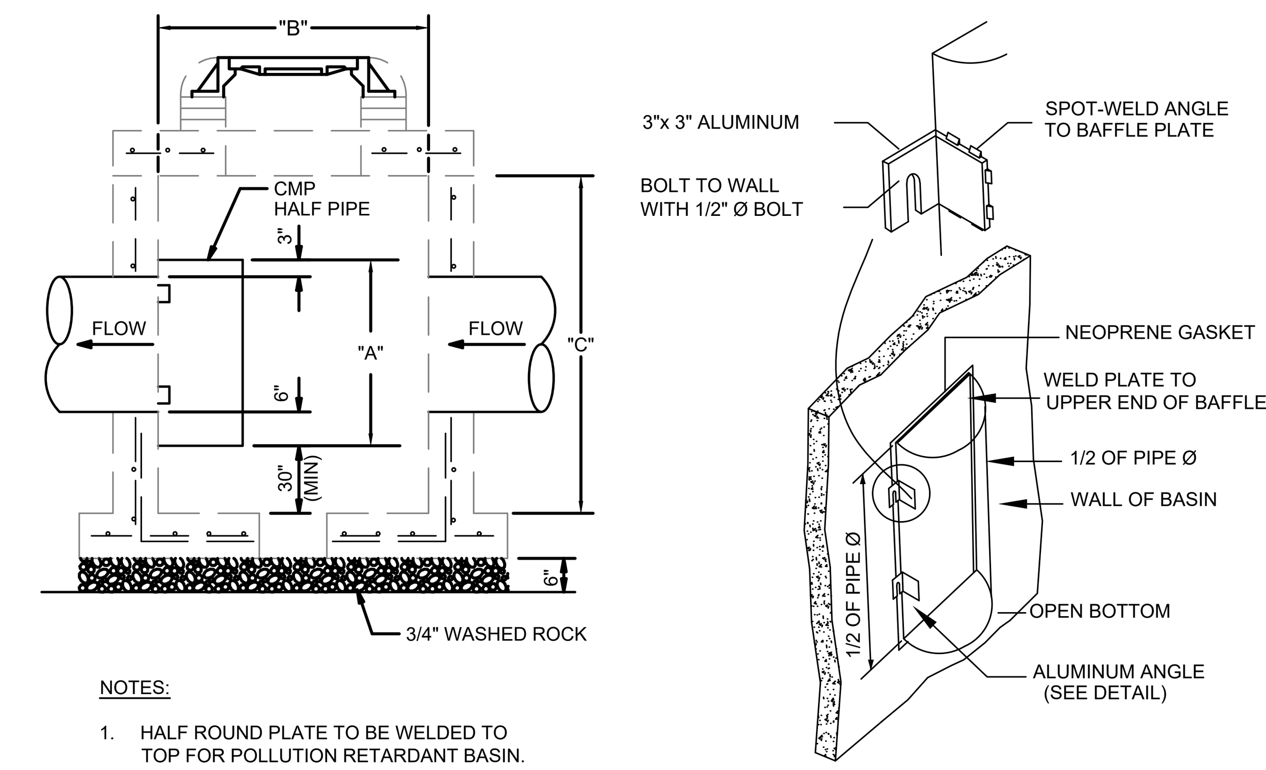
PRECAST DRAINAGE MANHOLE

NOT TO SCALE



CATCH BASIN TOP DETAIL

NOT TO SCALE

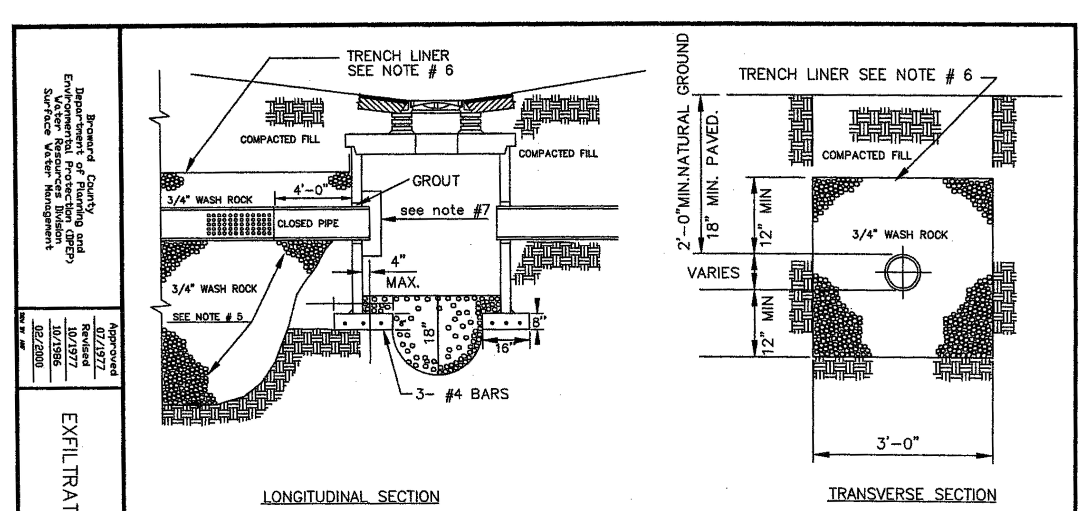


NOTES:
1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

PIPE DIAMETER	BAFFLE SCHEDULE "A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

POLLUTION RETARDANT BAFFLE (PRB)

NOT TO SCALE



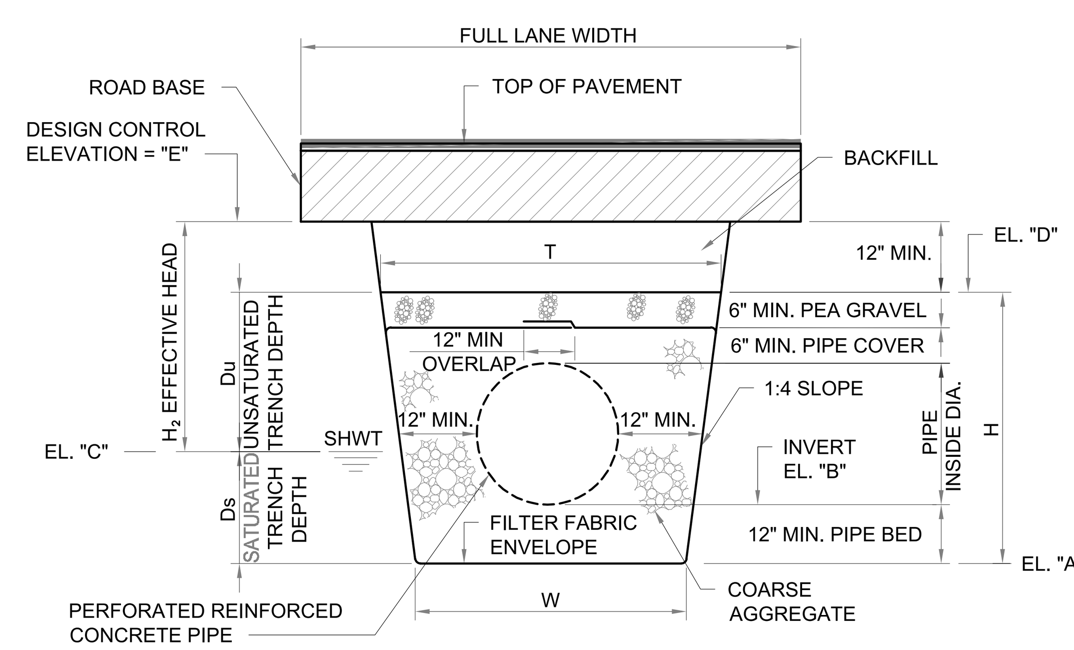
EXFILTRATION TRENCH DETAILS

NOTES:
1.– FOR CATCH BASIN SEE G.D. 7.2 AND W.M. 4.3 THRU 4.5.
2.– DRAIN FIELD MAY BE OF SLOTTED CONCRETE PIPE OR PERFORATED METAL PIPE MEETING BROWARD COUNTY SPECIFICATIONS. OTHER TYPES OF DRAIN PIPE REQUIRE WATER RESOURCES DIVISION APPROVAL.
3.– PIPE SHALL TERMINATE 2 FT FROM END OF TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
4.– COVER PIPE ENDS WITH No. 10 GALVANIZED OR ALUMINUM SCREEN, OPENING NO LARGER THAN 1/2" X 1/2".
5.– BALLAST ROCK SHALL BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
6.– SLIDES AND TOP OF TRENCH TO BE LINED WITH ONE LAYER OF PLASTIC TYPE FILTER CLOTH OR APPROVED EQUAL. OVERLAP TRENCH LINING MATERIAL A MINIMUM OF TWO FEET AT TOP OF TRENCH
7.– INSTALL BAFFLE AS REQUIRED. (SEE W.M. PLATE 4.3)

TRENCH SCHEDULE

PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE



No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 5/20/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

DRAINAGE DETAILS

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-07

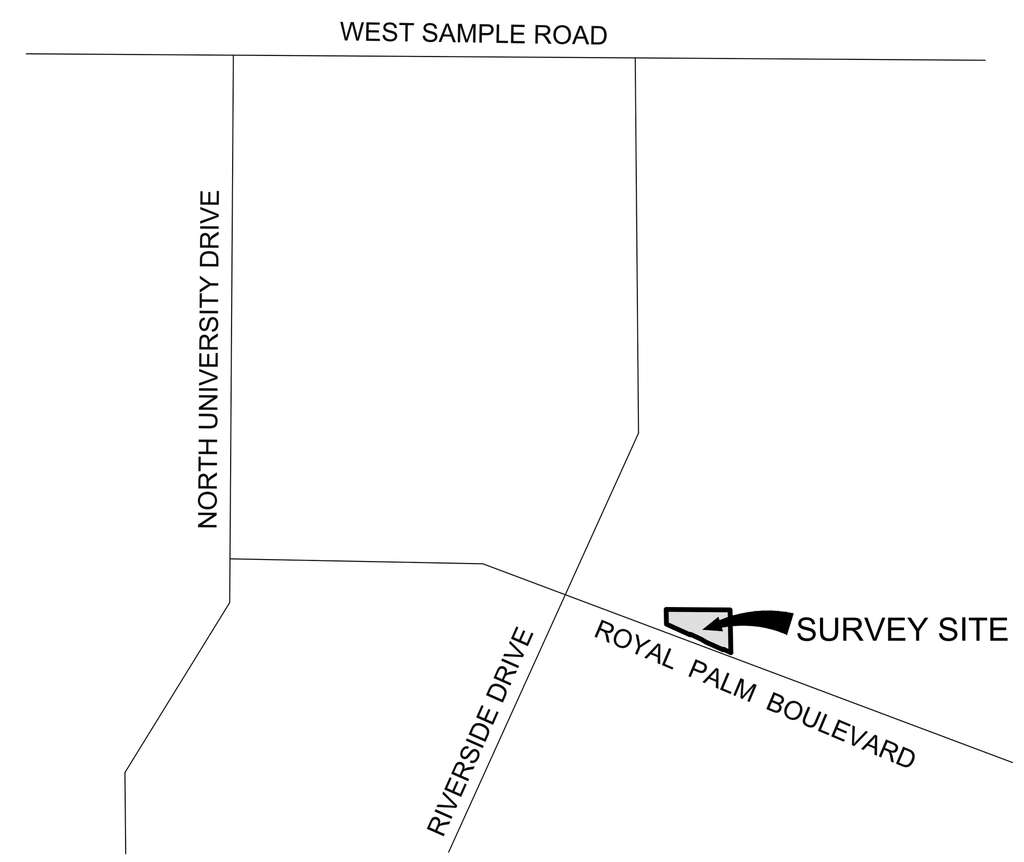
LEGAL DESCRIPTION:

PARCEL "A" AND "B" "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY, FLORIDA AND CONTAINING A TOTAL OF 610,532 SQUARE FEET (14.016 ACRES), MORE OR LESS.

NOTES:

1. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OR AN ELECTRONIC SIGNATURE AND ELECTRONIC SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. BROWARD COUNTY BENCHMARK #2279; ELEVATION: 8.408 FEET.
3. FLOOD ZONE: AE/X(0.2%)/X; BASE FLOOD ELEVATION: 12 FEET/NONE/NONE; PANEL #12011C0165H; COMMUNITY #120047; MAP DATE: 8/18/14.
4. THIS SITE LIES IN SECTION 26, TOWNSHIP 48 SOUTH, RANGE 41 EAST, BROWARD COUNTY, FLORIDA.
5. BEARINGS ARE BASED ON STATE PLANE COORDINATES AND ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1983 WITH 1990 ADJUSTMENT, FL-E ZONE, WITH THE NORTH LINE OF PARCEL "A" BEING S89°28'44"E.
6. REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND THE LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION OR CONSTRUCTION CONTACT BLOOD HOUND UNDERGROUND UTILITY LOCATIONS FOR FIELD VERIFICATION.
7. THIS SURVEY IS CERTIFIED EXCLUSIVELY TO: ABUNDANT LIFE CHURCH.
8. THE HORIZONTAL POSITIONAL ACCURACY OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.2'. THE VERTICAL ACCURACY OF ELEVATIONS OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.1'.
9. THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A COMMITMENT FOR TITLE INSURANCE. ONLY PLATTED OR KNOWN EASEMENTS ARE DEPICTED HEREON.
10. ALL RECORDED DOCUMENTS ARE PER BROWARD COUNTY PUBLIC RECORDS.
11. THE FLOOD ZONE DESIGNATION LINES DEPICTED HEREON ARE PLACED IN APPROXIMATE LOCATIONS, AS SCALED FROM THE IMAGE FROM THE FEMA.ORG WEBSITE.
12. THIS SITE CONTAINS 403 TOTAL CLEARLY IDENTIFIABLE PARKING SPACES (394 REGULAR & 9 DISABLED).
13. BOUNDARY CALCULATIONS PER COORDINATES ON THE LUPTON PLAT BOOK 122, PAGE 30.



CERTIFICATION:

I HEREBY CERTIFY: THAT THIS MAP OF SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA STATE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

☐ JOHN F. PULICE, PROFESSIONAL SURVEYOR AND MAPPER LS2691
☐ VICTOR R. GILBERT, PROFESSIONAL SURVEYOR AND MAPPER LS6274
☐ MICHAEL M. MOSSEY, PROFESSIONAL SURVEYOR AND MAPPER PSM5660
STATE OF FLORIDA

NO.	REVISIONS	BY
5		
4		
3		
2	#72824 -UPDATE SURVEY-6/19/24	J.S.
1	#71148 -ORIGINAL SURVEY-3/21/23	R.V.

ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: R.V.	SCALE: 1" = 40'	CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P.	SURVEY DATE: 6/1924	ORDER NO.: 72824

LEGEND & ABBREVIATIONS

	CONCRETE
	ASPHALT PAVEMENT
	BRICK PAVEMENT
10.00'	ELEVATION
	OVERHEAD WIRES
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND IRRIGATION LINE
	UNDERGROUND GAS LINE
	UNDERGROUND STORM SEWER LINE
	UNDERGROUND WATER LINE
—/—/—	NON-VEHICULAR ACCESS LINE
FPL	FLORIDA POWER & LIGHT COMPANY
LB	LICENSED BUSINESS
O.R.B.	OFFICIAL RECORDS BOOK
TP	TRAVERSE POINT (FOR FIELD INFORMATION ONLY)
(P)	PLATTED BEARINGS
	PALM
	TREE

SHEET 2 OF 2

THIS DOCUMENT IS NEITHER FULL NOR COMPLETE WITHOUT SHEETS 1 AND 2

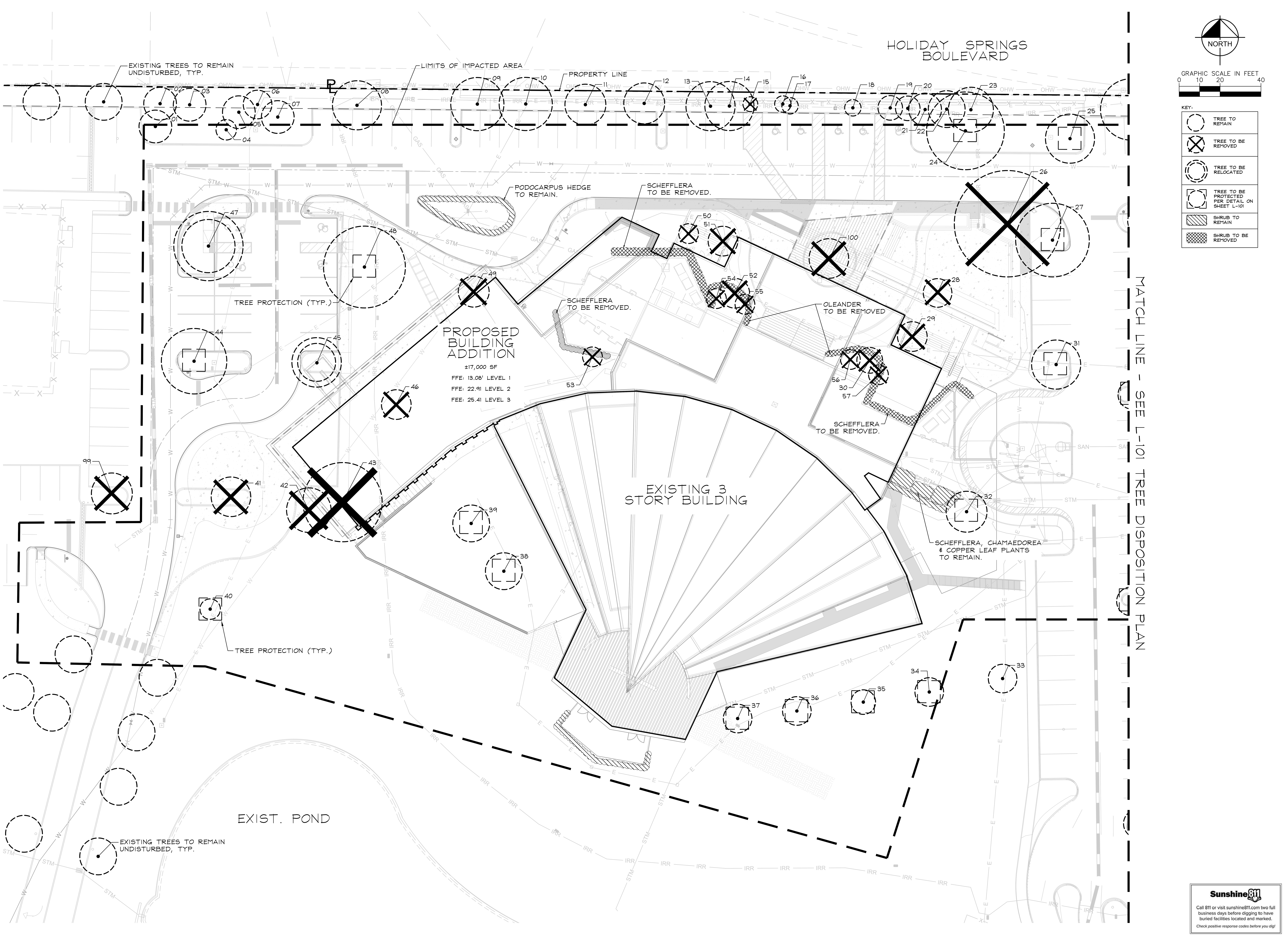
ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PLS

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: R.V.	SCALE: 1" = 40'	CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P.	SURVEY DATE: 6/19/24	ORDER NO.: 72824



Plotted By:Said, Naila Sheet Set:ABUNDANT LIFE CHURCH Layout:L-100 TREE DISPOSITION PLAN July 17, 2025 01:45:32pm K:\fl_civil\143 Jobs\143788000 abundant life church margate\Design\CADD\plansheets\Landscape\L-100 TREE DISPOSITION PLAN.dwg

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

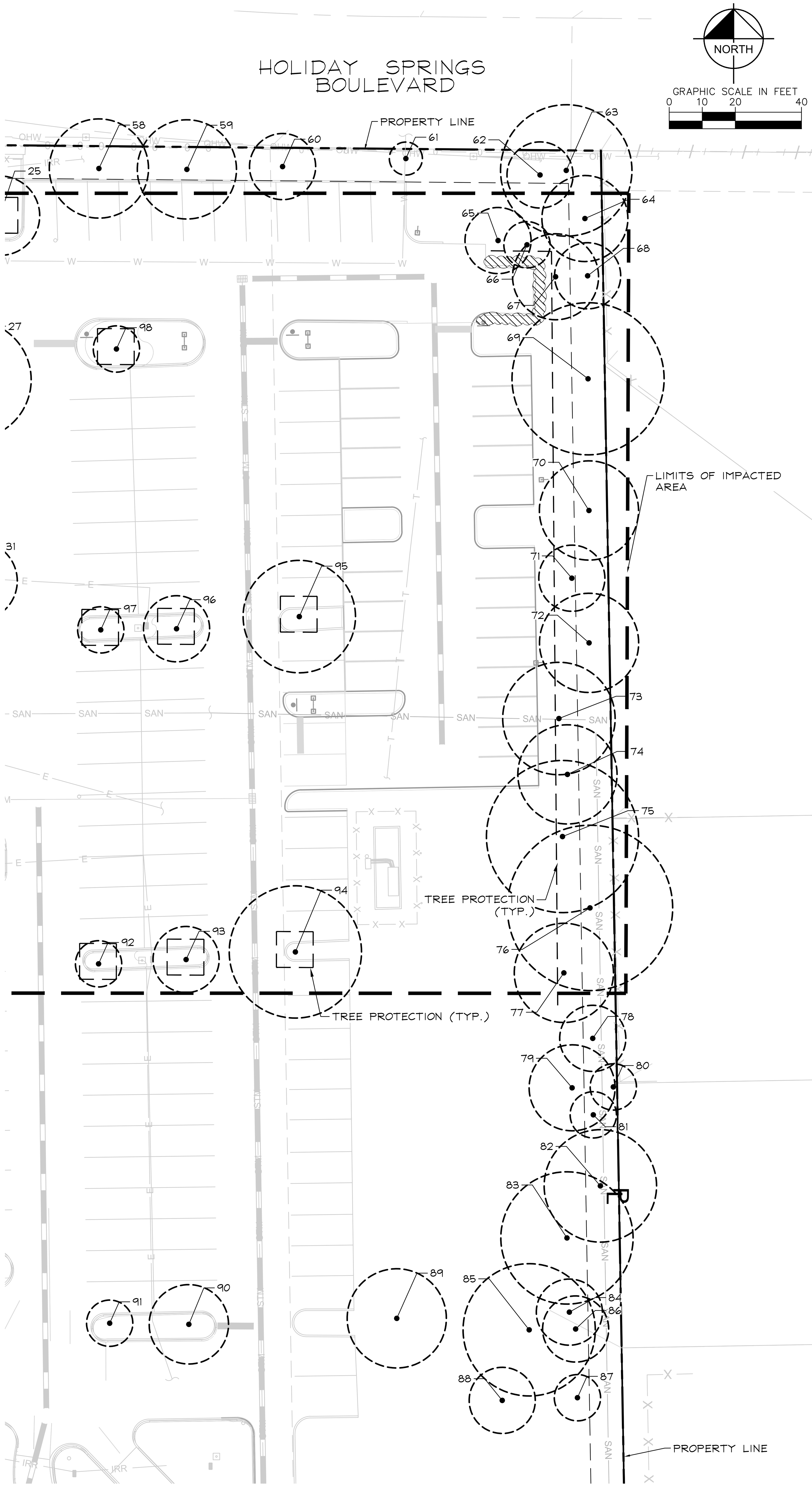
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

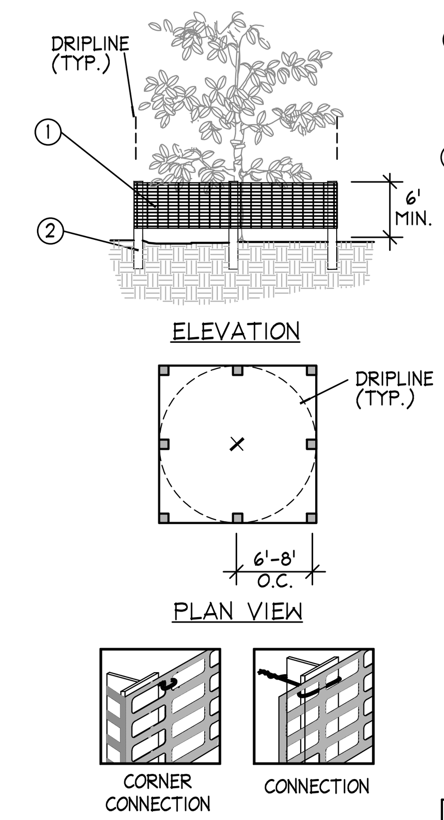
TREE DISPOSITION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
TD-01



TREE DISPOSITION LIST							
NO.	COMMON NAME	BOTANICAL NAME	DBH (in.)	SPREAD (ft.)	AREA (sf.)	HEIGHT (ft.)	DISPOSITION
1	Sabal Palm	Sabal palmetto		30	707		REMAIN
2	Live Oak	Quercus virginiana		30	707		REMAIN
3	Sabal Palm	Sabal palmetto		30	707		REMAIN
4	Sabal Palm	Sabal palmetto		10	79		REMAIN
5	Sabal Palm	Sabal palmetto		15	177		REMAIN
6	Mahogany	Swietenia mahagoni		15	177		REMAIN
7	Mahogany	Swietenia mahagoni		15	177		REMAIN
8	Mahogany	Swietenia mahagoni		25	491		REMAIN
9	Mahogany	Swietenia mahagoni		25	491		REMAIN
10	Mahogany	Swietenia mahagoni		25	491		REMAIN
11	Mahogany	Swietenia mahagoni		20	314		REMAIN
12	Mahogany	Swietenia mahagoni		20	314		REMAIN
13	Mahogany	Swietenia mahagoni		25	491		REMAIN
14	Japanese Privet	Ligustrum japonicum		25	491		REMAIN
15	**Stump**				0		**REMOVE**
16	Gumbo Limbo	Bursera simaruba		10	79		REMAIN
17	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
18	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
19	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
20	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
21	Japanese Privet	Ligustrum japonicum		15	177		REMAIN
22	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
23	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
24	Mahogany	Swietenia mahagoni		40	1257		REMAIN
25	Mahogany	Swietenia mahagoni		25	491		REMAIN
26	**Live Oak**	**Quercus virginiana**		50	1963		**REMOVE**
27	Live Oak	Quercus virginiana		35	962		REMAIN
28	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
29	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
30	**Royal Palm**	**Roystonia regia**		10	79		**REMOVE**
31	Live Oak	Quercus virginiana		25	491		REMAIN
32	Royal Palm	Roystonia regia		20	314		REMAIN
33	Royal Palm	Roystonia regia		15	177		REMAIN
34	Royal Palm	Roystonia regia		15	177		REMAIN
35	Royal Palm	Roystonia regia		10	79		REMAIN
36	Royal Palm	Roystonia regia		15	177		REMAIN
37	Royal Palm	Roystonia regia		15	177		REMAIN
38	Royal Palm	Roystonia regia		20	314		REMAIN
39	Royal Palm	Roystonia regia		20	314		REMAIN
40	Dahoon Holly	Ilex cassine		10	79		REMAIN
41	**Live Oak**	**Quercus virginiana**		20	314		**REMOVE**
42	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
43	**Live Oak**	**Quercus virginiana**		**40**	1257		**REMOVE**
44	Live Oak	Quercus virginiana		30	707		REMAIN
45	**Live Oak**	**Quercus virginiana**		25	491		**RELOCATE**
46	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
47	**Live Oak**	**Quercus virginiana**		30	707		**RELOCATE**
48	Live Oak	Quercus virginiana		40	1257		REMAIN
49	**Dahoon Holly**	**Ilex cassine**	**15**	**15**	177		**REMOVE**
50	**Live Oak**	**Quercus virginiana**		**10**	79		**REMOVE**
51	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
52	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
53	**Dahoon Holly**	**Ilex cassine**		**10**	79		**REMOVE**
54	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
55	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
56	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
57	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
58	Mahogany	Swietenia mahagoni		30	707		REMAIN
59	Mahogany	Swietenia mahagoni		30	707		REMAIN
60	Mahogany	Swietenia mahagoni		20	314		REMAIN
61	Sabal Palm	Sabal palmetto		10	79		REMAIN
62	Sabal Palm	Sabal palmetto		20	314		REMAIN
63	Live Oak	Quercus virginiana		40	1257		REMAIN
64	Live Oak	Quercus virginiana		25	491		REMAIN
65	Sabal Palm	Sabal palmetto		20	314		REMAIN
66	Sabal Palm	Sabal palmetto		15	177		REMAIN
67	Sabal Palm	Sabal palmetto		25	491		REMAIN
68	Live Oak	Quercus virginiana		20	314		REMAIN
69	Live Oak	Quercus virginiana		45	1590		REMAIN
70	Live Oak	Quercus virginiana		30	707		REMAIN
71	Live Oak	Quercus virginiana		20	314		REMAIN
72	Live Oak	Quercus virginiana		30	707		REMAIN
73	Live Oak	Quercus virginiana		35	962		REMAIN
74	Live Oak	Quercus virginiana		30	707		REMAIN
75	Live Oak	Quercus virginiana		45	1590		REMAIN
76	Live Oak	Quercus virginiana		50	1963		REMAIN
77	Live Oak	Quercus virginiana		30	707		REMAIN
78	Live Oak	Quercus virginiana		20	314		REMAIN
79	Southern Mangonlia	Magnolia grandiflora		25	491		REMAIN
80	Unknown	Unknown		15	177		REMAIN
81	Unknown	Unknown		15	177		REMAIN
82	Sabal Palm	Sabal palmetto		35	962		REMAIN
83	Live Oak	Quercus virginiana		40	1257		REMAIN
84	Unknown	Unknown		20	314		REMAIN
85	Mahogany	Swietenia mahagoni		40	1257		REMAIN
86	Unknown	Unknown		20	314		REMAIN
87	Unknown	Unknown		15	177		REMAIN
88	Unknown	Unknown		20	314		REMAIN
89	Live Oak	Quercus virginiana		30	707		REMAIN
90	Live Oak	Quercus virginiana		25	491		REMAIN
91	Live Oak	Quercus virginiana		15	177		REMAIN
92	Live Oak	Quercus virginiana		15	177		REMAIN
93	Live Oak	Quercus virginiana		20	314		REMAIN
94	Live Oak	Quercus virginiana		40	1257		REMAIN
95	Live Oak	Quercus virginiana		35	962		REMAIN
96	Live Oak	Quercus virginiana		20	314		REMAIN
97	Live Oak	Quercus virginiana		15	177		REMAIN
98	Live Oak	Quercus virginiana		15	177		REMAIN
99	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
100	**Pigmy Date Palm**	**Phoenix roebelenii**		**20**	314		**REMOVE**



1. 6'H "PERIMETER PLUS" CONSTRUCTION FENCE BY CONWED PLASTICS OR OWNER'S REPRESENTATIVE APPROVED EQUAL. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.

2. 8' TALL METAL "T" POSTS OR 2" x 2" X 8' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.

INSTALLATION NOTES:

A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.

B. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/4 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 8' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.

C. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).

D. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

A Tree/Shrub Protector
Barrier Detail
NTS

KEY:

- TREE TO REMAIN
- TREE TO BE REMOVED
- TREE TO BE RELOCATED
- TREE TO BE PROTECTED PER DETAIL ON SHEET L-101
- SHRUB TO REMAIN
- SHRUB TO BE REMOVED

ROOT PRUNING

1. THE LANDSCAPE ARCHITECT HAS OBSERVED TREES THAT COULD BE IMPACTED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
2. IF CONSTRUCTION ACTIVITIES OCCUR WITHIN THE DRIPLINE (OR THE HORIZONTAL EXTENT OF THE CANOPY) OF A TREE, THEN THAT TREE IS A CANDIDATE FOR ROOT PRUNING.
3. ROOT PRUNING MUST OCCUR PRIOR TO TRENCHING OPERATIONS TO INSURE THAT THE ROOTS ARE CUT CLEAN AND AT PROPER ANGLES AND NOT MECHANICALLY RIPPED FROM THE EARTH DURING CONSTRUCTION.
4. FOR TREES REQUIRING ROOT PRUNING, A TREE ASSESSMENT SHALL BE CONDUCTED AND A ROOT-PRUNING PLAN SHALL BE DEVELOPED BY A CERTIFIED ARBORIST OR CONSULTING ARBORIST. THIS PLAN SHOULD IDENTIFY:
   - MAXIMUM ALLOWABLE SIZE OF ROOTS TO BE CUT
   - ALLOWABLE PROXIMITY TO THE TRUNK FOR CUTS
   - TIME OF YEAR WHEN ROOT CUTTING IS ALLOWABLE
     (NOTE: IN FLORIDA, IT IS BEST TO AVOID ROOT PRUNING DURING TIMES OF THE MAY THROUGH SEPTEMBER, WHEN THE POTENTIAL FOR DAMAGING WIND LOADS ON TREES ARE GREATEST.)
   - METHOD FOR MAKING CUTS
   - MITIGATING CANOPY PRUNING
   - TYPE AND EXTENT OF NECESSARY STRUCTURAL SUPPORT
   - SCHEDULE FOR WATERING/FERTILIZATION AFTER PRUNING
5. IMPLEMENT THE ROOT PRUNING PLAN PER THE ARBORIST'S RECOMMENDATION.

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

TREE DISPOSITION SUMMARY	
TREES TO BE REMOVED	12
TREES TO BE RELOCATED	2
PALMS TO BE REMOVED	7

TREE MITIGATION SUMMARY	
TREE REMOVAL SUMMARY 6 LIVE OAKS (#26,41,42,43,50,99)= 4,241 SF 1 STUMP (#15) 4 SOUTHERN MAGNOLIAS (#54,55,56,57)= 314 SF 2 DAHOON HOLLIES (#49,53)= 255 SF	4,811 SF
PALM REMOVAL SUMMARY 6 ROYAL PALMS (#28,29,30,46,51,52)= 962 SF 1 PIGMY DATE PALM (#100)= 314 SF	1,276 SF
CANOPY PROVIDED PER SHEET L-201 1 GUMBO LIMBO @ 300 SF = 300 SF 3 LIVE OAKS @ 300 SF = 900 SF 2 SILVER BUTTON WOOD @200 SF = 400 SF 2 ROYAL PALMS @ 100 SF = 200 SF	1,800 SF

TREE MITIGATION COST	
SEC. 34-448.2.D. - PROCEDURES FOR DETERMINING TREE REPLACEMENT REQUIREMENTS. CONTRIBUTION OF $2.00 PER SF OF LOST CANOPY (6,087 SF - 1,800 SF = 4,287 SF OF LOST CANOPY) 4,287 X 2 = $ 8,574 CONTRIBUTION	$8,574

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

BUILDING DEPARTMENT REVISION SET

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

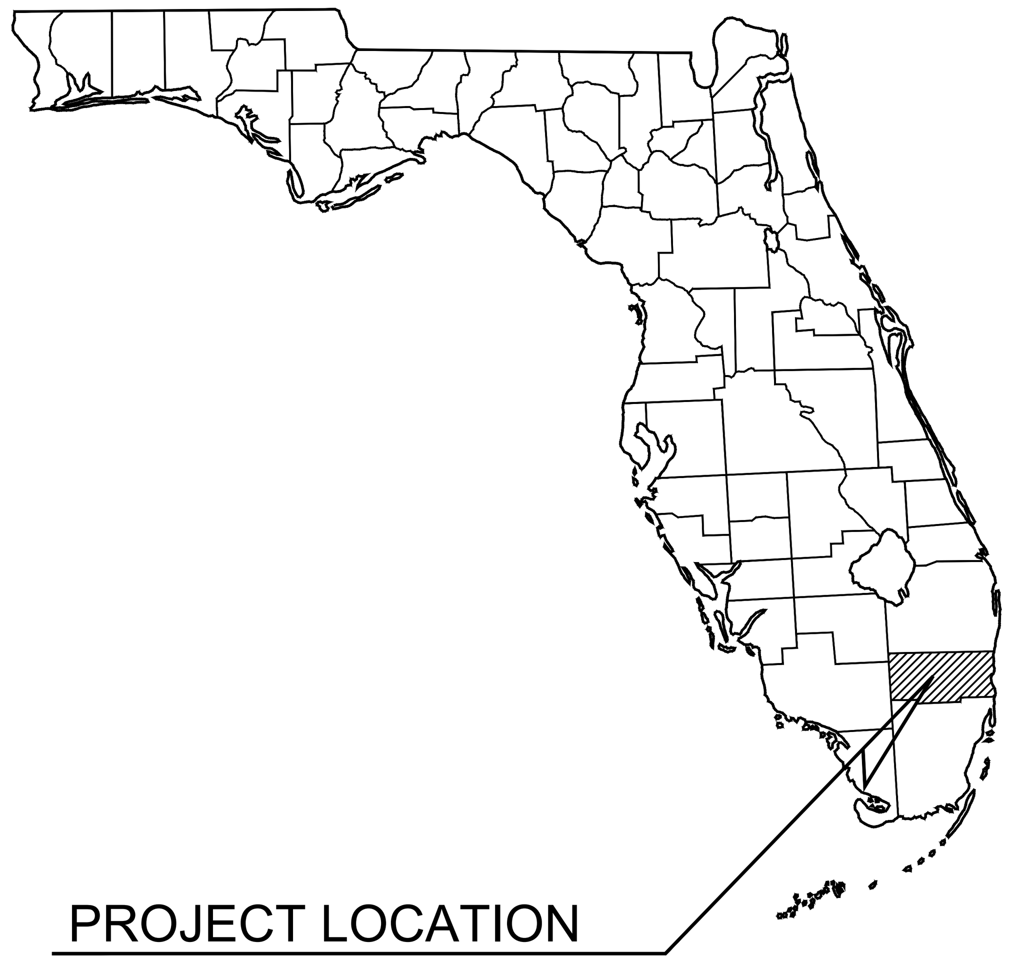
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

TREE DISPOSITION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
TD-02



PROJECT LOCATION
BROWARD COUNTY

CIVIL ENGINEERING SET
FOR
ABUNDANT LIFE CHURCH

7955 ROYAL PALM BLVD., MARGATE FL, 33063
BROWARD COUNTY
JULY 2025

PROGRESS SET

PROJECT TEAM:

OWNER/DEVELOPER:
SEAN THOMAS
ABUNDANT LIFE CHURCH
7955 ROYAL PALM BLVD
MARGATE, FL, 33063

ARCHITECT:
SPACE DESIGN
108 SOUTH BROADWAY
EDMOND, OKLAHOMA, 73034
(405) 310-8866
CONTACT: THOMAS SMALL

SURVEYOR:
PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD SUNRISE,
FLORIDA 33351
(954) 572-1777
CONTACT: JOHN F. PULICE

LANDSCAPE:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100

CIVIL:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100
CONTACT: AARON MACKEY, P.E.

LIST OF CONTACTS:

ENGINEERING DIVISION
901 NW 66TH AVENUE SUITE A
MARGATE, FL 33063
(954) 972-0828

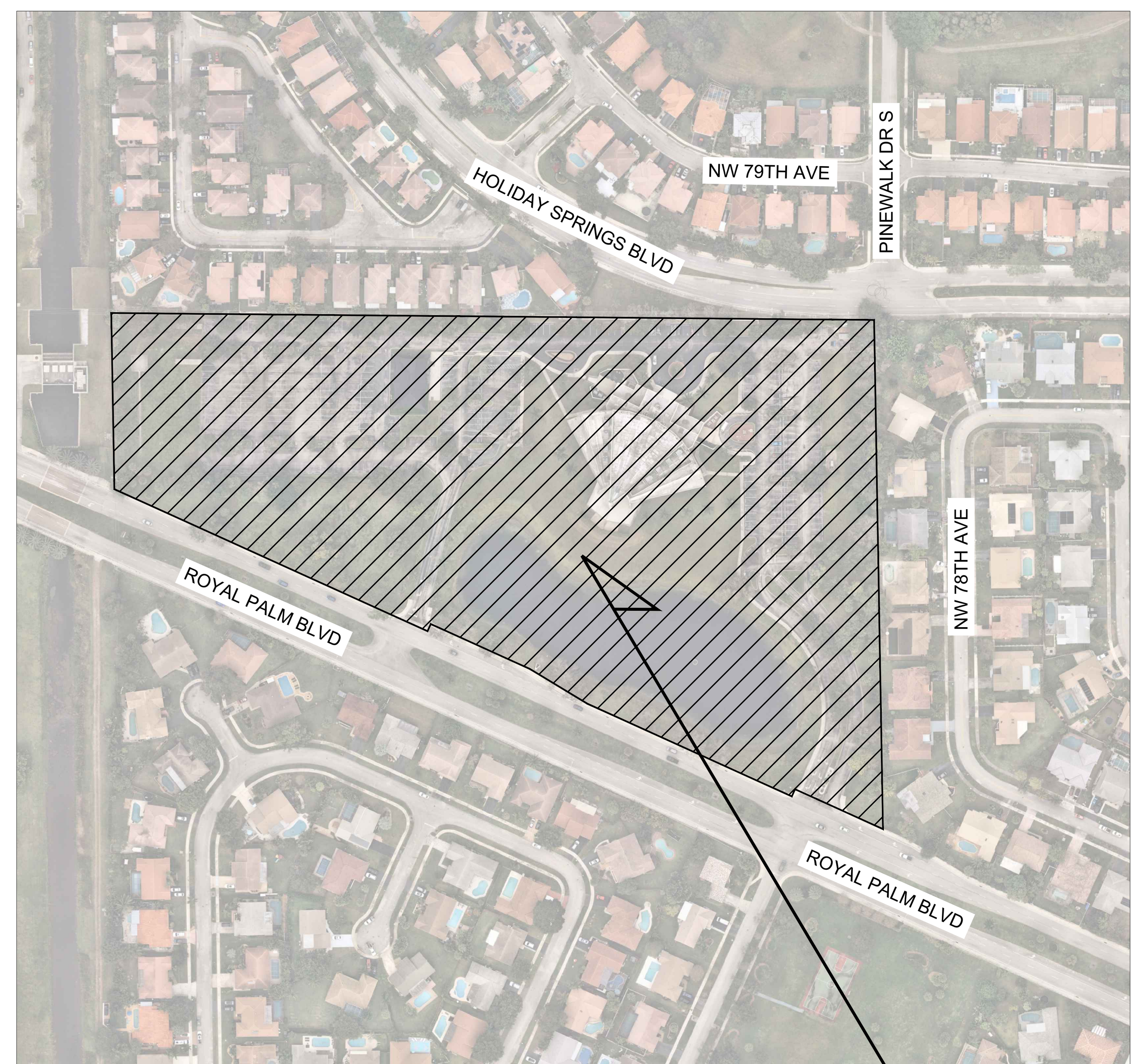
FIRE PROTECTION:
CITY OF MARGATE FIRE DEPARTMENT
1835 BANKS ROAD
MARGATE, FL 33063
(954) 971-4561

BROWARD COUNTY ENVIRONMENTAL PERMITTING DIVISION
1 N UNIVERSITY DR SUITE 203
PLANTATION, FL 33324
(954) 519-1260

BUILDING DEPARTMENT:
CITY OF MARGATE BUILDING DEPARTMENT
901 NW 66TH AVE B
MARGATE, FL 33063
(954) 970-3004

LEGAL DESCRIPTION

PARCEL "A", "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY FLORIDA.



VICINITY MAP

GRAPHIC SCALE IN FEET
0 100 200 400
SCALE: 1"=200'

NORTH

SUBJECT PROPERTY
7955 ROYAL PALM BLVD , MARGATE FL, 33063,

CIVIL ENGINEER:
Kimley»Horn

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C-0	COVER SHEET
G-01	GENERAL NOTES
D-01	EROSION CONTROL & DEMOLITION PLAN
SP-01	OVERALL SITE PLAN
SP-02	MASTER PARKING PLAN
C-01	HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN
SP-03	PAVING GRADING & DRAINAGE PLAN
SP-04	PAVING GRADING & DRAINAGE PLAN
CS-01	CROSS SECTIONS
CWS-01	WATER & SEWER PLAN
D-02	EROSION CONTROL& DEMOLITION DETAILS
C-02	HORIZONTAL CONTROL, SIGNANGE & MARKING DETAILS
SP-05	PAVING & GRADING DETAILS
SP-06	DRAINAGE DETAILS
SL-01	PHOTOMETRICS PLAN
SL-02	PHOTOMETRICS DETAILS
SL-03	PHOTOMETRICS DETAILS
TD-01	TREE DISPOSITION PLAN
TD-02	TREE DISPOSITION PLAN
LP-01	LANDSCAPE PLAN
LP-02	LANDSCAPE PLAN
LP-03	LANDSCAPE DETAILS
LP-04	LANDSCAPE NOTES
IRR-01	IRRIGATION PLAN
IRR-02	IRRIGATION PLAN
IRR-03	IRRIGATION DETAILS
IRR-04	IRRIGATION NOTES
IRR-05	IRRIGATION NOTES
L-400	HARDSCAPE PLAN

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

ISSUED FOR DEVELOPMENT REVIEW COMMITTEE (DRC) - NOT FOR CONSTRUCTION JULY 23, 2025

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

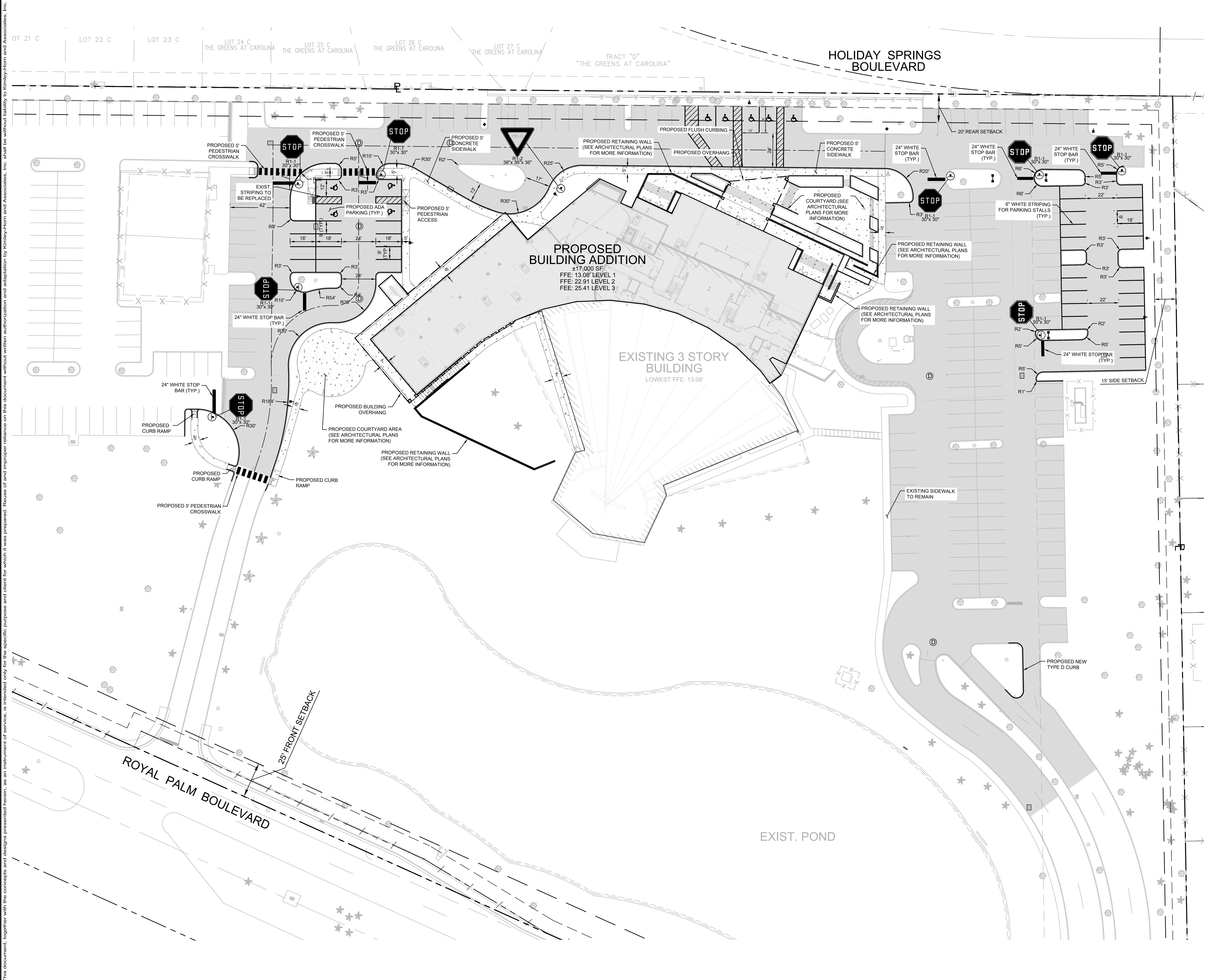
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

COVER SHEET

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-0



NORTH

GRAPHIC SCALE IN FEET

0 15 30 60

LEGEND

R/W — ℄	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-05 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

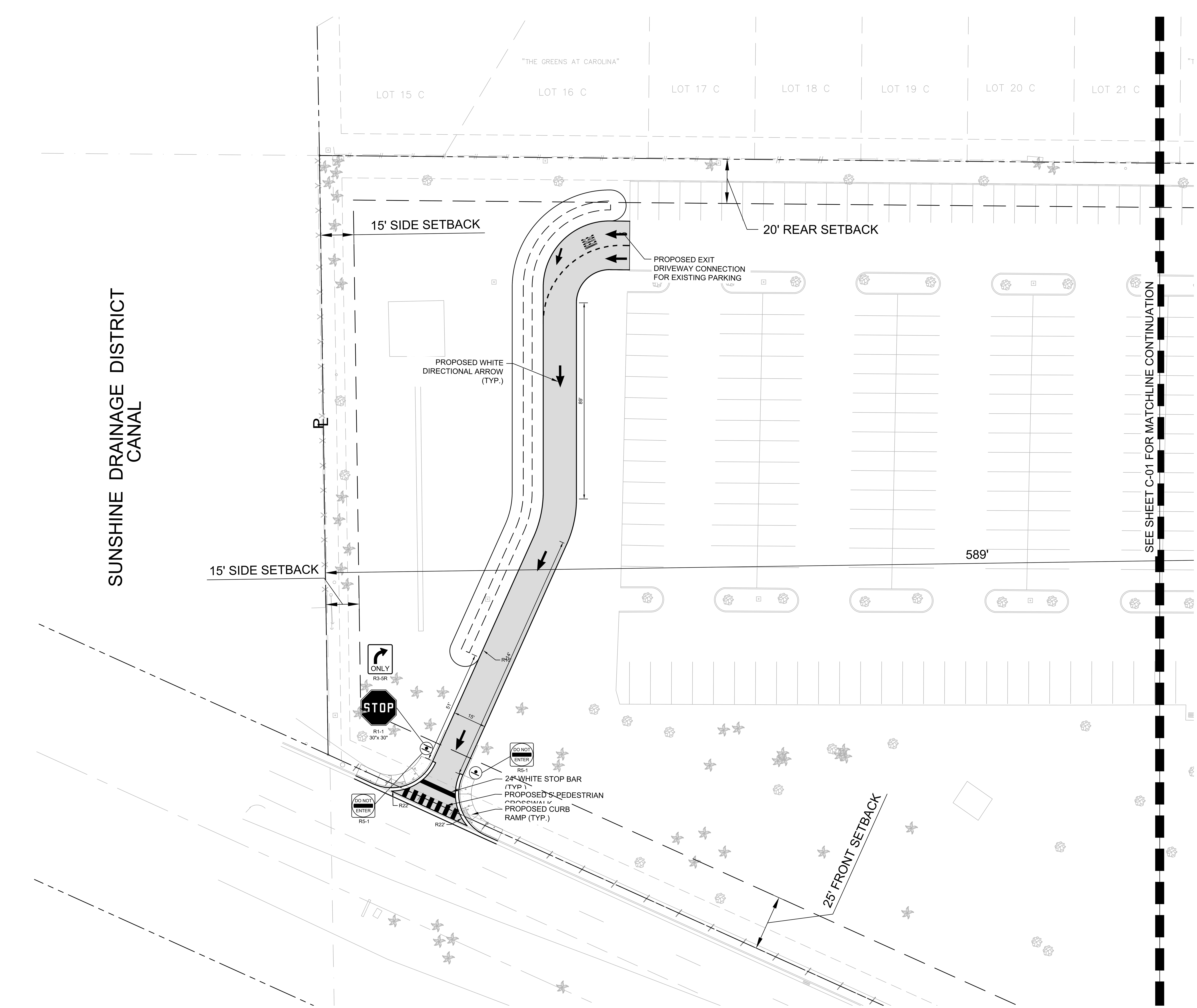
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-01



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- PROP. ROAD CENTERLINE
- PROP. SIGN
- EXIST. SIGN
- ASPHALT PAVEMENT SEE SHEET SP-06 FOR DETAIL
- PROP. CONCRETE SIDEWALK
- PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING

SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 2/6/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

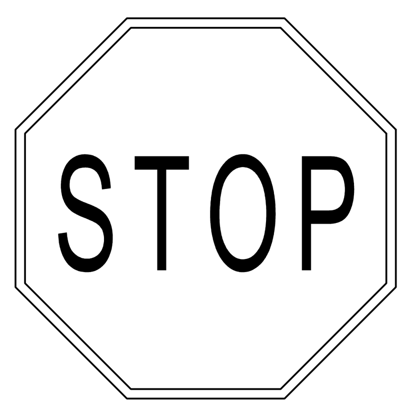
HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

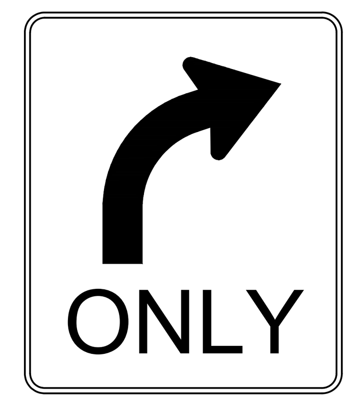
SHEET NUMBER
C-02

R1-1



R5-1

R3-5R

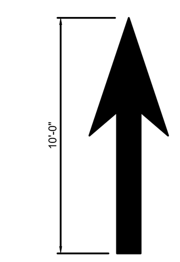


R6-1R

SIGNAGE
NOT TO SCALE

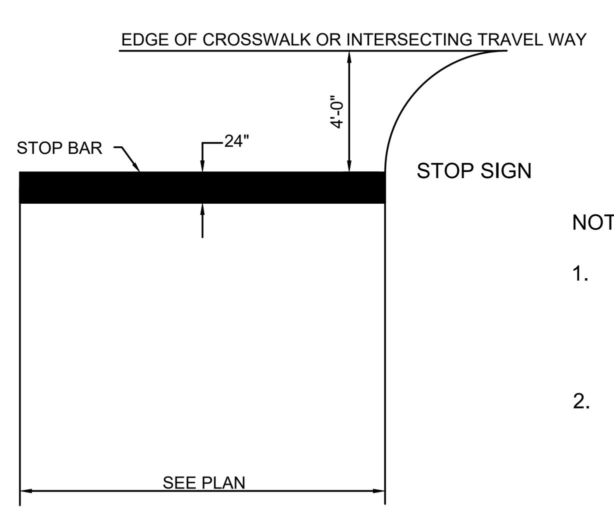
NOTES:

1. ARROWS SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE ARROWS ARE TO BE PAINTED RETROREFLECTIVE WHITE.
3. OPEN ARROWS SHALL CONSIST OF A 4" PERIMETER STRIPE.



SOLID ARROW MARKINGS
USED AT EXITS FROM THE PARKING LOT TO PUBLIC STREETS

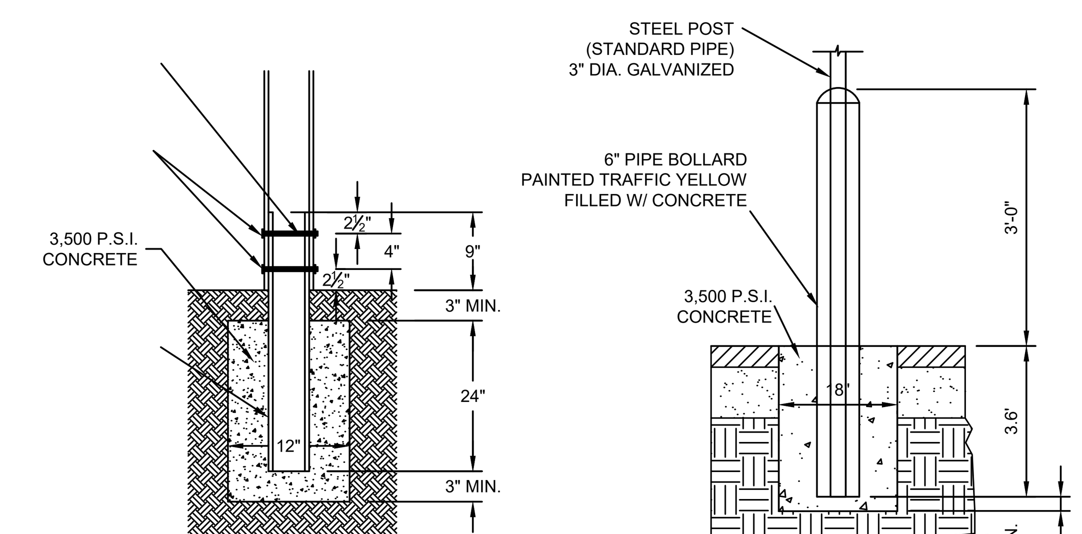
PAVEMENT MARKINGS
NOT TO SCALE



NOTE:

1. LINES SHALL BE APPLIED IN ACCORDANCE WITH SECTIONS 3B.16 AND 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE BARS ARE TO BE PAINTED WHITE RETROREFLECTIVE.

TYPICAL STOP BAR MARKING
NOT TO SCALE



BASE DETAIL IN LAWN OR LANDSCAPED AREAS

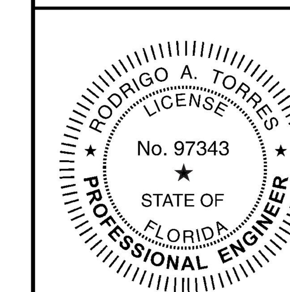
ADA BASE DETAIL IN PAVED AREAS

TYPICAL SIGN BASE
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

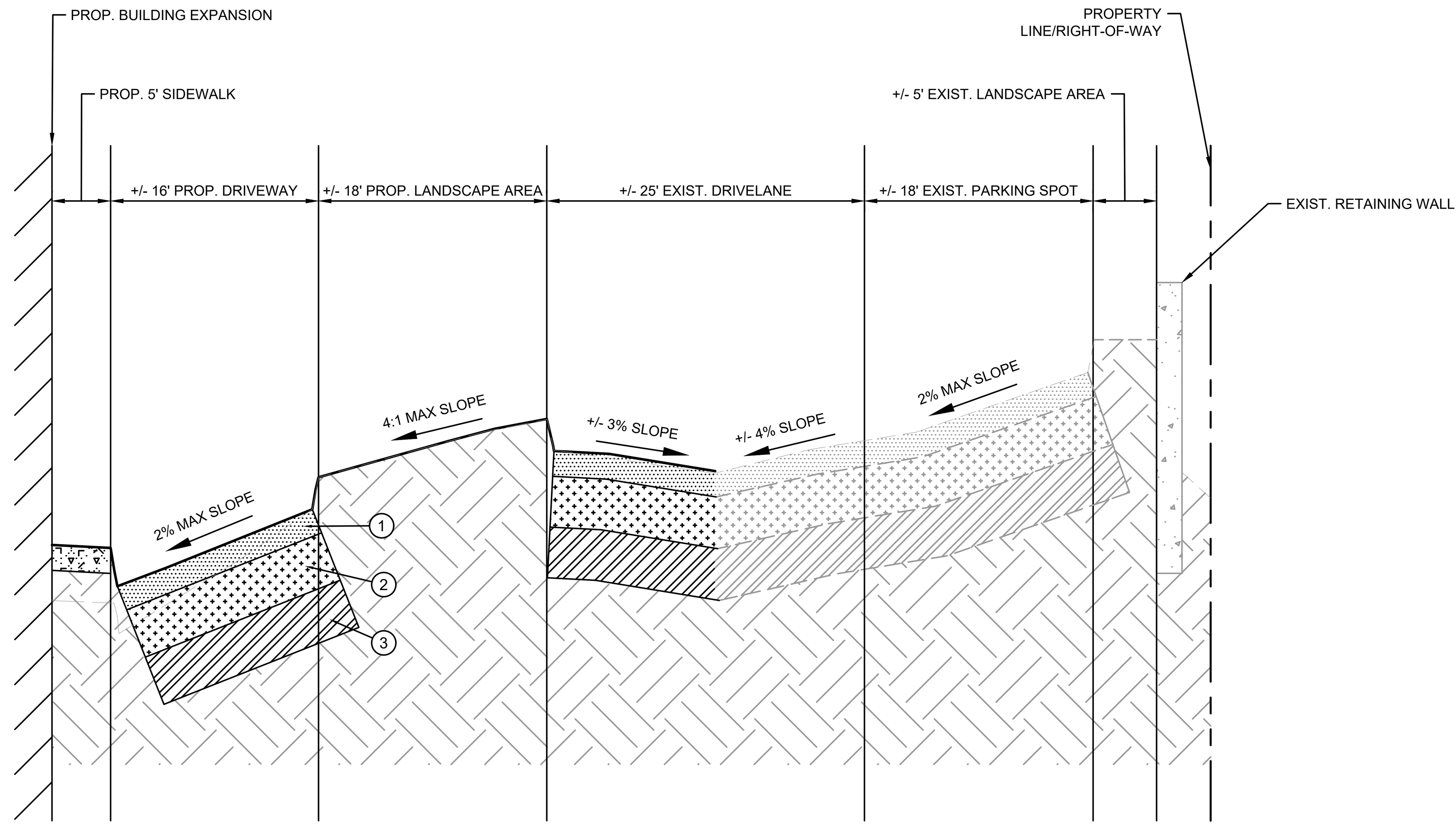


KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

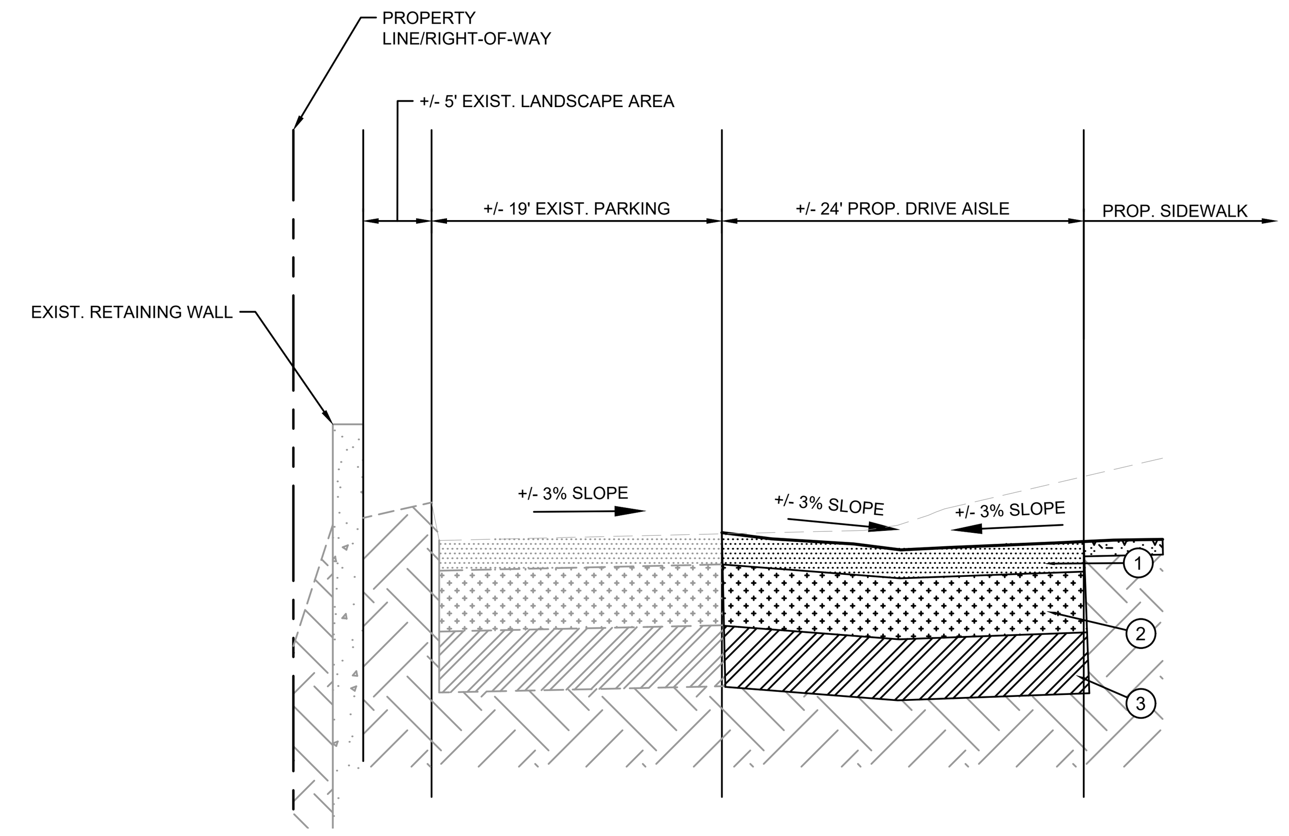
HORIZONTAL CONTROL, SIGNANGE & MARKING DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

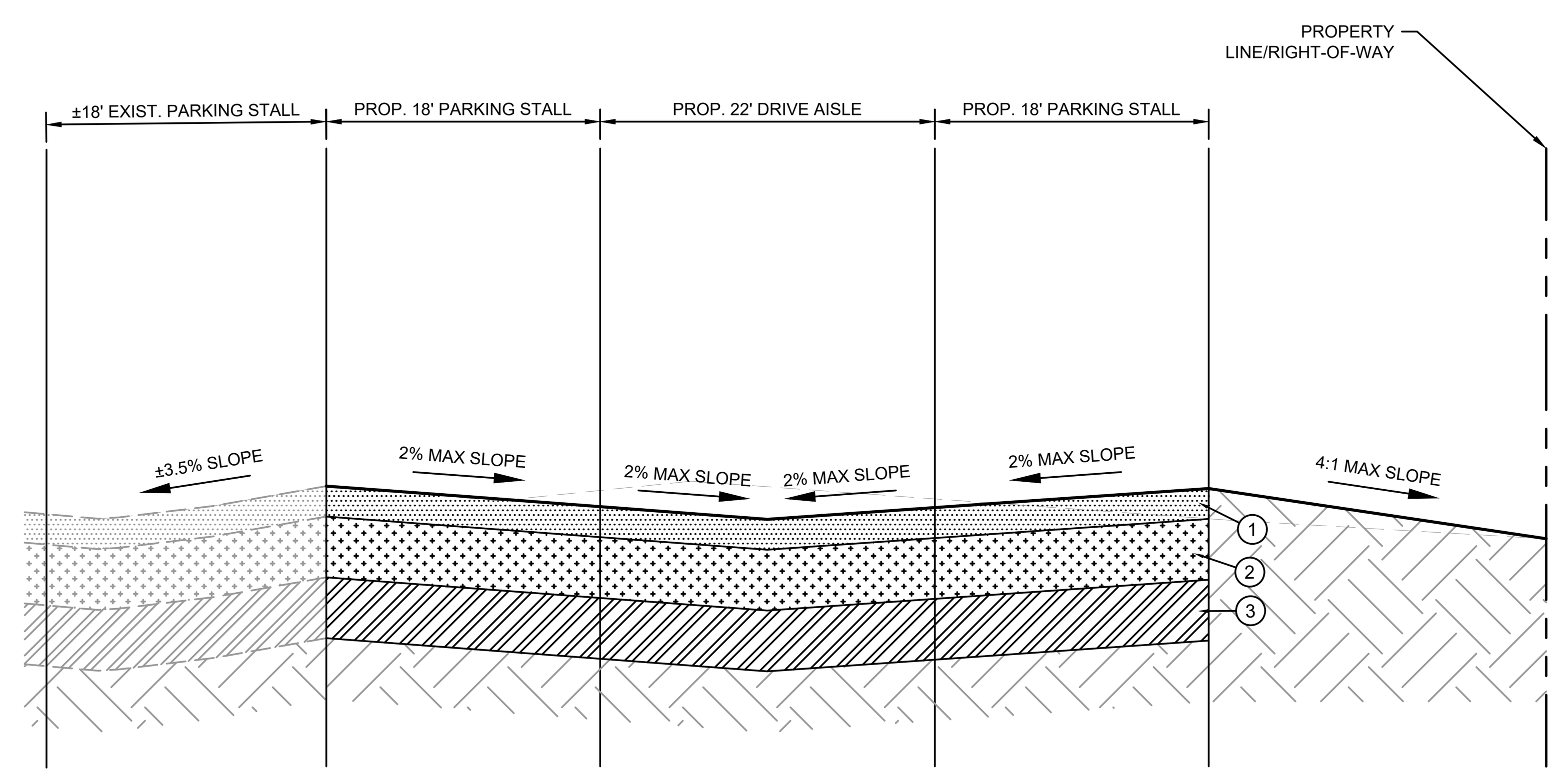
SHEET NUMBER
C-02



A
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



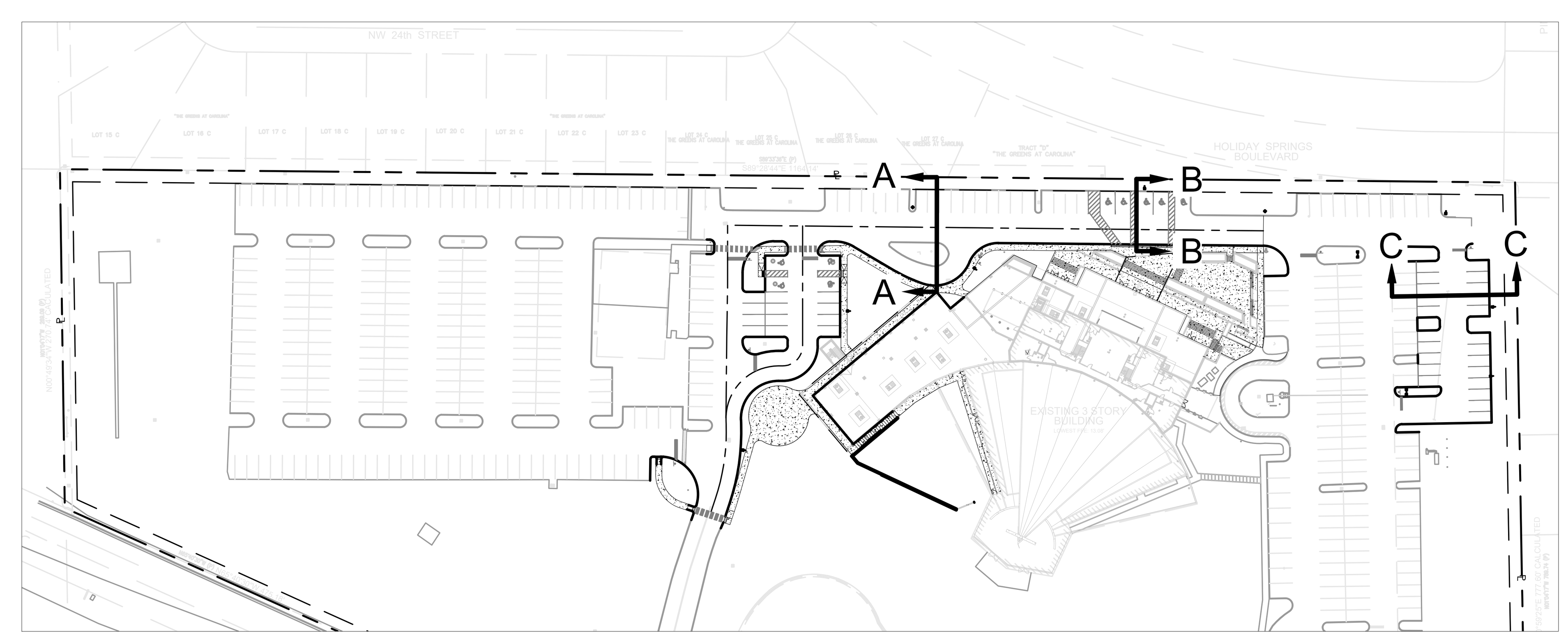
B
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



C
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE

LEGEND:

1. FULL DEPTH PAVEMENT
   2" SP-12.5 OR S-1 ASPHALTIC CONCRETE SURFACE COURSE (1500 MARSHALL STABILITY) ABOVE BASE
2. PROP. 8" CRUSHED CONCRETE BASE (LDR 100) COMPACTED TO A MIN. OF 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-135)
3. PROP. 12" STABILIZIED SUB BASE (LBR 40) COMPACTED TO A MIN. OF 98% OF MAX. DENSITY PER AASHTO T-180 MODIFIED PROCTOR



KEY MAP:

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

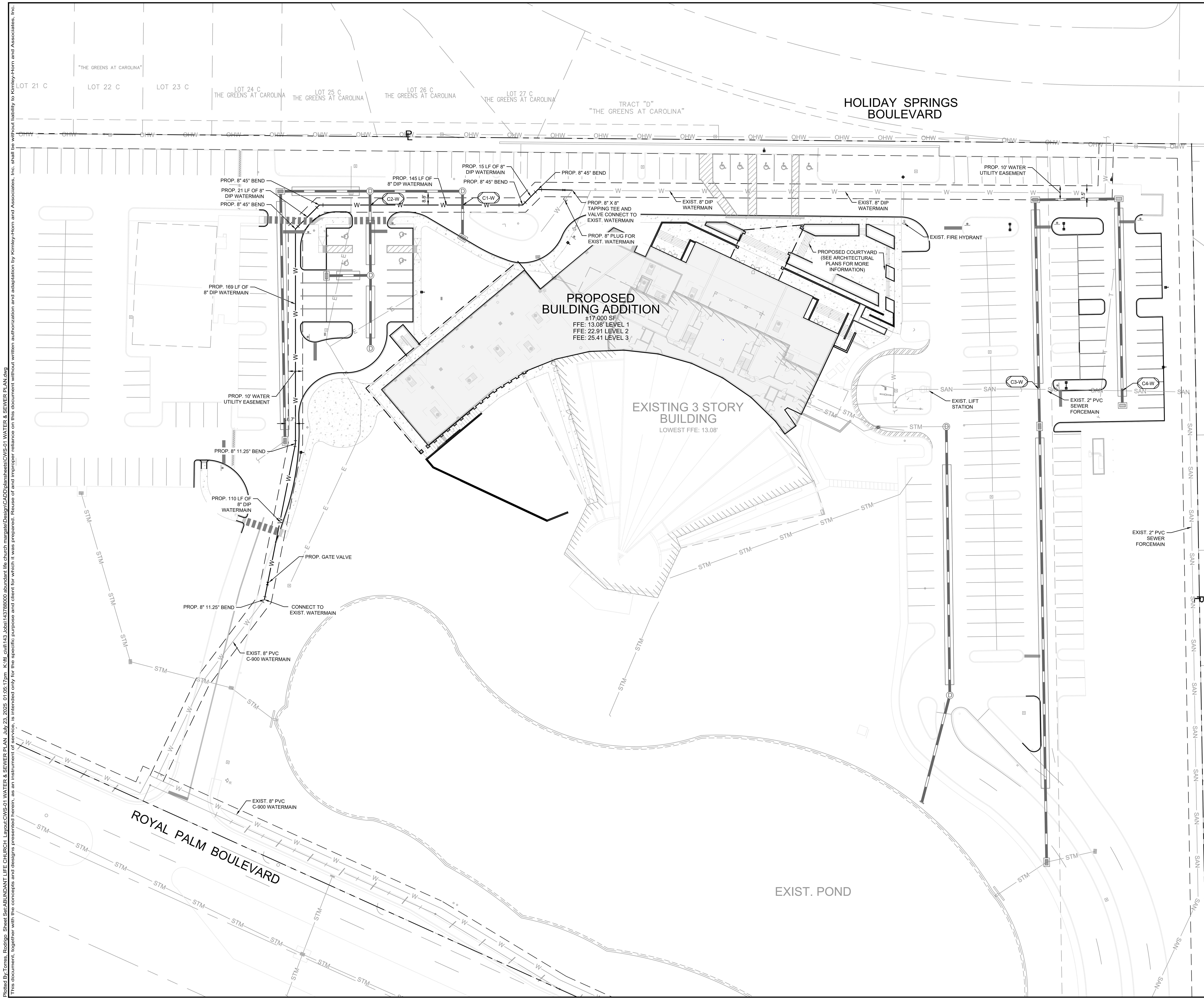
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

CROSS SECTIONS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
CS-01



GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

—R/W— —P—	PROPERTY LINE
— — —	EXIST. RIGHT OF WAY
— — —	EXIST. ROAD CENTERLINE
—W—	PROP. WATER LINE
— — —	PROP. RIGHT OF WAY
—SAN—	EXIST. SANITARY SEWER LINE
—W—	EXIST. WATER LINE
(shaded box)	PROPOSED BUILDING ADDITION
— — —	PROP. UTILITY EASEMENT

UTILITY CROSSING TABLE

C1-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 13.83' WATER TOP: 8.59' STORM BOT: 9.09' CLEARANCE: 0.50'
C2-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 12.53' WATER TOP: 7.00' STORM BOT: 7.50' CLEARANCE: 0.50'
C3-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 12.25' SEWER BOT: 9.25' STORM TOP: 7.82' CLEARANCE: 1.73'
C4-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 11.66' SEWER BOT: 8.66' STORM TOP: 8.17' CLEARANCE: 0.49'

NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO NOTIFY ENGINEER OF ANY CONFLICTS.
2. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
4. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY THE POWER LINES.
5. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
6. ALL PIPES SHALL BE LAID IN DRY TRENCH. ALL MUCK OR UNSUITABLE MATERIALS IN TRENCHES, INLETS OR MANHOLES SHALL BE REMOVED.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

WATER & SEWER PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
CWS-01

SHEET NUMBER
CWS-02

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

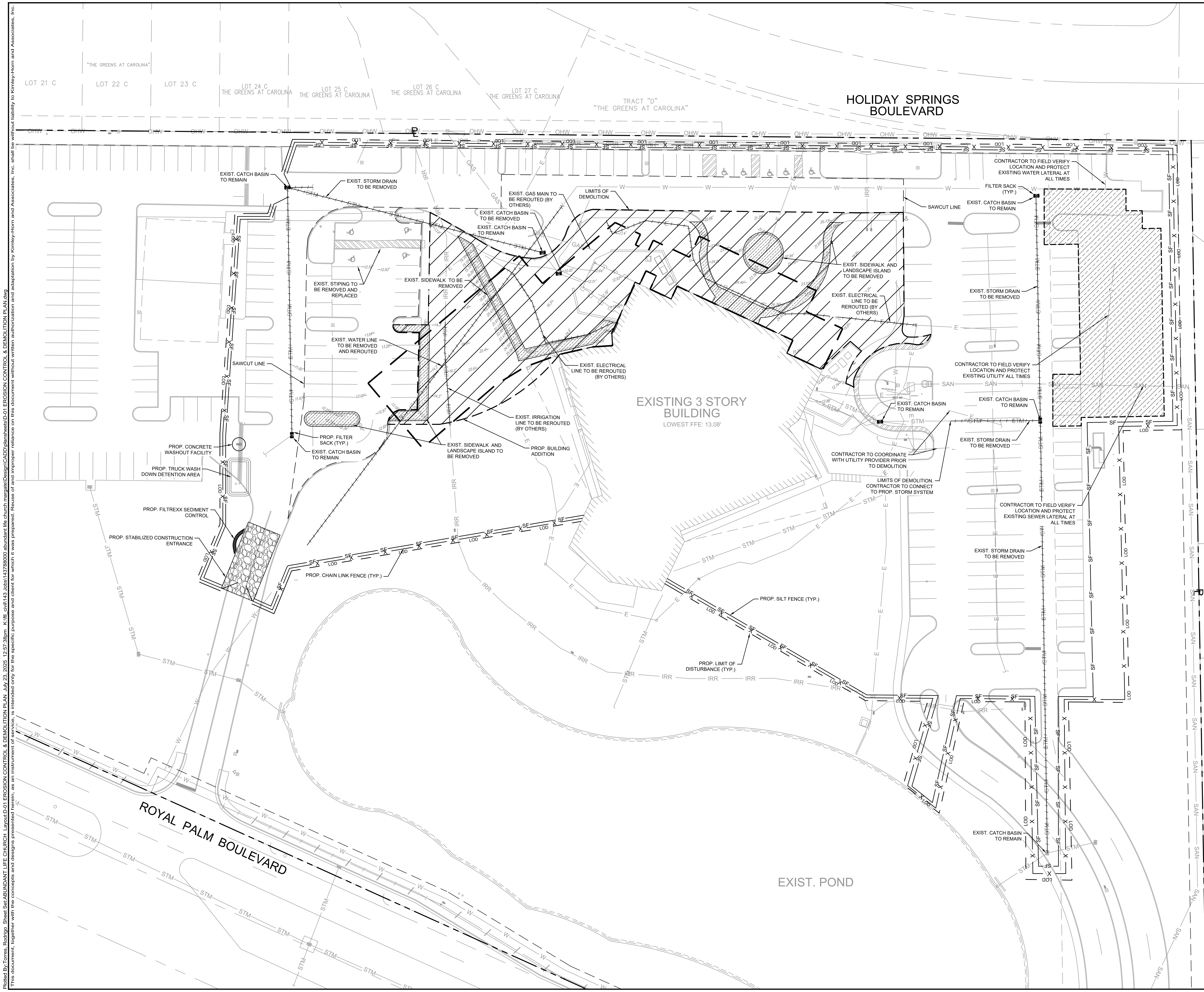
WATER & SEWER DETAILS

KHA PROJECT
143788000
DATE
5/19/2025
SCALE AS SHOWN
DESIGNED BY RR
DRAWN BY KH
CHECKED BY ARM

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

No.	REVISIONS	DATE	BY



LEGEND

R/W — ℙ	PROPERTY LINE
SF	SILT FENCE
X	CONSTRUCTION FENCE
LOD	LIMITS OF DISTURBANCE
	UTILITY TO BE REMOVED
	FILTER SACK
	EXISTING SIDEWALK, CURB, AND LANDSCAPE ISLANDS TO BE REMOVED
	LIMITS OF DEMOLITION
	PROPOSED BUILDING ADDITION

DEMOLITION NOTES:

1. ALL DEMOLITION SHALL BE WITHIN THE LIMITS OF DEMOLITION UNLESS OTHERWISE NOTED.
2. CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
3. PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN.
4. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
5. REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF SITE IN A LEGAL MANNER.
6. LOCATE EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES IN AREAS OF WORK IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING DEMOLITION OPERATION.
7. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING DEMOLITION, CONSULT PROJECT ENGINEER AND UTILITY OWNER FOR IMMEDIATE ACTION.
8. DEMOLISH AND COMPLETELY REMOVE FROM SITE, MATERIAL INDICATED ON PLAN OR NOTES.
9. THE USE OF EXPLOSIVES IS NOT PERMITTED.
10. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.
11. CONTRACTOR IS TO PROVIDE APPROVED EROSION CONTROL/SEDIMENTATION BARRIERS TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL AS NEEDED ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE.
12. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF DEMOLITION SHALL BE RE-LANDSCAPED AND IRRIGATION SYSTEMS REPAIRED TO PREVIOUS WORKING CONDITIONS.
13. ALL UTILITIES LOCATED WITHIN THE LIMITS OF DEMOLITION SHALL BE REMOVED TO THE LIMITS OF DEMOLITION AND/OR R/W AND CAPPED (WHERE APPLICABLE) UNLESS OTHERWISE NOTED.
14. ALL EXISTING CURBING AND ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION SHALL SAW CUT AND REMOVED UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO FIELD VERIFY PRESENCE OF ALL ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION.
16. CONTRACTOR IS TO OBTAIN PROPER PERMITS PRIOR TO DEMOLITION OF EXISTING STRUCTURES.
17. CONTRACTOR TO INSTALL SAFETY FENCE AND PROPERLY SIGN/MARK AROUND WORK AND STAGING AREA TO PREVENT PEDESTRIAN TRAFFIC FROM ENTERING.
18. CONTRACTOR SHALL PROVIDE ADEQUATE MAINTENANCE OF TRAFFIC AROUND WORK AND STAGING AREA.
19. ALL STRIPING TO BE REMOVED SHALL BE HYDROBLASTED.

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

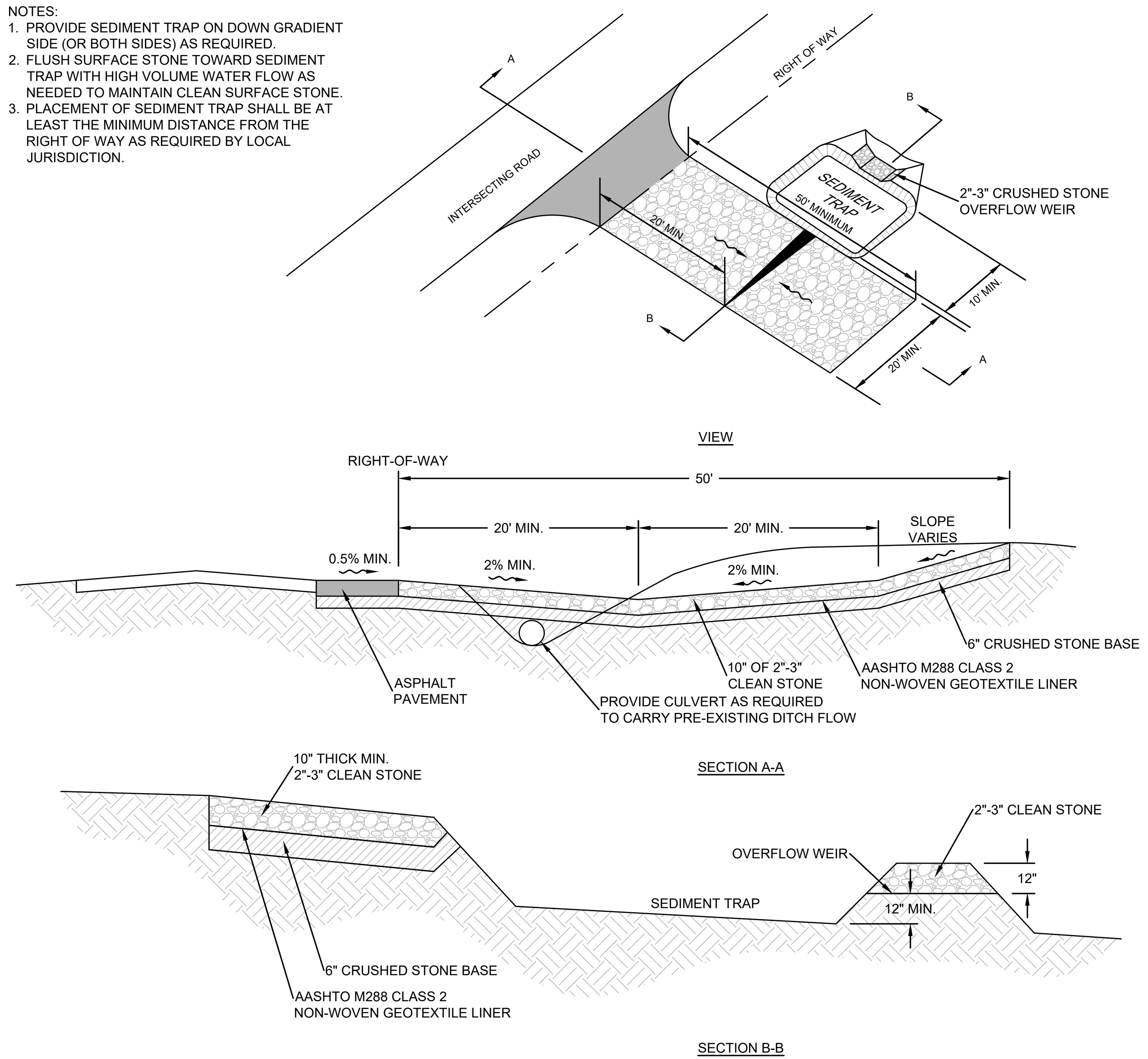
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

EROSION CONTROL & DEMOLITION PLAN

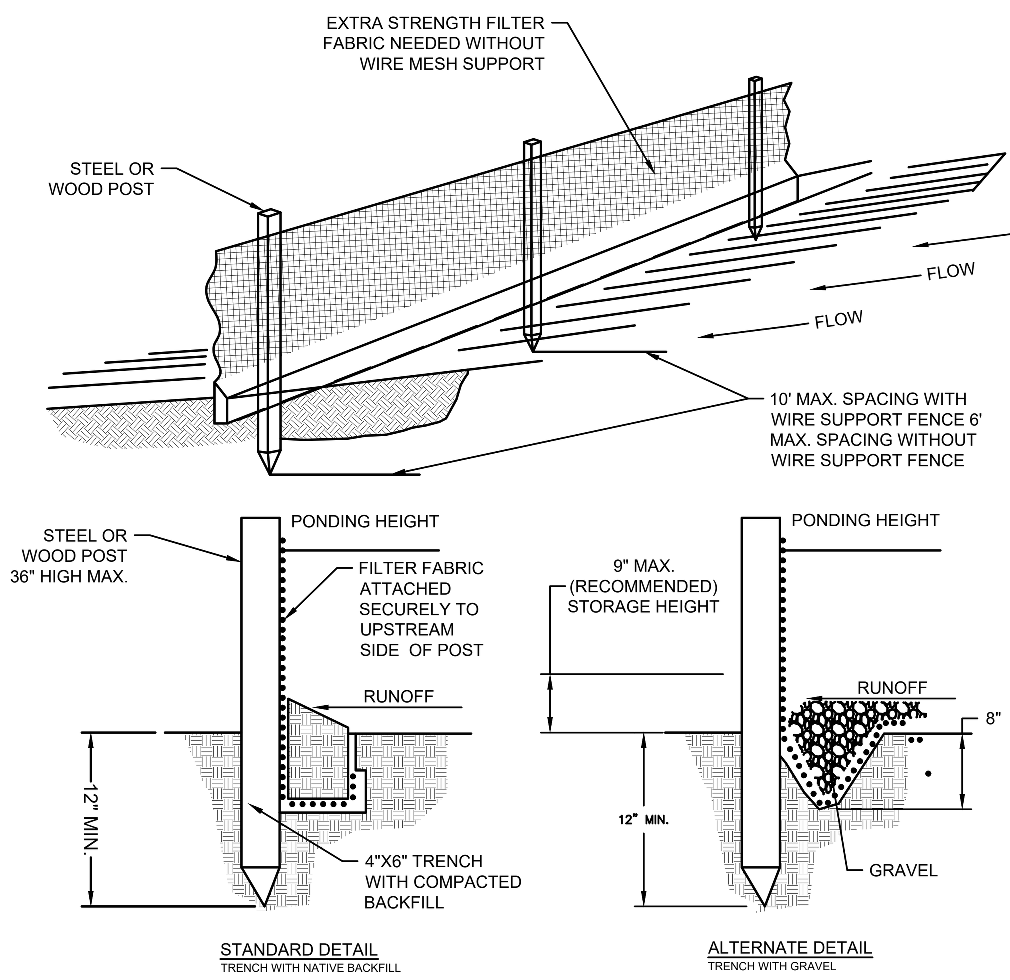
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
D-01

NOTES:
1. PROVIDE SEDIMENT TRAP ON DOWN GRADIENT SIDE (OR BOTH SIDES) AS REQUIRED.
2. FLUSH SURFACE STONE TOWARD SEDIMENT TRAP WITH HIGH VOLUME WATER FLOW AS NEEDED TO MAINTAIN CLEAN SURFACE STONE.
3. PLACEMENT OF SEDIMENT TRAP SHALL BE AT LEAST THE MINIMUM DISTANCE FROM THE RIGHT OF WAY AS REQUIRED BY LOCAL JURISDICTION.

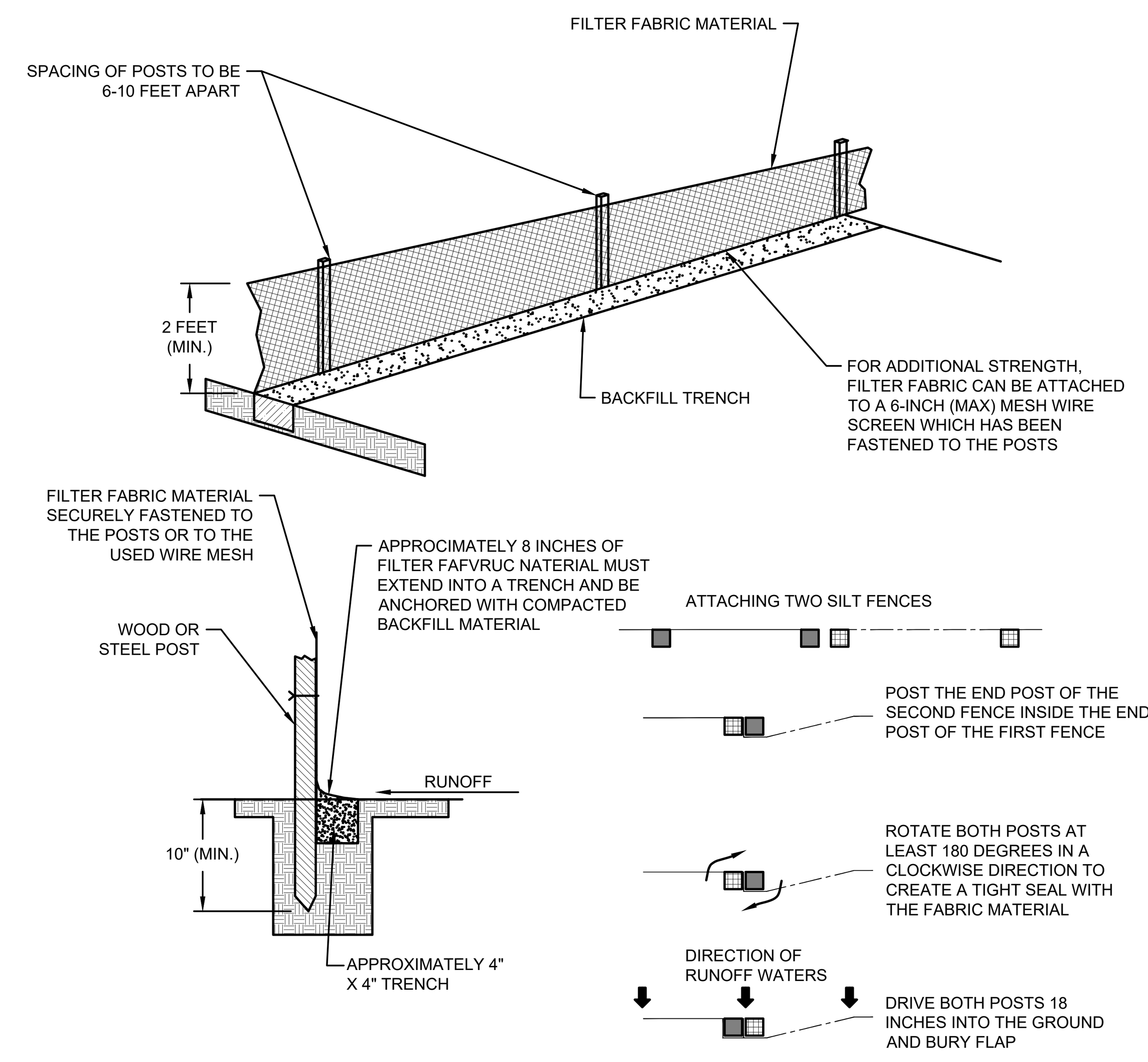


CONSTRUCTION ENTRANCE
NOT TO SCALE

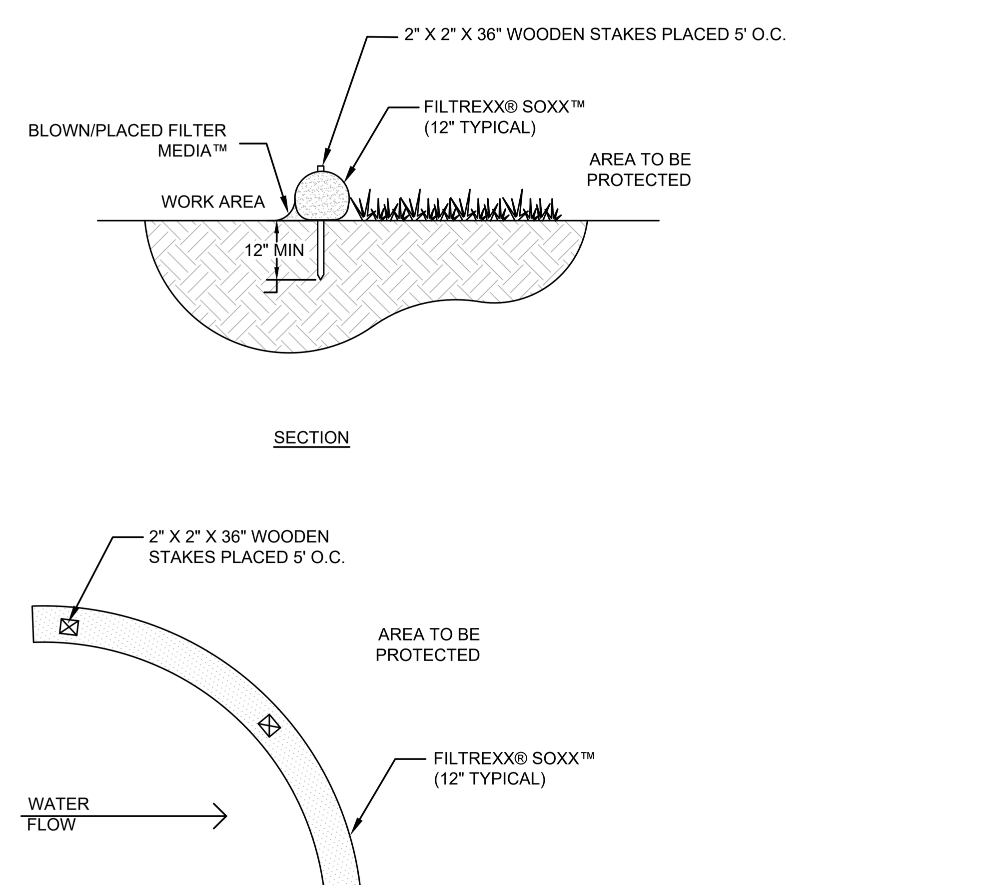


NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE DETAIL
NOT TO SCALE



SILT FENCE INSTALLATION DETAIL
NOT TO SCALE

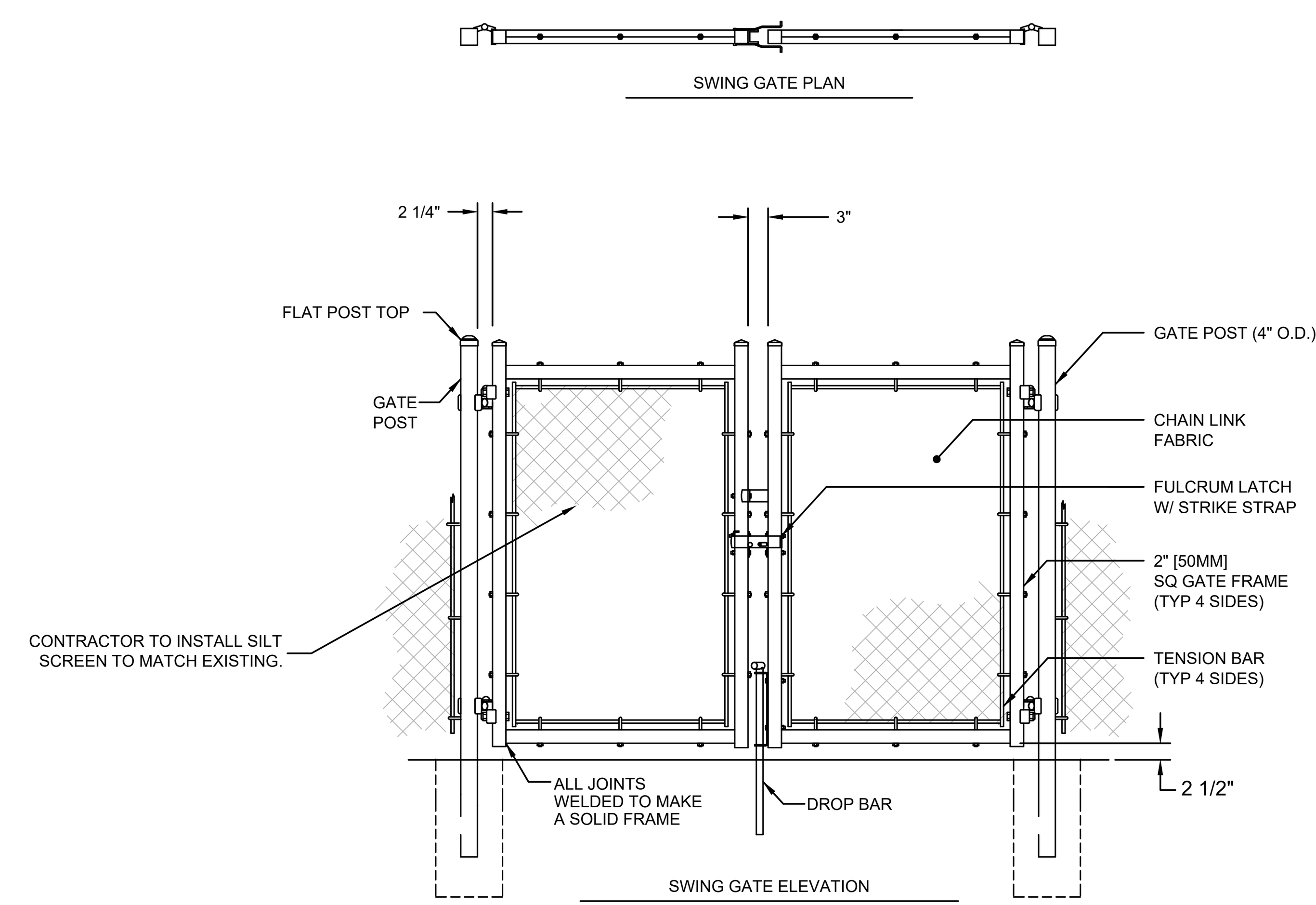


NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

PLAN

CONTRACTOR MAY USE SILT FENCE OF FILTREXX SOXX AS APPROPRIATE

FILTREXX SEDIMENT CONTROL
NOT TO SCALE



GATE NOTES:
1. GATE MATERIAL SHALL MATCH EXISTING GATES/FENCE.
2. BRACING SHALL BE PROVIDED.
3. GATES ARE MANUALLY OPERATED.

(FIRE DEPARTMENT ACCESSIBLE)

TEMPORARY 24" WIDE SWING GATES
NOT TO SCALE

No.	REVISIONS	DATE	BY

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

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

EROSION CONTROL & DEMOLITION DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
D-02

I. GENERAL NOTES AND SPECIFICATIONS:

1. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE FLORIDA BUILDING CODE, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS AND SPECIFICATIONS AND ALL OTHER LOCAL, STATE AND FEDERAL REQUIREMENTS.

2. LOCATIONS, SIZE AND MATERIAL OF EXISTING UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS. NEITHER THE DEVELOPER, CLIENT, OWNER NOR THE ENGINEER OF RECORD GUARANTEES THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HORIZONTALLY AND VERTICALLY LOCATE AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL PHYSICALLY FIELD VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

3. ALL EXISTING UNDERGROUND OR ABOVEGROUND UTILITY PIPES, CABLES, DUCTS, EQUIPMENT, DEVICES, ETC. WITHIN OR OUTSIDE THE PROJECT CONSTRUCTION LIMITS WHICH ARE DAMAGED OR DISRUPTED AS A RESULT OF THE CONTRACTOR'S OPERATION, SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. REGARDLESS OF WHETHER THEY WERE SHOWN OR NOT SHOWN ON THE PLANS OR LOCATED OR NOT BY THE OWNER'S REPRESENTATIVE, THE UTILITY COMPANY, SUNSHINE STATE ONE-CALL OF FLORIDA, ETC.

4. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING ANY CONSTRUCTION WORK.

5. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

6. ALL DEFECTIVE WORK NOT ACCEPTED BY THE ENGINEER OF RECORD, BY THE OWNER'S REPRESENTATIVE, OR BY ANY GOVERNMENTAL PERMITTING REGULATORY AGENCY SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

7. ALL STAGING AREAS SHALL BE PROPERLY FENCED AND SECURED BY THE CONTRACTOR.

8. ALL AREAS WHICH ARE BEING EXCAVATED SHALL BE PROPERLY PROTECTED AND BARRICADED BY THE CONTRACTOR. ALL TRENCH WORK SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 C.F.R.S. 1926.650 SUBPART P AND THE FLORIDA TRENCH SAFETY ACT.

9. ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT, CURB AND GUTTERS, CURBS AND WALKS, SOD, LANDSCAPING, FENCE, ETC. DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER OR CLIENT.

10. TEMPORARY ASPHALT PAVEMENT SHALL BE APPLIED TO ALL TRENCHES, WITHIN AN EXISTING PAVED RIGHT 0F WAY, AT THE END OF EACH WORKDAY. PLATING MAY BE USED WITH THE RIGHT-OF-WAY OWNER'S PRIOR CONSENT.

11. PROVIDE FILL TO ENSURE THAT THE FINISH GRADE (INCLUDING SOD) IN LANDSCAPE AREAS ARE AT LEVEL OF CURBS AND/OR EDGE OF SIDEWALKS.

12. WHERE NEW GRADES BLEND INTO EXISTING GRADES IN LANDSCAPE AREAS PROVIDE A UNIFORM TRANSITION. PROTECT ALL EXISTING PAVEMENT AND LANDSCAPE AREAS THAT ARE TO REMAIN.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER AND SEWER SERVICE DURING THE CONSTRUCTION OF THE TIE-IN CONNECTION OF ALL PROPOSED WATER OR SANITARY SEWER SYSTEMS, TO ANY EXISTING WATER OR SANITARY MAINS AND SERVICE LINES. ABANDONMENT SHALL NOT OCCUR UNTIL THE PROPOSED WORK HAS BEEN APPROVED AND ACCEPTED FOR OPERATION BY THE ENGINEER OF RECORD AND THE LOCAL PUBLIC WORKS DEPARTMENT. ALL EXISTING FIRE HYDRANTS SHALL BE RECONNECTED TO THE PROPOSED WATER MAIN. PUBLIC WORKS DEPARTMENT FIELD OPERATIONS WILL COORDINATE WITH ENGINEER OF RECORD IF AN EXISTING FIRE HYDRANT SHALL BE REPLACED AS NEEDED OR REQUIRED.

14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE PUBLIC HEALTH AND ENSURE JOB SAFETY. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY & HEALTH AGENCY (OSHA) STANDARDS AND FEDERAL, STATE AND LOCAL GOVERNMENT SAFETY REQUIREMENTS.

15. THE CONTRACTOR SHALL ENSURE THAT OVERFLOWS OR RAW SEWAGE SPILLS DO NOT OCCUR DURING CONSTRUCTION OF PROPOSED SANITARY SEWER TIE-IN CONNECTIONS.

16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT STORM WATER POLLUTION PREVENTION AND EROSION CONTROL MEASURES AND PRACTICES DURING CONSTRUCTION IN ACCORDANCE WITH THE EROSION CONTROL PLAN/DETAILS AND THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT FOR CONSTRUCTION ACTIVITIES REQUIREMENTS.

17. CONTRACTOR SHALL ENSURE THAT ALL STORM WATER RUN-OFF WITHIN THE CONSTRUCTION AREA IS CONTAINED ON-SITE.

18. WHEN POWER POLES ARE ADJACENT TO ANY PROPOSED UTILITY, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION. THE SHORING AND SUPPORT METHODS SHALL BE APPROVED BY THE UTILITY COMPANY'S ENGINEERING DEPARTMENT.

19. DUE TO FEDERAL REGULATIONS, THE CONTRACTOR MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES AND MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE WITHIN THE PROJECT AREA.

20. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING SITE IMPROVEMENTS, FEATURES AND CONDITIONS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE FOLLOWING TOPOGRAPHIC BOUNDARY SURVEY SPECIFICALLY PREPARED FOR THIS PROJECT:

TITLE: "BOUNDARY AND TOPOGRAPHIC SURVEY"
DATE: 03/21/2023
ADDRESS: PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
(954) 572-1777

21. ALL ELEVATIONS SHOWN ARE BASED ON THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD88).

22. ALL UTILITY CONNECTIONS TO THE BLDG. SHALL BE CONSTRUCTED AND CAPPED OR PLUGGED FIVE FEET FROM THE PROPOSED BUILDING. CONTRACTOR SHALL PERFORM TIE-INS TO THE BUILDING. THE COST ASSOCIATED WITH THE TAPPING/PLUGGING OF THE UTILITIES SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.

23. CONTRACTOR SHALL COORDINATE WORK WITH OTHER UTILITY AND BUILDING TRADES WORKING ON THIS OR ADJACENT PROJECTS.

24. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF THE EXISTING SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL SHORING, SHEETING AND/OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING CONSTRUCTION ACTIVITIES. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

25. AFTER LOCATING AND VERIFYING EXISTING UTILITY TIE IN POINTS, CONTRACTOR IS TO VERIFY THAT DESIGN COMPONENTS SUCH AS, BUT NOT LIMITED TO, PERCENT SLOPE, INVERT, TAP LOCATIONS, PIPE RUNS, INFRASTRUCTURE DEPTH, ETC. WILL STILL BE IN ACCORDANCE WITH THE ENGINEERING PLANS.

26. IF IT SHOULD BECOME NECESSARY TO STOP WORK FOR INDEFINITE PERIODS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE OR DETERIORATION OF THE WORK ALREADY PERFORMED.

II. PRE-CONSTRUCTION RESPONSIBILITIES:

1. 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.

2. CONTRACTOR MUST CONTACT THE ARCHITECT/ENGINEER OF RECORD TO ARRANGE FOR A PRE-CONSTRUCTION MEETING, A MINIMUM 2 BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

3. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA (1-800-432-4770) AND ALL KNOWN EXISTING UTILITY OWNERS AT LEAST 2 BUSINESS DAYS BEFORE DIGGING TO ALLOW FOR FIELD LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES IN THEIR EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

4. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.

5. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO ARRANGE FOR ANY REMOVAL, RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.

III. OBSERVATIONS AND TESTING:

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF PERFORMING ALL CIVIL RELATED TESTS. UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH TESTING UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO WITNESS THE TESTS.

2. THE ENGINEER OF RECORD WILL REQUIRE THAT THE FOLLOWING TESTS BE PERFORMED WITH ACCEPTABLE RESULTS:
   A. SANITARY SEWAGE COLLECTION SYSTEM:
      I. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE
      II. INFILTRATION/EXFILTRATION TEST UP TO THE CONNECTING MANHOLE
      III. PRESSURE TEST AS REQUIRED BY DRER
   B. STORM DRAINAGE-(EXFILTRATION TRENCH DEPTH)
      I. EXFILTRATION TRENCH DEPTH
      II.LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE (IF APPLICABLE)
   C. DRAINAGE WELL SPECIFIC CAPACITY TEST.
   D. WATER SYSTEM-(PRESSURE TEST AND BACTERIOLOGICAL TEST)
   E. SUBGRADE - SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK.
   F. LIME ROCK BASE - SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT. (FLAT BOARDING ALSO REQUIRED.)
   G. ASPHALT PAVEMENT
   H. FINAL WALK-THROUGH INSPECTION - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPLICABLE REGULATORY AGENCIES FOR INSPECTION REQUIREMENTS.
   I. CONCRETE FORMWORK AND ADA SLOPE VERIFICATIONS.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE FOLLOWING EVENTS:
   A. PRIOR TO PLACING BALLAST ROCK WITHIN EXFILTRATION TRENCH AND PIPE RUNS TO MEASURE DEPTH AND WIDTH, AS WELL AS DIRECTIONS RESPECTIVELY.
   B. PRIOR TO BACKFILLING WATER MAINS AND SERVICES
   C. PRIOR TO BACKFILLING SANITARY SEWER MAINS AND SERVICES
   D. AFTER COMPACTION OF LIMEROCK BASE AND PRIOR TO PLACEMENT OF FIRST LIFT OF ASPHALT
   E. AFTER 2ND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS
   F. INSTALLING CONNECTIONS TO EXISTING WATER AND SEWER MAINS/SERVICES AFTER SECOND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS.
   G. AT SUBSTANTIAL COMPLETION
   H. FINAL INSPECTION UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH THESE ACTIVITIES, UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO PERFORM AN INSPECTION.

4. SHOULD THE CONTRACTOR FAIL TO GIVE THE ENGINEER OF RECORD ADVANCE NOTICE OF TESTING AND INSPECTIONS AS SPECIFIED ABOVE, THE ENGINEER SHALL RESERVE THE RIGHT TO REFUSE ISSUANCE OF ANY CERTIFICATIONS OF COMPLETION AND FINAL INSPECTIONS, AND RESERVES THE RIGHT TO RECOMMEND THAT ANY CONTRACT AMOUNTS STILL HELD IN RETAINAGE NOT BE RELEASED. CITY INSPECTOR REPORTS SHALL NOT BE ACCEPTED AS A SUBSTITUTE FOR THE ENGINEER'S PRESENCE AT THE TESTING AND INSPECTION INTERVALS SPECIFIED ABOVE.

IV. SHOP DRAWINGS:

1. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS:
   A. DRAINAGE STRUCTURES, INCLUDING CATCH BASINS, WELL BOXES, PUMPS, MANHOLES/INLET FRAMES/GRATES, BAFFLES, ETC.
   B. ALL DRAINAGE PIPES.
   C. TRENCH DRAINS.
   D. EXFILTRATION FILTER FABRIC
   E. ALL WATER AND SEWER SYSTEM COMPONENTS
   F. ASPHALT PAVEMENT MIX DESIGN
   G. LIMEROCK MATERIAL
   H. CONCRETE MIX FOR PAVEMENT
   I. MATERIAL SUBSTITUTION REQUESTS
   J. EROSION CONTROL MATERIALS
   K. FILL MATERIAL

2. ALL PRECAST STRUCTURAL DRAWINGS MUST BE SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED ENGINEER OF RECORD STATING THAT THE STRUCTURE(S) MEETS THE H20 LOAD RATING REQUIREMENTS. STRUCTURAL SHOP DRAWINGS WILL BE REJECTED AND NOT REVIEWED IF NOT SEALED BY A FLORIDA LICENSED ENGINEER. IN ADDITION, SOME CITIES, COUNTIES, STATE AND/OR NATIONAL REGULATORY AGENCIES REQUIRE THEIR OWN INDIVIDUAL REVIEW AND APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY SHOP DRAWING APPROVALS AS REQUIRED.

V. TEMPORARY FACILITIES:

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

   B. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION, IF APPLICABLE.

   C. CONTRACTOR SHALL OBTAIN THE ENGINEERING DESIGN AND PERMIT FOR SUCH FACILITIES AT THE CONTRACTOR'S SOLE COST.

2. TRAFFIC REGULATION

   A. THE CONTRACTOR SHALL PROVIDE ALL MAINTENANCE OF TRAFFIC DURING CONSTRUCTION. TO INCLUDE BUT IS NOT LIMITED TO WARNING SIGNALS, SIGNS, LIGHTS AND FLAG PERSONS AS NECESSARY WITHIN PUBLIC RIGHT-OF-WAYS IN ACCORDANCE WITH THE LOCAL PUBLIC WORKS DEPARTMENT.

   B. 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 AT ALL TIMES. SPECIAL PRECAUTION IS TO BE TAKEN IN PATHS OF EGRESS.

   C. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE LOCAL PUBLIC WORKS DEPARTMENT.

VI. PROJECT CLOSE OUT:

1. CLEANING UP

   A. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER AND THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN. UPON FINAL CLEANUP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH, AND THE PAVED AREAS SHALL BE BROOMED AND PRESSURE CLEANED.

   B. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

   C. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS AND ANY OTHER IMPROVEMENTS REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION WHICH EXISTED PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

   D. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE 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 THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION. ANY ADVERSE EFFECTS OR BUILDUP IN PUBLIC INFRASTRUCTURE WILL BE CLEANED AND REDUCED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.

   E. ALL DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATED MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENGINEER OF RECORD. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.

2. ALL PROPERTY MONUMENTS OR PERMANENT SURVEY REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

3. PROJECT RECORD DOCUMENTS

   A. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS. PRIOR APPROVAL FROM THE ENGINEER OF RECORD IS REQUIRED FOR SAID FACILITIES.

   B. AT THE COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL SUBMIT THREE (3) SIGNED & SEALED AS-BUILT DRAWINGS, SIGNED & SEALED BY A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. ADDITIONAL AS-BUILT DRAWINGS REQUIRED BY THE CITY, COUNTY, STATE AND/OR FEDERAL REGULATORY AGENCIES SHALL ALSO BE SUBMITTED ONCE REQUIRED. THE AS-BUILT DRAWINGS SHALL INDICATE LOCATION, SIZE, ELEVATION, MATERIAL, ETC., OF ALL WORK COMPLETED UNDER THIS CONTRACT AND OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.

VII. STORM DRAINAGE:

1. WHEN EXISTING MANHOLE RINGS, CATCH BASIN GRATE AND FRAMES, VALVE BOXES, PULL BOXES OR OTHER UTILITY CASTINGS ARE ENCOUNTERED WITHIN THE PROPOSED LIMITS OF WORK THE CONTRACTOR SHALL FIELD ADJUST THE EXISTING RING AND FRAME, GRATE AND FRAME, VALVE BOXES OR PULL BOXES TO MATCH THE PROPOSED ELEVATION. SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE INDICATED.

3. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE DOUBLE WALLED SMOOTH INTERIOR PIPE AND SHALL MEET THE REQUIREMENTS OF AASHTO M294 TYPE S, MPT AND ASTM D2321, D3212, F1417, F477, F667 OR AS NOTED ON THE CONSTRUCTION DRAWINGS.

4. CONTRACTOR SHALL VACUUM CLEAN AND REMOVE ALL SILT, SEDIMENT AND DEBRIS FROM ALL OF THE EXISTING AND PROPOSED DRAINAGE STRUCTURES AND PIPE NETWORK WITHIN THE PROJECT LIMITS PRIOR TO FINAL ACCEPTANCE OF DRAINAGE SYSTEM. ALL COST OF SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

5. ALL DRAINAGE WORK SHALL CONFORM TO THE GOVERNING JURISDICTIONAL AGENCY REGULATIONS AND STANDARDS

6. UNLESS OTHERWISE SPECIFIED ON THE PLANS, MINIMUM COVER OVER ALL STORM DRAINAGE PIPE SHALL BE 36-INCHES. CONTRACTOR SHALL AVOID ALL UNNECESSARY CROSSINGS BY HEAVY CONSTRUCTION EQUIPMENT DURING CONSTRUCTION.

7. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL CATCH BASINS, MANHOLES, FRAMES AND GRATES, RINGS AND COVERS, WITHIN PRIVATE PROPERTY, SHALL BE DESIGNED TO WITHSTAND AN AASHTO AND XDOT H20 LOAD RATING AND SHALL BE OBTAINED FROM PLAN SPECIFIED MANUFACTURERS OR APPROVED EQUIVALENT MANUFACTURER.

VIII. EARTHWORK AND PAVING:

1. ALL UNDERGROUND UTILITY WORK SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF SUB BASE. ANY SUBGRADE RE-WORK DUE TO UNDERGROUND INFRASTRUCTURE INCONSISTENCIES WILL BE DONE AT THE CONTRACTOR'S EXPENSE.

2. PROPOSED ASPHALT PAVEMENT SHALL BE CONNECTED TO EXISTING AS PER STANDARD DETAILS. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS ON NEW SIDEWALK OR NEW PAVEMENT.

3. SAW CUT EXISTING CONCRETE WALKS, CURB AND GUTTERS, AND ASPHALT OR CONCRETE PAVEMENT CAREFULLY AND IN A STRAIGHT LINE WHERE UNDERGROUND WORK IS REQUIRED. WHERE PROPOSED ASPHALT OR CONCRETE PAVEMENT, CURB, SIDEWALK, ETC. WILL MEET AN EXISTING LOCATION CUT CONCRETE WALKS, CONCRETE PAVEMENT, CURB AND GUTTERS AT NEAREST EXISTING JOINT.

No.	REVISIONS	DATE	BY

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

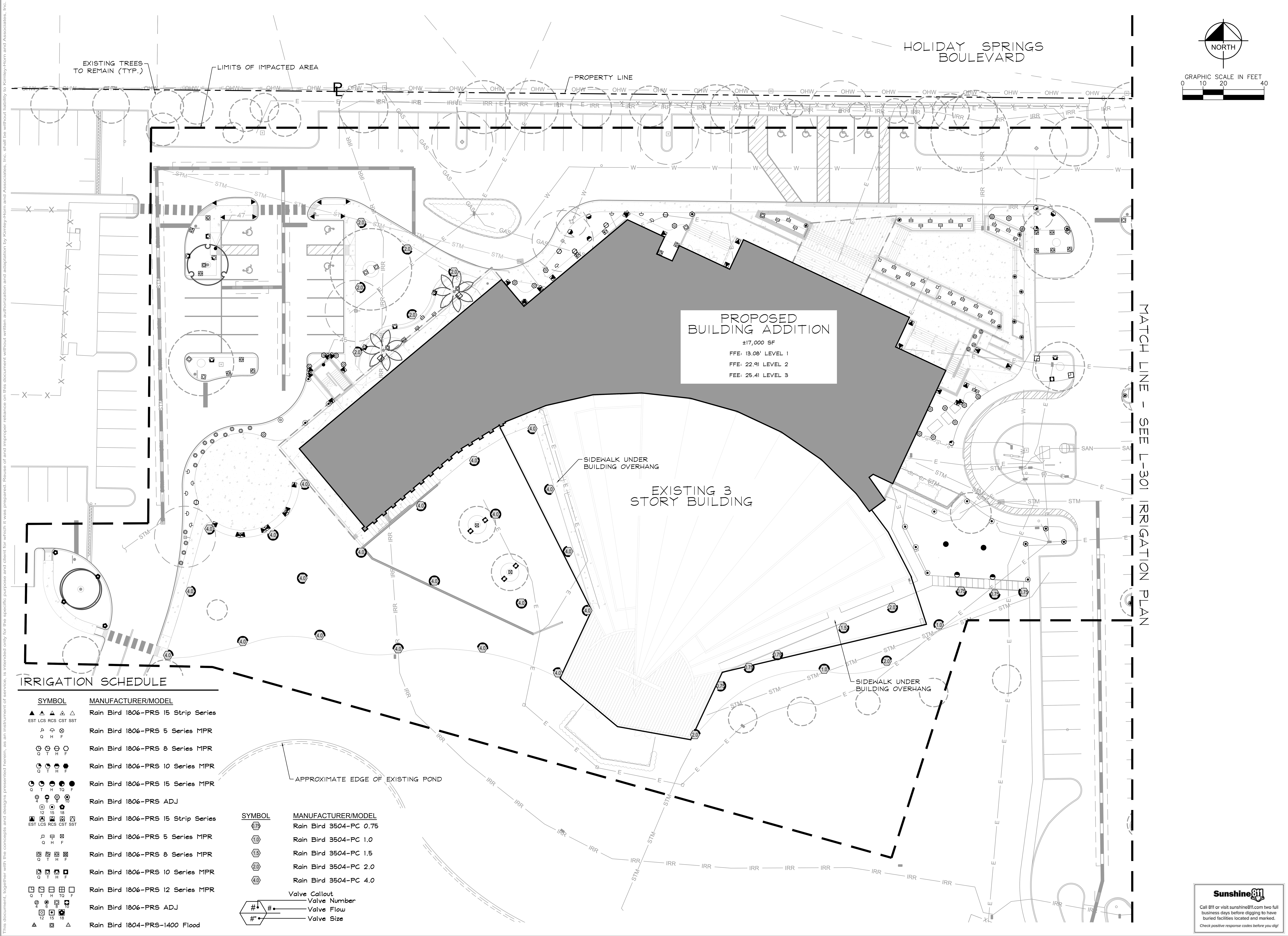
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

GENERAL NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
G-01



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
	Rain Bird 1804-PRS-1400 Flood

SYMBOL	MANUFACTURER/MODEL
0.75	Rain Bird 3504-PC 0.75
1.0	Rain Bird 3504-PC 1.0
1.5	Rain Bird 3504-PC 1.5
2.0	Rain Bird 3504-PC 2.0
4.0	Rain Bird 3504-PC 4.0

Valve Callout
Valve Number
Valve Flow
Valve Size

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

Plotted By:Said, Najla Sheet Set:ABUNDANT LIFE CHURCH Layout:L-300 IRRIGATION PLAN July 17, 2025 01:46:24pm K:\ftl_civil\143 Jobs\143788000 abundant life church margate\Design\CADD\plansheets\Landscape\L-300 IRRIGATION PLAN.dwg

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

IRRIGATION PLAN

CHURCH SITE IMPROVEMENTS

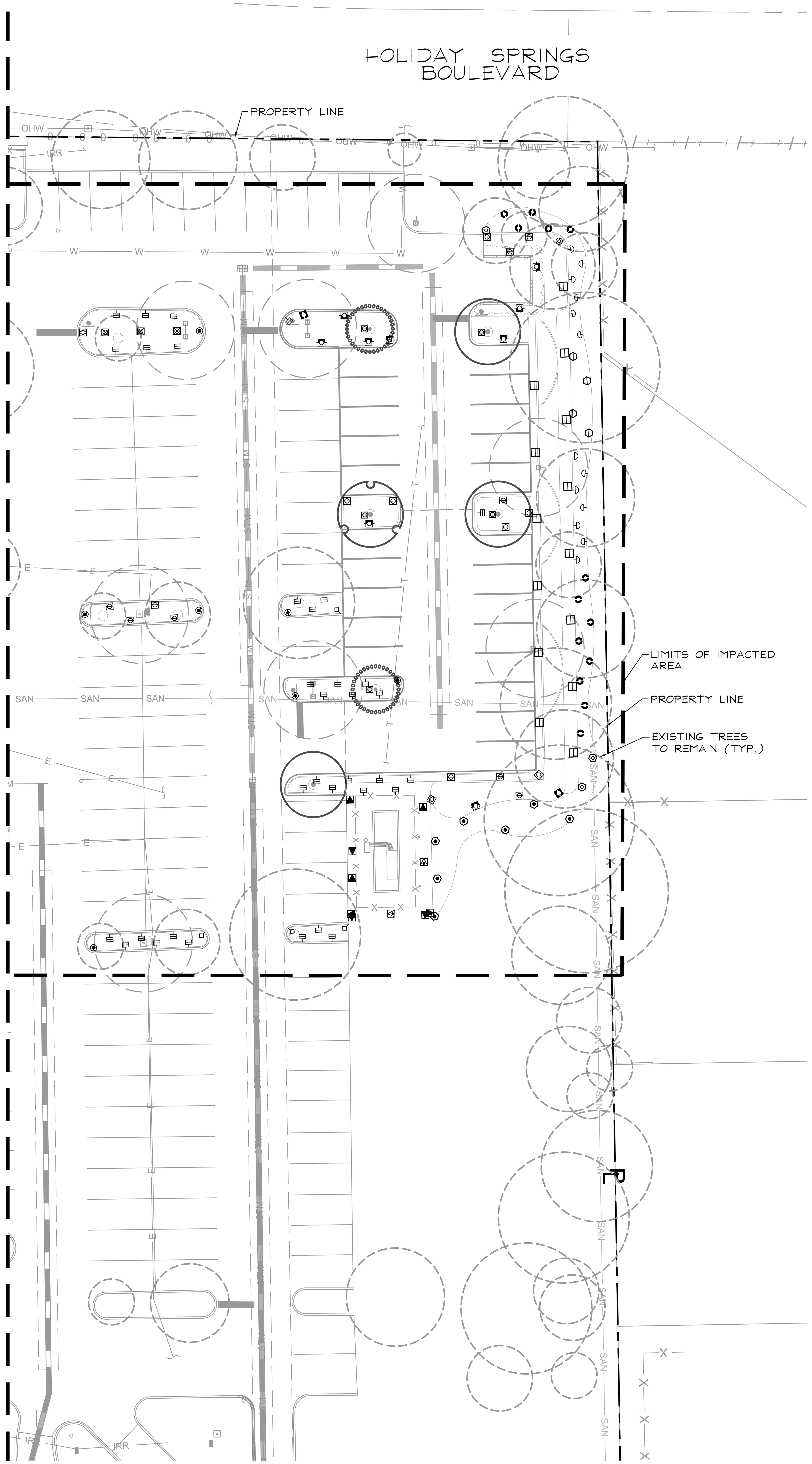
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

IRR-01



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	8	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	22	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	9	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	7	30
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	4	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	76	30
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	44	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	77	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	32	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	17	30
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	18	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	39	30
1401 1402 1404	Rain Bird 1804-PRS-1400 Flood Flood Bubbler 4in. popup with pressure regulating device. Install w/ PA-80 adapter.	8	20

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
0.75	Rain Bird 3504-PC 0.75 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	6	25	0.54	15'
1.0	Rain Bird 3504-PC 1.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	2	25	0.77	20'
1.5	Rain Bird 3504-PC 1.5 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	1	25	1.06	23'
2.0	Rain Bird 3504-PC 2.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	9	25	1.4	27'
4.0	Rain Bird 3504-PC 4.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	21	25	2.97	31'

Valve Callout
\# Valve Number
\# Valve Flow
\#" Valve Size

PLAN IS DIAGRAMMATIC. CONTRACTOR SHALL INSTALL ALL IRRIGATION EQUIPMENT IN LANDSCAPE OR TURF AREAS WITHIN PROJECT LIMITS.

IRRIGATION SYSTEM NOTES

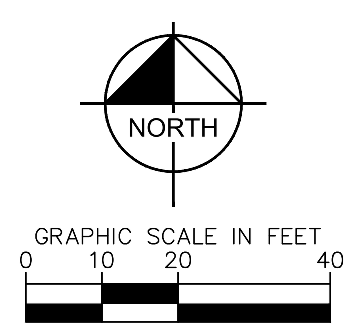
1. CONTRACTOR SHALL REFER TO THE IRRIGATION DETAILS, IRRIGATION SCHEDULE, SPECIFICATIONS AND ALL CONTRACT DOCUMENTS FOR FURTHER AND COMPLETE INSTRUCTIONS.
2. IRRIGATION QUANTITIES ARE PROVIDED FOR CONVENIENCE. IN THE EVENT OF QUANTITY DISCREPANCIES THE DRAWING SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING.
3. ANY SUBSTITUTIONS FOR SPECIFIED IRRIGATION EQUIPMENT MUST BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL FIELD ADJUST LOCATION OF IRRIGATION EQUIPMENT AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR INTERFERE WITH EXISTING ABOVE GROUND ELEMENTS. ALL FIELD ADJUSTMENTS SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
5. CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LIMITS OF WORK AND EXISTING CONDITIONS AND VERIFY ALL INFORMATION. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IN WRITING WITHIN SEVEN CALENDAR DAYS OF NOTICE TO PROCEED.
6. IRRIGATION PLAN IS DIAGRAMMATIC. EQUIPMENT SHOWN ON IMPERVIOUS SURFACES IS FOR GRAPHIC CLARITY UNLESS OTHERWISE NOTED. CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITHIN LANDSCAPE AREAS IN PROPERTY LIMITS.

THE IRRIGATION SYSTEM IS DESIGNED TO OPERATE WITH A SOURCE PROVIDING xx GPM AT xx PSI.

SPRAY HEAD DESIGN PRESSURE: 30 PSI
BUBBLER DESIGN PRESSURE: 30 PSI
ROTOR DESIGN PRESSURE: 25 PSI

SLEEVE SIZE SCHEDULE (SCH 40)

PIPE SIZE (or combination of pipe sizes)	SLEEVE SIZE
1"	2"
1½"	4"
2"	4"
3"	6"
4"	8"
6"	12"



REVISIONS
No. | DATE | BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

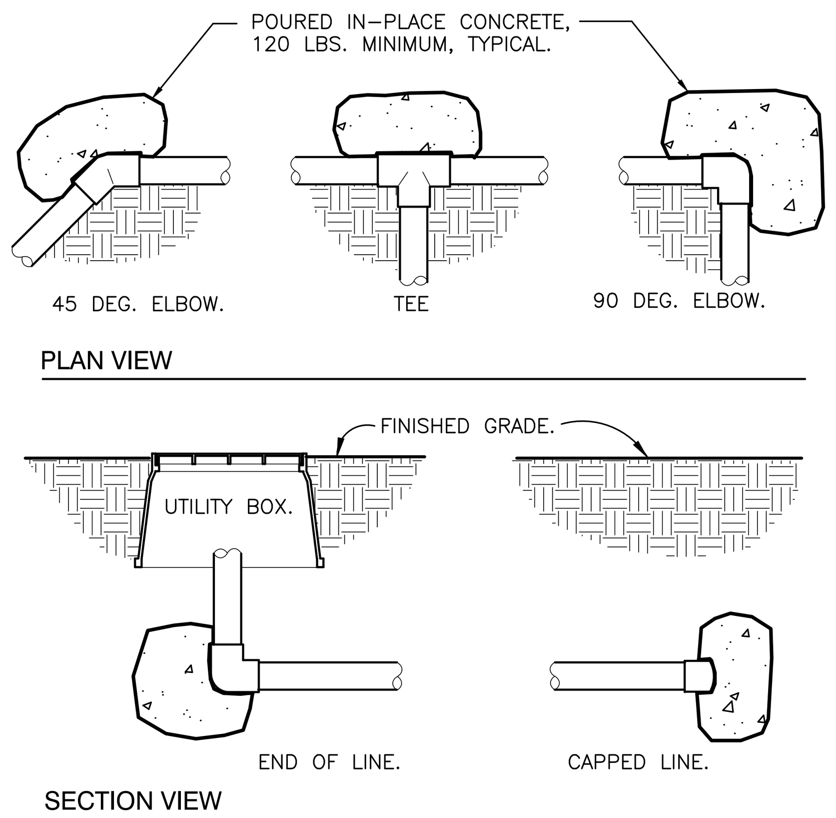
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION PLAN

CHURCH SITE IMPROVEMENTS

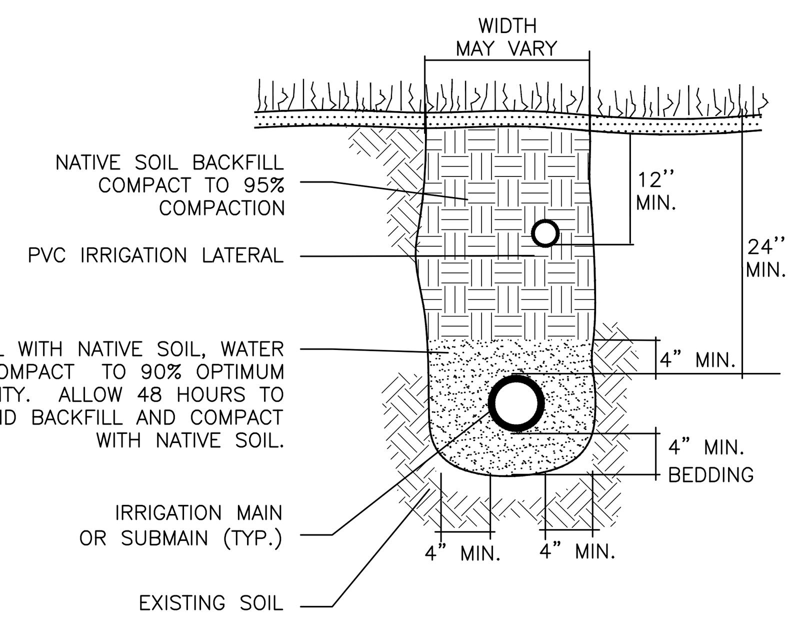
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-02



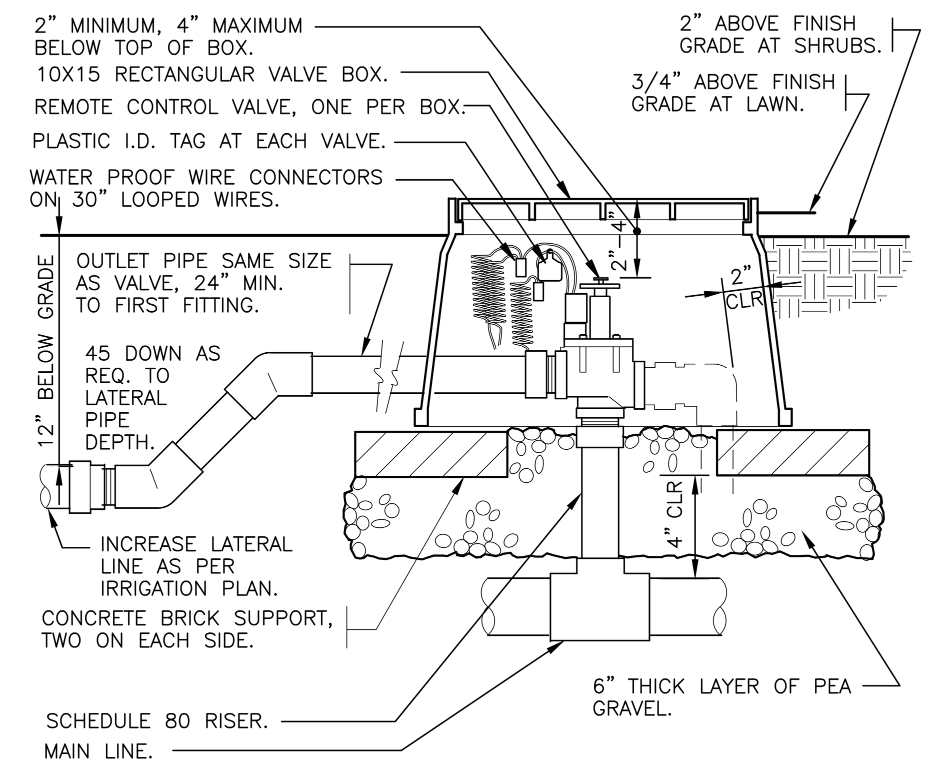
1 THRUST BLOCKING

3/4" = 1'-0" 32 8409.76-01



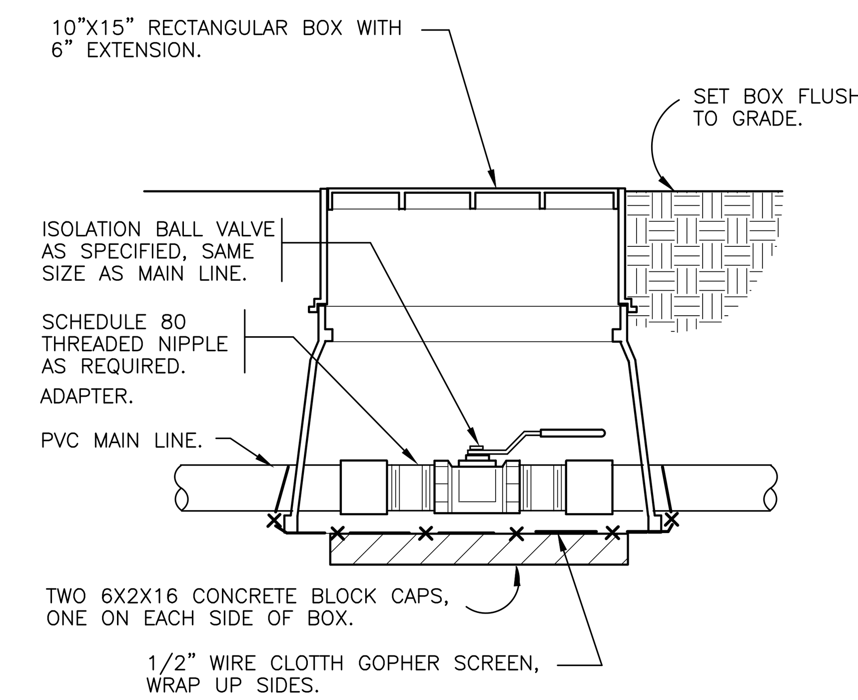
2 TRENCHING DETAIL

NOT TO SCALE 32 8409.76-03



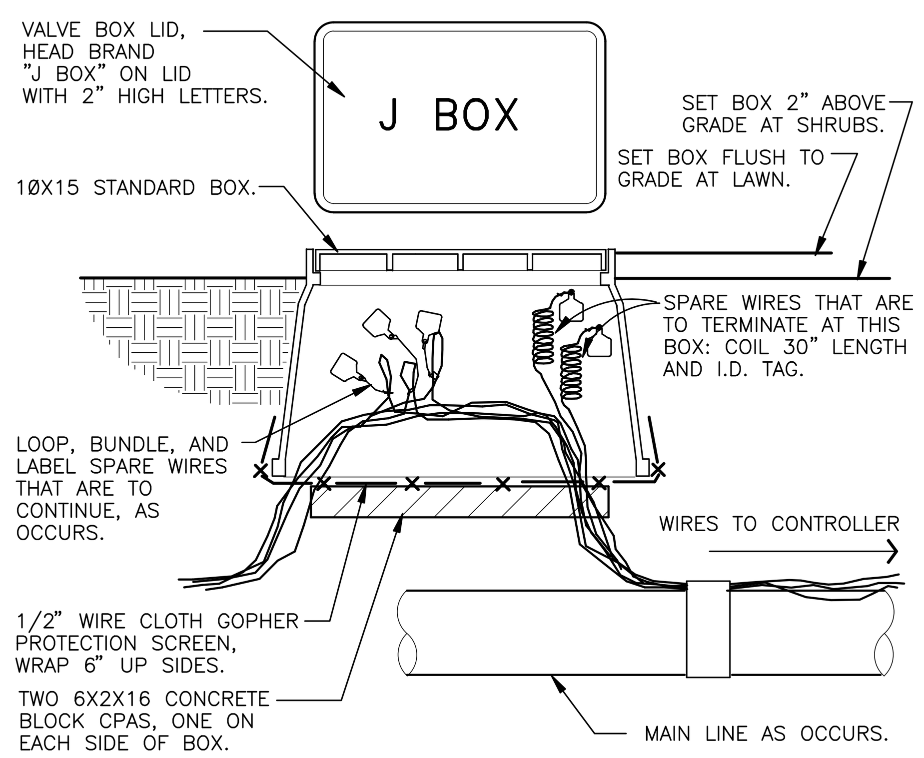
3 ELECTRIC REMOTE CONTROL VALVE

1 1/2" = 1'-0" 32 8406.13-01



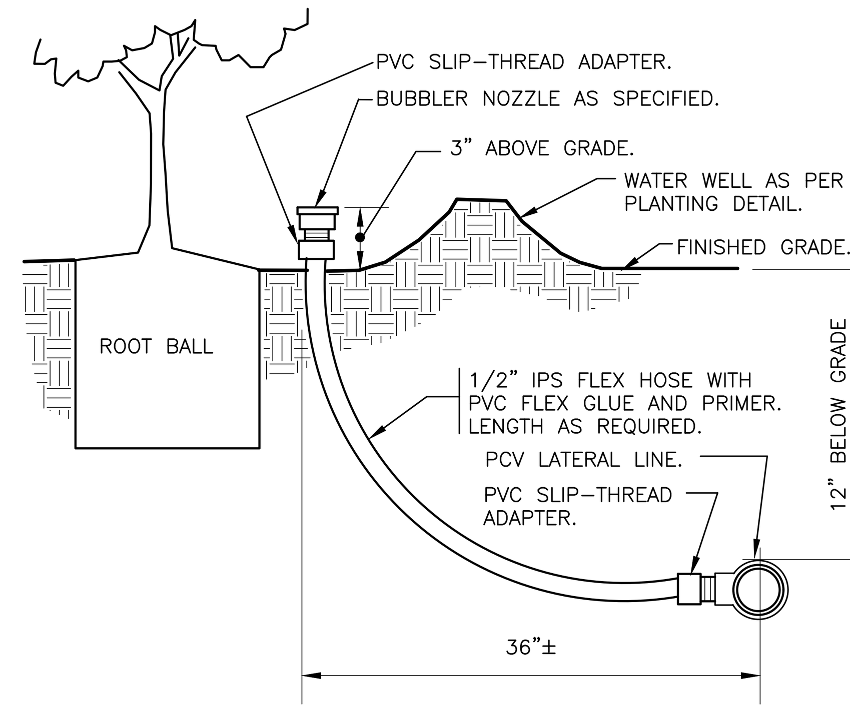
4 BRASS BALL ISOLATION VALVE

1 1/2" = 1'-0" 32 8406.33-02



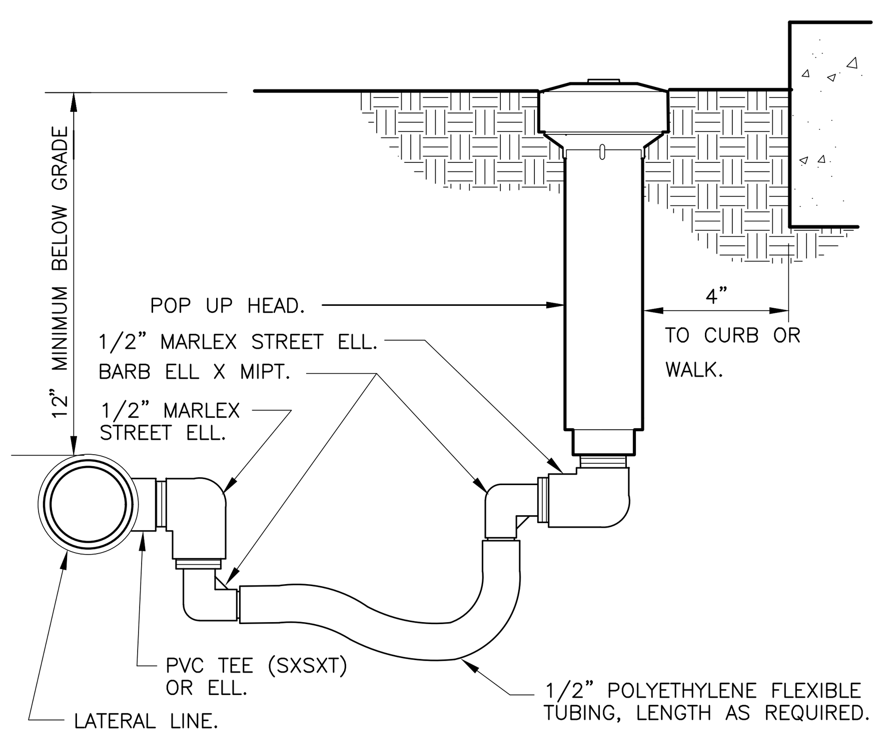
5 WIRE BUNDLE JUNCTION BOX

1 1/2" = 1'-0" 32 8409.79-01



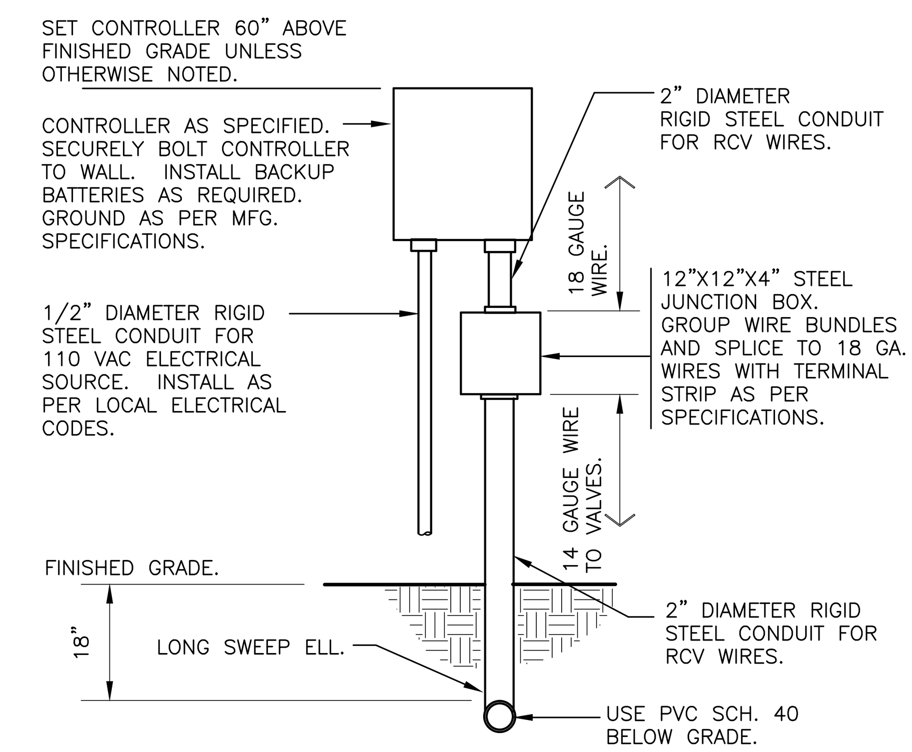
6 BUBBLER ON FLEX HOSE RISER

3" = 1'-0" DETAIL-FILE



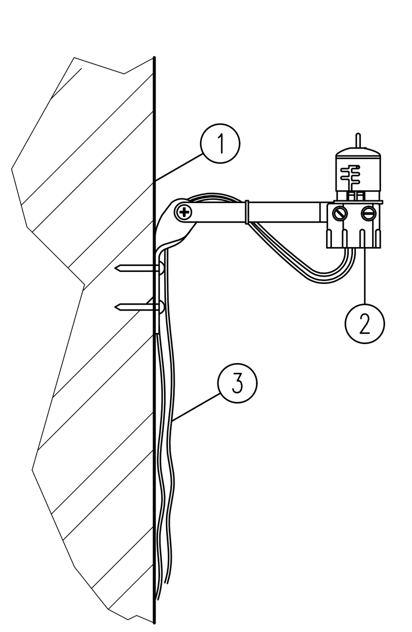
7 POP-UP SPRAY FLEX ASSEMBLY

3" = 1'-0" 32 8403.13-02



8 WALL MOUNT CONTROLLER

1" = 1'-0" 328409.13-02



1 EXTERIOR WALL (SEE NOTE)

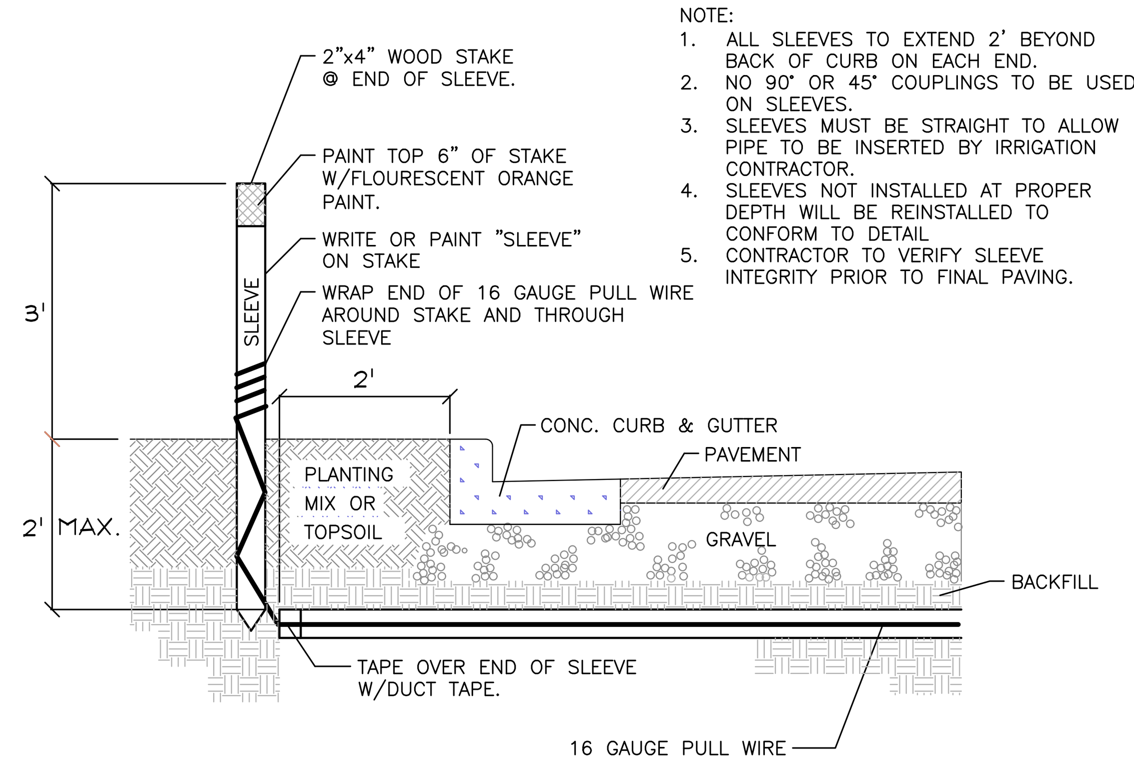
2 MODEL MINI-CLIK

3 RUN LEAD WIRES TO CONTROLLER

NOTE:
MOUNT SENSOR ON SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY. COORDINATE MOUNTING WITH OWNER AND ARCHITECT.

9 RAIN SENSOR

3" = 1'-0"



NOTE:
1. ALL SLEEVES TO EXTEND 2' BEYOND BACK OF CURB ON EACH END.
2. NO 90° OR 45° COUPLINGS TO BE USED ON SLEEVES.
3. SLEEVES MUST BE STRAIGHT TO ALLOW PIPE TO BE INSERTED BY IRRIGATION CONTRACTOR.
4. SLEEVES NOT INSTALLED AT PROPER DEPTH WILL BE REINSTALLED TO CONFORM TO DETAIL
5. CONTRACTOR TO VERIFY SLEEVE INTEGRITY PRIOR TO FINAL PAVING.

10 IRRIGATION SLEEVING

NTS

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

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

LICENSED PROFESSIONAL THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION DETAILS

CHURCH SITE IMPROVEMENTS

PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

IRR-03

UNDERGROUND IRRIGATION SYSTEM

PART I: GENERAL

1.01 SCOPE

A. The work covered by this specification shall include the furnishing of all labor, materials, tools and equipment necessary to perform and complete the installation of an automatic irrigation system as specified herein and as shown on the drawings and any incidental work not shown or specified which can reasonably be determined to be part of the work and necessary to provide a complete and functional system.

B. The work covered by this specification also includes all permits, federal, state and local taxes and all other costs, both foreseeable and unforeseeable at the time of construction.

C. No deviation from these specifications, the accompanying drawings, or agreement is authorized or shall be made without prior written authorization signed by the Owner or his duly appointed representative.

1.02 QUALITY ASSURANCE

A. Installer Qualifications: A firm specializing in irrigation work with not less than five (5) years of experience in installing irrigation systems similar to those required for this project.

B. Coordination: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.

C. Inspection of Site: The Contractor shall acquaint himself with all site conditions, including underground utilities before construction is to begin. Contractor shall coordinate placement of underground materials with contractors previously working underground in the vicinity or those scheduled to do underground work in the vicinity. Contractor is responsible for minor adjustments in the layout of the work to accommodate existing facilities.

D. Protection of Existing Plants and Site Conditions: The Contractor shall take necessary precautions to protect site conditions to remain. Should damages be incurred, this Contractor shall repair the damage to its original condition at his own expense. Any disruption, destruction, or disturbance of any existing plant, tree, shrub, or turf, or any structure shall be completely restored to the satisfaction of the Owner and his representatives, solely at the Contractor's expense.

E. Protection of Work and Property: The Contractor shall be liable for and shall take the following actions as required with regard to damage to any of the Owner's property.

1. Any existing building, equipment, piping, pipe coverings, electrical systems, sewers, sidewalks, roads, grounds, landscaping or structure of any kind (including without limitation, damage from leaks in the piping system being installed or having been installed by Contractor) damaged by the Contractor, or by his agents, employees, or subcontractors, during the course of his work, whether through negligence or otherwise, shall be replaced or repaired by Contractor at his own expense in a manner satisfactory to Owner, which repair or replacement shall be a condition precedent to Owner's obligation to make final payment under the Contract.

2. Contractor shall also be responsible for damage to any work covered by these specifications before final acceptance of the work. He shall securely cover all openings into the systems and cover all apparatus, equipment and appliances, both before and after being set in place to prevent obstructions on the pipes and the breakage, misuse or disfigurement of the apparatus, equipment or appliance.

3. All trenching or other work under the leaf canopy of any and all trees shall be done by hand or by other methods so that no branches are damaged in any way.

   Buildings, walks, walls, and other property shall be protected from damage. Open ditches left exposed shall be flagged and barricaded by the Contractor by approved means. The Contractor shall restore disturbed areas to their original condition.

4. The Contractor shall be responsible for requesting the proper utility company to stake the exact location of any underground lines including but not limited to electric, gas, telephone service, water, and cable.

   The Contractor shall take whatever precautions are necessary to protect these underground lines from damage. In the event damage does occur, all damage shall be completely repaired to its original condition, at no additional cost to the Owner.

5. The Contractor shall request the Owner, in writing, to locate any private utilities (i.e., electrical service to outside lighting) before proceeding with any excavation. If, after such requests and necessary staking, private utilities which were not staked are encountered and damaged by the Contractor, they shall be repaired by the Owner at no cost to the Contractor. If the Contractor damages staked or located utilities, they shall be repaired at the Contractor's expense.

F. Codes and Inspections: The entire installation shall comply fully with all local and state laws and ordinances and with all established codes arrange for all necessary inspections and shall pay all fees and expenses in connection with same, as part of the work under this Contract. Upon completion of the work, he shall furnish to the "Owner" all inspection certificates customarily issued in connection with the class of work involved.

G. The Contractor shall keep on his work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Owner, or Owner's representative.

H. The superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.

I. The Owner's Landscape Architect or designated individual shall have full authority to approve or reject work performed by the Contractor. The Owner's Authorized Representative shall also have full authority to make field changes that are deemed necessary.

J. Final Acceptance: Final acceptance of the work may be obtained from the Owner upon the satisfactory completion of all work. Acceptance by the Landscape Architect and/or Owner in no way removes the Contractor of his responsibility to make further repairs, corrections and adjustments to eliminate any deficiencies which may later be discovered.

K. Guarantee: All work shall be guaranteed for one year from date of final acceptance against all defects in material, equipment and workmanship to the satisfaction of the Owner. Repairs, if required, shall be done promptly at no cost to the Owner.

1. The guarantee shall also cover repair of damage to any part of the premises resulting from leaks or workmanship, to the satisfaction of the Owner. The Contractor shall not be responsible for work damaged by others. Repairs, if required, shall be done promptly. The guarantee shall state the name of the Owner, provide full guarantee terms, effective and termination date, name and license number of Contractor providing guarantee, address, and telephone number. It shall be signed by the chief executive of the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.

2. If, within ten (10) days after mailing of written notice by the Owner to the Contractor requesting repairs or replacement resulting from a breach of warranty, the Contractor shall neglect to make or undertake with due diligence to make the same, the Owner may make such repairs at the Contractor's expense; provided, however, that in the case of emergency where, in the judgment of the Owner, delay would cause serious loss or damage, repairs or replacement may be made without notice being sent to the Contractor, and Contractor shall pay the cost thereof.

L. The Contractor shall provide full, 100% irrigation coverage in all areas designed with proposed plantings, in accordance with the site's governing permitting requirements and as designed.

M. On-site Observation: At any time during the installation of the irrigation system by the Contractor, the Owner or Landscape Architect may visit the site to observe work underway. Upon request, the Contractor shall be required to uncover specified work as directed by the Owner or material, workmanship or method of installation not meet the standards specified herein, the Contractor shall replace the work at his own expense.

N. Workmanship: All work shall be installed by qualified, skilled personnel, proficient in the trades required, in a neat, orderly, and responsible manner with recognized standards of workmanship. The Contractor shall have had considerable experience and demonstrated ability in the installation of sprinkler irrigation systems of this type.

1.04 SUBMITTALS

All materials shall be those specified and/or approved by the Landscape Architect.

A. Product Data: After the award of the Contract and prior to beginning work, the Contractor shall submit for approval by the Owner and Landscape Architect, two copies of the complete list of materials, manufacturer's technical data, and installation instructions which he proposes to install.

B. Commence no work before approval of material list and descriptive material by the Landscape Architect.

C. Record Drawings: The Contractor shall record on reproducibles, all changes that may be made during actual installation of the system. Provide controller sequencing and control valve locations.

1. Immediately upon installation of any piping, valves, wiring, sprinklers, etc., in locations other than shown on the original drawings or of sizes other than indicated, the Contractor shall clearly indicate such changes on a set of blueline prints. Records shall be made on a daily basis. All records shall be neat and subject to the approval of the Owner.

2. The Contractor shall also indicate on the record prints the location of all wire splices, original or due to repair, that are installed underground in a location other than the controller pedestal, remote control valve box, power source or connection to a valve-in-head sprinkler.

3. These drawings shall also serve as work progress sheets. The Contractor shall make neat and legible notations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for review and shall be kept in a location designated by the Owner's Representative.

4. Progress payment request and record drawing information must be approved by Landscape Architect before payment is made.

5. If in the opinion of the Owner or his representative, the record drawing information is not being properly or promptly recorded, construction payment may be stopped until the proper information has been recorded and submitted.

6. Before the date of the final site observation and approval, the Contractor shall deliver one set (copies) of reproducible record drawing plans and notes to the Landscape Architect. Record drawing information shall be approved by the Landscape Architect prior to submittal to Owner for final payments, including retentions.

D. Operations and Maintenance Manuals: The Contractor shall prepare and deliver to the Owner, or his designated representative within ten (10) calendar days prior to completion of construction, a hard cover binder with three rings containing the following information:

1. Index sheet stating the Contractor's address and business telephone number, list of equipment with name(2) and address(es) of local manufacturer's representative(s).

2. Catalog and parts sheets on every material and equipment installed under this Contract.

3. Complete operating and maintenance instruction on all major equipment. Include initial controller schedule and recommended schedule after establishment period.

4. Demonstrate to and provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Owner, or his designated representative at the conclusion of the project that this service has been rendered.

1.05 EXPLANATION OF DRAWINGS

A. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings and sleeves which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the work and plan his work accordingly, furnishing such offsets, fittings and sleeves as may be required to meet such conditions.

B. The drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features. Deviations shall be brought to the Landscape Architects attention.

C. All work called for a on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

D. The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been known in engineering. Such obstructions or differences should be brought to the attention of the Landscape Architect. In the event that notification is not performed, the Contractor shall assume full responsibility for any revision necessary.

E. If, in the opinion of the Landscape Architect, the labor furnished by the Contractor is incompetent, unskilled, or unreliable, his equipment inadequate, improper or unsafe, or if the Contractor shall fail to continuously and diligently execute the construction, the Landscape Architect or Owner shall, in writing, instruct the Contractor to remove all such causes of noncompliance and the Contractor shall promptly comply.

F. The Contractor shall be responsible for full and complete coverage of all irrigation areas. The Landscape Architect shall be notified of any necessary adjustments at no additional cost to the Owner. Any revisions to the irrigation system must be submitted and answered in written form, along with any change in Contract price. Layout may be modified, if necessary to obtain coverage. Spacing not to exceed 60% of the diameter.

PART II: PRODUCTS

2.01 MATERIALS

Material and equipment shall be supplied by the Contractor. No substitutions shall be allowed without the prior written approval of the Owner/Landscape Architect. The Contractor shall inspect all materials and equipment prior to installation, and defective materials shall be replaced with the proper materials and equipment. Those items used in the installation found to be defective, improperly installed or not as specified, shall be removed and the proper materials and equipment installed in the proper manner, as interpreted by the Owner/Landscape Architect. The Contractor shall remove all damaged and defective pipe and equipment from the site.

2.02 PIPING

A. General Provisions: All materials throughout the system shall be new and in perfect condition unless otherwise directed by the Landscape Architect.

B. Polyvinyl Chloride Pipe (PVC): (Where indicated on plan, use non-potable purple piping.)

1. Laterals: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220. All lateral piping less than 3" in diameter shall be Class 200 SDR-21.

2. Main Line Under Pressure: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220, Schedule 40 with belled end for solvent weld connection.

3. Pipe Markings: All PVC pipe shall bear the following markings:
   - o Manufacturer's Name
   - o Nominal Pipe Size
   - o Schedule or Class
   - o Pressure Rating of PSI
   - o NSF (National Sanitation Foundation) Approval
   - o Date of Extrusion

2.04 PVC JOINTS

Joints in PVC pipe smaller than 3" shall be solvent welded in accordance with the recommendations of the pipe manufacturer; the solvent cleaner and welding compound furnished with the pipe.

2.05 THREADED CONNECTIONS

A. Threaded PVC connections shall be made up using Teflon tape only.

B. Connection between mainline pipe fittings and automatic or manual control valves shall be made using Schedule 80 threaded fittings and nipples.

2.06 SOLVENT CEMENT

A. General: Provide solvent cement and primer for PVC solvent weld pipe and fittings recommended by the manufacturer. Pipe joints for solvent weld pipe to be belled end. Pipe joints for gasketted pipe to be intrical ring type. Insert gaskets will not be accepted.

B. Thrust Blocks: Main line piping 3" or greater in diameter shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations or, in the absence of specified recommendations by the pipe manufacturer. 3000 PSI concrete thrusts shall be properly installed at tees, elbows, 45's, crosses, reducers, plugs, caps and valves.

2.07 PIPE AND WIRE SLEEVES

A. Sleeves to be installed:

1. The Contractor shall install irrigation system pipe and wire sleeves conforming to the following:

   a. All pipe sleeves shall extend a minimum of 36" beyond the edges of pavement.

   b. All pipe sleeves to be installed beneath future/existing road surfaces shall be PVC pipe Schedule 40 or jack and bore steel pipe as per FDOT specifications, and as shown on plans.

   c. All irrigation system wires shall be sleeved seperately from main or lateral lines.

   d. All pipe sleeves shall be installed at the minimum depth specified for main lines, lateral lines, and electric wire.

   e. Contractor shall coordinate all pipe sleeve locations and depths prior to initiating installation of the irrigation system.

2.08 SPRINKLER HEADS

A. Spray Sprinklers: The sprinkler shall be a fixed spray type designed for in-ground installation. The nozzle shall elevate 6" (or as designated on plan) when in operation. The body of the sprinkler shall be constructed of non-corrosive heavy duty Cycolac. A filter screen shall be in the nozzle piston. All sprinkler parts shall be removable through the tip of the unit by removal of a threaded cap.

Riser mounted spray shall be as indicated on the plans. The sprinkler shall consist of a nozzle and body. The body of the riser-mount sprinkler shall be constructed of non-corrosive materials. A cone strainer shall be a separate part with the nozzle assembly to allow for easy flushing of the sprinkler. Maximum working pressure at the base of the sprinkler shall be 40 PSI.

(continued...)

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-04

2.09 AUTOMATIC CONTROL VALVE

The automatic remote control valves shall be as specified on the plans, or approved equal.

2.10 GATE VALVES

A. Gate valves for 3/4" through 2-1/2" shall be of brass or bronze construction, solid wedge, IPS threads, non-rising stem with wheel operating handle, for a continuous working pressure of 150 PSI.

B. Gate valves for 3" and larger: Iron body, brass or bronze mounted AWWA gate valves, with a clear waterway equal to the full nominal diameter of the valve, rubber gasket for a continuous working pressure of 150p PSI. Valve shall be equipped with a square operating nut.

2.11 VALVE BOXES

A. For gate valves, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

B. For control valves 3/4" through 2", the drip valve assemblies, use AMETEK #10-181-014 box with #10-181-015 locking lid, or sized as necessary to effectively house the equipment

C. For control wiring splices, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

2.12 IRRIGATION WIRING

A. Wiring used for connecting the electric control valves to the controllers shall be Type UF, 600 volt, single strand, solid copper with PVC insulation 4/64" thick. Size shall be 14 gauge, red for "hot" or lead wires, and common wire to be 14 gauge, white in color.

B. Contractor shall perform an ohm test on ground to assure adequate protection against surges and indirect lightning strikes.

2.13 MISCELLANEOUS MATERIALS

A. Drainage Backfill: Cleaned gravel or crushed stone, graded from 1" maximum to 3/4" minimum.

B. Metalized Underground Tape: The detectable, underground utility marking tape shall consist of a minimum: 5 mil (0.005") overall thickness; five-ply composition; ultra-high molecular weight, 100% virgin polyethylene; acid, alkaline and corrosion resistant; with no less than 150 pounds of tensile break strength per 6" width; color-code impregnated with color stable, lead-free, organic pigments suitable for direct burial. Tapes utilizing reprocessed plastics or resins shall not be acceptable. The detectable, underground utility marking tape shall have a 35 gauge (0.0035") solid aluminum foil, core encapsulated within a 2.55 mil (0.00255") polyethylene backing and a 0.6 mil (0.006") PET cover coating. The laminate on each side shall consist of a 0.75 mil (0.00075") layer of hot LPDE, poly-fusing the "sandwich" without use of adhesives.

2.14 AUTOMATIC CONTROL SYSTEM

An Independent Station Controller: Furnish a solid state controller, as specified on the plans. Each station shall be capable of timing from zero (0) minute to 99 minutes per station in one (1) minute increments.

Each station shall be capable of operating two (2) 7VA electric valve-in-head solenoids.

The stand-alone controller shall have two (2) possible programs.

The stand-alone controller shall provide global percentage increase/decrease (water budget) for all stations simultaneously, from ten (10) to two hundred (200) percent, in ten (10) percent increments.

All stations shall be able to be turned on/off manually buy operating timing mechanism or by manual switch at station output.

The stand-alone controller shall incorporate an integral MOV surge protection into the terminal block for each of its 24 VAC field wire outputs. Controller power input wires will also incorporate surge protection.

The control panel shall provide continuous display time. It shall have alphanumeric displays of descriptive English menus and legend identifiers with cursor selection of function and precision value adjustment by rotary dial input.

The stand-alone controller shall be UL listed and FCC approved.

The stand-alone controller shall have 117 VAC, 60 Hz input, 26.5 VAC, 60 Hz output for operating 24 VAC solenoids.

The stand-alone controller cabinet shall be a lockable and weather-resistant outdoor cabinet. Mount as noted on plans.

The controller shall be equipped with lightening protection, by the Contractor, on both the primary (120v) and each secondary (24v) circuit. The controller circuits shall be grounded to a copper clad grounding rod located at each controller.

The controller shall be equipped for a water conservation device. as specified.

PART III: EXECUTION

3.01 INSPECTION

The Contractor shall examine the areas and conditions under which landscape irrigation system is to be installed and notify the Landscape Architect in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect.

3.02 PREPARATION

The Contractor shall provide sleeves to accommodate piping under walks or paving. The Contractor shall coordinate with other trades and install to accurate levels prior to paving work. Cutting and patching of paving and concrete will not be permitted. The Contractor shall maintain all warning signs, shoring, barricades, flares and red lanterns, as required by any local codes, ordinances or permits.

3.03 TRENCHING AND BACKFILLING

A. Excavation: The Contractor shall stake out the location of each run of pipe, sprinkler heads, sprinkler valves and isolation valves prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space or backfilling and tamping. Trenches for pipe shall be cut to required grade lines, and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of the trenches shall be free of rock or other sharp edged objects. Minimum cover shall be as follows:

Pipe and Wire Depth

Pressure Mainline	18" at top of pipe from Finish Grade
Lateral Piping (rotor)	12" at top of pipe from Finish Grade
Lateral Piping (pop-up)	12" at top of pipe from Finish Grade
Control Wiring	Side of main Line

B. Minimum Clearances: All pipelines shall have a minimum clearance of six inches from each other and from lines of other crafts. Parallel lines shall not be installed directly over one another. No lateral line shall be installed in the main-line trench.

3.04 INSTALLATION OF PIPING

A. PVC Pipe and Joints: The Contractor shall not install solvent wild pipe when air temperature is below 40ø F. Installation shall be in accordance with the manufacturer's instructions.

1. Only the solvent recommended by the pipe manufacturer shall be used. All PVC pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer, and it shall be the Contractor's full responsibility to make arrangements with the pipe manufacturer for any field assistance that may be necessary. The Contractor shall assume full responsibility for the correct installation.

3.05 BACKFILLING PROCEDURES

Initial backfill on PVC lines shall be pulverized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. The Contractor shall coordinate the location of trees and shrubs with the routing of lines and final head locations.

A. Backfill and Compaction: The Contractor shall leave trenches slightly mounded to allow for settlement after the backfilling is completed. The Contractor shall clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required.

The Contractor shall carefully backfill excavated materials approved for backfilling, consisting of earth, loam, sand, and other approved materials, free of rock and debris over 1" in size. Backfill shall be compacted to original density of surrounding soil without dips, sunken areas, or irregularities.

The Contractor shall conform to DOT requirements for methods and required compaction percentages, for roads and paving.

The Contractor shall hand place the first 6" of backfill (or to top of pipe) and have it walked on so as to secure the position of the pipe and wire.

No wheel rolling will be allowed. The Contractor shall remove rock or debris extracted from backfill materials and dispose of offsite. The Contractor shall fill any voids left in backfill with approved backfill materials.

B. Existing Lawns: Where trenching is required across existing lawns, uniformly cut strips of sod 6" wider than trench. The Contractor shall remove sod in rolls of suitable size for handling and keep moistened until replanted. The Contractor shall replant sod within 48 hours after removal, roll and water generously. The Contractor shall resod any areas not in healthy condition equal to adjoining lawns 10 days after replanting.

C. Seeded Area: Trenching will be required across existing seeded areas, primarily roadway edging. The Contractor shall conform to the requirements of seeding, Section 02930 for the reseeding of the disturbed trench area.

D. Pavements: Jack and bore or directional bore piping under paving materials as per local regulatory codes. No cutting and patching of pavement will be permitted.

3.06 VALVES

A. Isolation Valves: Shall be sized corresponding to adjacent pipe size. Specified valve boxes shall be installed flush with finish grade in such a manner that surface forces applied to their exposed area will not be transmitted to the piping in which the valve is installed nor any other piping, wiring or other lines in the vicinity of said valves.

B. Gate Valves: Install where shown, in valve boxes.

C. Electric Control Valves: Shall be installed in specified valve boxes. The valve shall have 6" of 3/4" pea gravel installed below the bottom of the valve. If the valve box does not extend to the base of the valve, a valve box extension shall be installed. Electric control valves shall be installed where shown and grouped together where practical. The Contractor shall place no closer than 24" to walk edges, bikeway edges, buildings and walls. The Contractor shall adjust the valve to provide flow rate or rated operating pressure required for each sprinkler circuit.

3.07 CONDUIT AND SLEEVES

A. Conduit and Sleeves for Control Wiring and Main/Lateral Pipe: The Contractor shall provide and install where necessary. Contractor shall coordinate locations of previously installed sleeving with the General Site Contractor.

The Contractor shall coordinate installation of sleeves with work of other disciplines.

3.08 CONTROLS

A. The Contractor shall connect electric control valves to controllers in a clockwise sequence to correspond with station settings beginning with Stations 1, 2, 3, etc. Automatic controllers shall be provided and installed by the Contractor as noted on the drawings. All zones will be labeled on the controller.

B. Controllers shall be equipped with lightning protection and grounded to a standard 5/8" copper clad steel ground rod driven a minimum of 8' into the ground and clamped.

C. The electrical service to the controllers shall be performed by an electrical subcontractor in compliance with NEC requirements.

3.09 CONTROL WIRE

A. Control wiring between the controller and electric valves shall be buried in main line trenches or in separate trenches. Electrical connection at valve will allow for pigtail so solenoid can be removed from valve with sufficient slack to allow ends to be pulled 12" above ground for examination and cleaning.

B. An expansion loop shall be provided at every valve at 100' o.c. Expansion loop shall be formed by wrapping wire at least eight times around a 3/4" pipe and withdrawing pipe.

C. The wire shall be bundled and taped every ten feet. The wire shall be laid in the trench prior to installing the pipe being careful to install wire beneath and 6" to the side of the main pipe line.

D. Electrical connections to electric control valves shall be made with Rainbird Pen-Tite or Techdel GT-3-GEL - Tite connectors or equal.

Power Connections: Electrical connections to power and signal wires shall be made using 3M 82-A2 power cable splice kits.

3.10 SPRINKLER HEADS

A. General Provisions:

1. Sprinkler heads shall be installed as designated on the shop drawings. Heads shall be installed on flexible PVC. Top to be flush with finish grade or top of curb.

2. Spacing of heads shall not exceed the maximum indicated on the shop drawings (unless directed by the Landscape Architect). In no case shall the spacing exceed the maximum recommended by the manufacturer.

B. Head Types:

1. Pop-up- Rotary Sprinkler Heads: Shall be installed on flex joint and be set with top of head flush with finish grade. Heads installed at curb shall have 6" to 10" between perimeter of head and concrete. Heads placed at edge of pavement having no curb shall be installed 24" from edge of pavement.

2. Spray Pop-up Sprinkler Heads: Shall be installed on flexible PVC and be set with top of head flush with finished grade. Sprinkler heads placed adjacent to curbs will be installed 9" from concrete. Sprinkler heads placed adjacent to pavement having no curb shall be installed 24" from the edge of pavement.

3.11 COMPLETION

A. Flushing: Before sprinkler heads are set, the Contractor shall flush the lines thoroughly to make sure there is no foreign matter in the lines.

The Contractor shall flush the main lines from dead end fittings for a minimum of five minutes under a full head of pressure.

B. Testing: The Contractor shall notify Landscape Architect and Owner forty-eight (48) hours in advance of testing.

Prior to backfilling of main line fittings, Contractor shall fill the main line piping with water, in the presence of the Owner/Landscape Architect, taking care to purge the air from it by operating all the sprinkler control valves one or more times and/or such other means as may be necessary. A small, high pressure pump or other means of maintaining a continuous water supply shall be connected to the main line and set so as to maintain 100 PSI in the main line system for two (2) hours without interruption. When this has been accomplished and while the pressure in the system is still 100 PSI, leakage testing shall be performed in accordance with AWWA Standard C-600. Pressure readings shall be noted and make up water usage shall be recorded. Should the rate of make up water usage indicate significant leakage, the source of such leakage shall be found and corrected and the system then retested until the Owner/Landscape Architect is satisfied that the system is reasonably sound. Lateral line testing shall be conducted during the operating testing of the system by checking visually the ground surface until no leaks in this portion of the system are evident. Leaks shall be repaired or paid for by the Contractor at any time they appear during the warranty period.

C. Adjustment and Coverage of System: Coordinate pressure testing with adjustments and coverage test of system so both may occur at the same time. The Contractor shall balance and adjust the various components of the system so that the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

3.12 WARRANTY

A. The Contractor shall fully warrant the landscape irrigation system for a period of one (1) year after the written final acceptance and will receive a written confirmation from the Landscape Architect that the warranty period is in effect.

B. During the warranty period, the Contractor will enforce all manufacturer's and supplier's warranties as if made by the Contractor himself. Any malfunctions, deficiencies, breaks, damages, disrepair, or other disorder due to materials, workmanship, or installation by the Contractor and his suppliers shall be immediately and properly corrected to the proper order as directed by the Owner and/or Landscape Architect.

C. Any damages caused by system malfunction shall be the responsibility of the Contractor who shall make full and immediate restoration for said damages.

REVISIONS | No. | DATE | BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

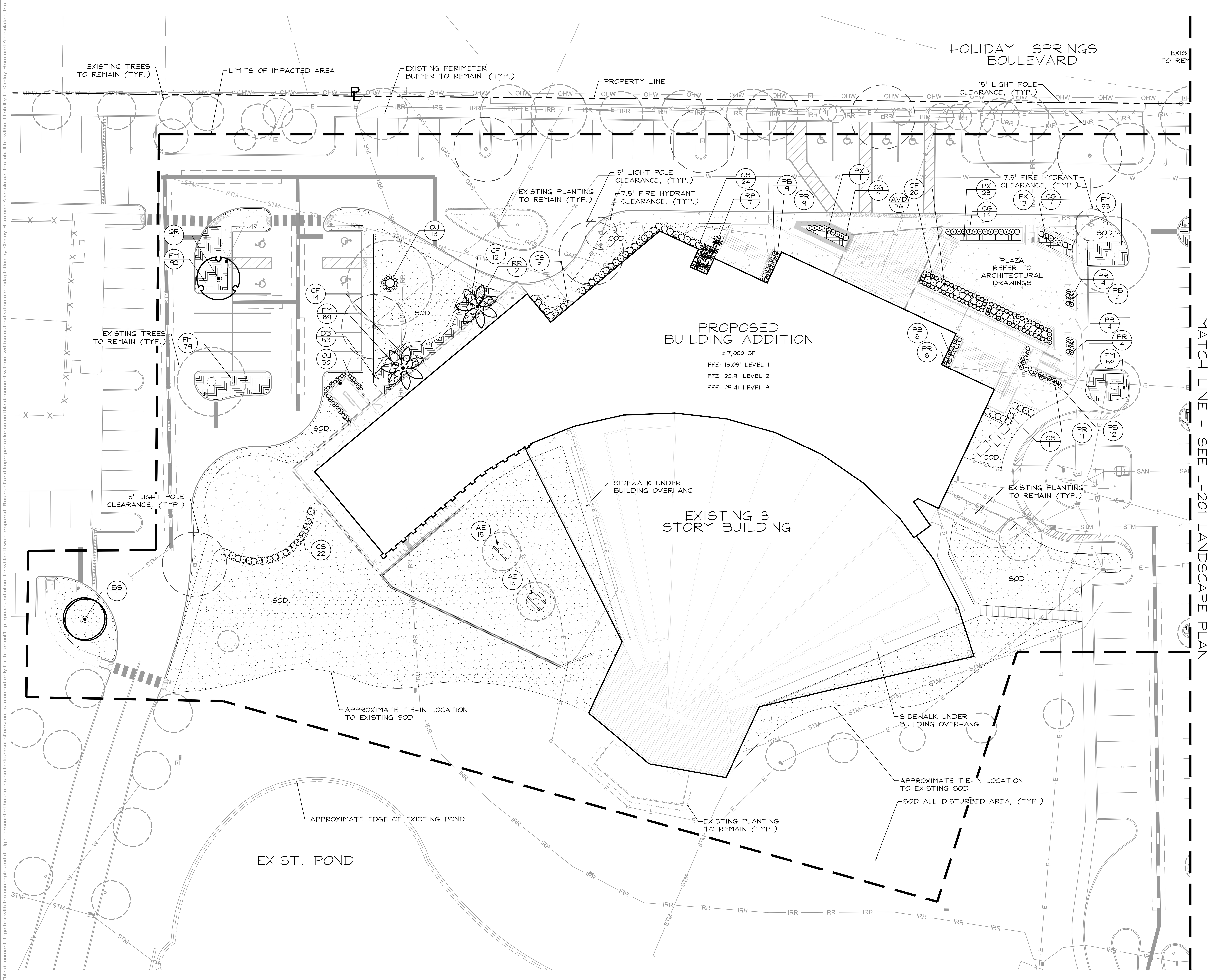
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

KHA PROJECT	143788000
DATE	07/17/2025
SCALE	AS SHOWN
DESIGNED BY	NS
DRAWN BY	NS
CHECKED BY	TCH

IRRIGATION NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-05



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

PLANT SCHEDULE

CODE	COMMON NAME
TREES	
BS	Gumbo Limbo
CE	Silver Buttonwood
QR	Southern Live Oak
QV	Southern Live Oak
PALM TREES	
RR	Royal Palm
SHRUBS	
AVD	Dwarf Variegated Ginger
CF	Red Sister Ti Plant 3 PPP Shade Grown
CG	Gold Dust Croton 3 PPP
CS	Small Leaf Clusia
OJ	Mondo Grass
PB	Butterfly Series Star Cluster
PR	Ruby Glow Star Cluster
RP	Lady Palm Shade Grown, 7 Stems min.
SHRUB AREAS	
AE	Cast Iron Plant Shade Grown
AZ	Variegated Shell Ginger
FM	Green Island Ficus
HN	Dwarf Firebush
MCA	Pink Muhly Grass
GROUND COVERS	
DB	Blueberry Flax Lily
PX	Xanadu Philodendron
SOD	St. Augustine Grass

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

REVISIONS
No. | DATE | BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

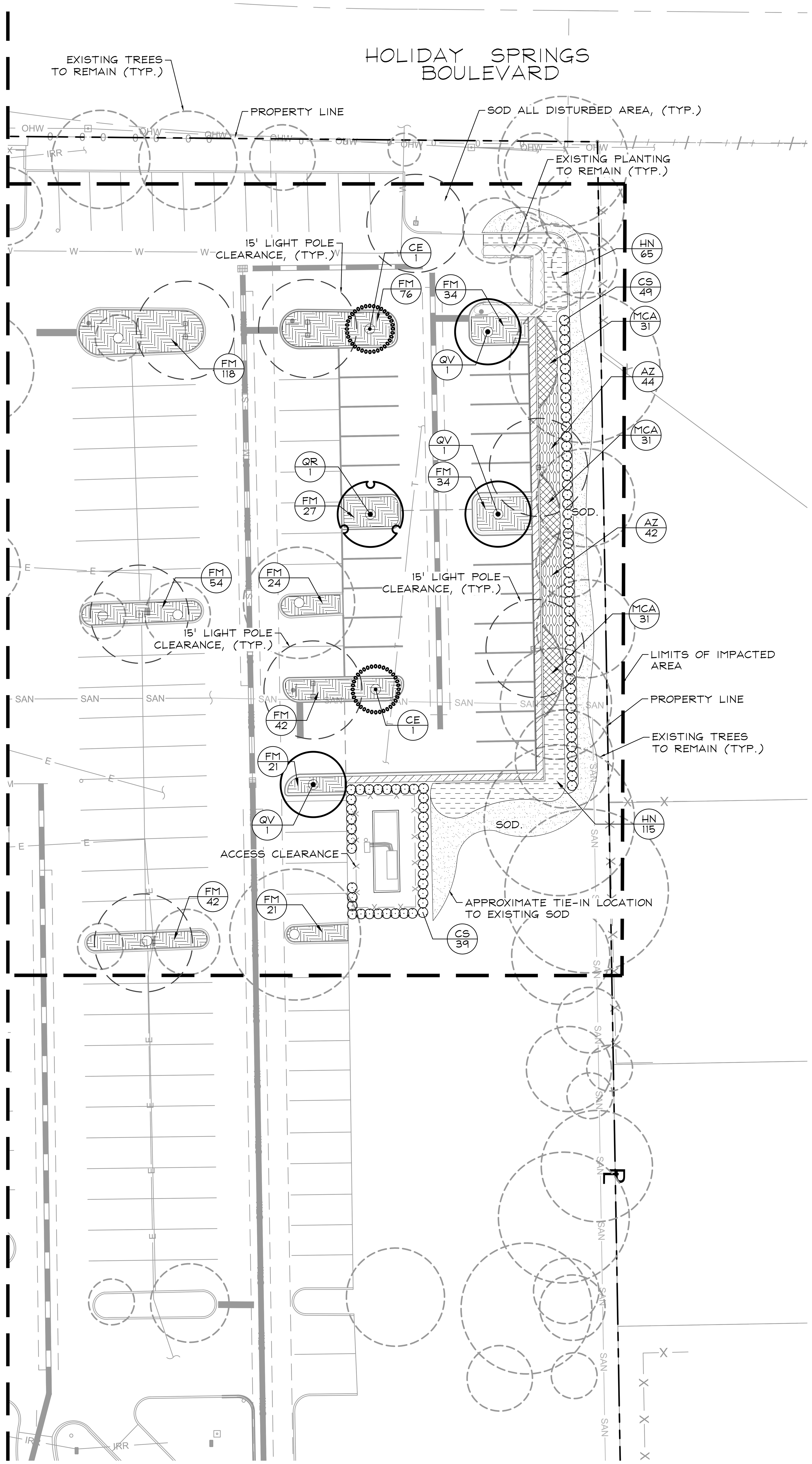
KHA PROJECT	143788000
DATE	07/17/2025
SCALE	AS SHOWN
DESIGNED BY	NS
DRAWN BY	NS
CHECKED BY	TCH

LANDSCAPE PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-01

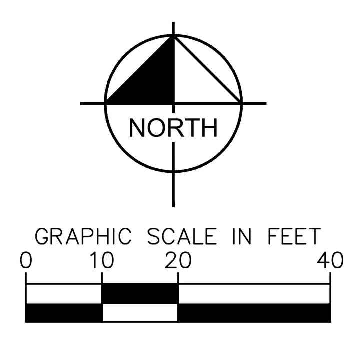


PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	QTY
TREES							
BS	Bursera simaruba	Gumbo Limbo	F.G.	3" Cal.	15' HT X 6' SPR	Yes	1
CE	Conocarpus erectus f. sericeus	Silver Buttonwood	F.G.	3" Cal.	12' HT x 5' SPR	Yes	2
QR	Quercus virginiana	Southern Live Oak	Relocated				2
QV	Quercus virginiana	Southern Live Oak	F.G.	3" Cal.	15' HT X 6' SPR	Yes	3
PALM TREES							
RR	Roystonea regia	Royal Palm	F.G.		22' OA	Yes	2

CODE	BOTANICAL NAME	COMMON NAME	CONT	O.C.	SIZE	NATIVE	QTY
SHRUBS							
AVD	Alpinia zerumbet 'Variegata Dwarf'	Dwarf Variegated Ginger	Cont.	24" O.C.	24" HT" X 24" SPR.	Florida Native	76
CF	Cordyline fruticosa 'Red Sister' 3 PPP Shade Grown	Red Sister Ti Plant	Cont.	24" O.C.	36" HT	Yes	46
CG	Codiaeum x 'Gold Dust' 3 PPP	Gold Dust Croton	Cont.	30" O.C.	30" HT	Yes	30
CS	Clusia guttifera	Small Leaf Clusia	Cont.	18" O.C.		Yes	154
OJ	Ophiopogon japonicus	Mondo Grass	Cont.	12" O.C.	18" HT. X 18" SPR.	Yes	43
PB	Pentas lanceolata 'Butterfly'	Butterfly Series Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	37
PR	Pentas lanceolata 'Ruby Glow'	Ruby Glow Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	36
RP	Rhapis excelsa Shade Grown. 7 Stems min.	Lady Palm	25 gal	As Shown	5' HT		7
SHRUB AREAS							
AE	Aspidistra elatior Shade Grown	Cast Iron Plant	Cont.	24" O.C.	15' HT. x 15' SPR.	Florida Friendly	30
AZ	Alpinia zerumbet 'Variegata'	Variegated Shell Ginger	Cont.	36" O.C.	24"x24"	Florida Friendly	86
FM	Ficus microcarpa	Green Island Ficus	Cont.	24" O.C.	18" HT. X 18" SPR.	Florida Friendly	907
HN	Hamelia nodosa	Dwarf Firebush	Cont.	24" O.C.	24" HT. X 24" SPR.	Yes	180
MCA	Muhlenbergia capillaris	Pink Muhly Grass	Cont.	30" O.C.	30" HT. x 30" SPR.	Yes	93
GROUND COVERS							
DB	Dianella tasmanica 'Blueberry'	Blueberry Flax Lily	Cont.	18" O.C.	12" HT	Florida Friendly	238
PX	Philodendron x 'Xanadu'	Xanadu Philodendron	Cont.	24" O.C.	18" X HT. X 18" SPR.	Florida Friendly	47
SOD	Stenotaphrum secundatum	St. Augustine Grass	Sod				± 6,577

City of Margate Code Compliane Chart		
	Required	Provided
Section 40.704 - LANDSCAPING		
40.704.E.1.a - Materials, installation and irrigation requirements.		
A minimum of 50% of all required landscaping shall be South Florida native species	✓	✓
40.704.E.1.b - Materials, installation and irrigation requirements.		
Trees shall be planted at a Minimum of 12' Height and 2" DBH	✓	✓
Palm shall not exceed 25% of the requiered shade tree	✓	✓
40.704.G.1 - Required landscaping adjacent to other perimeters		
one (1) shade tree along the common property line for every for every seventy-five (75) linear feet or fractional part thereof. Impacted East {Property Buffer: 196 LF / 75 = 3	3	Satisfied with Existing Trees
40.704.H.1.g - Parking area and pedestrian zone interior landscaping		
There shall be one (1) shade tree and three (3) shrubs per two hundred (200) square feet, or fraction thereof, of interior landscaping in the VUA minus the landscape islands	✓	✓



Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL: THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

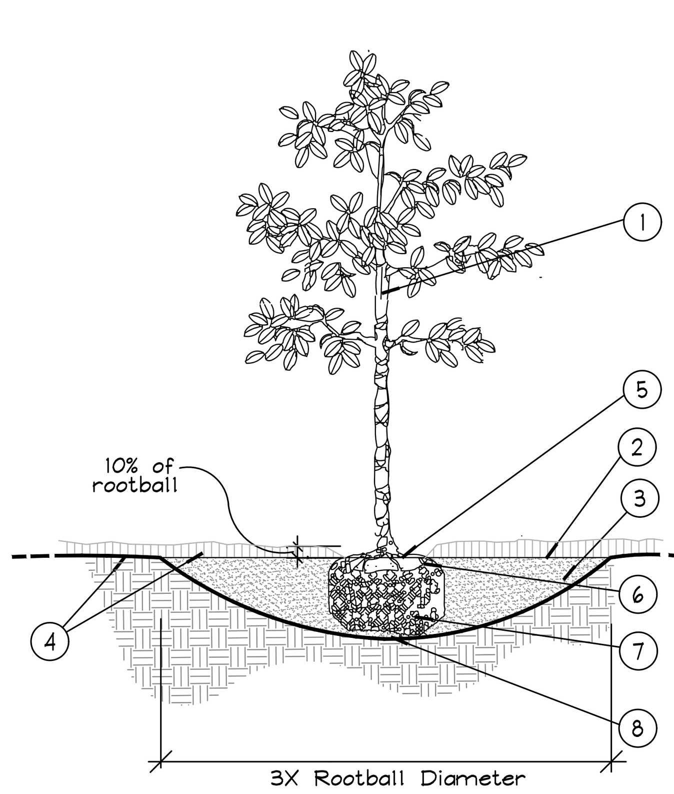
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-02

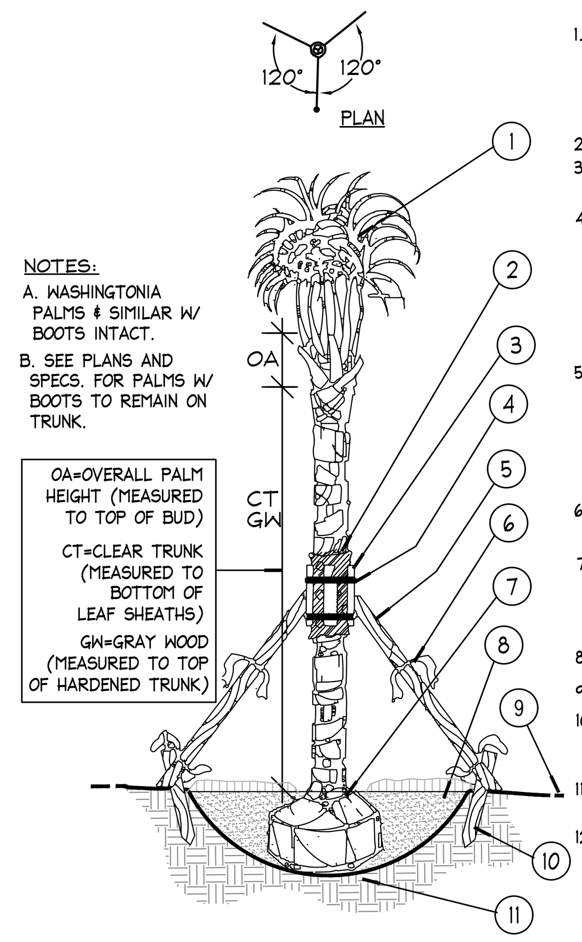


1. TRUNK
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. B & B OR CONTAINER (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
7. REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL.
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:
A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

A Tree Planting
SECTION — NTS

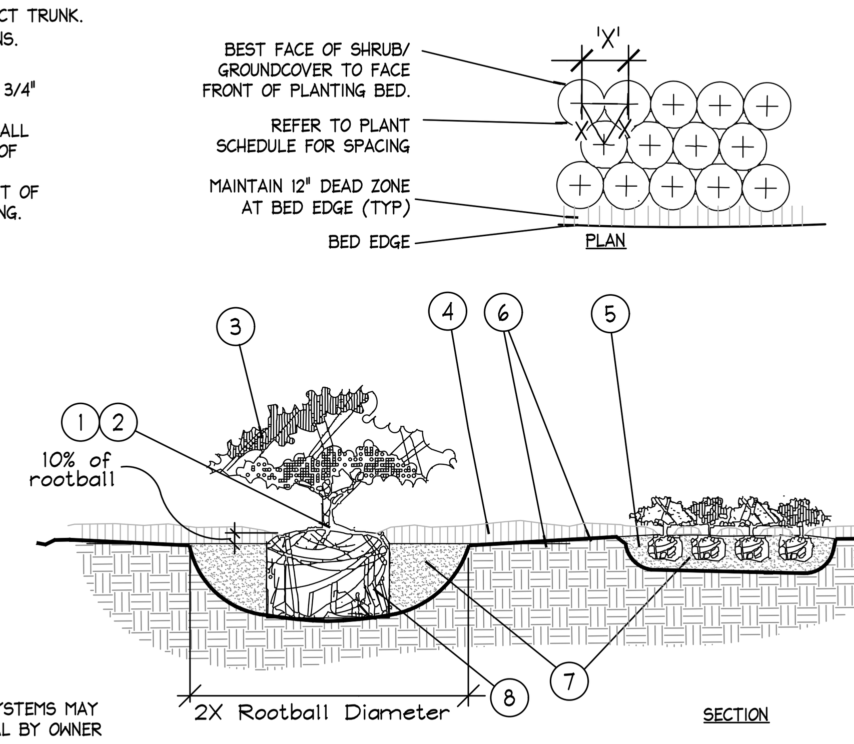


NOTES:
A. WASHINGTONIA PALMS & SIMILAR W/ BOOTS INTACT.
B. SEE PLANS AND SPECS. FOR PALMS W/ BOOTS TO REMAIN ON TRUNK.

1. MINIMUM OF NINE (9) GOOD PALM FRONDS; PRUNE AND TIE FRONDS WITH HEMP TWINE. SABAL PALMS TO BE SELECTIVELY "HURRICANE CUT", LEAVING ONLY NEWLY-EMERGING GROWTH.
2. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
3. FIVE (5) 18"L, 2X4 WOOD BATTENS. UNTREATED, #2
4. SECURE BATTENS WITH TWO (2) 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED PROPORTIONATELY TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
5. THREE (3) 8'L 2X4 SUPPORTS. NAIL (DRILL AND NAIL IF NECESSARY) TO BATTENS AND 2" X 4" STAKES. PALMS SHALL BE PLUMB VERTICALLY UNLESS OTHERWISE NOTED.
6. PROVIDE FLAGGING AT MIDPOINT AND BASE OF SUPPORTS.
7. TOP-MOST ROOT SHALL BE VISIBLE AT THE SURFACE OF THE ROOTBALL, SLIGHTLY ABOVE SURROUNDING GRADE.
8. 3" SPECIFIED MULCH
9. FINISH GRADE
10. 24"L (MIN.) 2X4 P.T. WOOD STAKES, NAIL TO SUPPORT POLES
11. PREPARED PLANTING SOIL AS SPECIFIED
12. ALTERNATE PALM ANCHORING SYSTEMS MAY BE SUBSTITUTED UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

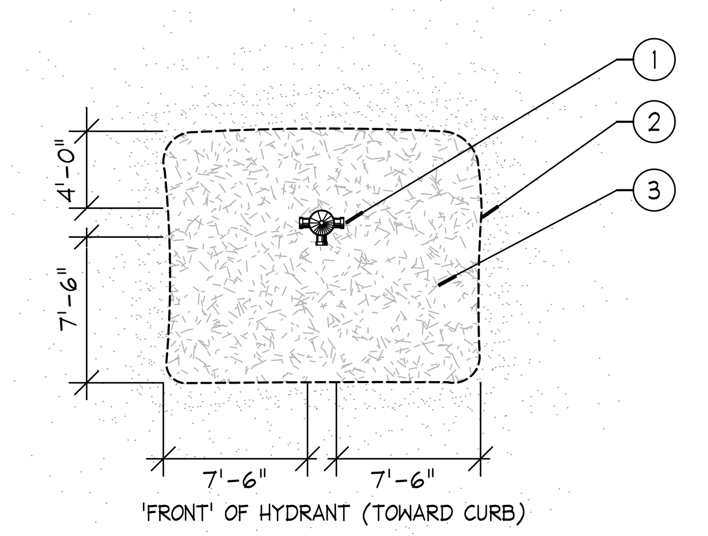
B Palm Planting and Staking
SECTION — NTS



* ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

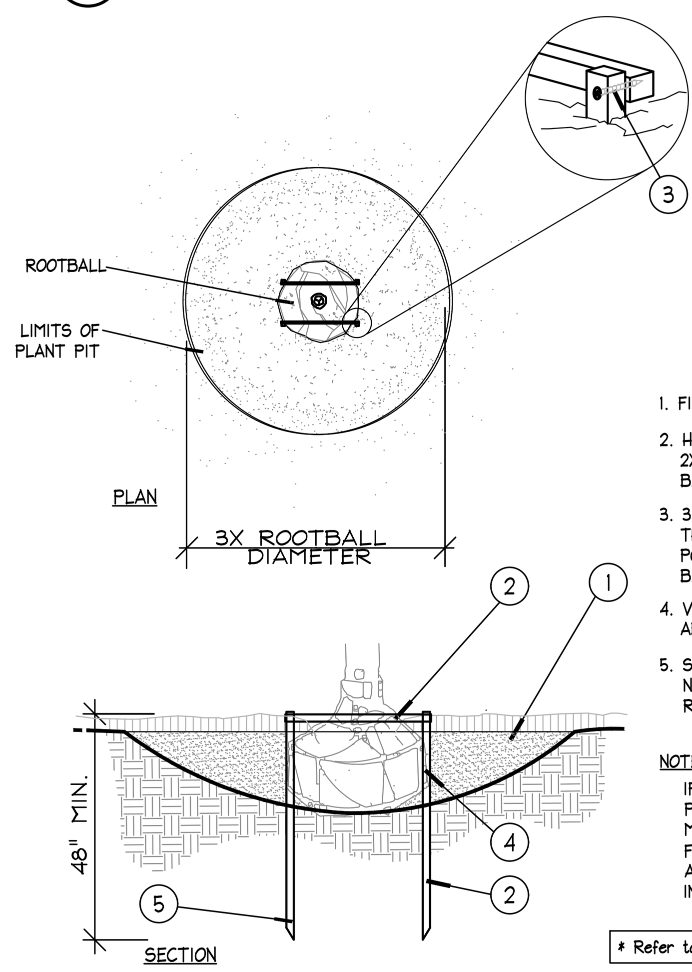
NOTES:
1. FIND POINT WHERE TOPMOST ROOT EMERGES FROM TRUNK WITHIN 2" OF SURFACE. CLEAR EXCESS SOIL IF NECESSARY.
2. TOP 10% OF SHRUB AND GROUNDCOVER ROOTBALLS TO BE PLANTED ABOVE THE LANDSCAPE GRADE. DO NOT COVER EXPOSED 10% ON SIDES WITH SOIL.
3. PRUNE ALL LIKE SHRUBS WITHIN A PLANTED MASS TO ACHIEVE A UNIFORM MASS/HEIGHT.
4. 3" MINIMUM MULCH AS SPECIFIED - DO NOT COVER ENTIRE SHRUB ROOTBALL OR CREATE 'WATER RINGS' ONLY COVER SIDES OF ROOTBALL WITH MULCH
5. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
6. FINISHED GRADE (SEE GRADING PLAN).
7. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
8. SCARIFY ROOTBALL SIDES AND BOTTOM.

C Shrub / Groundcover Planting
PLAN/SECTION — NTS



1. FIRE HYDRANT
2. NO PLANT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. PROVIDE A MULCH, 3" DEPTH MIN., SURROUNDING AREA INDICATED.

D Fire Hydrant Clear Zone
PLAN — NTS

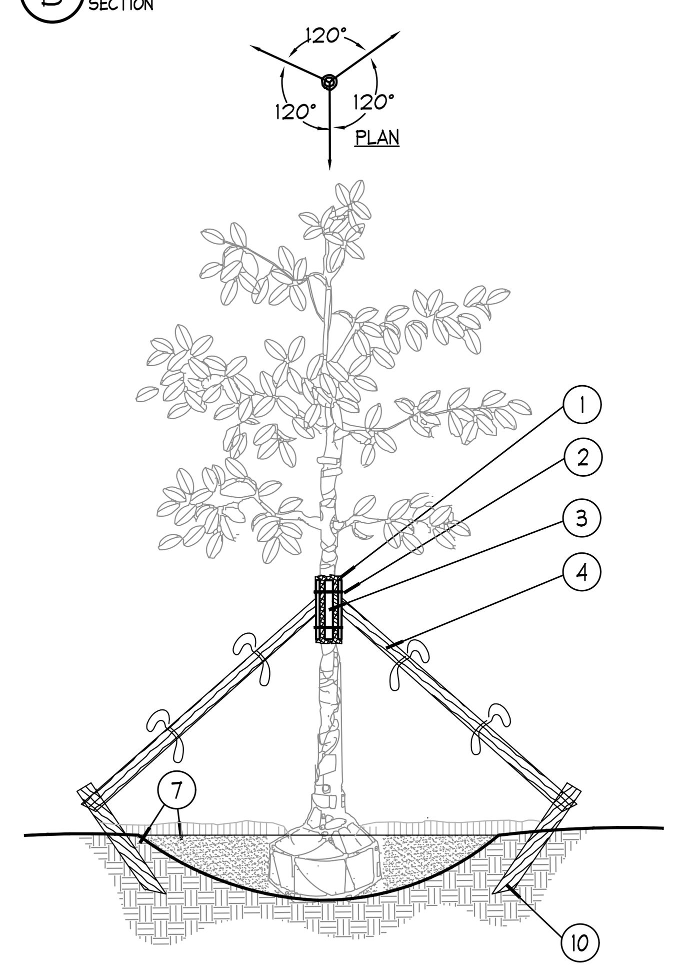


1. FINISH GRADE
2. HORIZONTAL 2X2 SCREWED TO 2X2 STAKE. ALL WOOD SHALL BE #2 UNTREATED.
3. 3-1/2" DRYWALL SCREW, THREAD SIZE 12, SHARP POINT, FULL THREAD, BLACK PHOSPHATE FINISH
4. VERTICAL STAKES SHALL ABUT SIDE OF ROOTBALL
5. STAKES TO EXTEND INTO NATIVE SOIL BY 1-1/2 X THE ROOTBALL DEPTH MIN.

NOTE:
IF SPATIAL REQUIREMENTS PRECLUDE STAKING WITH THIS METHOD, SUBMIT ALTERNATE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLING PLANT.

* Refer to details B and D for planting

E Staking - up to 65 gal. or B&B to 3-1/2" Cal.
PLAN/SECTION — NTS



1. FIVE (5) LAYERS OF BURLAP TO PROTECT TRUNK
2. TWO STEEL BANDS TO SECURE BATTENS
3. FIVE 2 X 4 X 18"L WOOD BATTENS
4. THREE (3) 2" X 8' LODGE POLES. DRILL, USING GALVANIZED SCREWS, TO BATTENS AND 2" X 4" STAKES. NO SCREWS SHALL PENETRATE TREE. FLAG AT MIDPOINT AND AT BASE.
10. 2" x 4" x 3' (MIN), P.T. WOOD STAKES BURIED 3" BELOW FINISHED GRADE.
7. FINISHED GRADE (SEE GRADING PLAN)

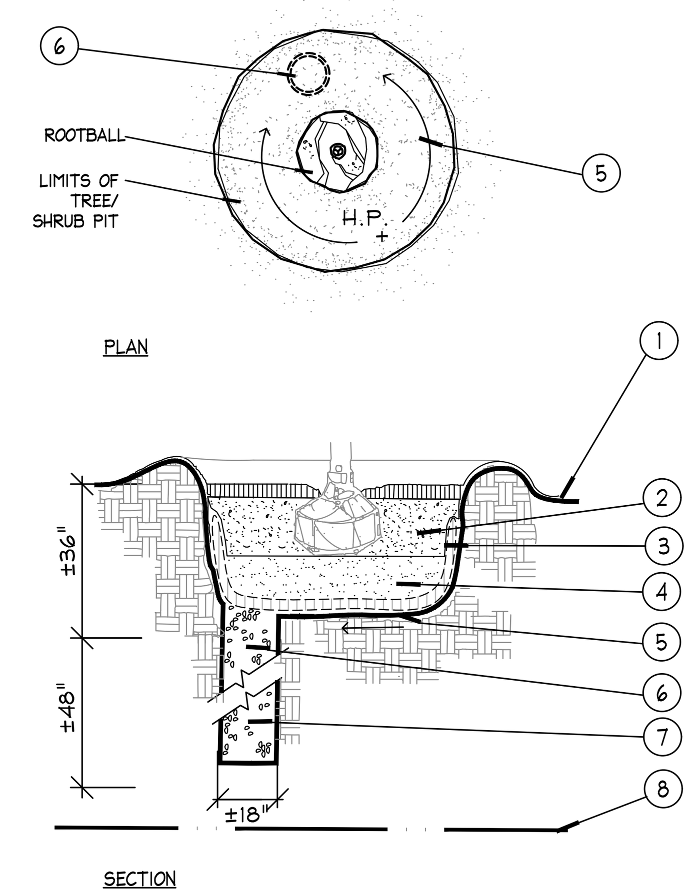
NOTES:
A. ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. ALTERNATE TREE ANCHORING SYSTEMS MAY BE SUBSTITUTED FOR WOOD STAKING SYSTEM UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

D. RUBBER HOSE/WIRE SYSTEMS ARE NOT ALLOWED.

* Refer to details B and D for planting

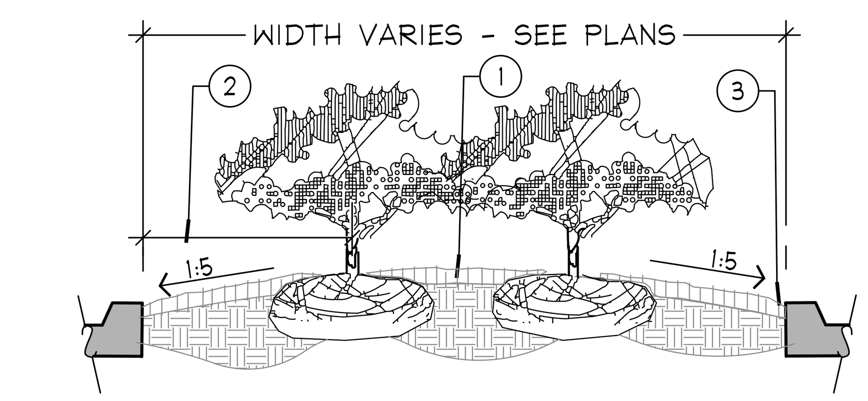
F Large Tree Staking - 100 Gal + or B&B 4" +
SECTION — NTS



1. FINISH GRADE
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER
4. 12" CLEAN SAND, COMPACTED. ADJUST LAYER THICKNESS SO TOP OF ROOTBALL IS AT LEAST 1" ABOVE FINISHED GRADE.
5. SLOPE BOTTOM TO DRAIN
6. ±18"⌀ AUGURED HOLE PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
7. BACKFILL WITH 1/2" - 3/4" GRAVEL.
8. WATER TABLE. (DEPTH VARIES)

NOTE:
FOR A PARKING ISLAND PLANTING SITUATION, CONTRACTOR TO BACKFILL ENTIRE LENGTH OF PLANTING AREA TO WITHIN 4" OF BACK OF CURB OR EDGE OF PAVEMENT.
REFER TO NOTE 0.3 OF WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

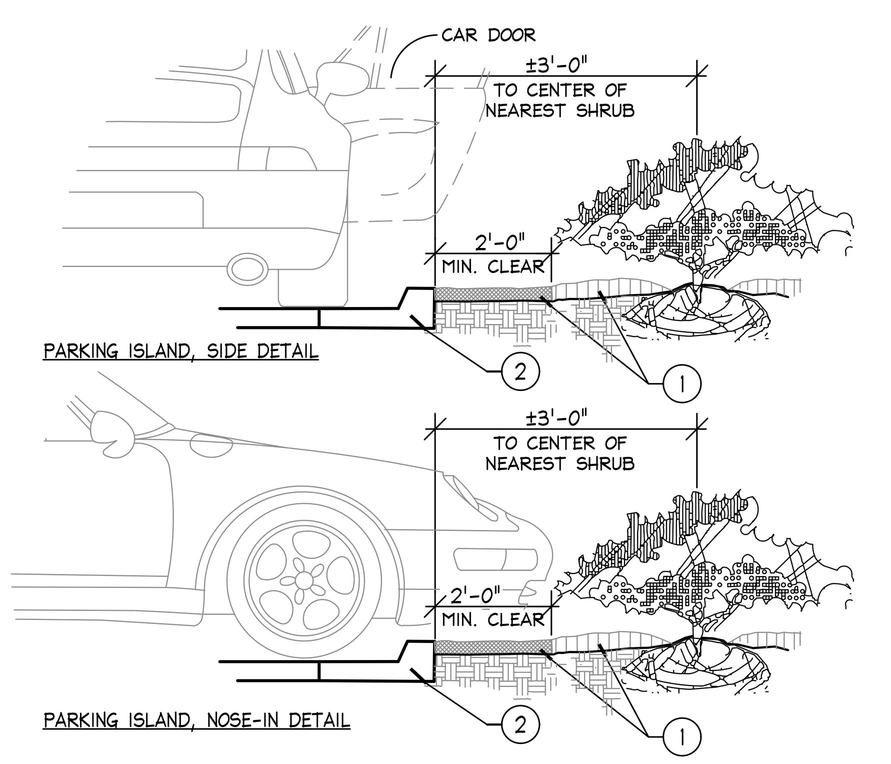
G Poor Drainage Condition
PLAN/SECTION — NTS



PLANTER ISLAND NOTES
1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS. SEE DETAIL 'I' FOR PLANTER MEDIANS ADJACENT TO PARKING SPACES.
3. 1" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

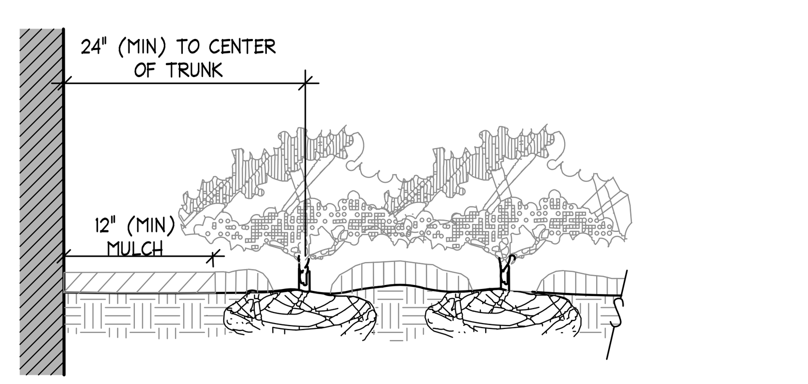
- EXCAVATE CONTINUOUS 36" DEEP (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.
- PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).
- ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

H Planted Parking Lot Islands / Medians
SECTION — NTS



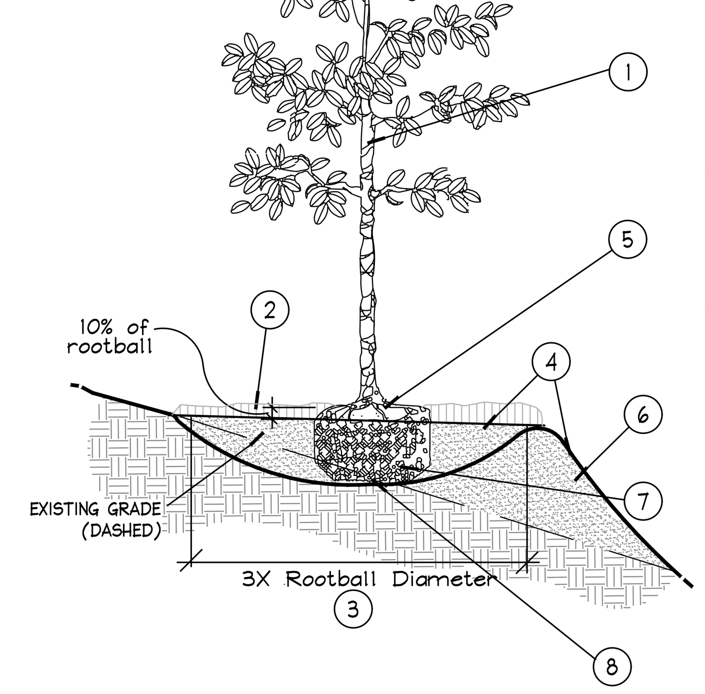
1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP.
NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE
2. CURB OR PARKING LOT EDGE, BY OTHERS

I Parking Space/Curb Planting
SECTION — NTS



NOTES
* CLEAR ZONE: 24" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.

J Plantings Adjacent to Buildings
SECTION — NTS

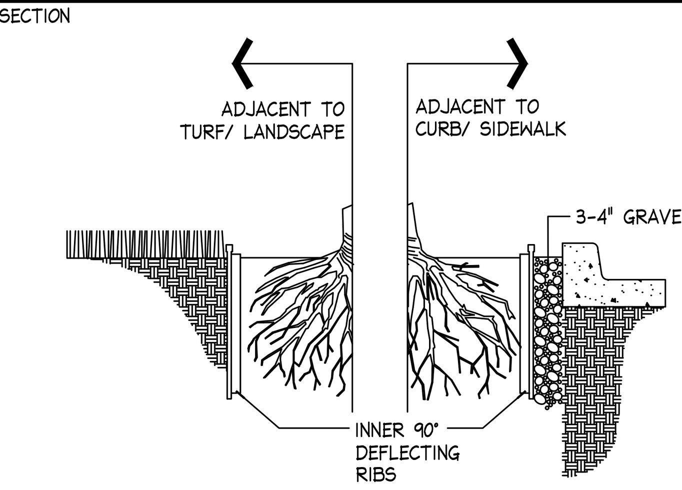


1. TREES, PALMS, AND LARGE SHRUBS (15 GAL OR GREATER) SHALL BE PLANTED IN SIMILAR MANNER
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. BERM SOIL SO THAT TOP OF BERM IS JUST BELOW THE TOP 10% OF THE TOP OF THE ROOTBALL. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE.
7. B & B OR CONTAINER REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL. (SEE SPECIFICATIONS FOR OTHER ROOT BALL REQUIREMENTS)
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:
A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

K Planting on a Slope
SECTION — NTS



LINEAR APPLICATION

ROOT BARRIER BY: Century Root Barrier (714)632-7083
(or) DeepRoot (800)458-7668
(or approved equal)

SIZE: 36" D
MATERIAL: POLYETHYLENE WITH ULTRAVIOLET INHIBITORS
THICKNESS: .085 IN. (min.)

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. INSTALL AS REQUIRED, PER PLAN NOTES.
3. SUBMIT PRODUCT DATA FOR APPROVAL.

L Root Barrier
Barrier Detail — NTS

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-03

GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/ OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

D. MATERIALS

1. GENERAL

MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS' APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SUBMITTAL
MULCH	PRODUCT DATA
TOPSOIL MIX	AMENDMENT MIX/ PRODUCT DATA/ TEST RESULTS
PLANTS	PHOTOGRAPHS OF ONE (1) OF EACH SPECIES (OR TAGGED IN NURSERY) CLIENT-REQUESTED TAGGING MAY SUBSTITUTE PHOTOS. INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC.
FERTILIZER	PRODUCT DATA
INNOCULANT	PRODUCT DATA
HERBICIDE	PRODUCT DATA
STAKING/GUYING	FOR ALTERNATE TO DETAILS: SEND PRODUCT DATA, DETAIL

2. PLANT MATERIALS

A. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE

B. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 20% CLEAN FLORIDA MUCK AND 80% PARTS CLEAN SAND. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
2. MUCK (OR MUCKY PEAT) FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, AND OF A VERY HIGH ORGANIC CONTENT DERIVED FROM FLORIDA SOURCES; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.
3. SAND FOR USE IN PREPARING SOIL MIXTURE SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY THE OWNER.
4. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.
5. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

F. WATER

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). TYPE OF MATERIAL: "FLORIMULCH" OR SHREDDED, STERILE EUCALYPTUS MULCH

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.
3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.
4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.
5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB- BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, FLORIDA #1 OR BETTER.
2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.
4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO LOCATE UTILITIES.
3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.
4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
5. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE , PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.
6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.
8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
13. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A-300.
14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" TO ACHEIVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
16. MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.
17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
4. SODDING

A. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

B. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

C. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED - REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
6. LAWN MAINTENANCE:

A. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

B. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

S. MAINTENANCE (ALTERNATE BID ITEM)

CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

U. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL 7 GALLON AND LARGER PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
2. THE LIFE AND SATISFACTORY CONDITION OF ALL OTHER PLANT MATERIAL (INCLUDING SOD) INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
3. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.
4. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

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

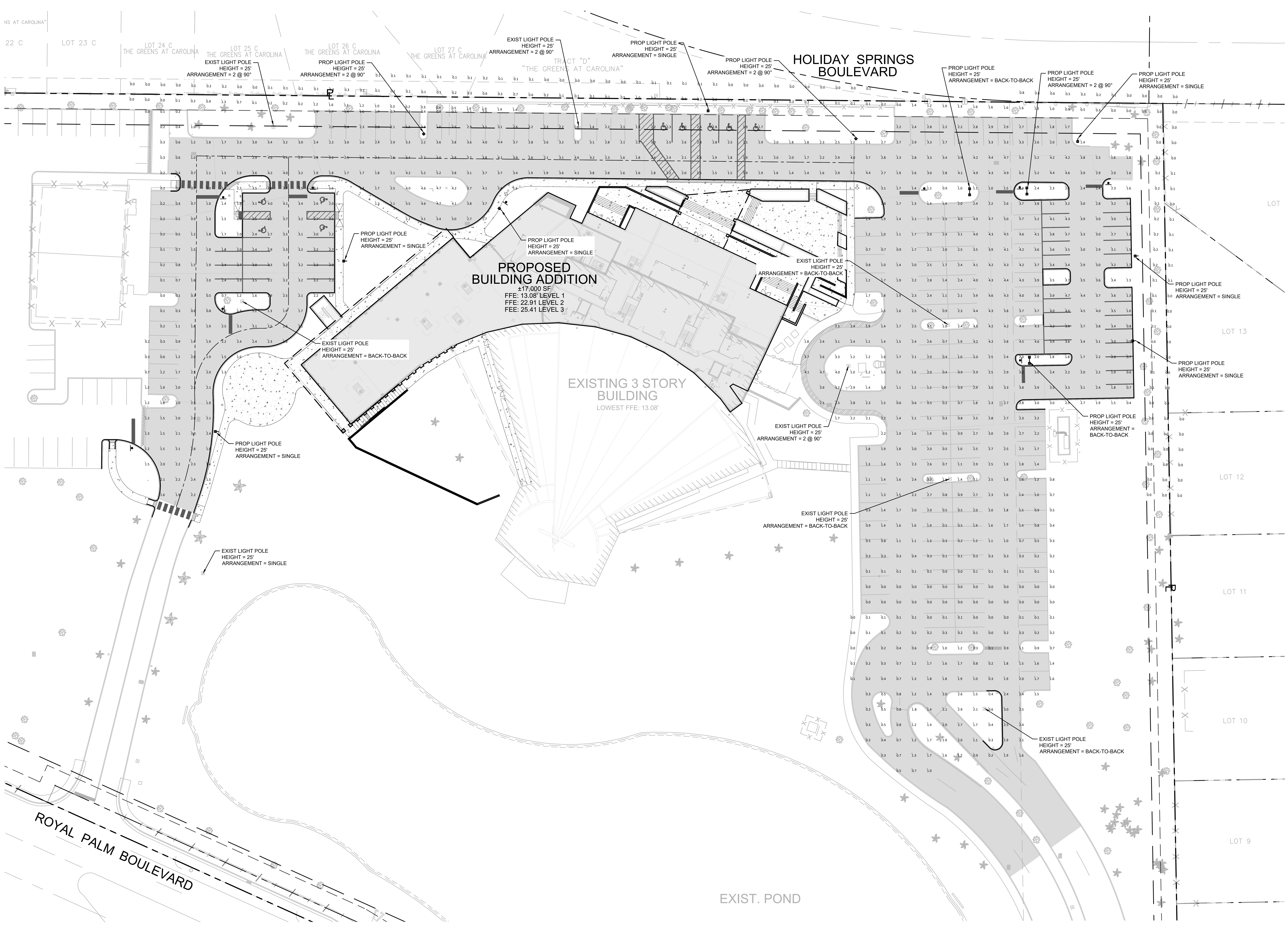
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

LANDSCAPE NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-04



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

Symbol	Description
R/W ℄	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-05 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION
	EXIST. SITE LIGHTING
	PROP. SITE LIGHTING

NOTES:

1. EXISTING LUMINAIRES ARE ASSUMED TO BE THE ETA2 (ENTABULATURE) 54L-750 T4 BY KIM LIGHTING.
2. LOCATIONS AND ARRANGEMENTS OF EXISTING SITE LIGHTING IS BASED ON SURVEY AND FIELD OBSERVATIONS. MOUNTING HEIGHT IS ASSUMED TO BE 25-FT PER THE MAXIMUM ALLOWABLE BY CITY OF MARGATE CODE
3. PROPOSED SITE LIGHTING IS DESIGNED TO COMPLY WITH CITY OF MARGATE CODE SEC. 40.705(G) (LEVEL 1) FOR PARKING AREAS IMPACTED BY THE PROPOSED SITE IMPROVEMENTS. NON-COMPLIANT EXISTING SITE AREAS ARE NOT ADDRESSED BY THE PROPOSED SITE LIGHTING LAYOUT.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
	5	90 Degree Angle	2 @ 90 degrees	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1262.7	25
	8	Single Head	Single	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1010.16	25
	7	Back-to-Back	Back-Back	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1767.78	25

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Lot Area	Illuminance	Fc	2.03	6.1	0.0	N.A.	N.A.
Property Limits	Illuminance	Fc	0.27	1.9	0.0	N.A.	N.A.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
143788000	7/23/2025	AS SHOWN	RT	KH	ARM

PHOTOMETRICS PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SL-01

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

Entablature®

FEATURES
- TIR Strike Optics
- Patented low profile luminaire
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Type 1, 2, 3, 4, 4W, 5W, 5QM, L, and R distributions
- 0 - 10V dimming drivers standard
- IP65 optical assembly

c UL us LISTED — BUY AMERICAN SOLUTIONS (See Certification Specifications) — ida DARK SKY APPROVED 2016 (3000K and warmer CCTs only)

CONTROL TECHNOLOGY
NX LIGHTING CONTROLS — wiSCAPE™

RELATED PRODUCTS

Ouro	Pavilion	PGL8

SPECIFICATIONS

CONSTRUCTION
- One piece die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- Solid barrier wall separates optical and electrical compartments
- Double-thick wall with gussets on the support-arm mounting end
- Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- One-piece die-cast, low copper (<0 6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange
- Optional clear 1/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimete
- Optional, fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens. CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance
- One-piece extruded aluminum arm with internal bolt guides and fully radiussed top and bottom
- Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief

CONSTRUCTION (CONTINUED)
- Arm is circular cut for specified round pole
- Optional cast, low copper aluminum horizontal slip-fitter with adaptor plate to secure the luminaire to 2" IPS pipe size arms
- Optional cast aluminum wall mount plate assembly. Attaches to the wall over the junction box. Luminaire attaches to the wall plate

OPTICS
- Optical cartridge system consisting of a die cast heat sink, LED Total Internal Reflection (TIR) optics, gasket and bezel plate
- Molded silicone gasket ensures a weather-proof seal around each individual LED
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Optional BackLight Control for complete control of unwanted backlight
- IP65 Optical assembly
- Type 1, 2, 3, 4, 4W, 5W, 5QM, R, and L standard distributions
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level
- Anodized aluminum heat sink modules

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

ELECTRICAL
- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts
  DF for 208, 240, 480 Line volts

CONTROLS
- 7-pin Receptacle and Button Photocell

CERTIFICATIONS AND LISTINGS
- Listed to UL1598 and CSA C22.2#250.0-24 for wet location and 40°C ambient temperatures
- IDA approved, 3000K and warmer CCTs only
- RoHS compliant
- This product qualifies as a “designated country construction material” per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	4,363–20,433
Wattage Range	88.7–178.2
Efficacy Range (LPW)	46.2–128.3
Reported Life (Hours)	L70/60,000
Weight	45 lbs 20.4 kg
EPS Side View	1.8

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: ETA2-1A-750-35K8-3-CLR-SQ-UNV-BLT-7PR-SF-A4

CATALOG #

ETA2		54L-750	3K7	4		BC
Model	**Mounting**	**LED Engine**	**CCT/CRI [6]**	**Distribution**	**Lens Options**	**House Side Shield**
ETA2 Entablature 2.0 Large Fixture	1A Single Arm Mount	54L-560 54 LEDs - 11,000 Lumens	AM [1] Monochromatic Amber [1]	1 Type I	(Blank) No Lens	BC [7] Backlight Control
	1W Wall Mount	54L-750 54 LEDs - 14,000 Lumens	27K8 [2] 2700K, 80CRI	2 Type II	CLR [9] Clear Glass Lens	
	HSF Horizontal Slipfitter	81L-700 81 LEDs - 19,000 Lumens	27K9 [2] 2700K, 90CRI	3 Type III	CP [9] Clear Polycarbonate Lens	
			3K7 3000K, 70CRI	4 Type IV Forward		
			3K8 [2] 3000K, 80CRI	4W Type IV Wide		
			3K9 [2] 3000K, 90CRI	5W Type V Wide		
			35K8 [2] 3500K, 80CRI	5QM Type V Square Medium		
			35K9 [2] 3500K, 90CRI	R Corner Right		
			4K7 4000K, 70CRI	L Corner Left		
			4K8 [2] 4000K, 80CRI			
			4K9 [2] 4000K, 90CRI			
			5K7 5000K, 70CRI			
			5K8 [2] 5000K, 80CRI			
			5K9 [2] 5000K, 90CRI			

VSF 2B	UNV	BLS			
Mounting Options	**Voltage**	**Fixture Finish**	**Photocell Options**	**Fuse Options**	**Optional Entablatures**
VSF [8] Vertical Slipfitter Mount for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	UNV 120-277V	BLS Black Gloss Smooth	7PR 7-Pin Photocell Receptacle	SF Single Fuse 120, 277, 347 Line Volts	A1 Arch
SVSF [8] Vertical Slipfitter Mount square for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	347 347V	BLT Black Matte Textured	PC [10] Button Photocell	DF Double Fuse 208, 240, 480 Line Volts	A2 Broken Arch
3 Side Arm Mount 3" O.D. Pole	480 480V	DBS Dark Bronze Gloss Smooth			A3 Stepped Arch
3.5 Side Arm Mount 3.5" O.D. Pole		DBT Dark Bronze Matte Textured			A4 Stepped Brock Arch
4 Side Arm Mount 4" O.D. Pole		GTT Graphite Matte Textured			A5 Standard Entablature
5 Side Arm Mount 5" O.D. Pole		LGS Light Grey Gloss Smooth			P6 Peak
6 Side Arm Mount 6" O.D. Pole		LGT Light Grey Matte Textured			P7 Broken Peak
SQ Side Arm Mount Square Pole		PSS Platinum Silver Smooth			P8 Stepped Peak
		VGT Verde Green Matte Textured			P9 Stepped Broken Peak
		WHS White Gloss Smooth			P10 Stepped
		WHT White Matte Textured			See Page 5 for details
		Color Option			
		CC Custom Color			

Control Options	**Control Accessories [3]**
SCH-R Round Pole Mounted (Occupancy Sensor up to 16' to 30')	WIR-RME-L wiSCAPE 7-pin Module
SCH-S Square Pole Mounted (Occupancy Sensor up to 16' to 30')	NXOFM-1R1D-UNV NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming

Notes:
1. Turtle Friendly.
2. See Lumen Multiplier chart on Page 13 for lumen scaling factor. Consult factory for additional details.
3. Not available with other sensor or wireless control options
6. 5-step MacAdam Ellipse Binning is standard. Consult factory for 3-step MacAdam Ellipse Binning
7. Not available with 5QM and 5W distributions
8. For all arm configurations, please refer to page 4. VSF/SVSF options ordered seperately.
9. Not Available with 81L-700
10. Not Available in 480V

KIMLIGHTING®

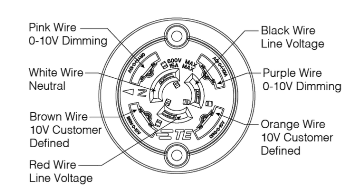
ETA2
ARCHITECTURAL AREA/SITE

SPECIFICATIONS (CONTINUED)

CONTROLS

BUTTON PHOTOCELL
- Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others

7PR
- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others
- Standard customer operation modes:
  1. Traditional on/off photoelectric control
  2. 5-pin wireless photoelectric control for added dimming feature
  3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use

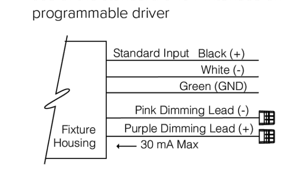


wiSCAPE™
- wiSCAPE™ wireless control modules allow an individual fixture to managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The wiSCAPE modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L
- wiSCAPE External Module,120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

NX LIGHTING CONTROLS
- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity.

DIMMING:
- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver



- Modular wiring harness in the service area provides user access to the dimming circuitry
- Dimming circuitry compatible with 0-10V, user-defined control devices
- Optional factory programmed dimming profile

POLE MOUNTED

ROUND POLE-MOUNTED OCCUPANCY SENSOR UP TO 30’

SCH-R
- Round Pole Mounted Occupancy Sensor up to 30’ - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for round pole mounting. Pole diameter needed. Pole to be drilled in the field with provided installation instructions
- Ordering Example: SCH-R4[1]/277[2]/BL[3]

SQUARE POLE-MOUNTED OCCUPANCY SENSOR UP TO 30’

SCH-S
- Square Pole Mounted Occupancy Sensor up to 30’ - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for square pole mounting
- Ordering Example: SCH-S/277[2]/BL[3]

ASTRODIM
- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times

OPTIONAL FUSING:
- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- High temperature fuse holders factory installed inside the fixture housing
- Fuse is included

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

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

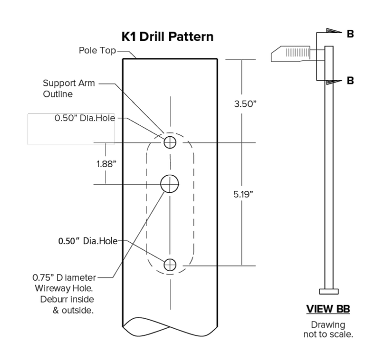
Configuration			EPA
	1A	1 Arm Side Mount	1.8
	1W	Single Wall Mount	n/a
	HSF	Horizontal Slipfitter	n/a

VSF/SVSF Configuration			
	1A		3T
	2B		3Y
	2L		4C

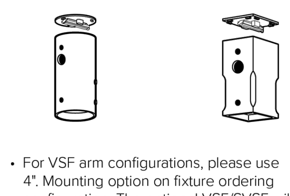
MOUNTING OPTIONS

SUPPORT ARM:
- Die-cast, low copper aluminum alloy, with splice access cover
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief
- The arm adapter is square or circular cut for specified pole size and shape
- For field wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment

Fixture Drilling Instructions:
For AR, CC, CCS, and ET Fixtures



OPTIONAL VERTICAL SLIP-FITTER (VSF/SVSF):
- Internally accessible slip-fitter attaches to a 2-3/8” x 4" long tenon and allows hands-free wiring and maintenance
- Available for round and square poles



- For VSF arm configurations, please use 4". Mounting option on fixture ordering configuration. The optional VSF/SVSF will need to be ordered separately.
- SVSF use square configuration.

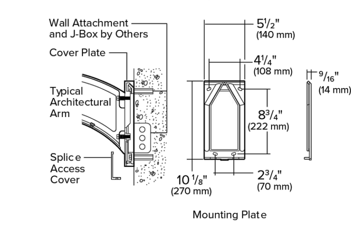
Ordering example for round:
- 2 A/ETA2/54L-500/35K8/3/CLR/**4.00**/UNV/BLT
- 1 VSF-2B

Ordering example for square:
- 2 1A/ETA2/54L-500/35K8/3/CLR/**SQ**/UNV/BLT
- 1 SVSF-2SB

VSF	SVSF
VSF-1A	SVF-1A
VSF-2B	SVF-2B
VSF-2L	SVSF-2L
VSF-3T	SVSF-3T
VSF-3Y	SVSF-3Y
VSF-4C	SVSF-4C

WALL MOUNT

1W
- A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color
- Optional Wall Mount: (CC is illustration the same for all site area?)
- Optional, cast aluminum mounting plate attaches to a wall over a junction box and the speed mount is bolted to the cover plate. To complete the wiring, the luminaire assembly slides over the mounting plate.



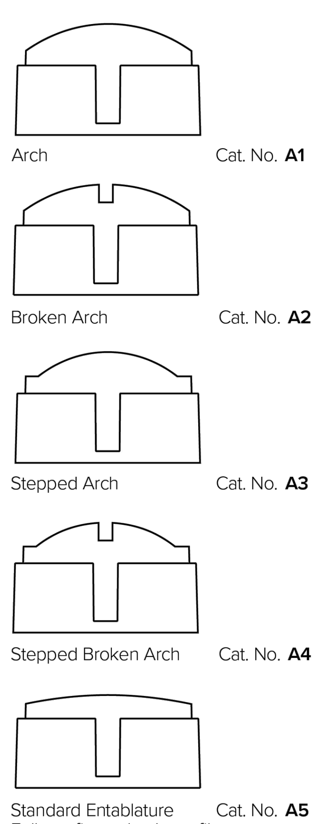
KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

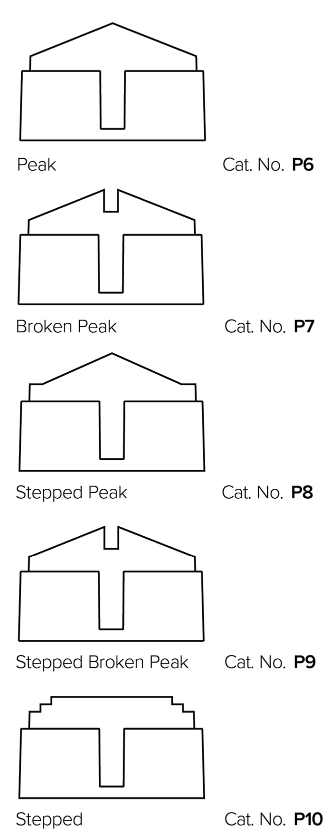
PRODUCT EXCEPTIONS & DETAILS

OPTIONAL ENTABLATURES

ARCHED ENTABLATURES



PEAKED ENTABLATURES



KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS

NO LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	B	U	G	lm/w	4000K 70CRI Lumen	B	U	G	lm/w	5000K 70CRI Lumen	B	U	G	lm/w
54	11,000	560	1	10664	1	0	1	120.2	10802	1	0	1	121.7	11380	1	0	1	128.3
			1-BC	6020	0	0	0	67.8	6098	0	0	0	68.7	6424	0	0	1	72.4
			2	9651	2	0	2	108.8	9776	2	0	2	110.2	10299	2	0	2	116.1
			2-BC	5304	0	0	1	59.8	5373	0	0	1	60.6	5660	0	0	1	63.8
			3	9901	1	0	2	111.6	10029	1	0	2	113.0	10566	1	0	2	119.1
			3-BC	5426	0	0	2	61.2	5496	0	0	2	61.9	5791	0	0	2	65.3
			4	10301	1	0	2	116.1	10435	1	0	2	117.6	10994	1	0	2	123.9
			4-BC	7046	0	0	2	79.4	7138	0	0	2	80.4	7520	0	0	2	84.8
			4W	9545	1	0	2	107.6	9669	1	0	2	109.0	10186	1	0	2	114.8
			4W-BC	5724	0	0	2	64.5	5798	0	0	2	65.3	6108	0	0	2	68.8
			5W	9561	3	0	2	107.7	9685	3	0	2	109.1	10203	3	0	2	115.0
			5QM	10254	3	0	1	115.6	10387	3	0	1	117.1	10943	3	0	1	123.3
			R	10021	2	0	2	112.9	10151	2	0	2	114.4	10695	2	0	2	120.5
			L	10021	1	0	2	112.9	10151	1	0	2	114.4	10695	1	0	2	120.5
	14,000	750	1	14256	1	0	1	112.9	14441	1	0	1	114.4	15213	1	0	1	120.5
			1-BC	8048	0	0	1	63.7	8152	0	0	1	64.6	8588	0	0	1	68.0
			2	12901	2	0	2	102.2	13069	2	0	2	103.5	13768	2	0	2	109.0
			2-BC	7090	0	0	1	56.2	7183	0	0	1	56.9	7567	0	0	2	59.9
			3	13236	2	0	2	104.8	13407	2	0	2	106.2	14125	2	0	2	111.9
			3-BC	7254	0	0	2	57.4	7348	0	0	2	58.2	7741	0	0	2	61.3
			4	13771	1	0	3	109.1	13950	1	0	3	110.5	14696	1	0	3	116.4
			4-BC	9420	0	0	2	74.6	9542	0	0	2	75.6	10052	0	0	2	79.6
			4W	12760	2	0	3	101.1	12926	4	0	2	102.4	13618	2	0	3	107.8
			4W-BC	7652	0	0	2	60.6	7751	0	0	2	61.4	8166	0	0	2	64.7
			5W	12781	4	0	2	101.2	12947	2	0	3	102.5	13640	4	0	2	108.0
			5QM	13708	3	0	1	108.6	13886	3	0	1	110.0	14629	4	0	1	115.9
			R	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
			L	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
81	19,500	700	1	19820	2	0	1	111.2	20077	2	0	1	112.6	21151	2	0	1	118.7
			1-BC	11188	0	0	1	62.8	11334	0	0	1	63.6	11940	0	0	1	67.0
			2	17937	2	0	2	100.6	18169	2	0	2	101.9	19142	3	0	3	107.4
			2-BC	9858	0	0	2	55.3	9986	0	0	2	56.0	10520	0	0	2	59.0
			3	18402	2	0	3	103.2	18640	2	0	3	104.6	19638	2	0	3	110.2
			3-BC	10085	0	0	2	56.6	10216	0	0	2	57.3	10762	0	0	2	60.4
			4	19146	2	0	4	107.4	19395	2	0	4	108.8	20433	2	0	4	114.6
			4-BC	13096	0	0	3	73.5	13266	0	0	3	74.4	13976	0	0	3	78.4
			4W	17741	2	0	4	99.5	17971	2	0	4	100.8	18933	2	0	4	106.2
			4W-BC	10638	1	0	2	59.7	10776	1	0	3	60.5	11353	1	0	3	63.7
			5W	17769	4	0	2	99.7	18000	4	0	2	101.0	18963	4	0	2	106.4
			5QM	19058	4	0	2	106.9	19305	4	0	2	108.3	20338	4	0	2	114.1
			R	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	3	0	3	111.5
			L	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	2	0	3	111.5

KIMLIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

CLR LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	B	U	G	lm/w	4000K 70CRI Lumen	B	U	G	lm/w	5000K 70CRI Lumen	B	U	G	lm/w
54	11,000	560	1	8907	1	0	1	100.4	9023	1	0	1	101.7	9506	1	0	1	107.1
			1-BC	5028	0	0	0	56.7	5094	0	0	0	57.4	5366	0	0	0	60.5
			2	8061	1	0	2	90.8	8166	1	0	2	92.0	8603	1	0	2	97.0
			2-BC	4430	0	0	1	49.9	4488	0	0	1	50.6	4728	0	0	1	53.3
			3	8270	1	0	2	93.2	8377	1	0	2	94.4	8826	1	0	2	99.5
			3-BC	4532	0	0	1	51.1	4591	0	0	1	51.7	4837	0	0	2	54.5
			4	8605	1	0	2	97.0	8716	1	0	2	98.2	9183	1	0	2	103.5
			4-BC	5885	0	0	2	66.3	5962	0	0	2	67.2	6281	0	0	2	70.8
			4W	7973	1	0	2	89.9	8076	1	0	2	91.0	8509	1	0	2	95.9
			4W-BC	4781	0	0	2	53.9	4843	0	0	2	54.6	5102	0	0	2	57.5
			5W	7986	3	0	1	90.0	8089	3	0	1	91.2	8522	3	0	2	96.0
			5QM	8565	3	0	1	96.5	8676	3	0	1	97.8	9140	3	0	1	103.0
			R	8371	3	0	1	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
			L	8371	1	0	2	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
	14,000	750	1	11907	1	0	1	94.3	12062	1	0	1	95.5	12708	1	0	1	100.6
			1-BC	6722	0	0	1	53.2	6809	0	0	1	53.9	7174	0	0	1	56.8
			2	10776	2	0	2	85.3	10916	2	0	2	86.4	11500	2	0	2	91.1
			2-BC	5923	0	0	1	46.9	5999	0	0	1	47.5	6321	0	0	1	50.1
			3	11056	1	0	2	87.6	11199	1	0	2	88.7	11798	1	0	2	93.4
			3-BC	6059	0	0	2	48.0	6137	0	0	2	48.6	6466	0	0	2	51.2
			4	11503	1	0	2	91.1	11652	1	0	2	92.3	12276	1	0	2	97.2
			4-BC	7868	0	0	2	62.3	7970	0	0	2	63.1	8397	0	0	2	66.5
			4W	10658	1	0	2	84.4	10797	1	0	2	85.5	11375	1	0	3	90.1
			4W-BC	6391	0	0	2	50.6	6474	0	0	2	51.3	6821	0	0	2	54.0
			5W	10676	3	0	2	84.5	10814	3	0	2	85.6	11393	3	0	2	90.2
			5QM	11450	3	0	1	90.7	11598	3	0	1	91.9	12219	3	0	1	96.8
			R	11190	2	0	2	88.6	11335	2	0	2	89.8	11942	2	0	2	94.6
			L	11190	1	0	2	88.6	11335	1	0	2	89.8	11942	1	0	2	94.6

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000	
DATE 7/23/2025	
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-02

KIM LIGHTING

ETA2

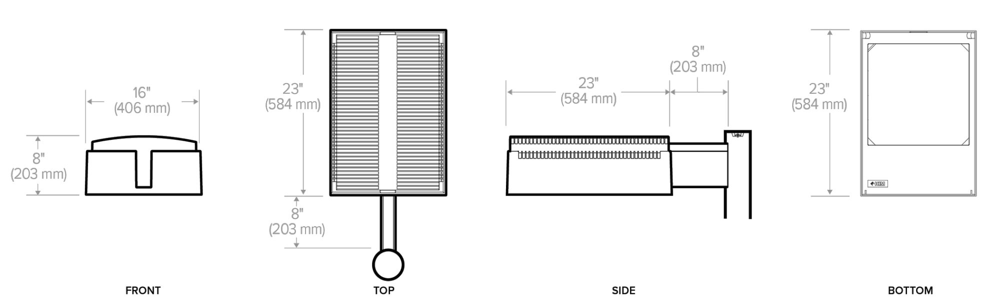
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

PL LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
54	11,000	560	1	8772	1	0	1	98.9	8886	1	0	1	100.2	9362	1	0	1	105.5
			1-BC	4952	0	0	0	55.8	5016	0	0	0	56.5	5285	0	0	0	59.6
			2	7939	1	0	1	89.5	8042	1	0	2	90.6	8472	1	0	2	95.5
			2-BC	4363	0	0	1	49.2	4420	0	0	1	49.8	4656	0	0	1	52.5
			3	8145	1	0	2	91.8	8251	1	0	2	93.0	8692	1	0	2	98.0
			3-BC	4464	0	0	1	50.3	4522	0	0	1	51.0	4764	0	0	1	53.7
			4	8475	1	0	2	95.5	8584	1	0	2	96.7	9044	1	0	2	101.9
			4-BC	5797	0	0	2	65.3	5872	0	0	2	66.2	6186	0	0	2	69.7
			4W	7852	1	0	2	88.5	7954	1	0	2	89.6	8380	1	0	2	94.4
			4W-BC	4709	0	0	2	53.1	4770	0	0	2	53.8	5025	0	0	2	56.6
			5W	7865	3	0	1	88.6	7967	3	0	1	89.8	8393	3	0	2	94.6
			5QM	8435	3	0	1	95.1	8545	3	0	1	96.3	9002	3	0	1	101.5
			R	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
			L	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
	14,000	750	1	11727	1	0	1	92.9	11880	1	0	1	94.1	12515	1	0	1	99.1
			1-BC	6620	0	0	1	52.4	6706	0	0	1	53.1	7065	0	0	1	56.0
			2	10613	2	0	2	84.1	10751	2	0	2	85.1	11326	2	0	2	89.7
			2-BC	5833	0	0	1	46.2	5909	0	0	1	46.8	6225	0	0	1	49.3
			3	10888	1	0	2	86.2	11030	1	0	2	87.3	11620	1	0	2	92.0
			3-BC	5967	0	0	2	47.3	6045	0	0	2	47.9	6368	0	0	2	50.4
			4	11329	1	0	2	89.7	11476	1	0	2	90.9	12090	1	0	2	95.7
			4-BC	7749	0	0	2	61.4	7849	0	0	2	62.2	8270	0	0	2	65.5
			4W	10497	1	0	2	83.1	10633	1	0	2	84.2	11203	1	0	3	88.7
			4W-BC	6295	0	0	2	49.8	6376	0	0	2	50.5	6718	0	0	2	53.2
			5W	10514	3	0	2	83.3	10651	3	0	2	84.3	11221	3	0	2	88.9
			5QM	11277	3	0	1	89.3	11423	3	0	1	90.5	12034	3	0	1	95.3
			R	11021	2	0	2	87.3	11164	2	0	2	88.4	11761	2	0	2	93.1
			L	11021	1	0	2	87.3	11164	1	0	2	88.4	11761	1	0	2	93.1

DIMENSIONS



KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-1

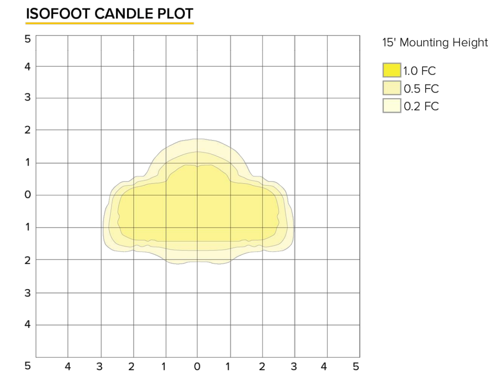
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	14440
Watts	126.27
Efficacy	114.4
IES Type	1
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12851	89.0%
Downward House Side	1589	11.0%
Downward Total	14440	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	14440	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-1-BC

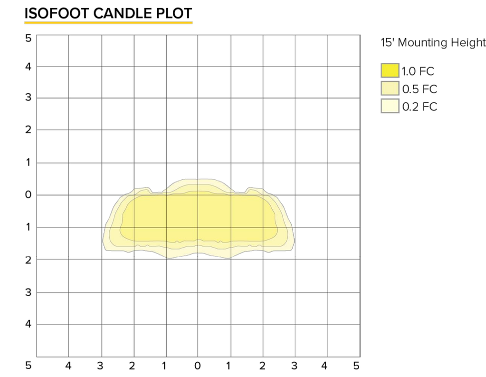
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	8151
Watts	126.27
Efficacy	64.6
IES Type	1
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8033	98.5%
Downward House Side	118	1.5%
Downward Total	8151	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	8151	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-2

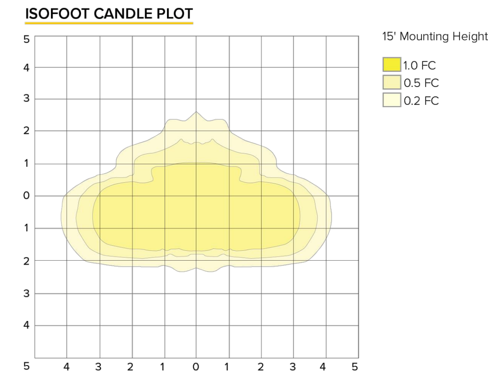
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13069
Watts	126.27
Efficacy	103.5
IES Type	2
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10825	82.8%
Downward House Side	2245	17.2%
Downward Total	13069	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13069	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-2-BC

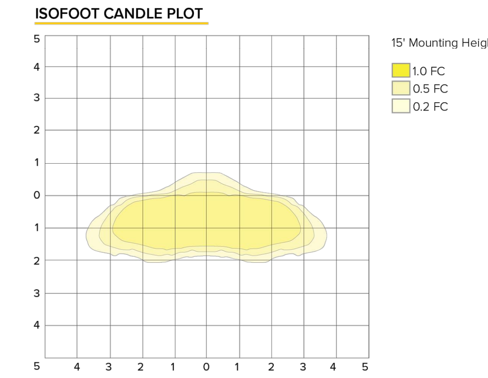
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7182
Watts	126.27
Efficacy	56.9
IES Type	2
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7019	97.7%
Downward House Side	163	2.3%
Downward Total	7182	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7182	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3

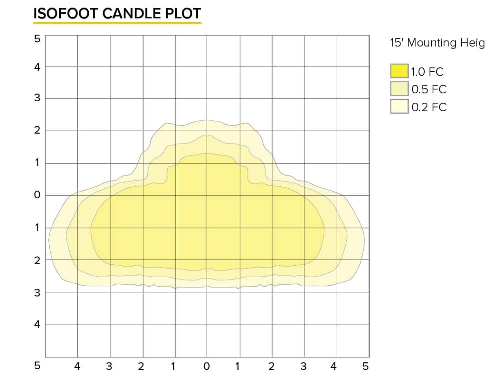
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13406
Watts	126.27
Efficacy	106.2
IES Type	3
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11502	85.8%
Downward House Side	1904	14.2%
Downward Total	13406	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13406	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3-BC

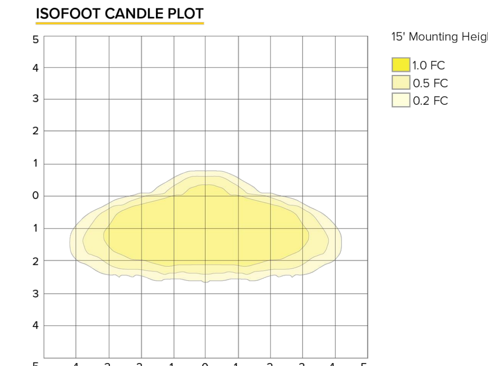
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7347
Watts	126.27
Efficacy	58.2
IES Type	3
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7108	96.7%
Downward House Side	239	3.3%
Downward Total	7347	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7347	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4

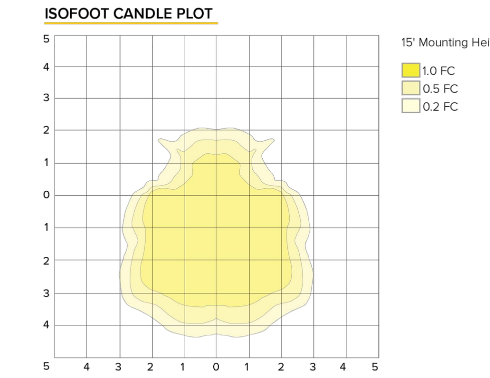
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13950
Watts	126.27
Efficacy	110.5
IES Type	4
BUG Rating	B1-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12630	87.6%
Downward House Side	1321	12.4%
Downward Total	13951	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13951	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4-BC

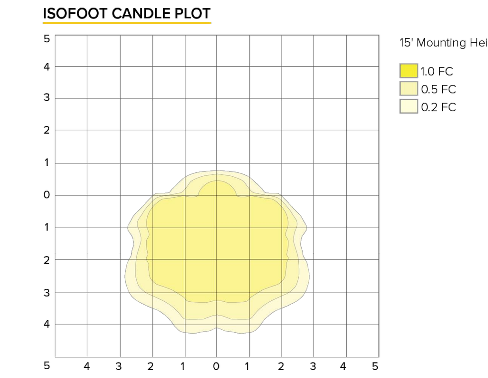
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	9542
Watts	126.27
Efficacy	75.6
IES Type	4
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	9312	87.6%
Downward House Side	231	12.4%
Downward Total	9543	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	9543	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4W

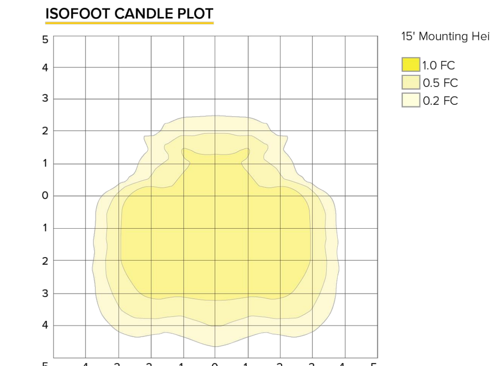
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12926
Watts	126.27
Efficacy	102.4
IES Type	4W
BUG Rating	B2-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11324	87.6%
Downward House Side	1602	12.4%
Downward Total	12926	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12926	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4W-BC

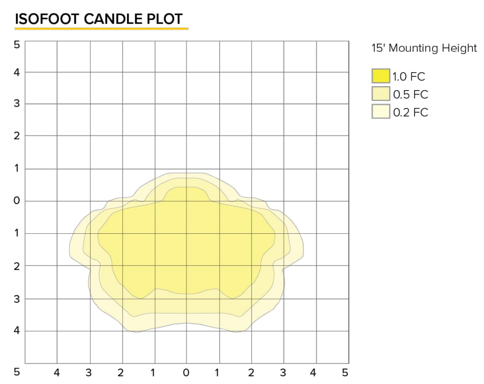
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7750
Watts	126.27
Efficacy	61.4
IES Type	4W
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7449	96.0%
Downward House Side	301	4.0%
Downward Total	7750	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7750	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5QM

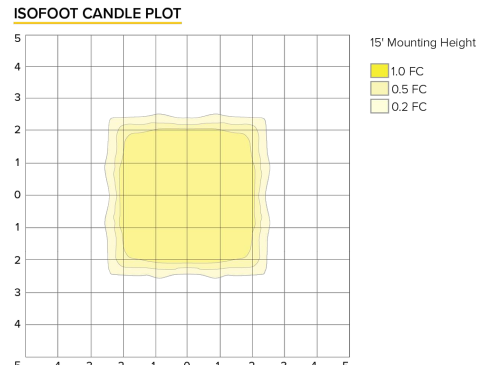
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13885
Watts	126.27
Efficacy	110.0
IES Type	5
BUG Rating	B3-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6943	50.0%
Downward House Side	6942	50.0%
Downward Total	13885	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13885	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5W

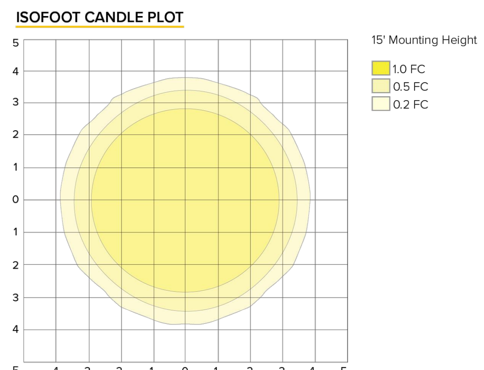
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12946
Watts	126.27
Efficacy	102.5
IES Type	5
BUG Rating	B4-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6473	50.0%
Downward House Side	6473	50.0%
Downward Total	12946	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12946	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-R

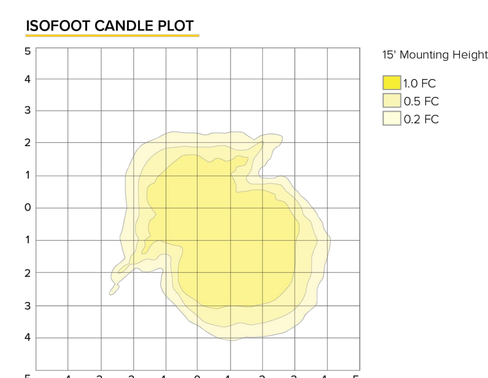
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13570
Watts	126.27
Efficacy	107.5
IES Type	R
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11231	82.8%
Downward House Side	2339	17.2%
Downward Total	13570	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13570	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-L

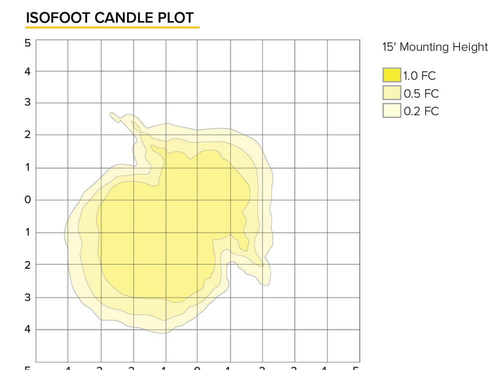
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13571
Watts	126.27
Efficacy	107.5
IES Type	L
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11523	84.9%
Downward House Side	2048	15.1%
Downward Total	13571	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13571	100%

ISOFOOT CANDLE PLOT



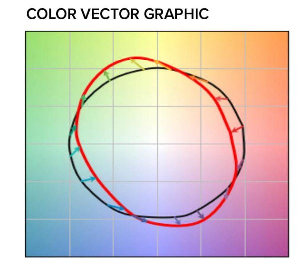
KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

TM-30 DATA

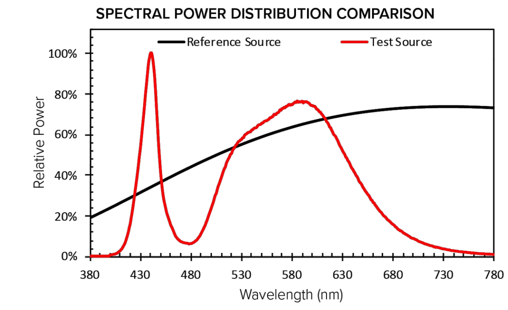
COLOR VECTOR GRAPHIC



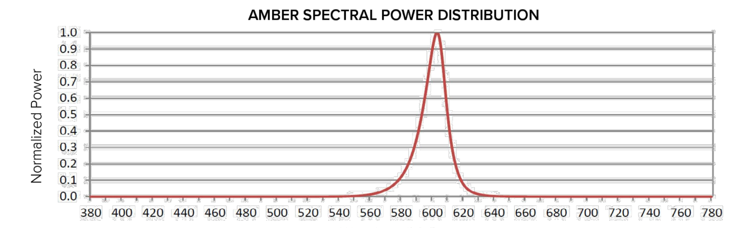
TEST SOURCE

R_f	68
R_g	99
CCT(K)	3947
D_{uv}	0.0004
x	0.3831
y	0.3793
CIE R_a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



AMBER SPECTRAL POWER DISTRIBUTION



ELECTRICAL DATA

LED Count	System Watts	Current	Line Voltage		Amps AC						Min Power Factor	Max. THD (%)	Dimming				
			VAC	Hz	120	208	240	277	347	480			Dimming Range	Source Current Out		Absolute Voltage	
														Min	Max	Min	Max
54 LEDs	88.7	560 mA	120-480	50/60	0.74	0.43	0.37	0.32	0.26	0.18	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	126.3	750 mA			1.05	0.61	0.53	0.46	0.36	0.26							
81 LEDs	178.2	700 mA			1.49	0.86	0.74	0.64	0.51	0.37							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
Ambient Temp.	0	25,000	36,000	50,000	100,000	Reported L70
25°C / 77°F	100%	94.22%	92.26%	89.84%	81.68%	>60khrs

CRI Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.9119	.7033
3500K	0.906	0.732
4000K	0.8941	.734
5000K	0.879	.7712
Scaling factor of 5000K 70CRI lumen packages		

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS

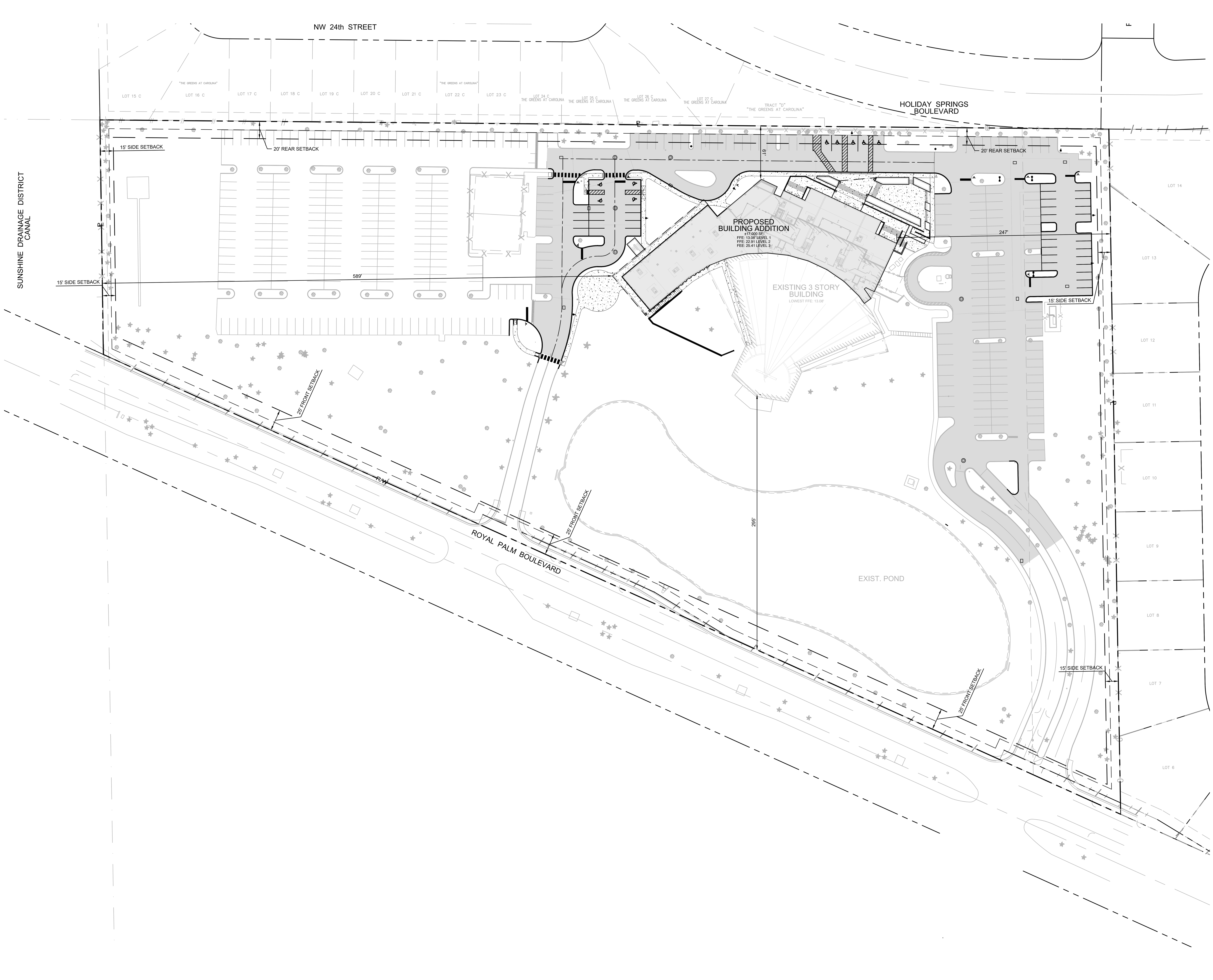
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SL-03



NORTH

GRAPHIC SCALE IN FEET

0 25 50 100

LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- PROP. ROAD CENTERLINE
- PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING		
SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

OVERALL SITE PLAN

CHURCH SITE IMPROVEMENTS

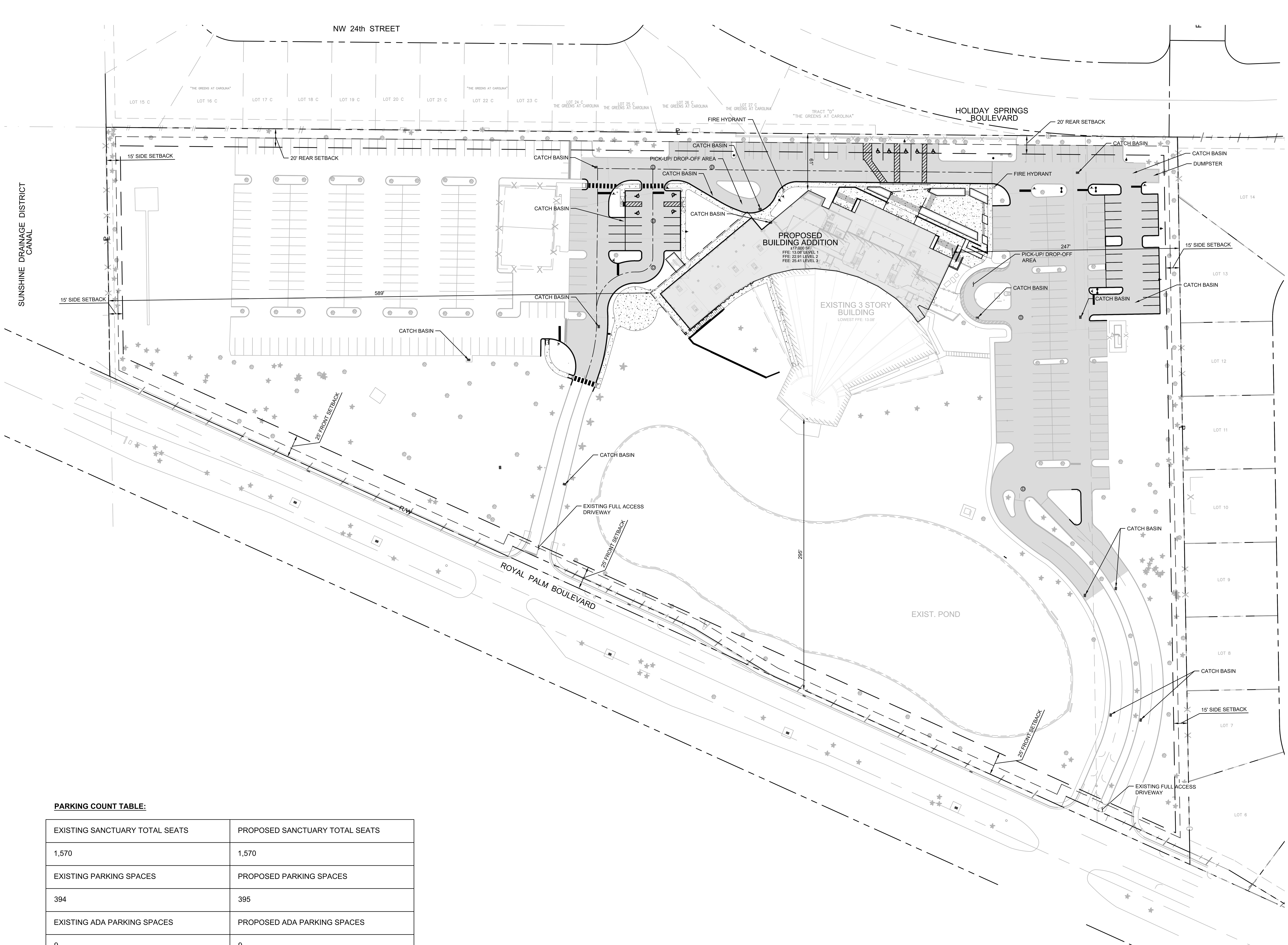
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SP-01



GRAPHIC SCALE IN FEET

0 25 50 100

LEGEND

R/W ℄	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

PARKING COUNT TABLE:

EXISTING SANCTUARY TOTAL SEATS	PROPOSED SANCTUARY TOTAL SEATS
1,570	1,570
EXISTING PARKING SPACES	PROPOSED PARKING SPACES
394	395
EXISTING ADA PARKING SPACES	PROPOSED ADA PARKING SPACES
9	9
TOTAL EXISTING PARKING SPACES	TOTAL PROPOSED PARKING SPACES
403	404

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

MASTER PARKING PLAN

CHURCH SITE IMPROVEMENTS

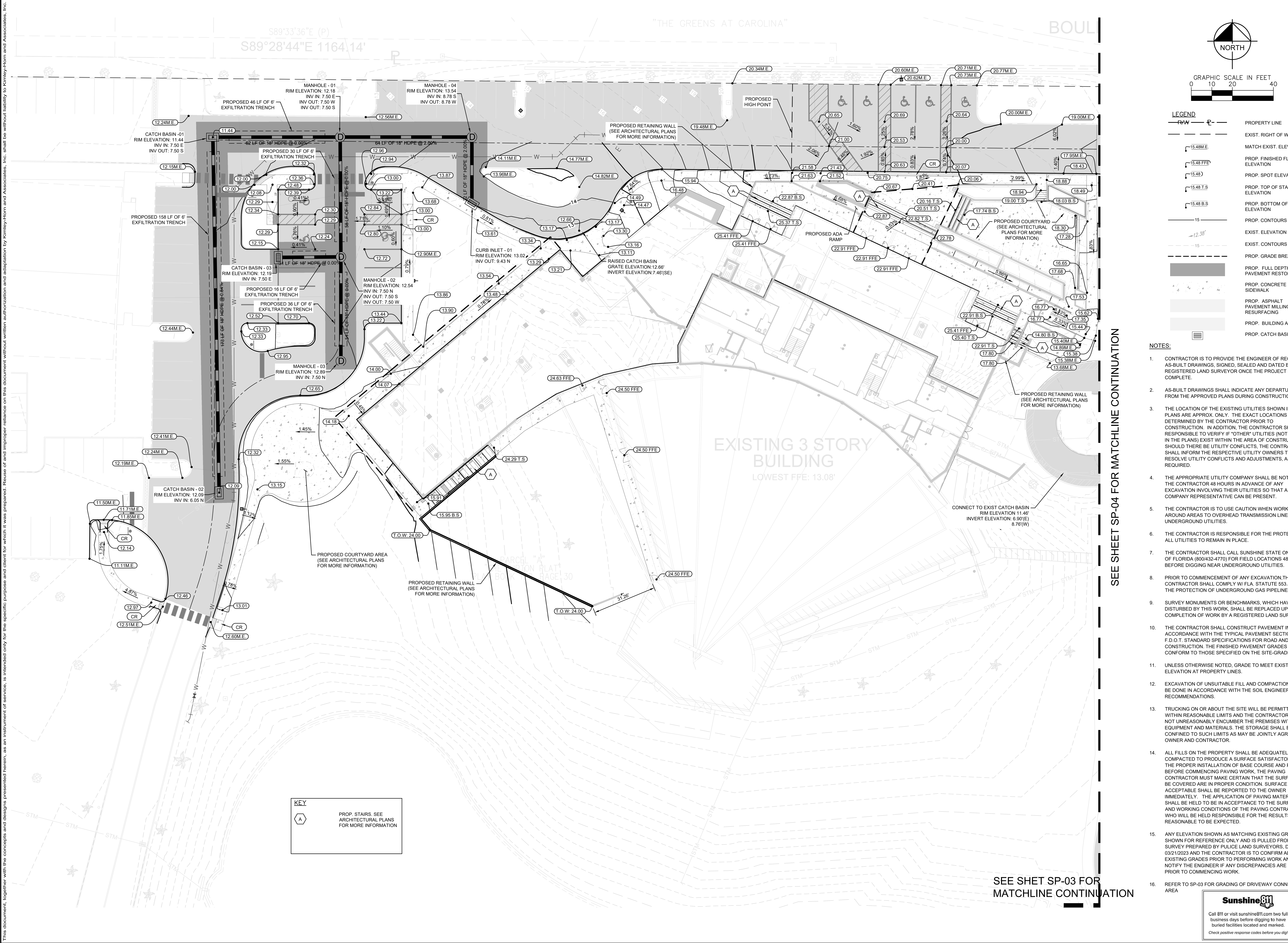
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SP-02



LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- MATCH EXIST. ELEVATION
- PROP. FINISHED FLOOR ELEVATION
- PROP. SPOT ELEVATION
- PROP. TOP OF STAIR ELEVATION
- PROP. BOTTOM OF STAIR ELEVATION
- PROP. CONTOURS
- EXIST. ELEVATION
- EXIST. CONTOURS
- PROP. GRADE BREAK
- PROP. FULL DEPTH PAVEMENT RESTORATION
- PROP. CONCRETE SIDEWALK
- PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
- PROP. BUILDING ADDITION
- PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.
16. REFER TO SP-03 FOR GRADING OF DRIVEWAY CONNECTION AREA

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

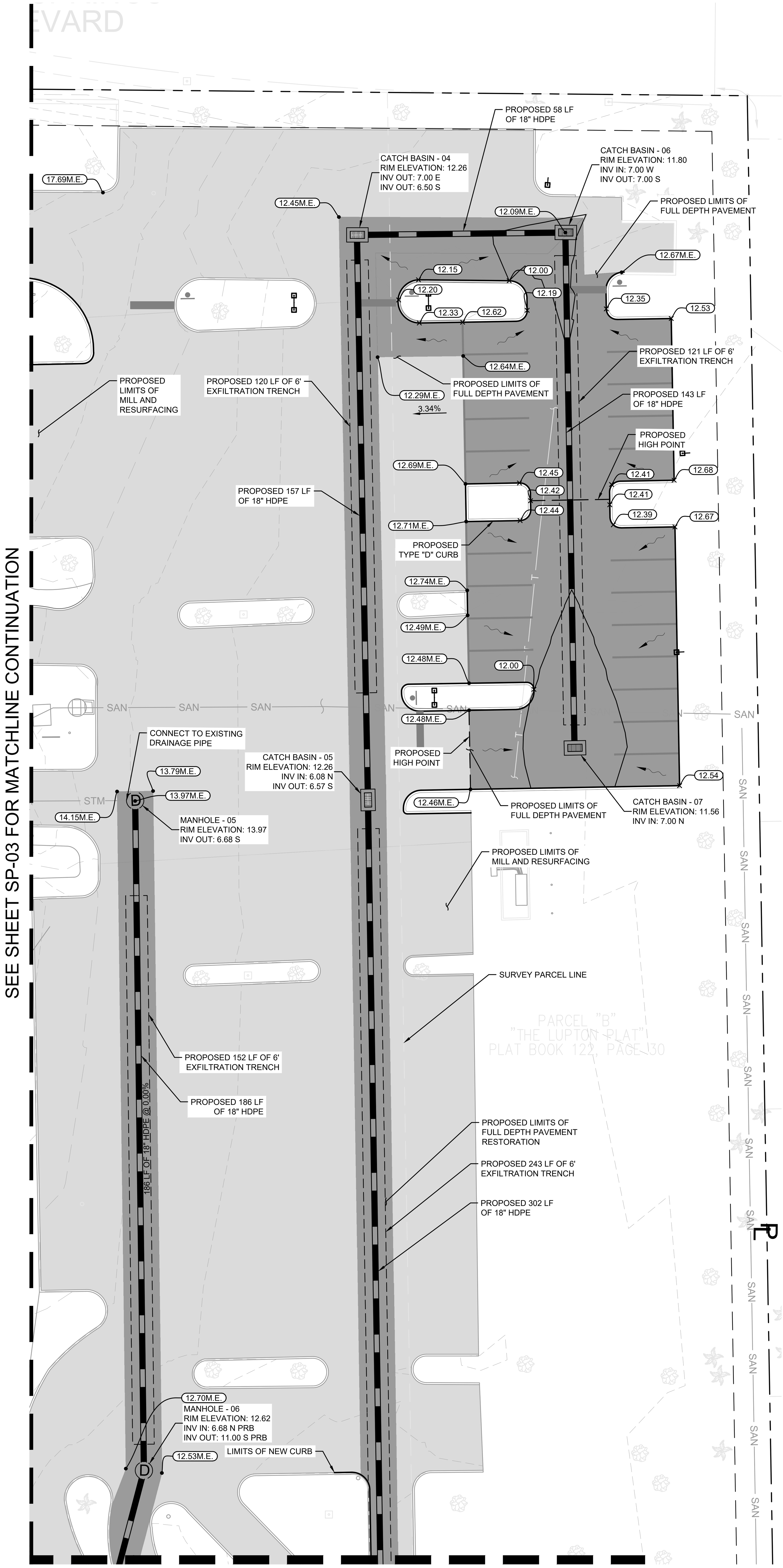
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

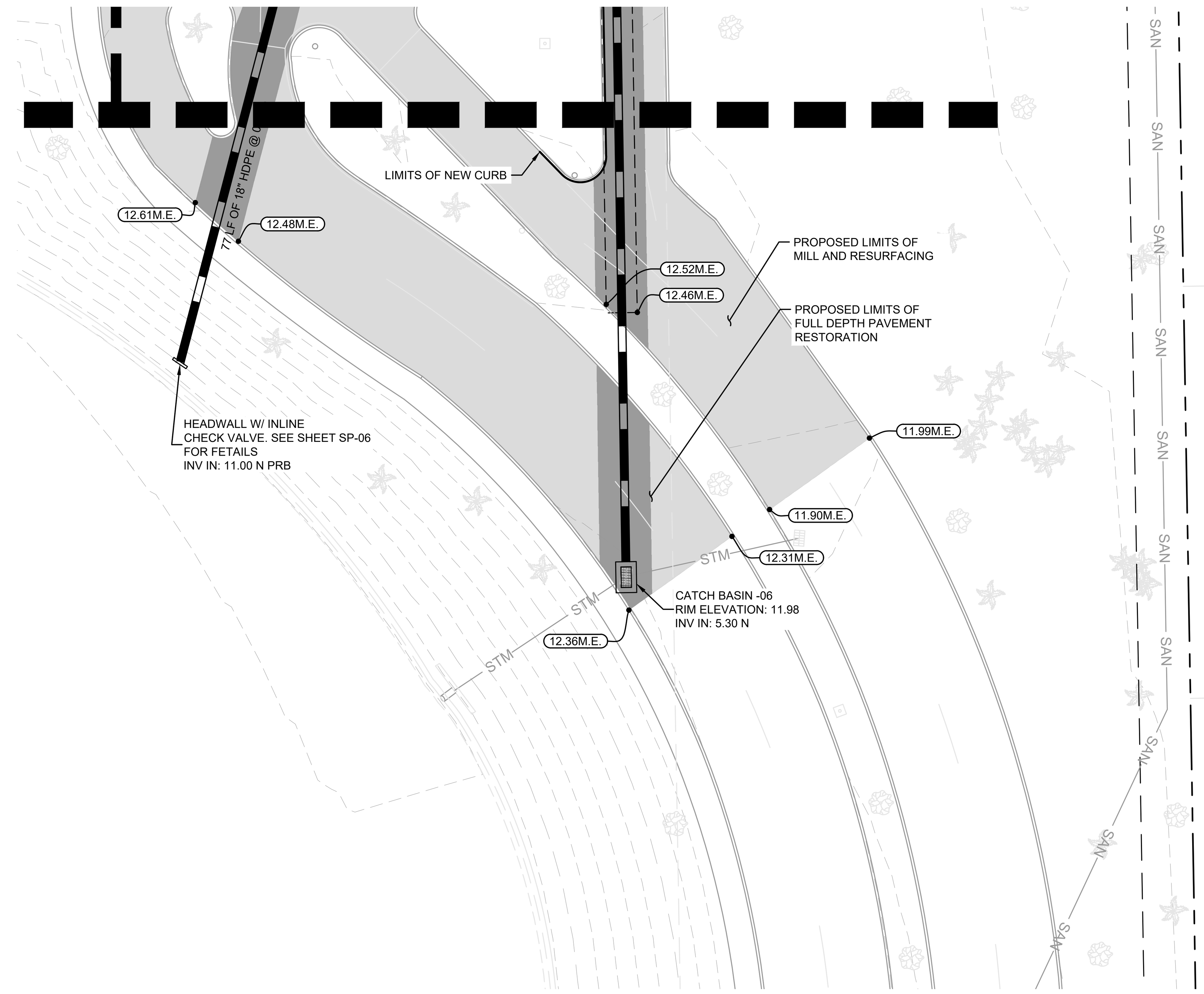
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-03



SEE LEFT FOR MATCHLINE CONTINUATION



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

R/W — ℙ —	PROPERTY LINE
	EXIST. RIGHT OF WAY
15.48M.E.	MATCH EXIST. ELEVATION
15.48 FFE	PROP. FINISHED FLOOR ELEVATION
15.48	PROP. SPOT ELEVATION
15.48 T.S	PROP. TOP OF STAIR ELEVATION
15.48 B.S	PROP. BOTTOM OF STAIR ELEVATION
15	PROP. CONTOURS
12.38	EXIST. ELEVATION
15	EXIST. CONTOURS
	PROP. GRADE BREAK
	PROP. FULL DEPTH PAVEMENT RESTORATION
	PROP. CONCRETE SIDEWALK
	PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
	PROP. BUILDING ADDITION
	PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

No.	REVISIONS	DATE	BY

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

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

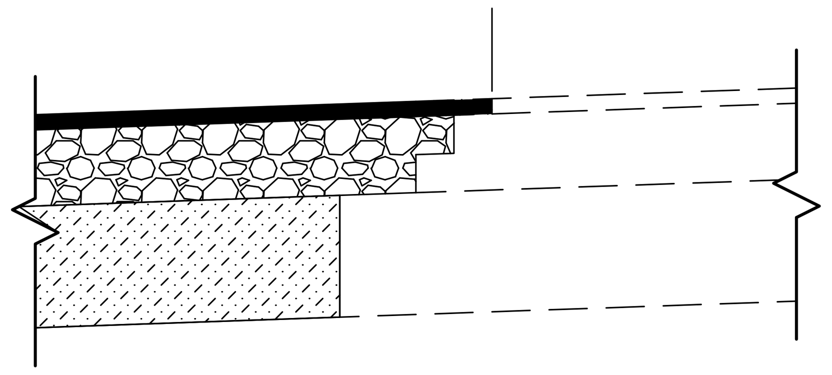
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

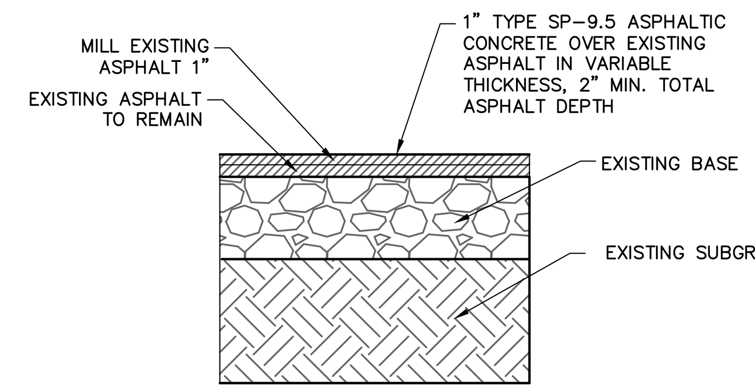
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

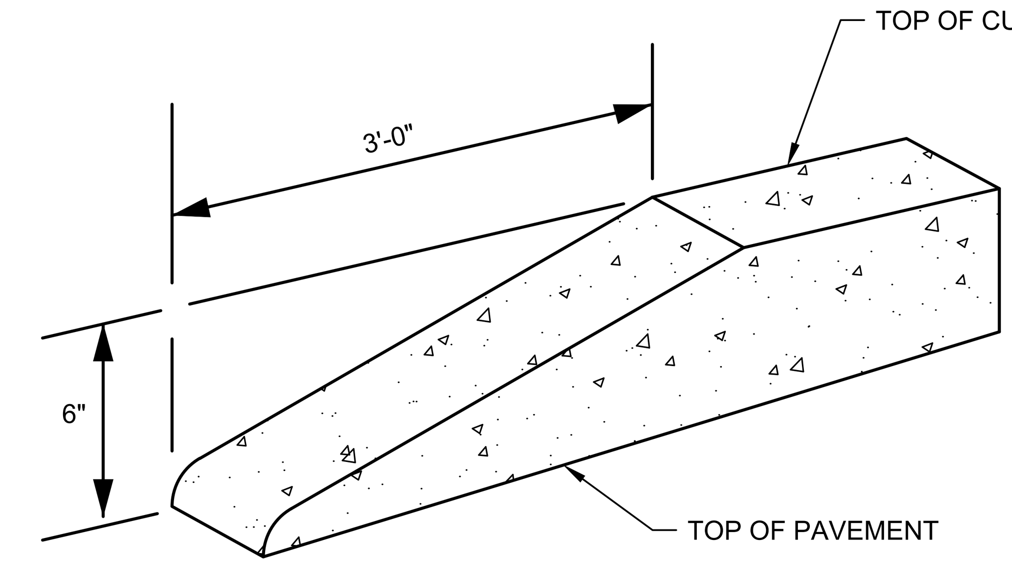
SHEET NUMBER
SP-04



CONNECTION TO EXISTING PAVEMENT DETAIL
NOT TO SCALE

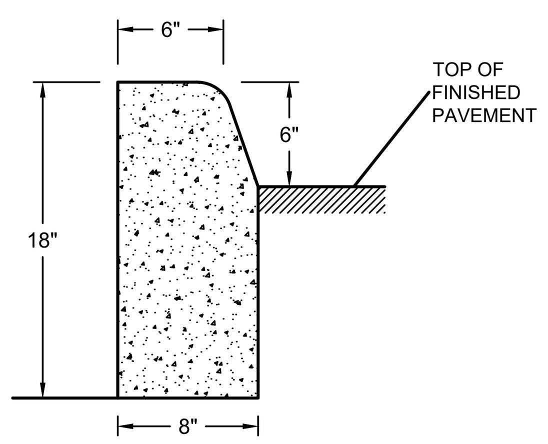


EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED
K-H
NOT TO SCALE

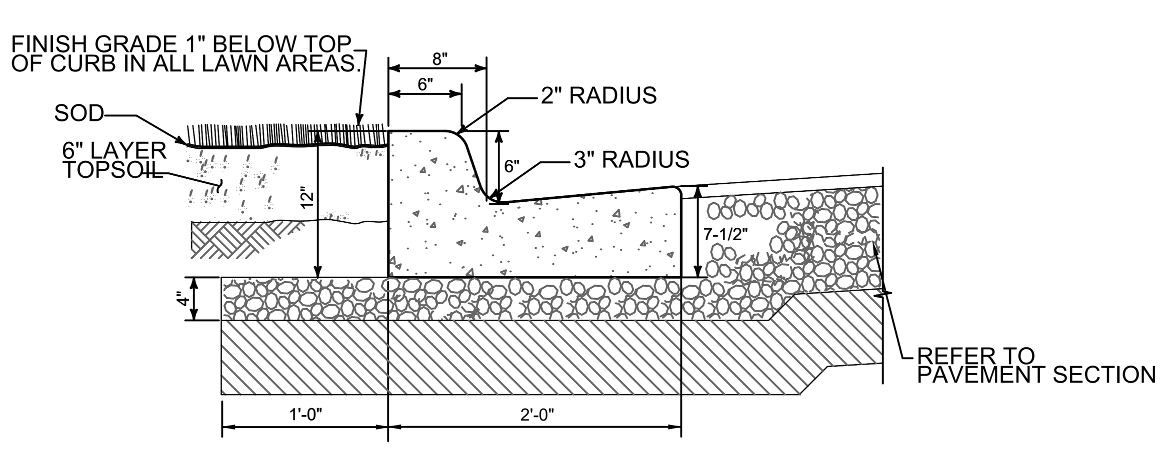


ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

STANDARD CURB TRANSITIONS
NOT TO SCALE

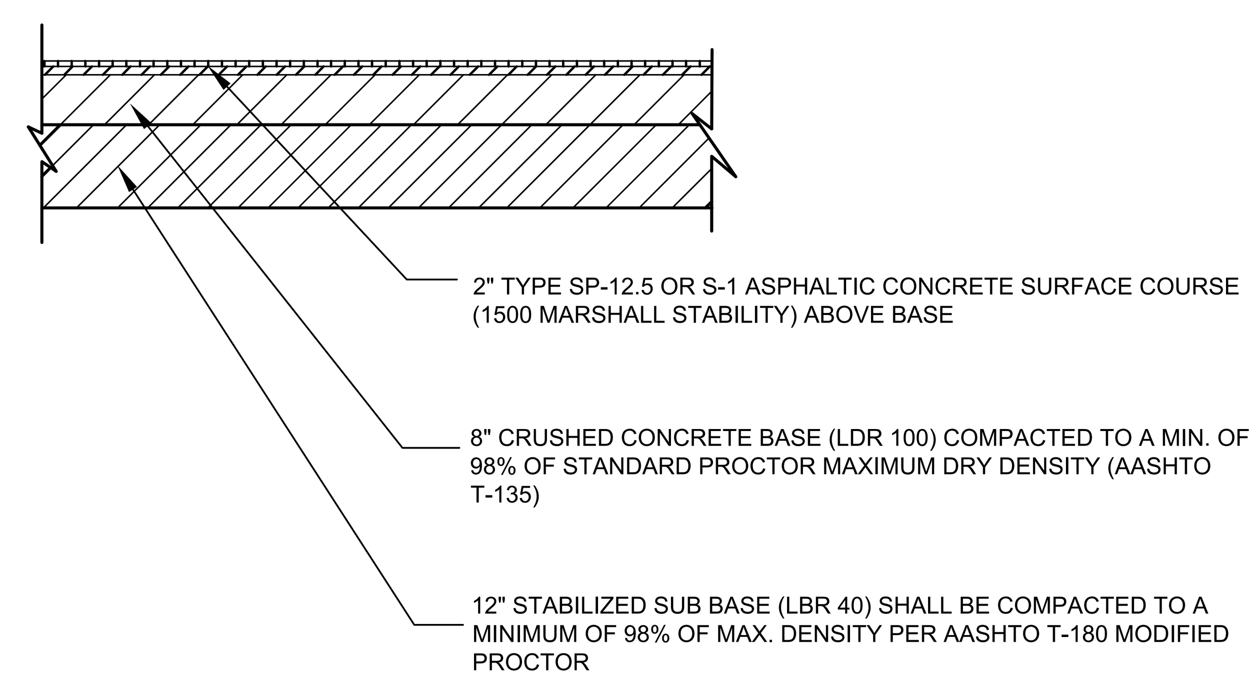


TYPE 'D' CURB
AS PER FDOT INDEX 300
NOT TO SCALE

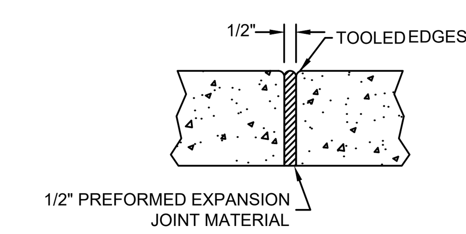


NOTES:
1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

TYPE "F" CURB
NOT TO SCALE

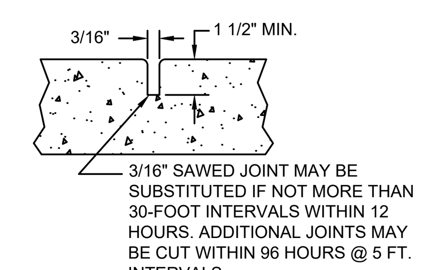


HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



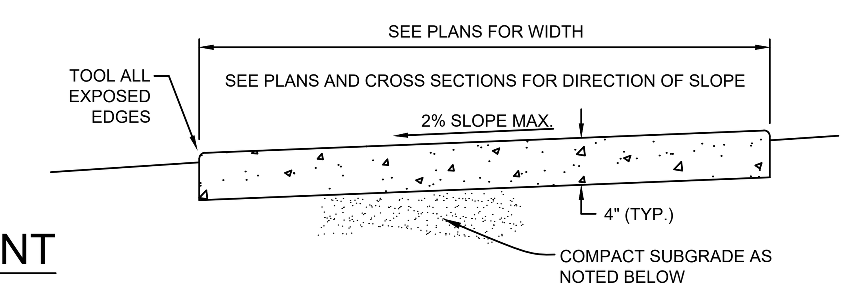
EXPANSION JOINT
NOT TO SCALE

(120 FT. MAX. SPACING)



(5 FT. MAX. SPACING)

CONTRACTION JOINT
NOT TO SCALE



TYPICAL SECTION

NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM   REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

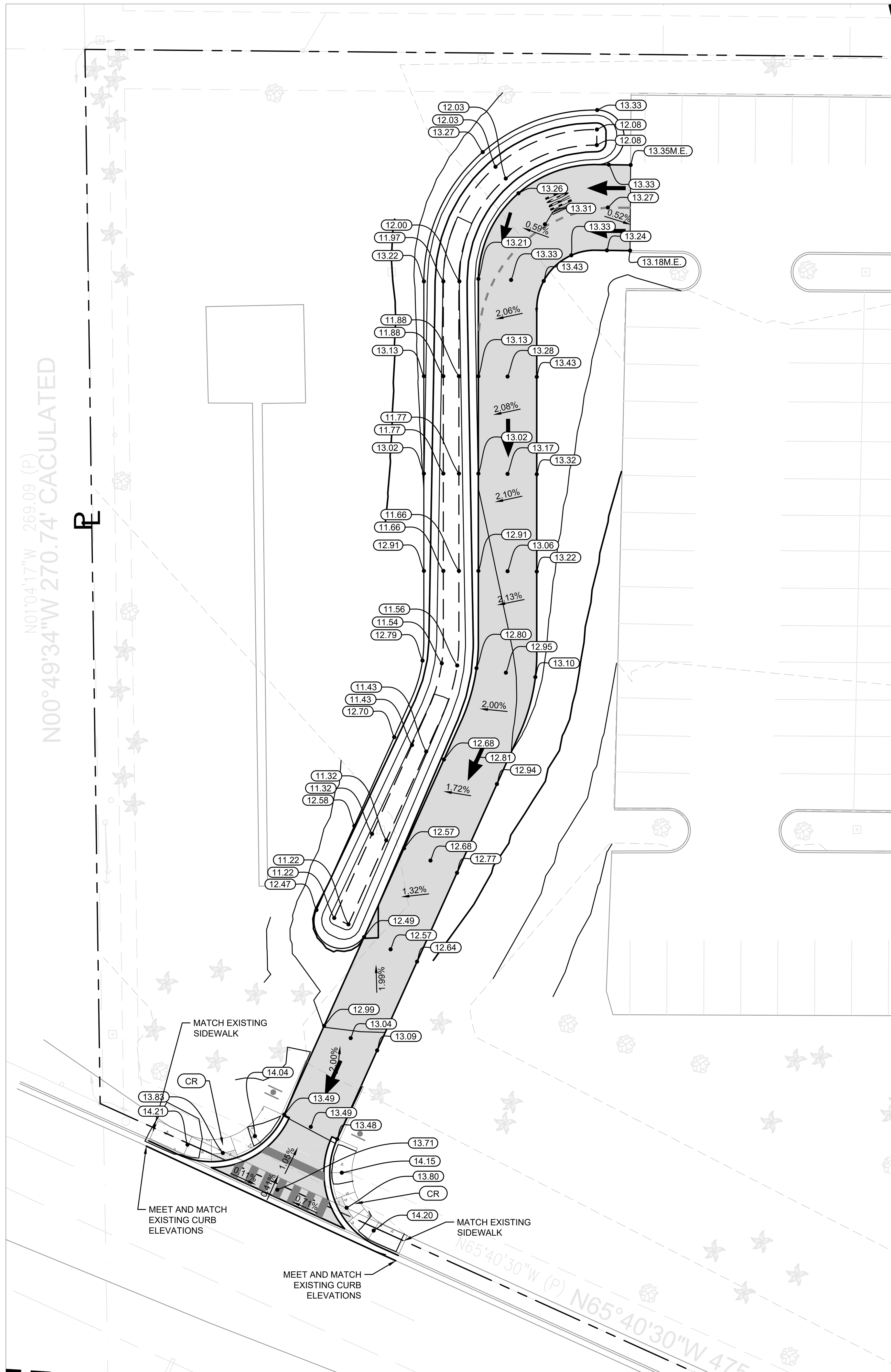
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

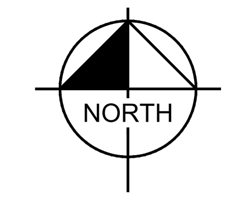
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING & GRADING DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE   FL

SHEET NUMBER
SP-05





NORTH

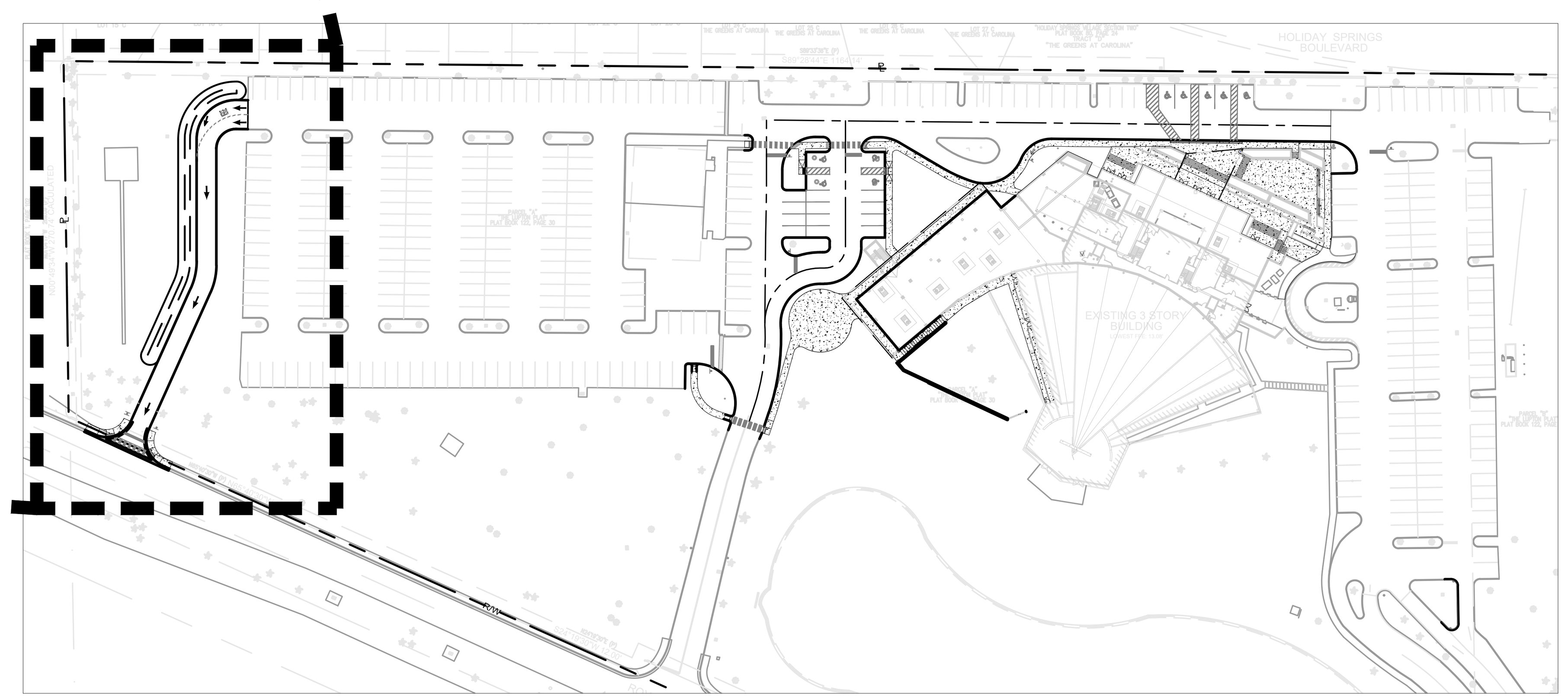
GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

R/W — P —	PROPERTY LINE
	EXIST. RIGHT OF WAY
15.48M.E.	MATCH EXIST. ELEVATION
15.48 FFE	PROP. FINISHED FLOOR ELEVATION
15.48	PROP. SPOT ELEVATION
15.48 T.S	PROP. TOP OF STAIR ELEVATION
15.48 B.S	PROP. BOTTOM OF STAIR ELEVATION
15	PROP. CONTOURS
12.38'	EXIST. ELEVATION
15	EXIST. CONTOURS
	PROP. GRADE BREAK
	PROP. FULL DEPTH PAVEMENT RESTORATION
	PROP. CONCRETE SIDEWALK
	PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
	PROP. BUILDING ADDITION
	PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.



KEY MAP:

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

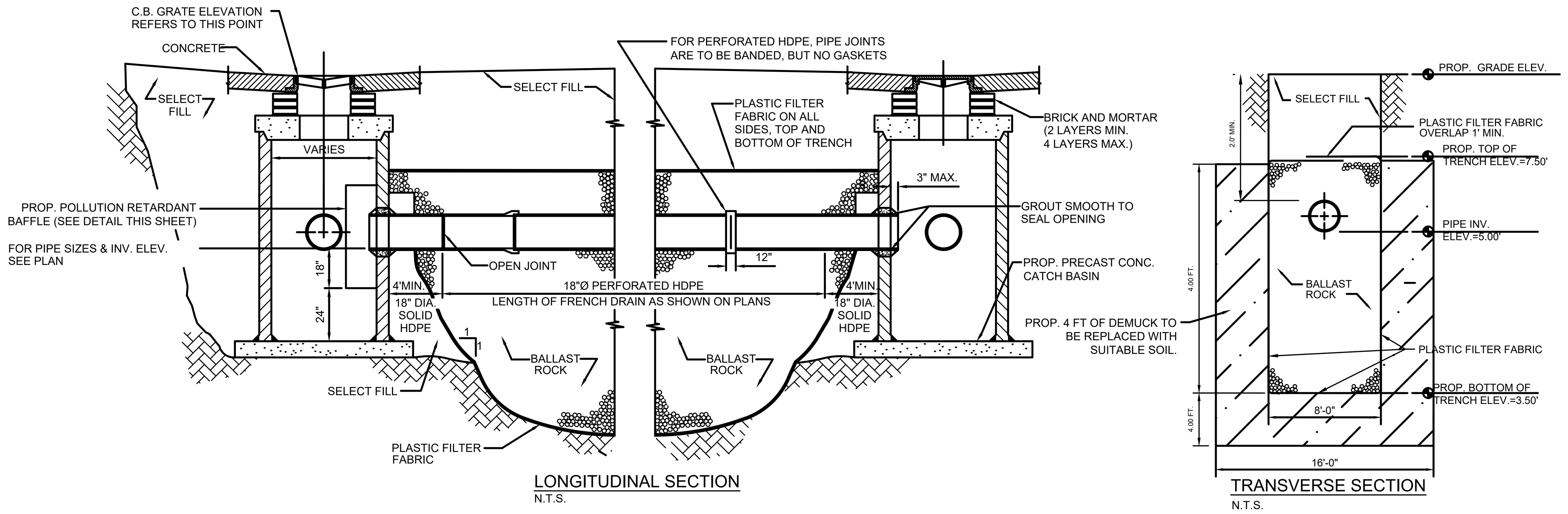
KHA PROJECT	143788000
DATE	2/6/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

CHURCH SITE IMPROVEMENTS

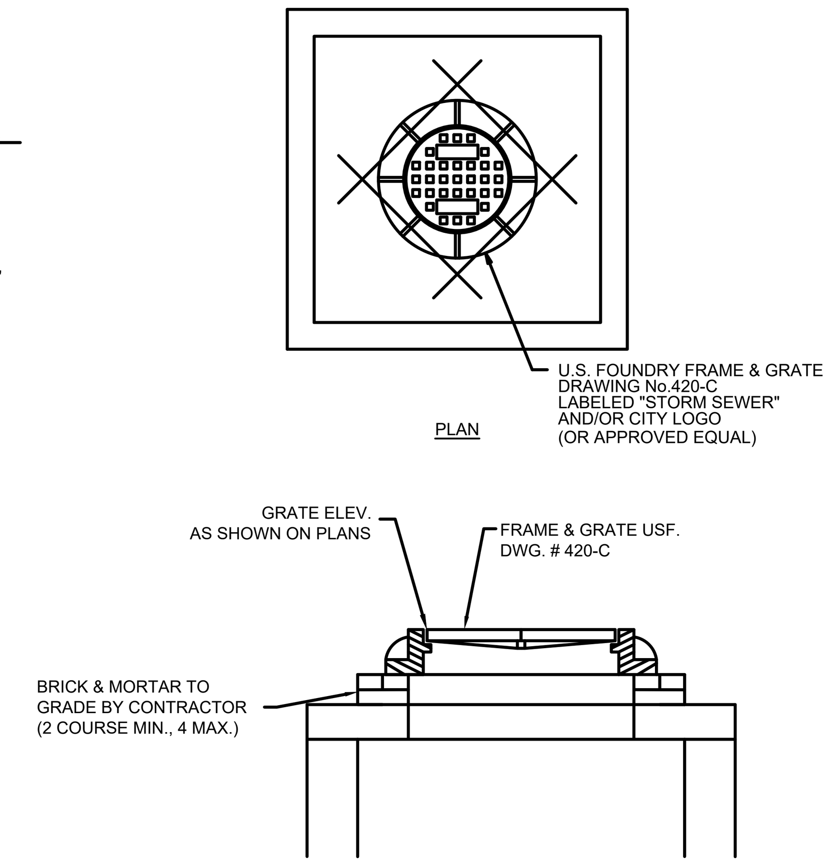
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-05

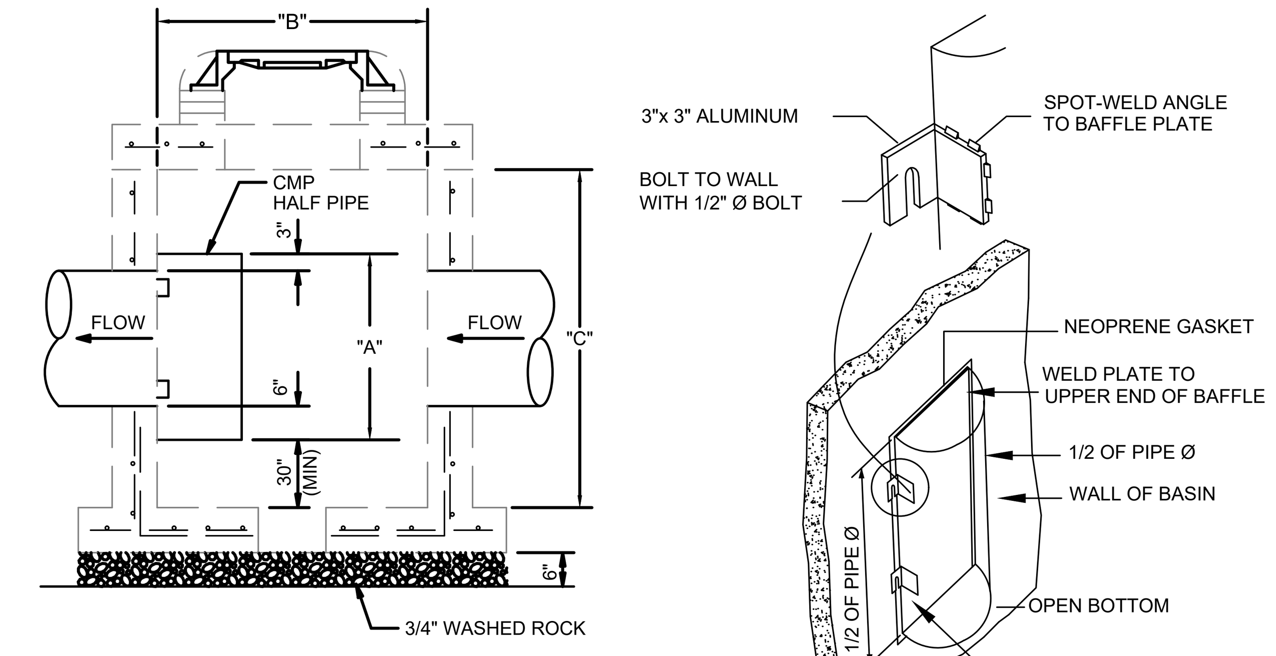


NOTES
1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

CATCH BASIN AND EXFILTRATION TRENCH DETAIL
NOT TO SCALE



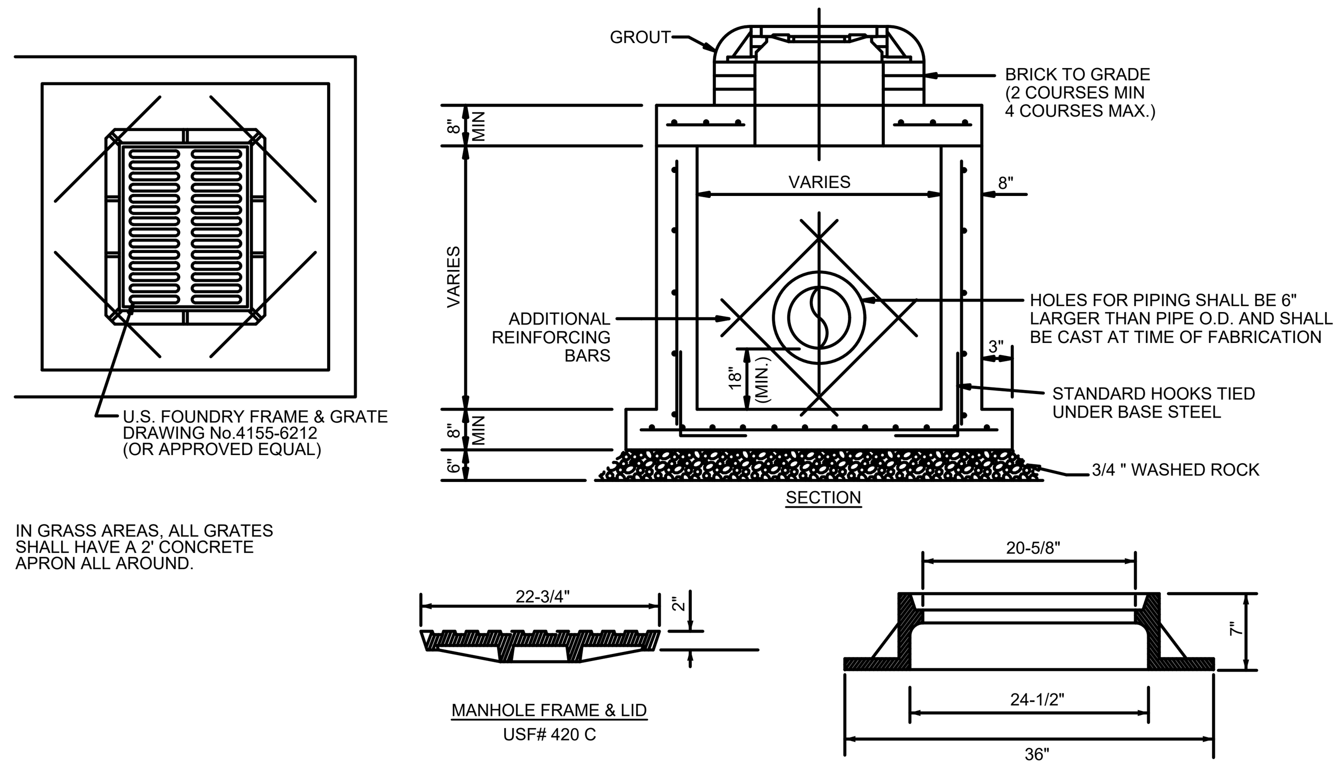
STORM MANHOLE TOP
NOT TO SCALE



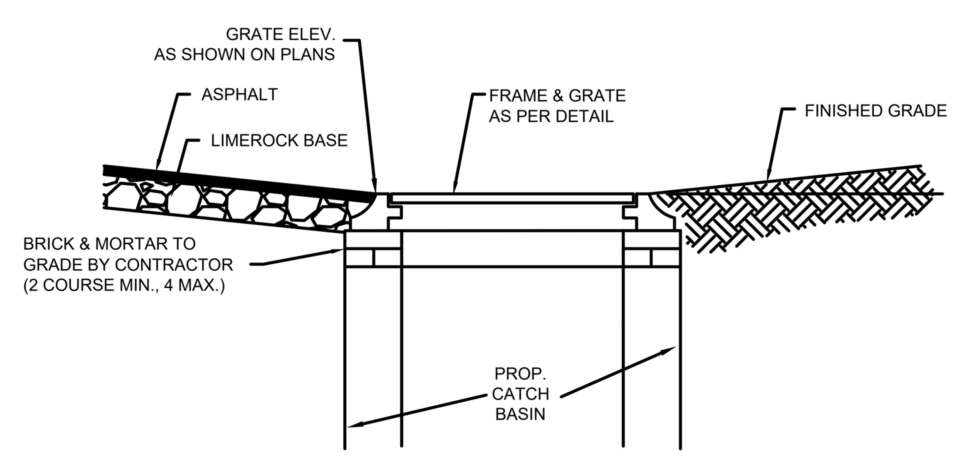
NOTES:
1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

PIPE	BAFFLE SCHEDULE		
DIAMETER	"A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

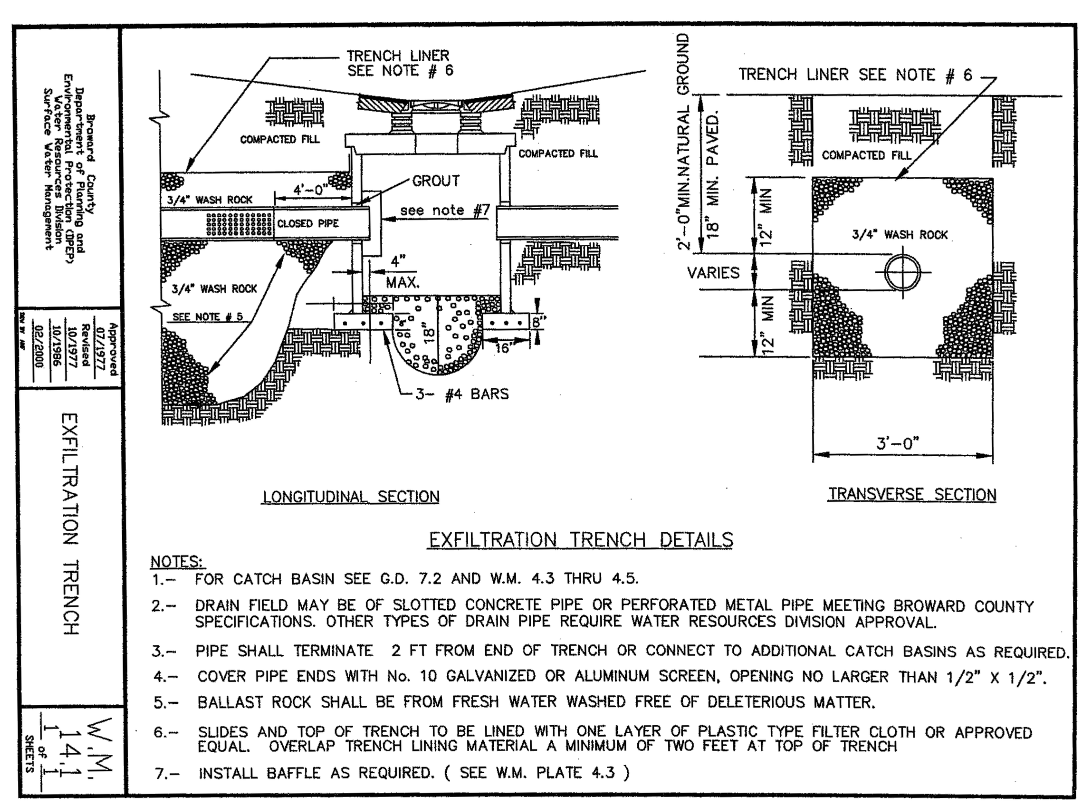
POLLUTION RETARDANT BAFFLE (PRB)
NOT TO SCALE



PRECAST DRAINAGE MANHOLE
NOT TO SCALE



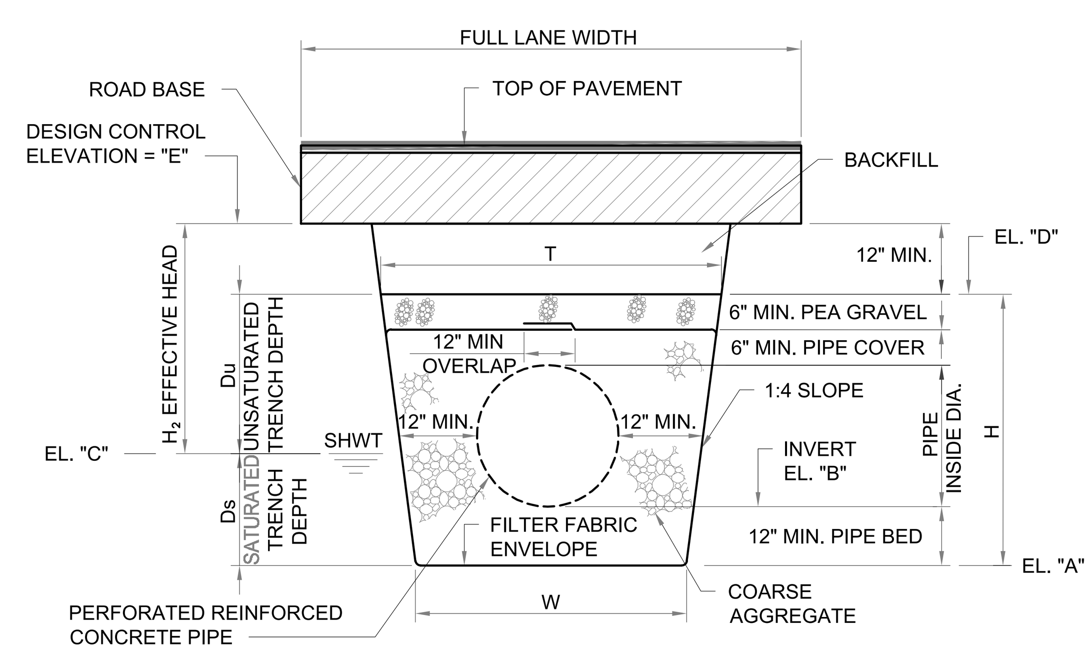
CATCH BASIN TOP DETAIL
NOT TO SCALE

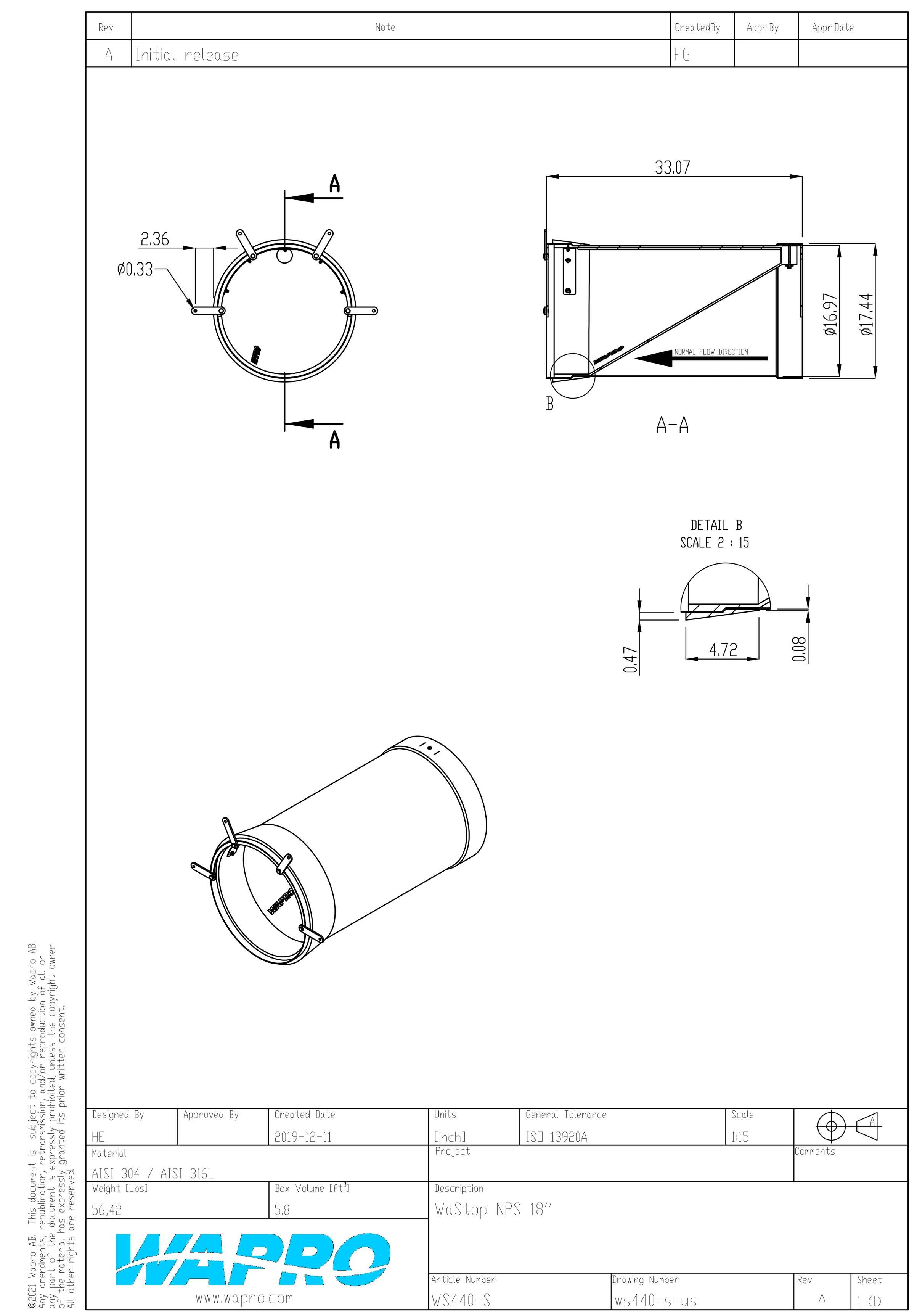


TRENCH SCHEDULE

PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE





REVISIONS

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

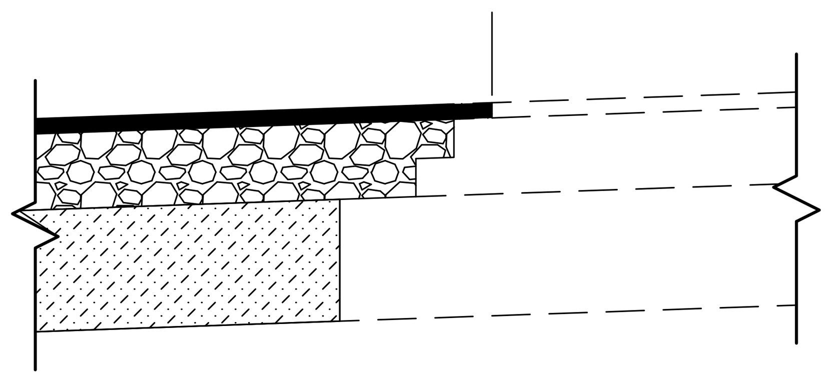
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 5/29/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

DRAINAGE DETAILS

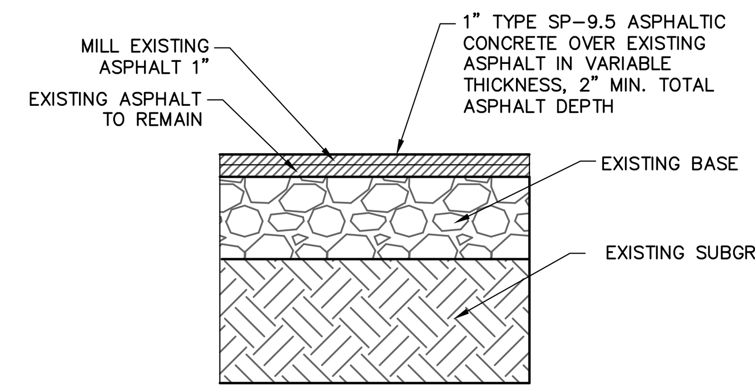
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-06



CONNECTION TO EXISTING PAVEMENT DETAIL

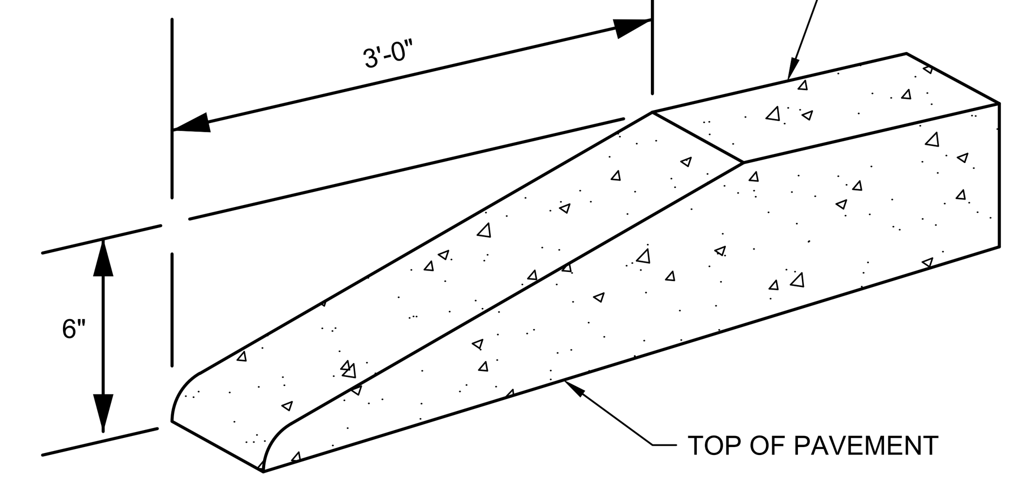
NOT TO SCALE



EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED

K-H

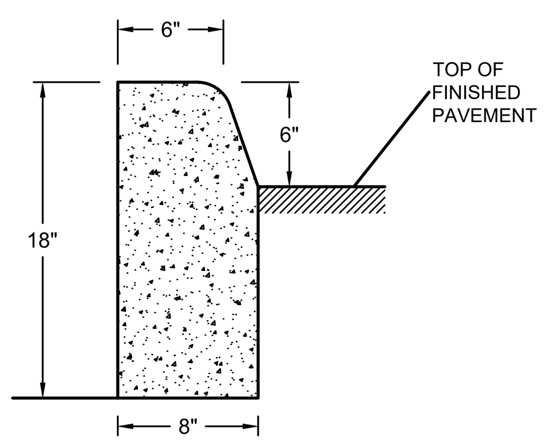
NOT TO SCALE



ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

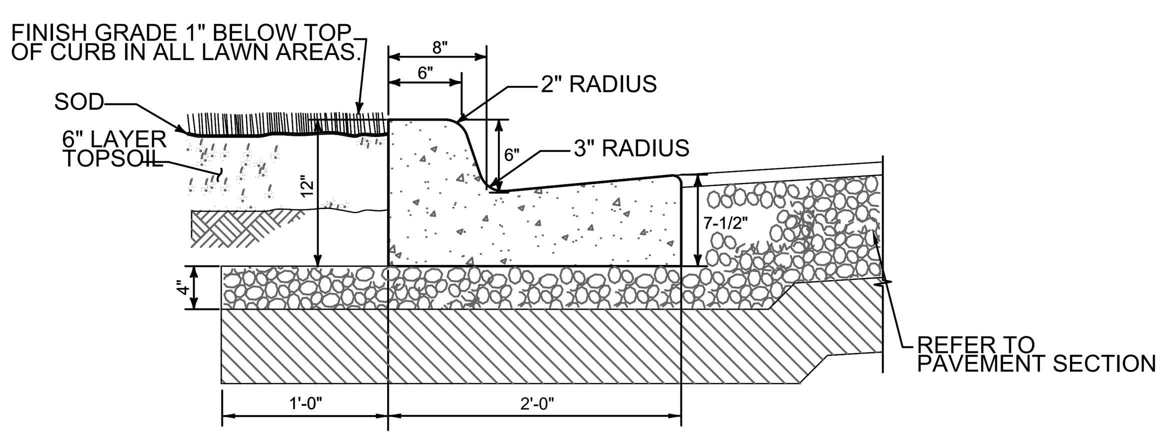
STANDARD CURB TRANSITIONS

NOT TO SCALE



TYPE 'D' CURB

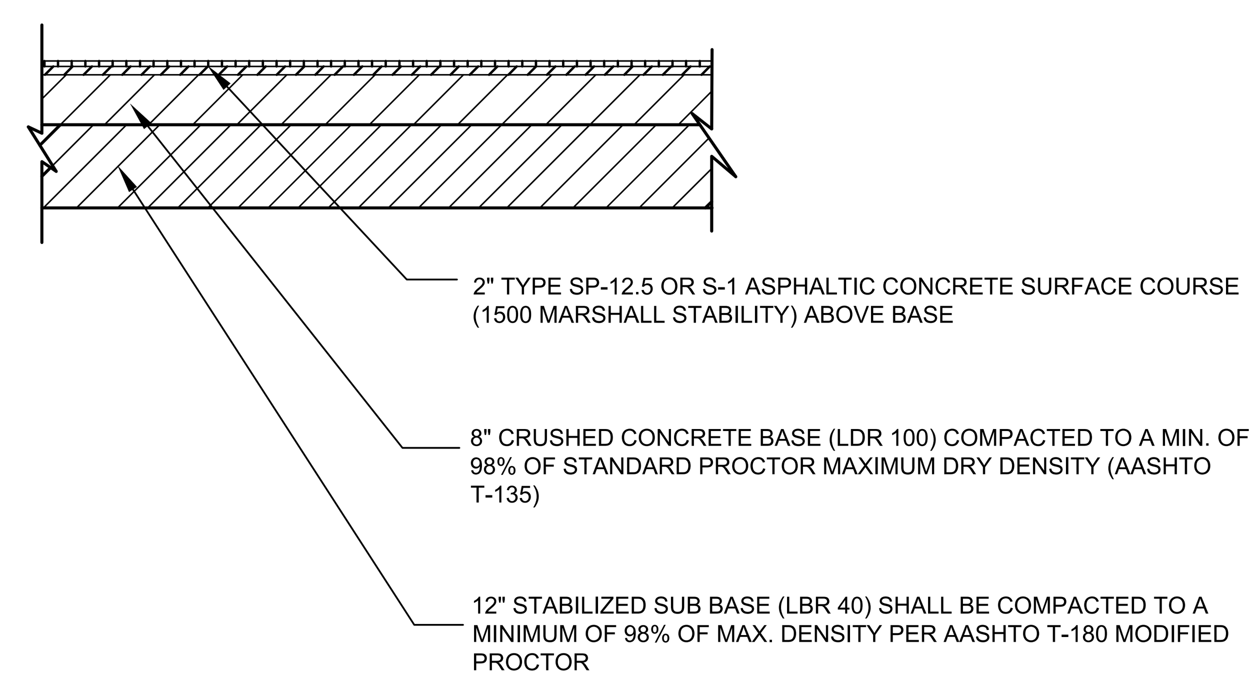
AS PER FDOT INDEX 300
NOT TO SCALE



NOTES:
1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

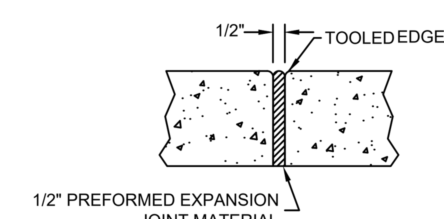
TYPE "F" CURB

NOT TO SCALE



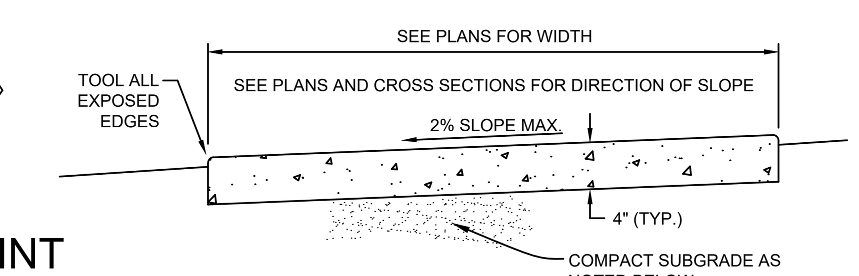
HEAVY DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE



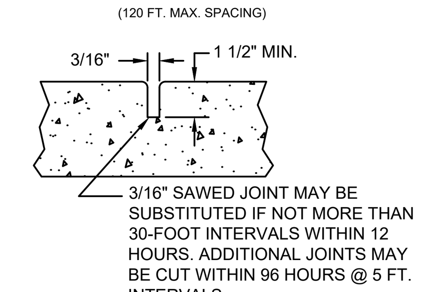
EXPANSION JOINT

NOT TO SCALE



TYPICAL SECTION

(120 FT. MAX. SPACING)



(5 FT. MAX. SPACING)

CONTRACTION JOINT

NOT TO SCALE

NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL

NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM   REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT	143788000
DATE	2/6/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING & GRADING DETAILS

CHURCH SITE IMPROVEMENTS

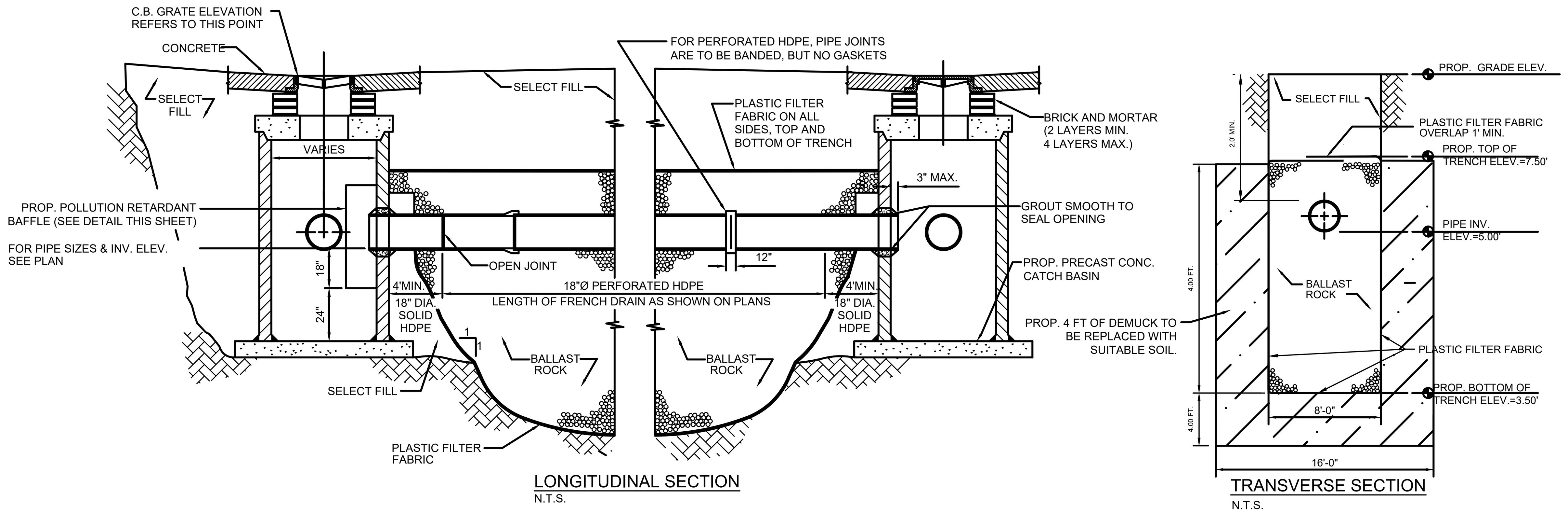
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE   FL

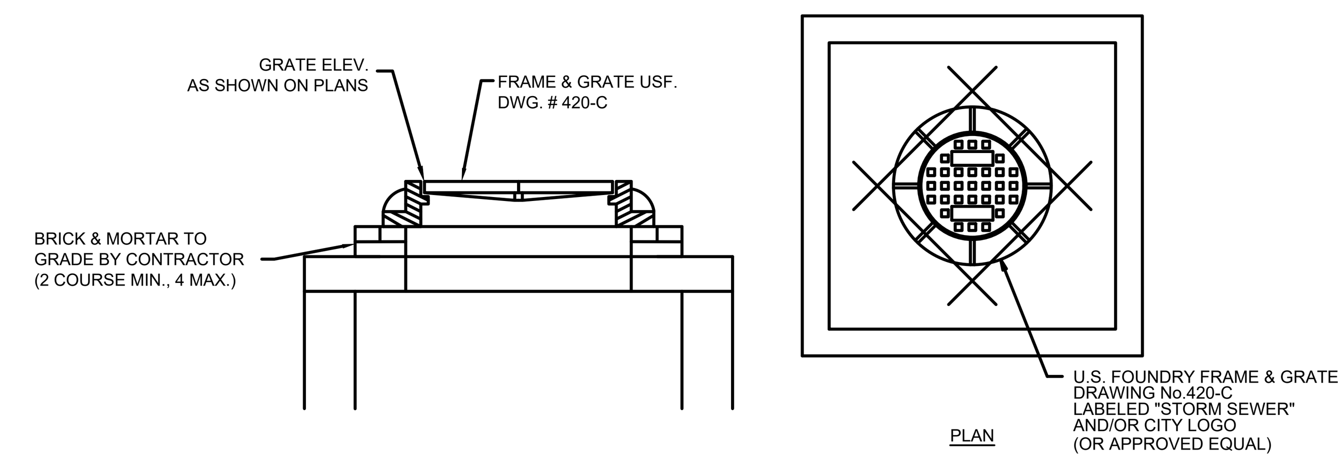
SHEET NUMBER

SP-06

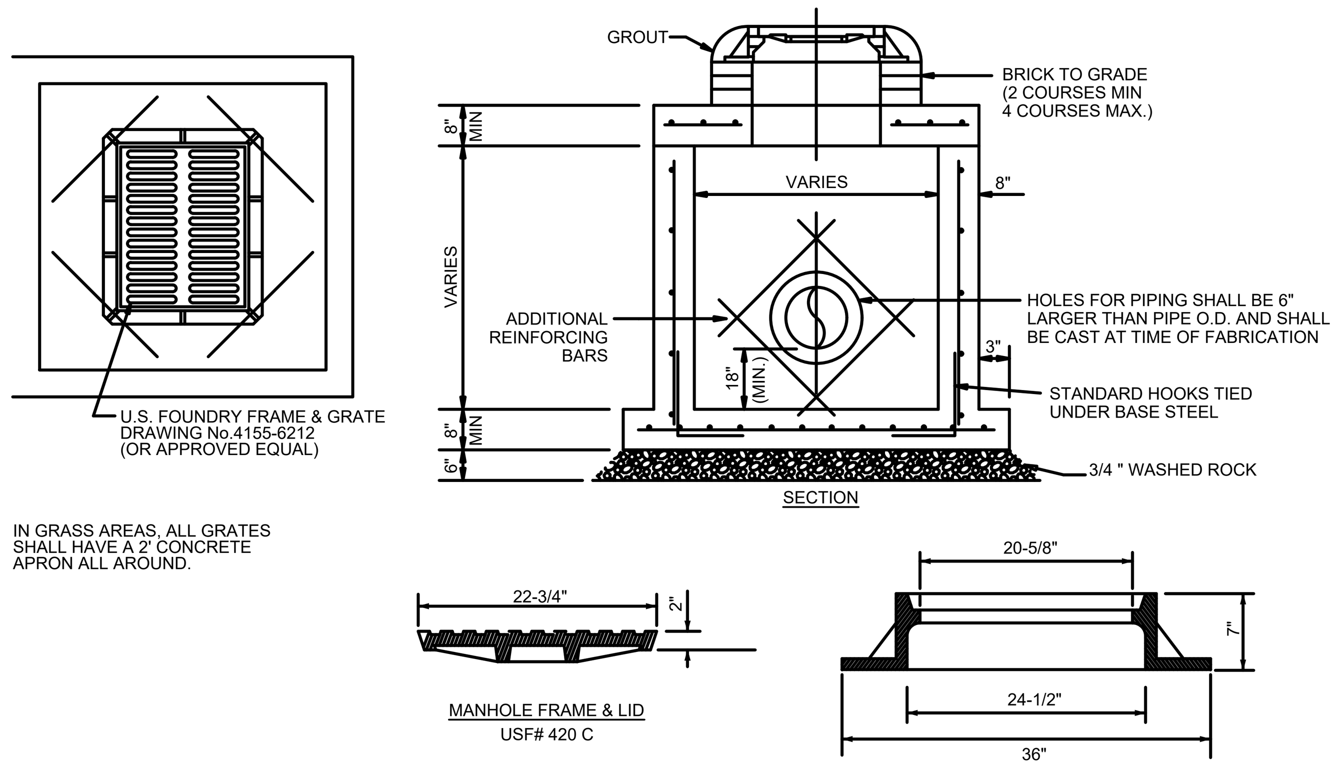


NOTES
1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

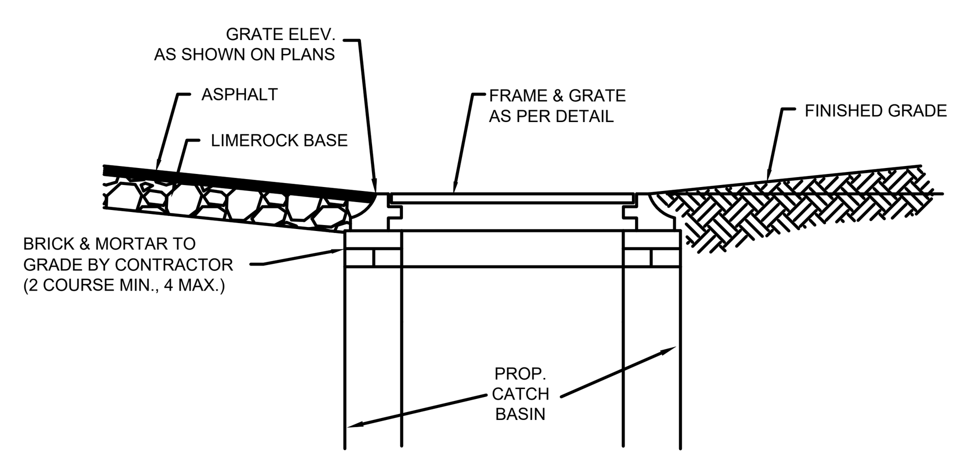
CATCH BASIN AND EXFILTRATION TRENCH DETAIL
NOT TO SCALE



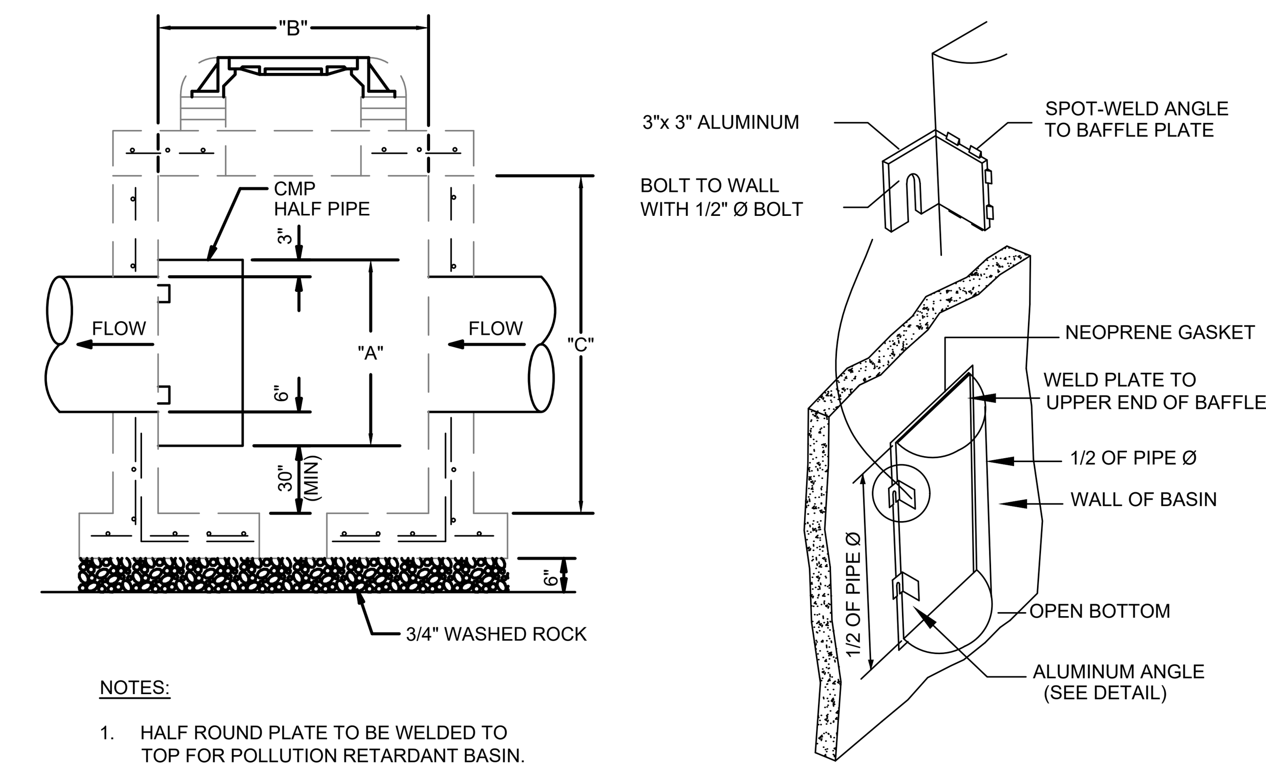
STORM MANHOLE TOP
NO TO SCALE



PRECAST DRAINAGE MANHOLE
NOT TO SCALE



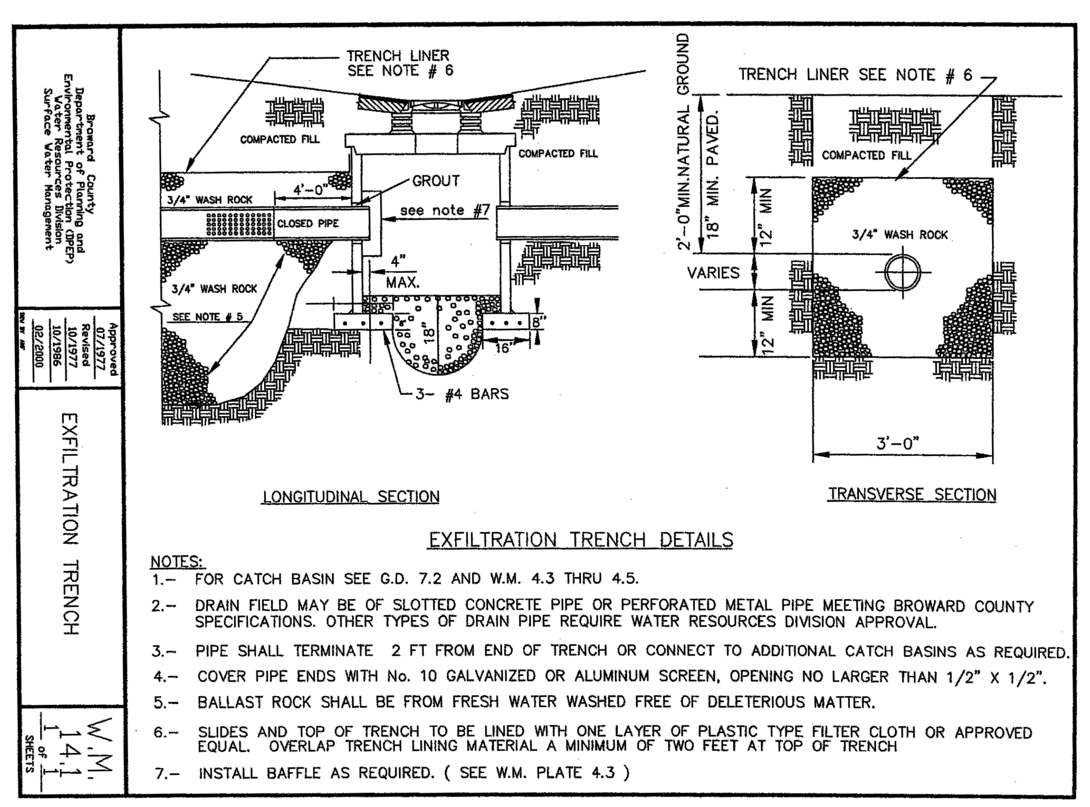
CATCH BASIN TOP DETAIL
NOT TO SCALE



NOTES:
1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

PIPE DIAMETER	BAFFLE SCHEDULE "A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

POLLUTION RETARDANT BAFFLE (PRB)
NOT TO SCALE



Broward County Department of Planning and Environmental Protection (DPEP) Water Resources Division Surface Water Management

Approved 07/1977 Revised 10/1977 10/1986 02/2000

EXFILTRATION TRENCH

W.M. 14.1
1 of 1 SHEETS

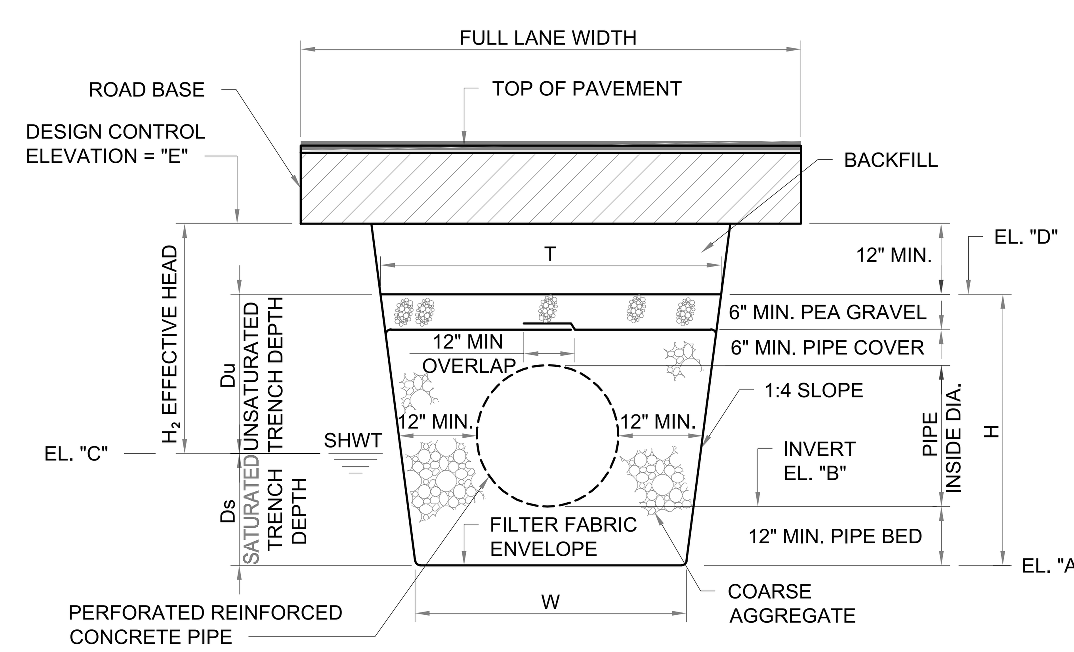
EXFILTRATION TRENCH DETAILS

NOTES:
1.– FOR CATCH BASIN SEE G.D. 7.2 AND W.M. 4.3 THRU 4.5.
2.– DRAIN FIELD MAY BE OF SLOTTED CONCRETE PIPE OR PERFORATED METAL PIPE MEETING BROWARD COUNTY SPECIFICATIONS. OTHER TYPES OF DRAIN PIPE REQUIRE WATER RESOURCES DIVISION APPROVAL.
3.– PIPE SHALL TERMINATE 2 FT FROM END OF TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
4.– COVER PIPE ENDS WITH No. 10 GALVANIZED OR ALUMINUM SCREEN, OPENING NO LARGER THAN 1/2" X 1/2".
5.– BALLAST ROCK SHALL BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
6.– SLIDES AND TOP OF TRENCH TO BE LINED WITH ONE LAYER OF PLASTIC TYPE FILTER CLOTH OR APPROVED EQUAL. OVERLAP TRENCH LINING MATERIAL A MINIMUM OF TWO FEET AT TOP OF TRENCH
7.– INSTALL BAFFLE AS REQUIRED. (SEE W.M. PLATE 4.3)

TRENCH SCHEDULE

PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE



REVISIONS			
No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 5/13/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

DRAINAGE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-07

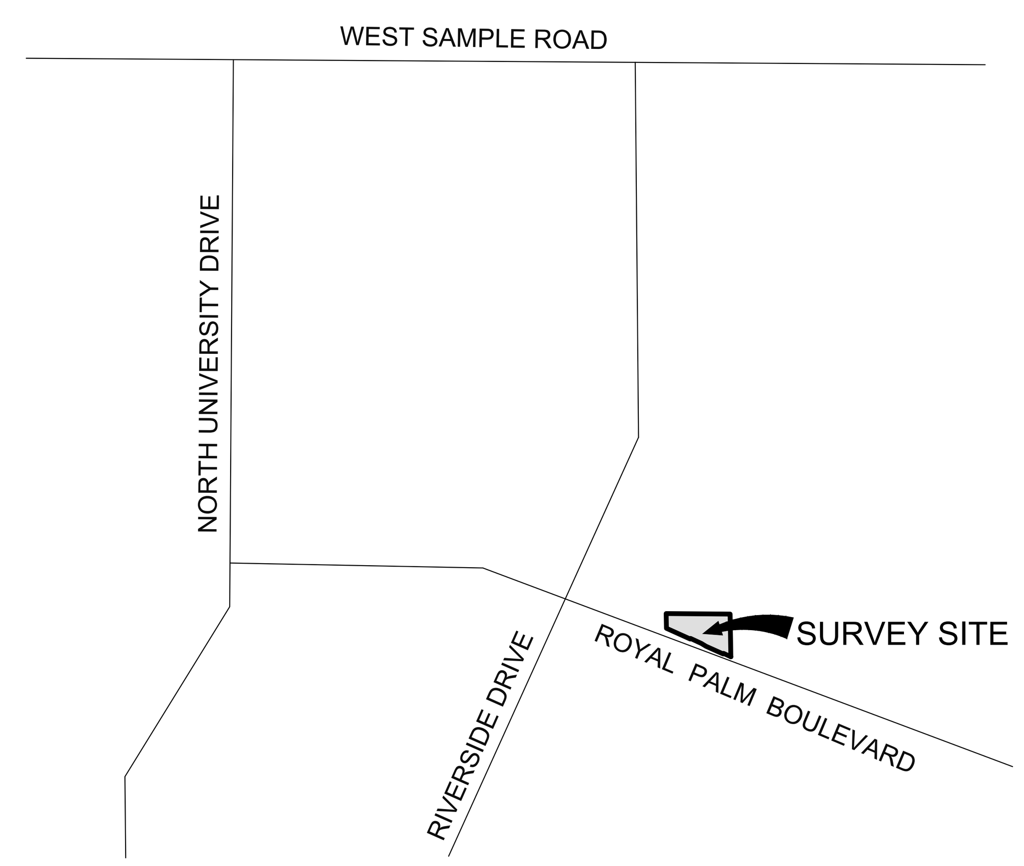
LEGAL DESCRIPTION:

PARCEL "A" AND "B" "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY, FLORIDA AND CONTAINING A TOTAL OF 610,532 SQUARE FEET (14.016 ACRES), MORE OR LESS.

NOTES:

1. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OR AN ELECTRONIC SIGNATURE AND ELECTRONIC SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. BROWARD COUNTY BENCHMARK #2279; ELEVATION: 8.408 FEET.
3. FLOOD ZONE: AE/X(0.2%)/X; BASE FLOOD ELEVATION: 12 FEET/NONE/NONE; PANEL #12011C0165H; COMMUNITY #120047; MAP DATE: 8/18/14.
4. THIS SITE LIES IN SECTION 26, TOWNSHIP 48 SOUTH, RANGE 41 EAST, BROWARD COUNTY, FLORIDA.
5. BEARINGS ARE BASED ON STATE PLANE COORDINATES AND ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1983 WITH 1990 ADJUSTMENT, FL–E ZONE, WITH THE NORTH LINE OF PARCEL "A" BEING S89°28'44"E.
6. REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND THE LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION OR CONSTRUCTION CONTACT BLOOD HOUND UNDERGROUND UTILITY LOCATIONS FOR FIELD VERIFICATION.
7. THIS SURVEY IS CERTIFIED EXCLUSIVELY TO: ABUNDANT LIFE CHURCH.
8. THE HORIZONTAL POSITIONAL ACCURACY OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.2'. THE VERTICAL ACCURACY OF ELEVATIONS OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.1'.
9. THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A COMMITMENT FOR TITLE INSURANCE. ONLY PLATTED OR KNOWN EASEMENTS ARE DEPICTED HEREON.
10. ALL RECORDED DOCUMENTS ARE PER BROWARD COUNTY PUBLIC RECORDS.
11. THE FLOOD ZONE DESIGNATION LINES DEPICTED HEREON ARE PLACED IN APPROXIMATE LOCATIONS, AS SCALED FROM THE IMAGE FROM THE FEMA.ORG WEBSITE.
12. THIS SITE CONTAINS 403 TOTAL CLEARLY IDENTIFIABLE PARKING SPACES (394 REGULAR & 9 DISABLED).
13. BOUNDARY CALCULATIONS PER COORDINATES ON THE LUPTON PLAT BOOK 122, PAGE 30.



CERTIFICATION:

I HEREBY CERTIFY: THAT THIS MAP OF SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA STATE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J–17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

☐ JOHN F. PULICE, PROFESSIONAL SURVEYOR AND MAPPER LS2691
☐ VICTOR R. GILBERT, PROFESSIONAL SURVEYOR AND MAPPER LS6274
☐ MICHAEL M. MOSSEY, PROFESSIONAL SURVEYOR AND MAPPER PSM5660
STATE OF FLORIDA

NO.	REVISIONS	BY
5		
4		
3		
2	#72824 –UPDATE SURVEY–6/19/24	J.S.
1	#71148 –ORIGINAL SURVEY–3/21/23	R.V.

ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572–1777
FAX: (954) 572–1778
E–MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

PLS

DRAWN BY: R.V. | SCALE: 1" = 40' | CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P. | SURVEY DATE: 6/1924 | ORDER NO.: 72824

SHEET 2 OF 2

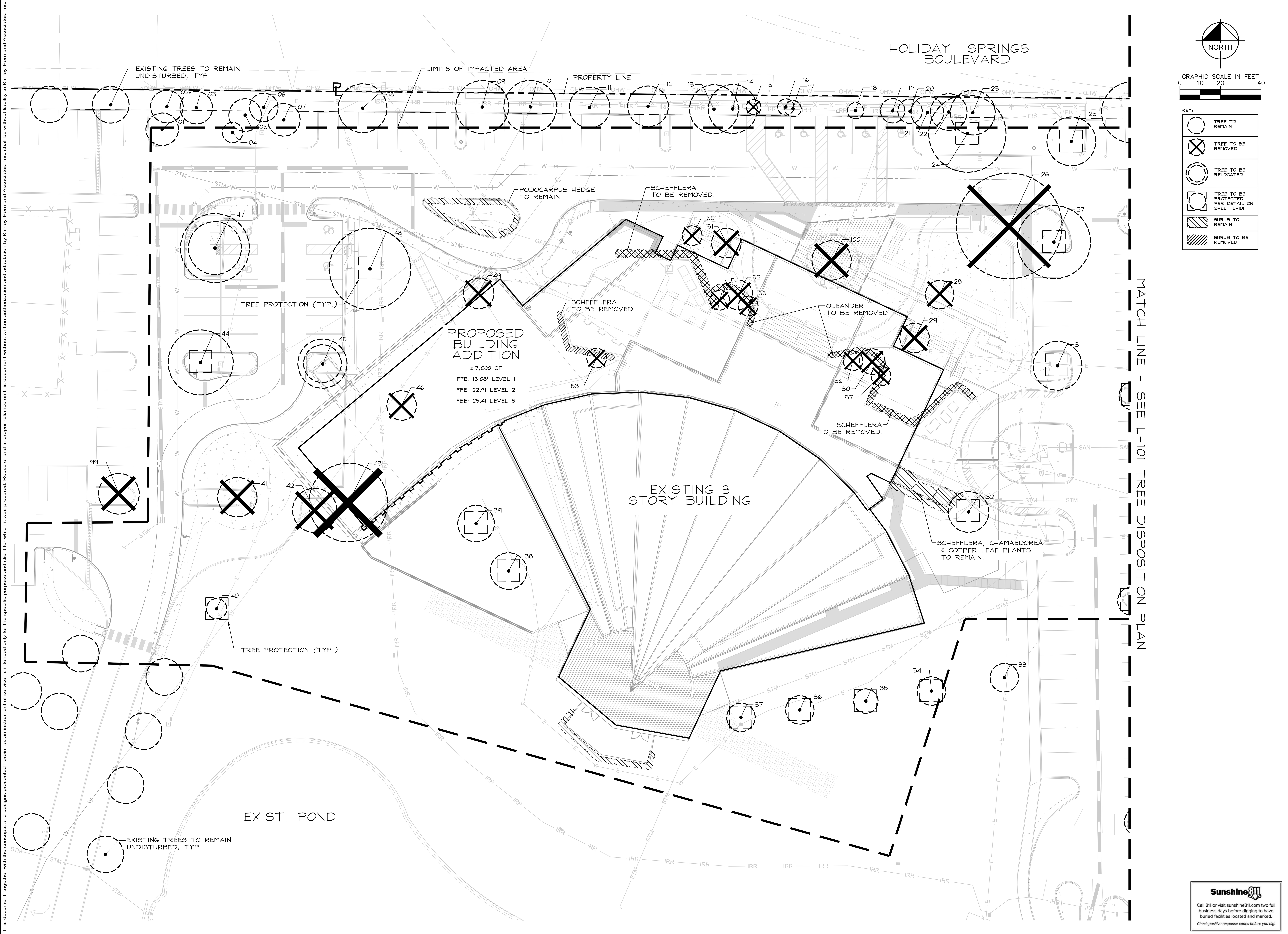
THIS DOCUMENT IS NEITHER FULL NOR COMPLETE WITHOUT SHEETS 1 AND 2

ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: R.V.	SCALE: 1" = 40'	CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P.	SURVEY DATE: 6/19/24	ORDER NO.: 72824



No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

KHA PROJECT	143788000
DATE	07/17/2025
SCALE	AS SHOWN
DESIGNED BY	NS
DRAWN BY	NS
CHECKED BY	TCH

TREE DISPOSITION PLAN

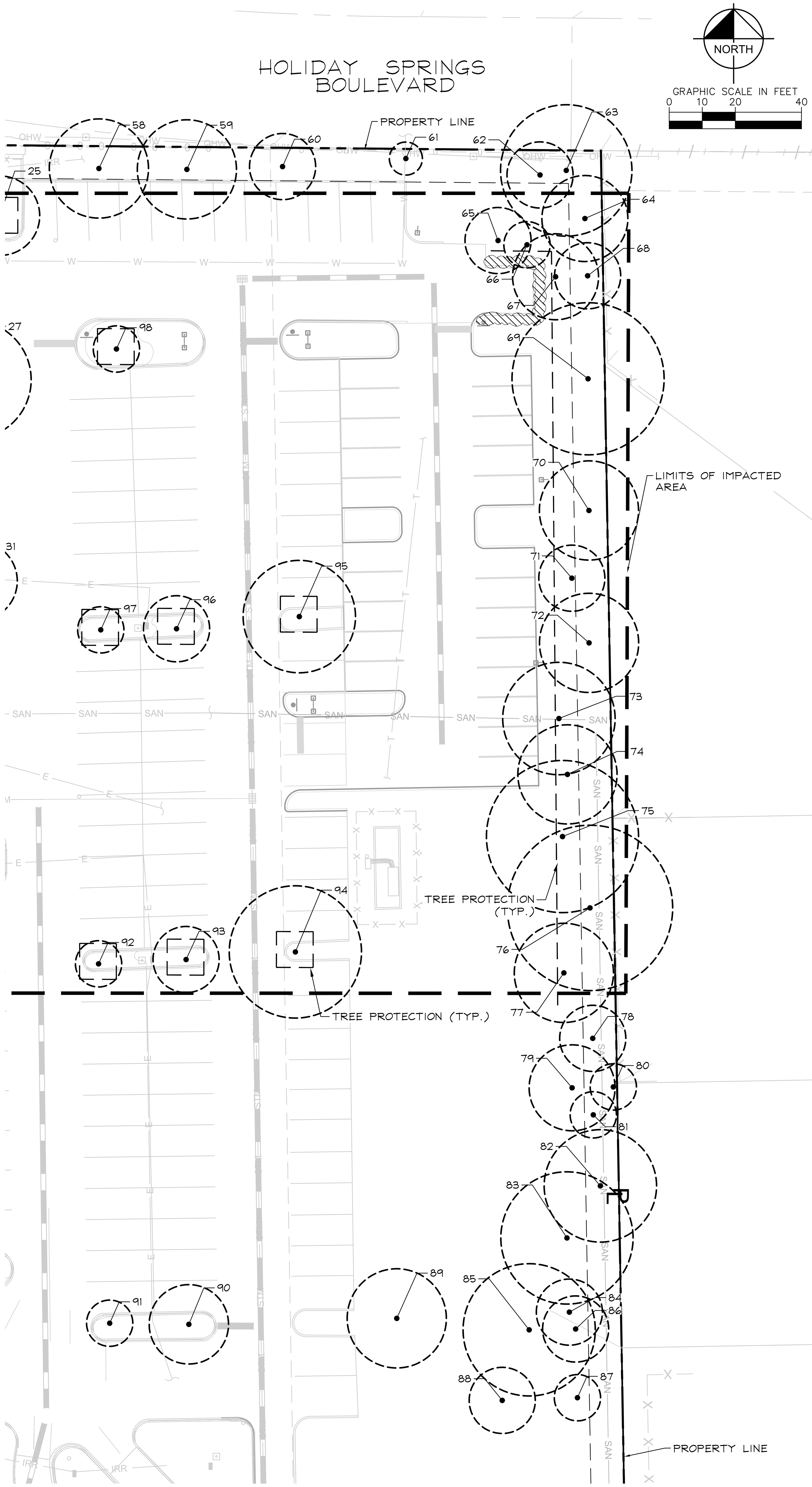
CHURCH SITE IMPROVEMENTS

PREPARED FOR

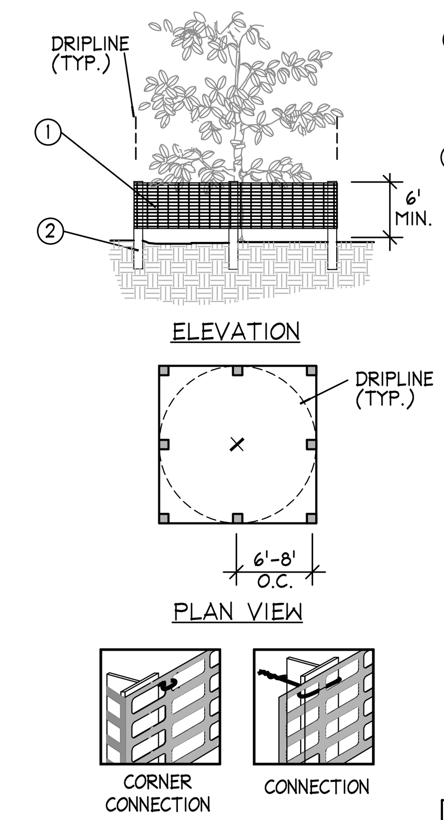
ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER
TD-01



TREE DISPOSITION LIST							
NO.	COMMON NAME	BOTANICAL NAME	DBH (in.)	SPREAD (ft.)	AREA (sf.)	HEIGHT (ft.)	DISPOSITION
1	Sabal Palm	Sabal palmetto		30	707		REMAIN
2	Live Oak	Quercus virginiana		30	707		REMAIN
3	Sabal Palm	Sabal palmetto		30	707		REMAIN
4	Sabal Palm	Sabal palmetto		10	79		REMAIN
5	Sabal Palm	Sabal palmetto		15	177		REMAIN
6	Mahogany	Swietenia mahagoni		15	177		REMAIN
7	Mahogany	Swietenia mahagoni		15	177		REMAIN
8	Mahogany	Swietenia mahagoni		25	491		REMAIN
9	Mahogany	Swietenia mahagoni		25	491		REMAIN
10	Mahogany	Swietenia mahagoni		25	491		REMAIN
11	Mahogany	Swietenia mahagoni		20	314		REMAIN
12	Mahogany	Swietenia mahagoni		20	314		REMAIN
13	Mahogany	Swietenia mahagoni		25	491		REMAIN
14	Japanese Privet	Ligustrum japonicum		25	491		REMAIN
15	**Stump**				0		**REMOVE**
16	Gumbo Limbo	Bursera simaruba		10	79		REMAIN
17	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
18	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
19	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
20	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
21	Japanese Privet	Ligustrum japonicum		15	177		REMAIN
22	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
23	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
24	Mahogany	Swietenia mahagoni		40	1257		REMAIN
25	Mahogany	Swietenia mahagoni		25	491		REMAIN
26	**Live Oak**	**Quercus virginiana**		50	1963		**REMOVE**
27	Live Oak	Quercus virginiana		35	962		REMAIN
28	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
29	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
30	**Royal Palm**	**Roystonia regia**		10	79		**REMOVE**
31	Live Oak	Quercus virginiana		25	491		REMAIN
32	Royal Palm	Roystonia regia		20	314		REMAIN
33	Royal Palm	Roystonia regia		15	177		REMAIN
34	Royal Palm	Roystonia regia		15	177		REMAIN
35	Royal Palm	Roystonia regia		10	79		REMAIN
36	Royal Palm	Roystonia regia		15	177		REMAIN
37	Royal Palm	Roystonia regia		15	177		REMAIN
38	Royal Palm	Roystonia regia		20	314		REMAIN
39	Royal Palm	Roystonia regia		20	314		REMAIN
40	Dahoon Holly	Ilex cassine		10	79		REMAIN
41	**Live Oak**	**Quercus virginiana**		20	314		**REMOVE**
42	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
43	**Live Oak**	**Quercus virginiana**		**40**	1257		**REMOVE**
44	Live Oak	Quercus virginiana		30	707		REMAIN
45	**Live Oak**	**Quercus virginiana**		25	491		**RELOCATE**
46	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
47	**Live Oak**	**Quercus virginiana**		30	707		**RELOCATE**
48	Live Oak	Quercus virginiana		40	1257		REMAIN
49	**Dahoon Holly**	**Ilex cassine**	**15**	**15**	177		**REMOVE**
50	**Live Oak**	**Quercus virginiana**		**10**	79		**REMOVE**
51	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
52	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
53	**Dahoon Holly**	**Ilex cassine**		**10**	79		**REMOVE**
54	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
55	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
56	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
57	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
58	Mahogany	Swietenia mahagoni		30	707		REMAIN
59	Mahogany	Swietenia mahagoni		30	707		REMAIN
60	Mahogany	Swietenia mahagoni		20	314		REMAIN
61	Sabal Palm	Sabal palmetto		10	79		REMAIN
62	Sabal Palm	Sabal palmetto		20	314		REMAIN
63	Live Oak	Quercus virginiana		40	1257		REMAIN
64	Live Oak	Quercus virginiana		25	491		REMAIN
65	Sabal Palm	Sabal palmetto		20	314		REMAIN
66	Sabal Palm	Sabal palmetto		15	177		REMAIN
67	Sabal Palm	Sabal palmetto		25	491		REMAIN
68	Live Oak	Quercus virginiana		20	314		REMAIN
69	Live Oak	Quercus virginiana		45	1590		REMAIN
70	Live Oak	Quercus virginiana		30	707		REMAIN
71	Live Oak	Quercus virginiana		20	314		REMAIN
72	Live Oak	Quercus virginiana		30	707		REMAIN
73	Live Oak	Quercus virginiana		35	962		REMAIN
74	Live Oak	Quercus virginiana		30	707		REMAIN
75	Live Oak	Quercus virginiana		45	1590		REMAIN
76	Live Oak	Quercus virginiana		50	1963		REMAIN
77	Live Oak	Quercus virginiana		30	707		REMAIN
78	Live Oak	Quercus virginiana		20	314		REMAIN
79	Southern Mangonlia	Magnolia grandiflora		25	491		REMAIN
80	Unknown	Unknown		15	177		REMAIN
81	Unknown	Unknown		15	177		REMAIN
82	Sabal Palm	Sabal palmetto		35	962		REMAIN
83	Live Oak	Quercus virginiana		40	1257		REMAIN
84	Unknown	Unknown		20	314		REMAIN
85	Mahogany	Swietenia mahagoni		40	1257		REMAIN
86	Unknown	Unknown		20	314		REMAIN
87	Unknown	Unknown		15	177		REMAIN
88	Unknown	Unknown		20	314		REMAIN
89	Live Oak	Quercus virginiana		30	707		REMAIN
90	Live Oak	Quercus virginiana		25	491		REMAIN
91	Live Oak	Quercus virginiana		15	177		REMAIN
92	Live Oak	Quercus virginiana		15	177		REMAIN
93	Live Oak	Quercus virginiana		20	314		REMAIN
94	Live Oak	Quercus virginiana		40	1257		REMAIN
95	Live Oak	Quercus virginiana		35	962		REMAIN
96	Live Oak	Quercus virginiana		20	314		REMAIN
97	Live Oak	Quercus virginiana		15	177		REMAIN
98	Live Oak	Quercus virginiana		15	177		REMAIN
99	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
100	**Pigmy Date Palm**	**Phoenix roebelenii**		**20**	314		**REMOVE**



1. 6'H "PERIMETER PLUS" CONSTRUCTION FENCE BY CONWED PLASTICS OR OWNER'S REPRESENTATIVE APPROVED EQUAL. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.
2. 8' TALL METAL "T" POSTS OR 2" x 2" X 8' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.

INSTALLATION NOTES:

A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.

B. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/4 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 8' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.

C. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).

D. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

A Tree/Shrub Protector
Barrier Detail
NTS

KEY:
- TREE TO REMAIN
- TREE TO BE REMOVED
- TREE TO BE RELOCATED
- TREE TO BE PROTECTED PER DETAIL ON SHEET L-101
- SHRUB TO REMAIN
- SHRUB TO BE REMOVED

ROOT PRUNING

1. THE LANDSCAPE ARCHITECT HAS OBSERVED TREES THAT COULD BE IMPACTED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
2. IF CONSTRUCTION ACTIVITIES OCCUR WITHIN THE DRIPLINE (OR THE HORIZONTAL EXTENT OF THE CANOPY) OF A TREE, THEN THAT TREE IS A CANDIDATE FOR ROOT PRUNING.
3. ROOT PRUNING MUST OCCUR PRIOR TO TRENCHING OPERATIONS TO INSURE THAT THE ROOTS ARE CUT CLEAN AND AT PROPER ANGLES AND NOT MECHANICALLY RIPPED FROM THE EARTH DURING CONSTRUCTION.
4. FOR TREES REQUIRING ROOT PRUNING, A TREE ASSESSMENT SHALL BE CONDUCTED AND A ROOT-PRUNING PLAN SHALL BE DEVELOPED BY A CERTIFIED ARBORIST OR CONSULTING ARBORIST. THIS PLAN SHOULD IDENTIFY:
   - MAXIMUM ALLOWABLE SIZE OF ROOTS TO BE CUT
   - ALLOWABLE PROXIMITY TO THE TRUNK FOR CUTS
   - TIME OF YEAR WHEN ROOT CUTTING IS ALLOWABLE (NOTE: IN FLORIDA, IT IS BEST TO AVOID ROOT PRUNING DURING TIMES OF THE MAY THROUGH SEPTEMBER, WHEN THE POTENTIAL FOR DAMAGING WIND LOADS ON TREES ARE GREATEST.)
   - METHOD FOR MAKING CUTS
   - MITIGATING CANOPY PRUNING
   - TYPE AND EXTENT OF NECESSARY STRUCTURAL SUPPORT
   - SCHEDULE FOR WATERING/FERTILIZATION AFTER PRUNING
5. IMPLEMENT THE ROOT PRUNING PLAN PER THE ARBORIST'S RECOMMENDATION.

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

TREE DISPOSITION SUMMARY	
TREES TO BE REMOVED	12
TREES TO BE RELOCATED	2
PALMS TO BE REMOVED	7

TREE MITIGATION SUMMARY	
TREE REMOVAL SUMMARY 6 LIVE OAKS (#26,41,42,43,50,99)= 4,241 SF 1 STUMP (#15) 4 SOUTHERN MAGNOLIAS (#54,55,56,57)= 314 SF 2 DAHOON HOLLIES (#49,53)= 255 SF	4,811 SF
PALM REMOVAL SUMMARY 6 ROYAL PALMS (#28,29,30,46,51,52)= 962 SF 1 PIGMY DATE PALM (#100)= 314 SF	1,276 SF
CANOPY PROVIDED PER SHEET L-201 1 GUMBO LIMBO @ 300 SF = 300 SF 3 LIVE OAKS @ 300 SF = 900 SF 2 SILVER BUTTON WOOD @200 SF = 400 SF 2 ROYAL PALMS @ 100 SF = 200 SF	1,800 SF

TREE MITIGATION COST	
SEC. 34-448.2.D. - PROCEDURES FOR DETERMINING TREE REPLACEMENT REQUIREMENTS. CONTRIBUTION OF $2.00 PER SF OF LOST CANOPY (6,087 SF - 1,800 SF = 4,287 SF OF LOST CANOPY) 4,287 X 2 = $ 8,574 CONTRIBUTION	$8,574

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.

BUILDING DEPARTMENT REVISION SET

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

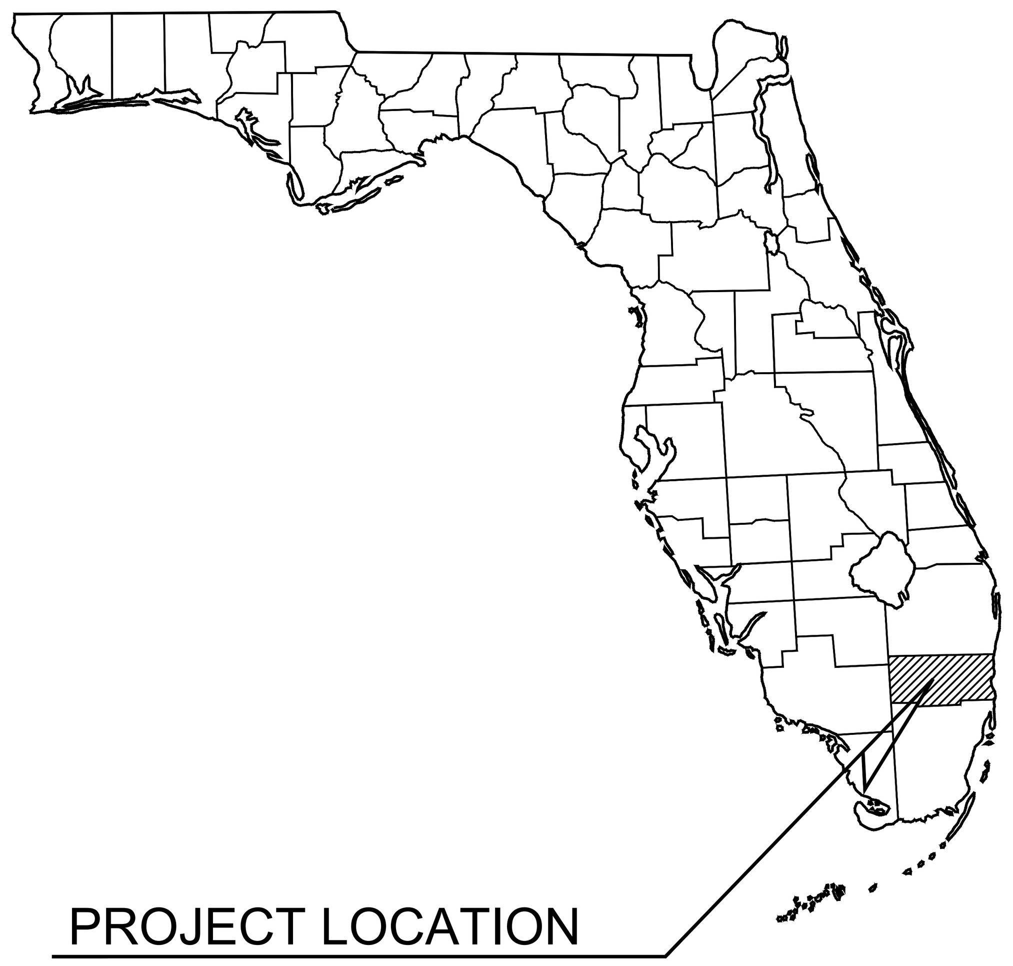
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

TREE DISPOSITION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
TD-02



CIVIL ENGINEERING SET
FOR
ABUNDANT LIFE CHURCH

7955 ROYAL PALM BLVD., MARGATE FL, 33063
BROWARD COUNTY
JULY 2025
PROGRESS SET

PROJECT TEAM:

OWNER/DEVELOPER:
SEAN THOMAS
ABUNDANT LIFE CHURCH
7955 ROYAL PALM BLVD
MARGATE, FL, 33063

ARCHITECT:
SPACE DESIGN
108 SOUTH BROADWAY
EDMOND, OKLAHOMA, 73034
(405) 310-8866
CONTACT: THOMAS SMALL

SURVEYOR:
PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD SUNRISE,
FLORIDA 33351
(954) 572-1777
CONTACT: JOHN F. PULICE

LANDSCAPE:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100

CIVIL:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100
CONTACT: AARON MACKEY, P.E.

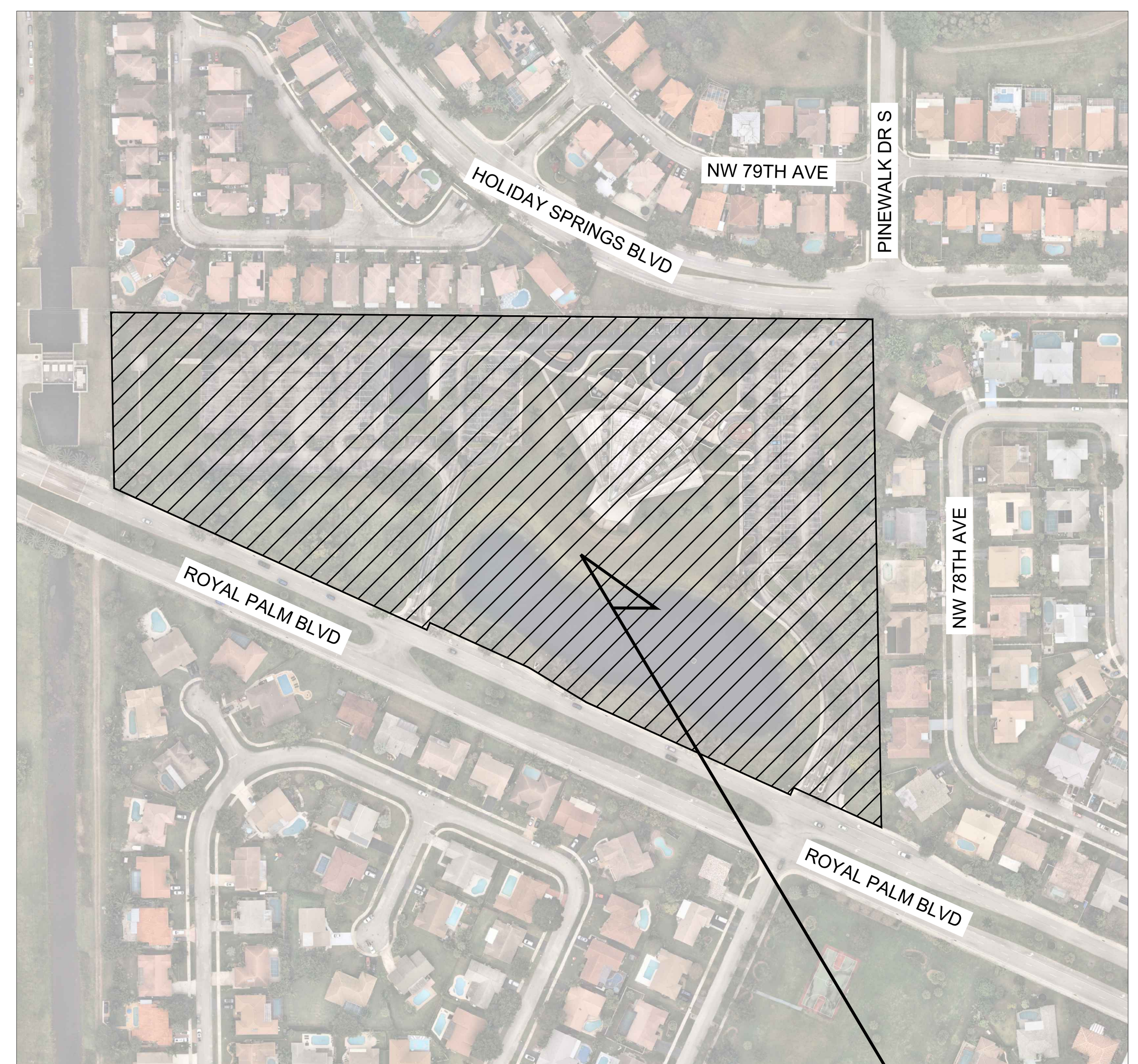
LIST OF CONTACTS:

ENGINEERING DIVISION
901 NW 66TH AVENUE SUITE A
MARGATE, FL 33063
(954) 972-0828

FIRE PROTECTION:
CITY OF MARGATE FIRE DEPARTMENT
1835 BANKS ROAD
MARGATE, FL 33063
(954) 971-4561

BROWARD COUNTY ENVIRONMENTAL PERMITTING DIVISION
1 N UNIVERSITY DR SUITE 203
PLANTATION, FL 33324
(954) 519-1260

BUILDING DEPARTMENT:
CITY OF MARGATE BUILDING DEPARTMENT
901 NW 66TH AVE B
MARGATE, FL 33063
(954) 970-3004



VICINITY MAP

GRAPHIC SCALE IN FEET
0 100 200 400
SCALE: 1"=200'

NORTH

SUBJECT PROPERTY
7955 ROYAL PALM BLVD , MARGATE FL, 33063,

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C-0	COVER SHEET
G-01	GENERAL NOTES
D-01	EROSION CONTROL & DEMOLITION PLAN
SP-01	OVERALL SITE PLAN
SP-02	MASTER PARKING PLAN
C-01	HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN
SP-03	PAVING GRADING & DRAINAGE PLAN
SP-04	PAVING GRADING & DRAINAGE PLAN
CS-01	CROSS SECTIONS
CWS-01	WATER & SEWER PLAN
D-02	EROSION CONTROL& DEMOLITION DETAILS
C-02	HORIZONTAL CONTROL, SIGNANGE & MARKING DETAILS
SP-05	PAVING & GRADING DETAILS
SP-06	DRAINAGE DETAILS
SL-01	PHOTOMETRICS PLAN
SL-02	PHOTOMETRICS DETAILS
SL-03	PHOTOMETRICS DETAILS
TD-01	TREE DISPOSITION PLAN
TD-02	TREE DISPOSITION PLAN
LP-01	LANDSCAPE PLAN
LP-02	LANDSCAPE PLAN
LP-03	LANDSCAPE DETAILS
LP-04	LANDSCAPE NOTES
IRR-01	IRRIGATION PLAN
IRR-02	IRRIGATION PLAN
IRR-03	IRRIGATION DETAILS
IRR-04	IRRIGATION NOTES
IRR-05	IRRIGATION NOTES
L-400	HARDSCAPE PLAN

LEGAL DESCRIPTION

PARCEL "A", "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY FLORIDA.

CIVIL ENGINEER:

Kimley»Horn

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

ISSUED FOR DEVELOPMENT REVIEW COMMITTEE (DRC) - NOT FOR CONSTRUCTION JULY 23, 2025

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

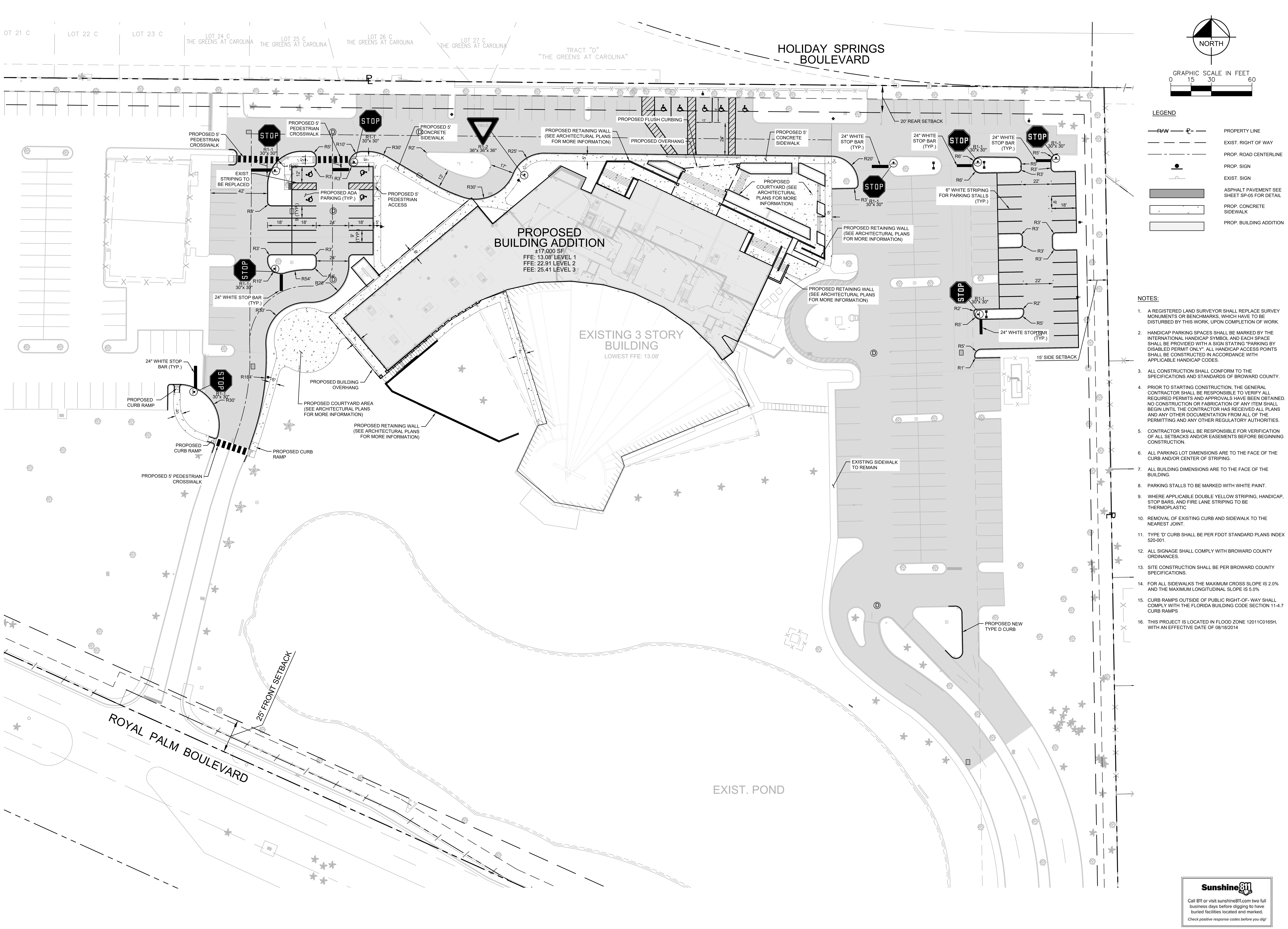
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

COVER SHEET

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-0



NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

REVISIONS	DATE	BY
No.		

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

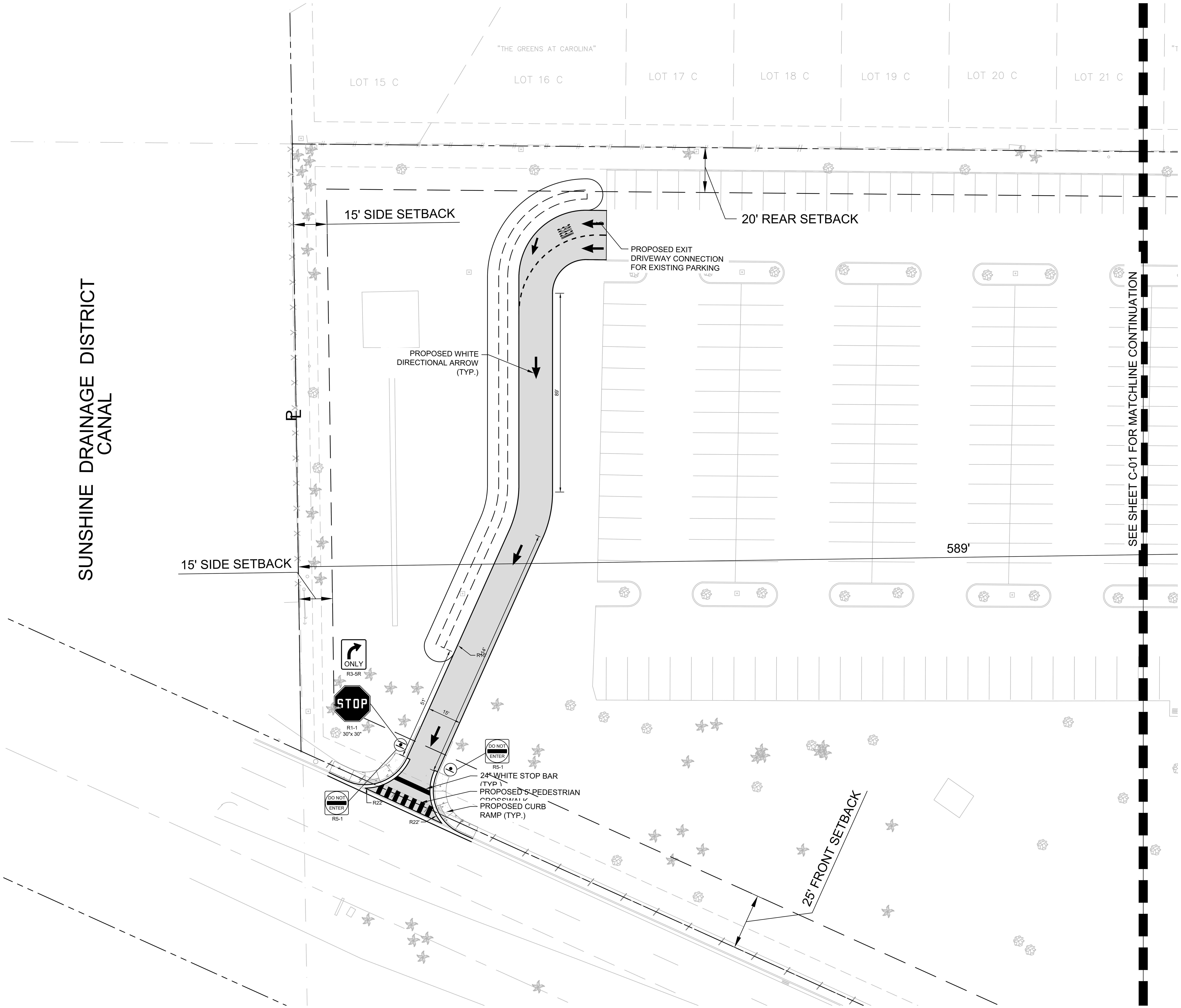
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-01



NORTH

GRAPHIC SCALE IN FEET

0 10 20 40

LEGEND

R/W — ℄	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-06 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING

SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT	143788000
DATE	2/6/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

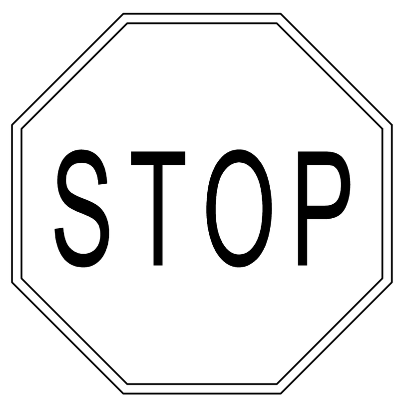
HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

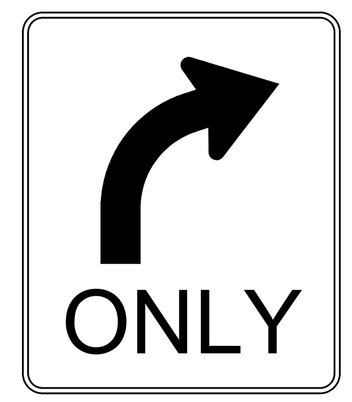
SHEET NUMBER
C-02

R1-1



R5-1

R3-5R



R6-1R

SIGNAGE

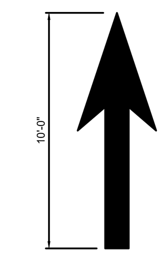
NOT TO SCALE

NOTES:

1. ARROWS SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

2. THESE ARROWS ARE TO BE PAINTED RETROREFLECTIVE WHITE.

3. OPEN ARROWS SHALL CONSIST OF A 4" PERIMETER STRIPE.

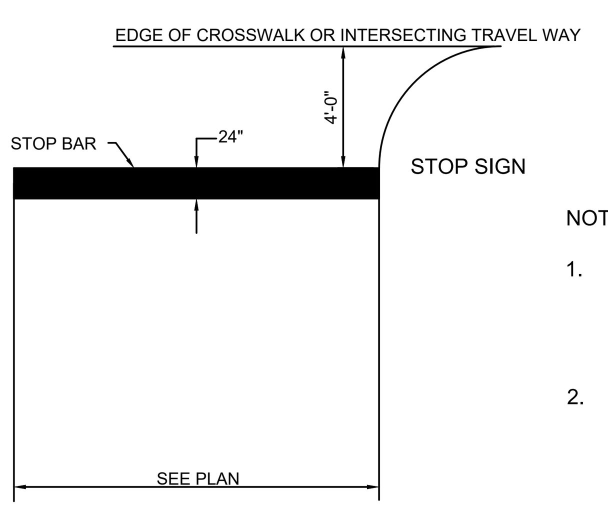


SOLID ARROW MARKINGS

USED AT EXITS FROM THE PARKING LOT TO PUBLIC STREETS

PAVEMENT MARKINGS

NOT TO SCALE



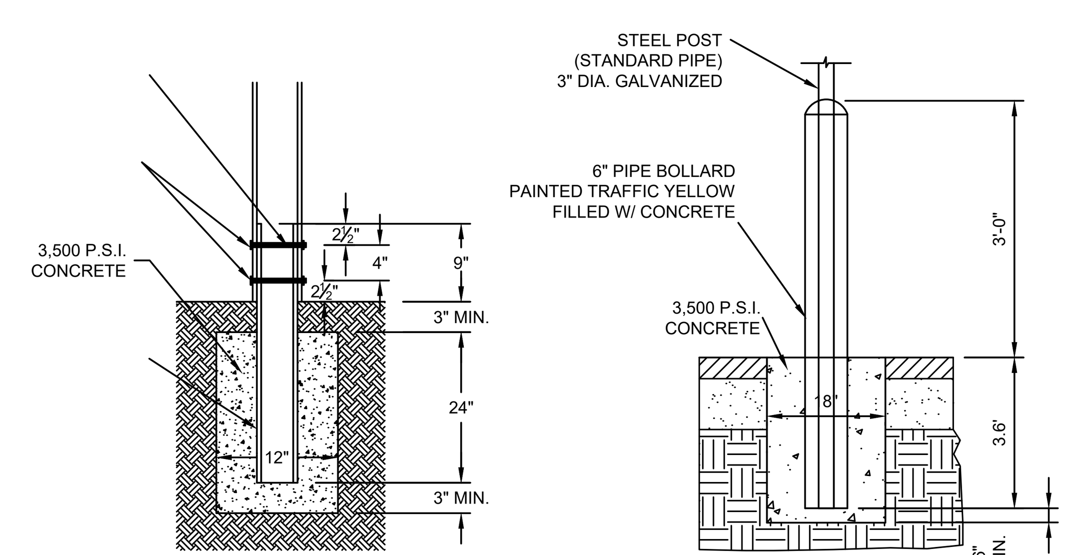
NOTE:

1. LINES SHALL BE APPLIED IN ACCORDANCE WITH SECTIONS 3B.16 AND 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

2. THESE BARS ARE TO BE PAINTED WHITE RETROREFLECTIVE.

TYPICAL STOP BAR MARKING

NOT TO SCALE



BASE DETAIL IN LAWN OR LANDSCAPED AREAS

ADA BASE DETAIL IN PAVED AREAS

TYPICAL SIGN BASE

NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

HORIZONTAL CONTROL, SIGNANGE & MARKING DETAILS

CHURCH SITE IMPROVEMENTS

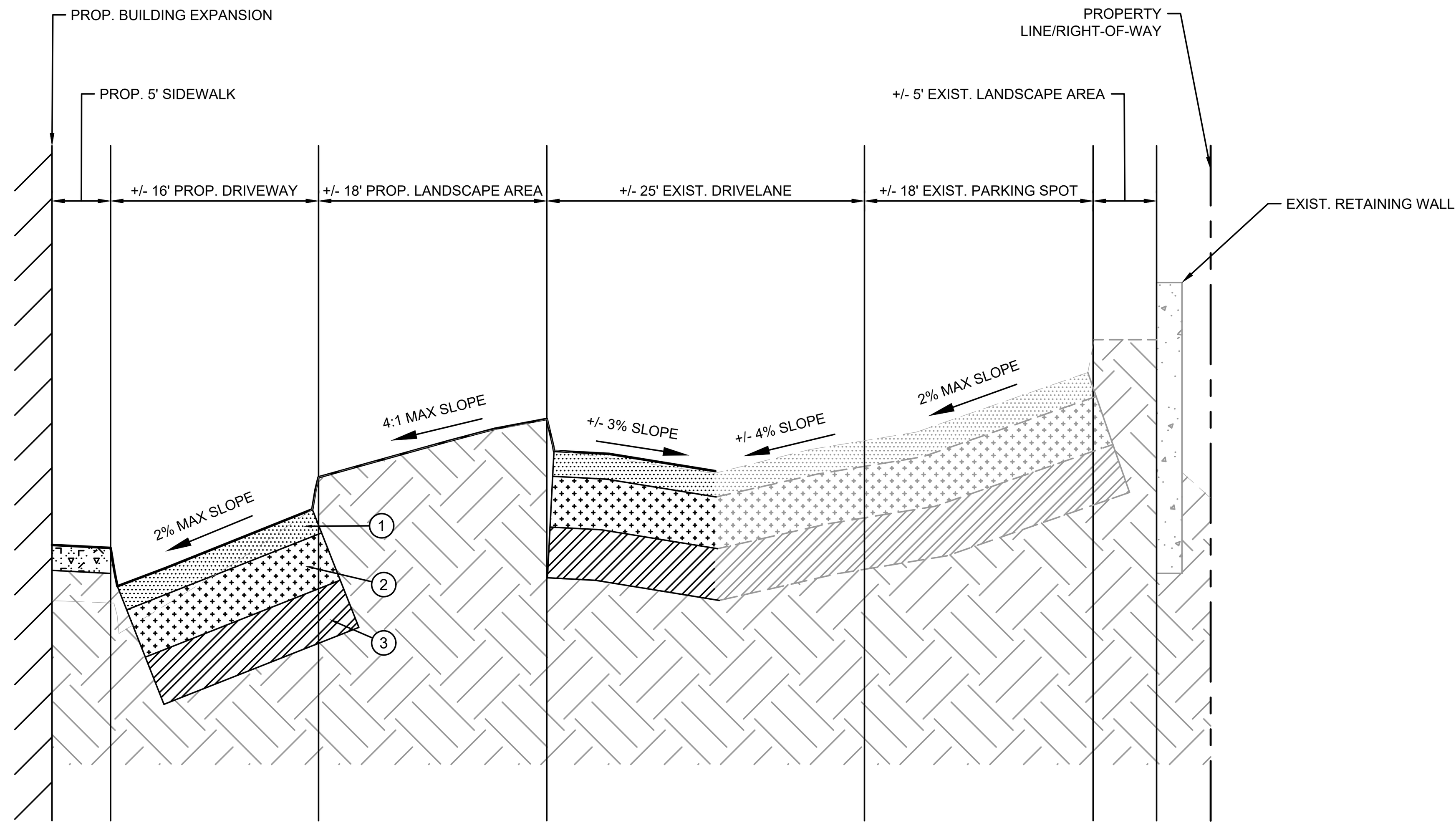
PREPARED FOR

ABUNDANT LIFE CHURCH

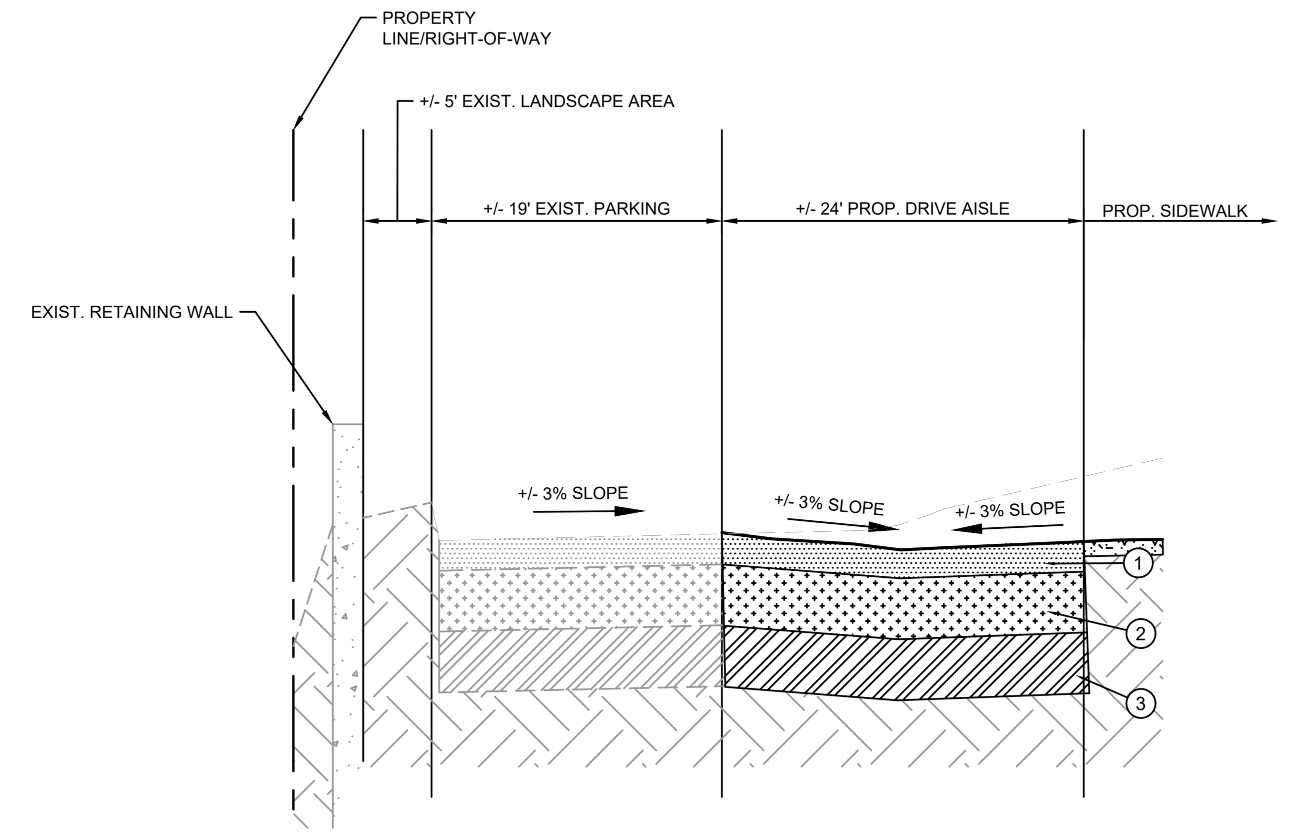
CITY OF MARGATE FL

SHEET NUMBER

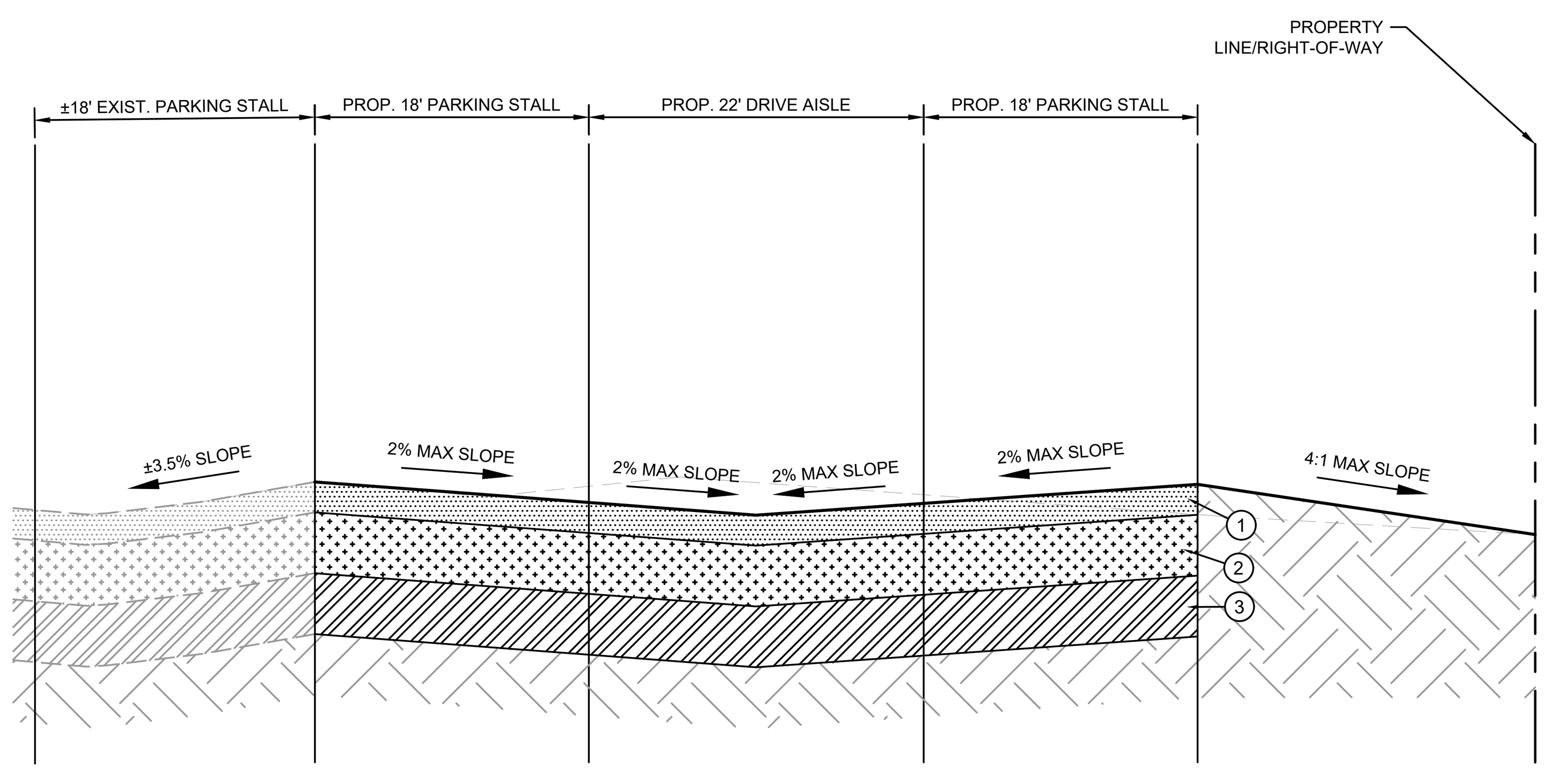
C-02



A
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



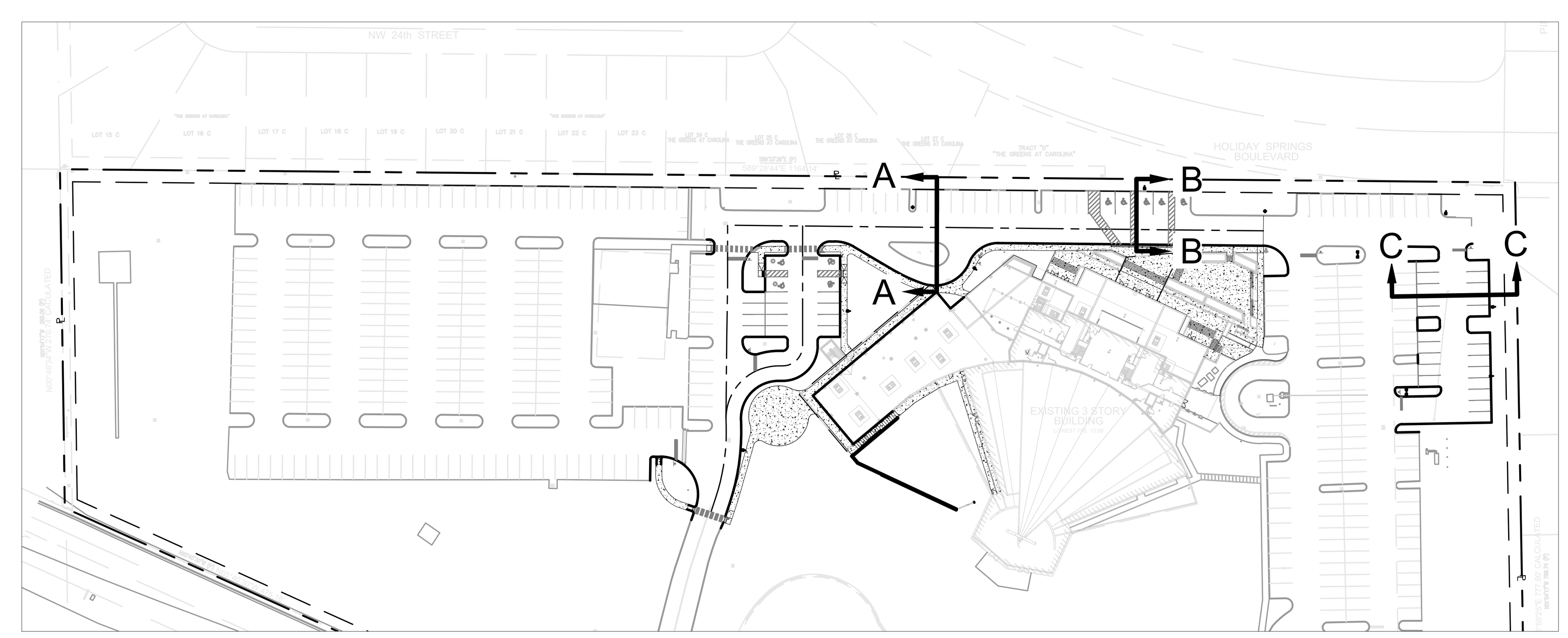
B
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



C
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE

LEGEND:

1. FULL DEPTH PAVEMENT
   2" SP-12.5 OR S-1 ASPHALTIC CONCRETE SURFACE COURSE (1500 MARSHALL STABILITY) ABOVE BASE
2. PROP. 8" CRUSHED CONCRETE BASE (LDR 100) COMPACTED TO A MIN. OF 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-135)
3. PROP. 12" STABILIZIED SUB BASE (LBR 40) COMPACTED TO A MIN. OF 98% OF MAX. DENSITY PER AASHTO T-180 MODIFIED PROCTOR



KEY MAP:

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

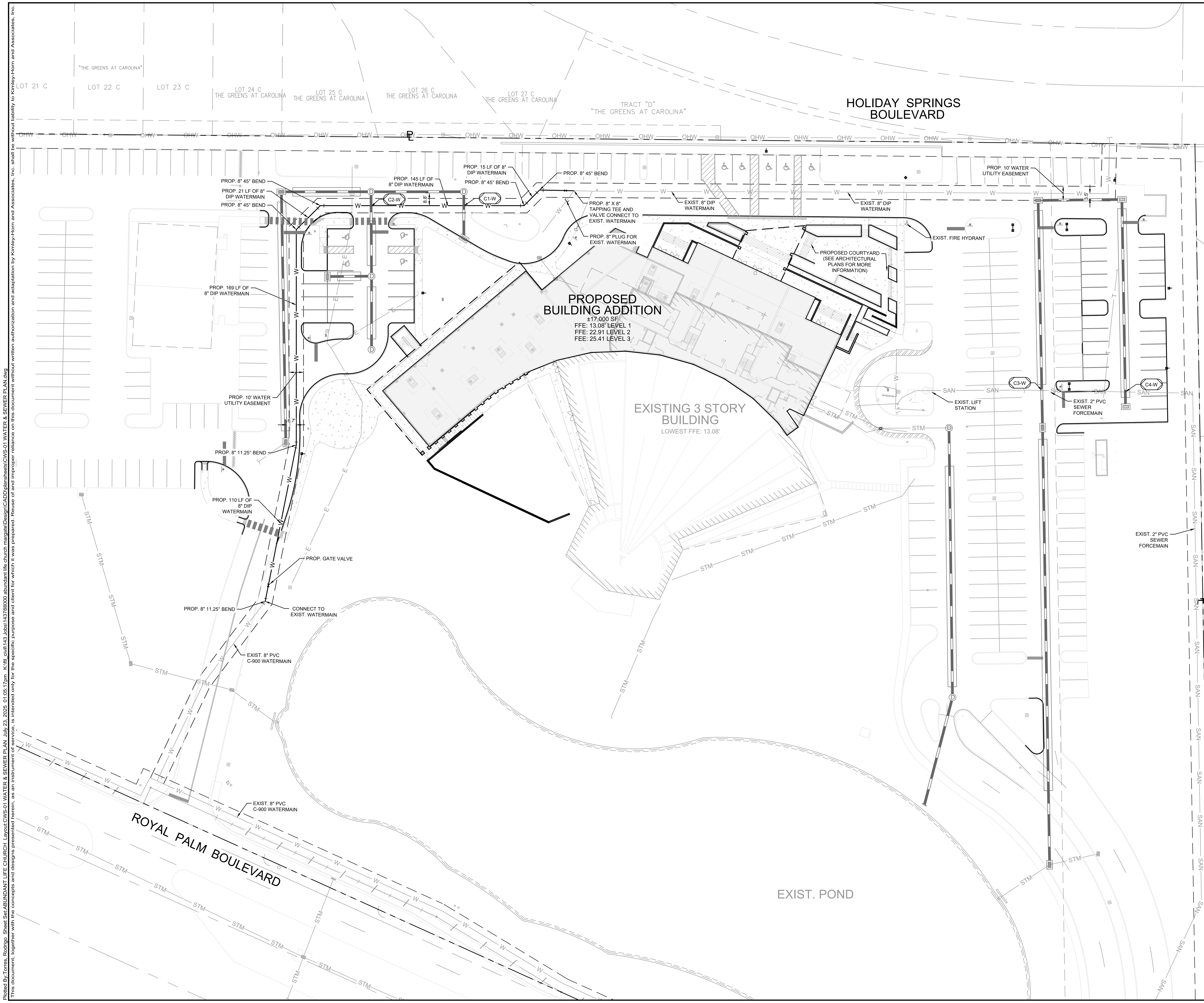
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

CROSS SECTIONS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
CS-01



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

Symbol	Description
R/W — P	PROPERTY LINE
	EXIST. RIGHT OF WAY
	EXIST. ROAD CENTERLINE
W	PROP. WATER LINE
	PROP. RIGHT OF WAY
SAN	EXIST. SANITARY SEWER LINE
W	EXIST. WATER LINE
	PROPOSED BUILDING ADDITION
	PROP. UTILITY EASEMENT

UTILITY CROSSING TABLE

C1-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 13.83' WATER TOP: 8.59' STORM BOT: 9.09' CLEARANCE: 0.50'
C2-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 12.53' WATER TOP: 7.00' STORM BOT: 7.50' CLEARANCE: 0.50'
C3-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 12.25' SEWER BOT: 9.25' STORM TOP: 7.82' CLEARANCE: 1.73'
C4-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 11.66' SEWER BOT: 8.66' STORM TOP: 8.17' CLEARANCE: 0.49'

NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO NOTIFY ENGINEER OF ANY CONFLICTS.
2. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
4. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY THE POWER LINES.
5. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
6. ALL PIPES SHALL BE LAID IN DRY TRENCH. ALL MUCK OR UNSUITABLE MATERIALS IN TRENCHES, INLETS OR MANHOLES SHALL BE REMOVED.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

WATER & SEWER PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
CWS-01

SHEET NUMBER
CWS-02

CHURCH SITE IMPROVEMENTS

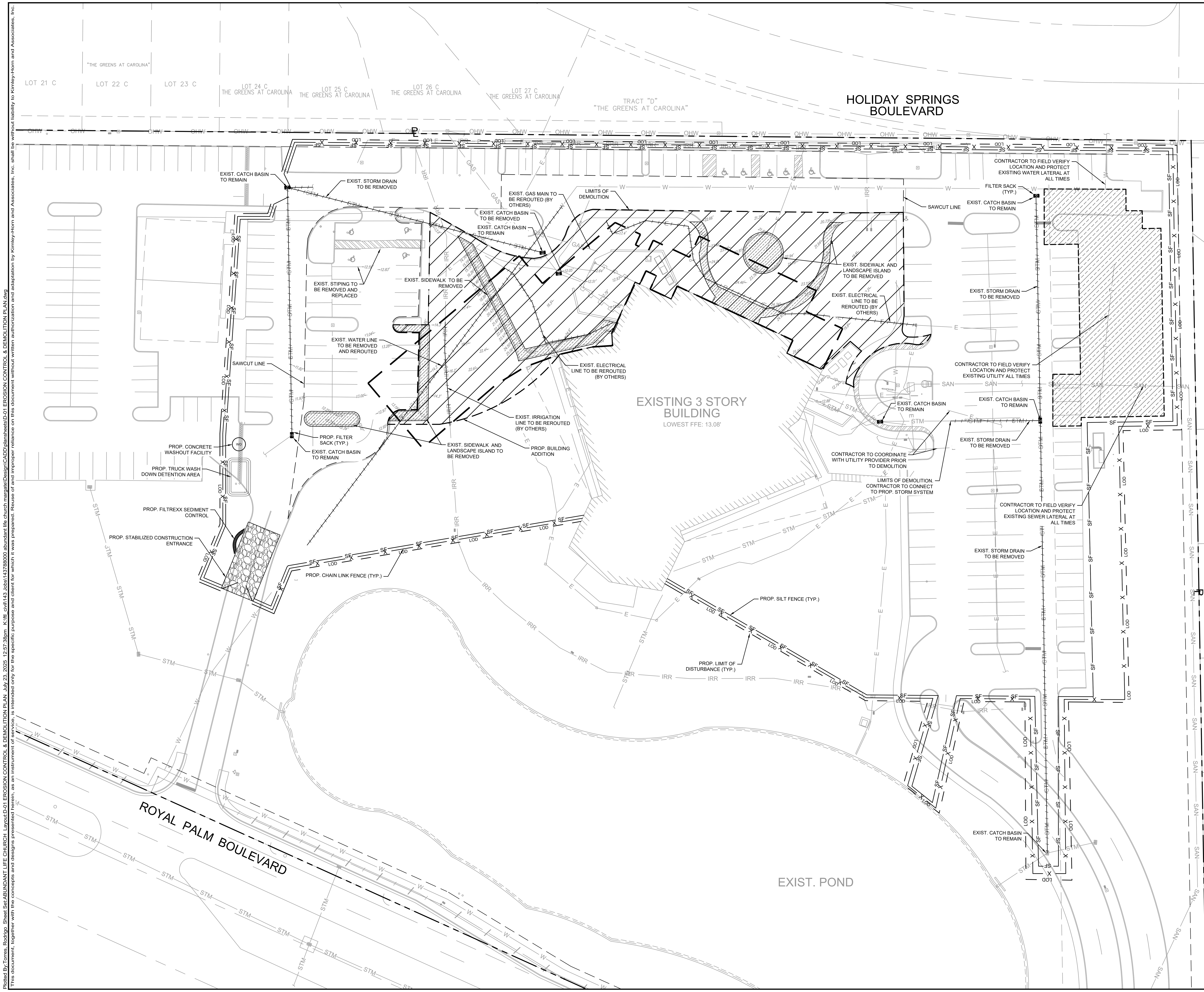
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

WATER & SEWER DETAILS

KHA PROJECT	143788000
DATE	5/19/2025
SCALE	AS SHOWN
DESIGNED BY	RR
DRAWN BY	KH
CHECKED BY	ARM

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

No.	REVISIONS	DATE	BY



LEGEND

R/W — ℙ	PROPERTY LINE
SF	SILT FENCE
X	CONSTRUCTION FENCE
LOD	LIMITS OF DISTURBANCE
	UTILITY TO BE REMOVED
	FILTER SACK
	EXISTING SIDEWALK, CURB, AND LANDSCAPE ISLANDS TO BE REMOVED
	LIMITS OF DEMOLITION
	PROPOSED BUILDING ADDITION

DEMOLITION NOTES:

1. ALL DEMOLITION SHALL BE WITHIN THE LIMITS OF DEMOLITION UNLESS OTHERWISE NOTED.
2. CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
3. PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN.
4. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
5. REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF SITE IN A LEGAL MANNER.
6. LOCATE EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES IN AREAS OF WORK IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING DEMOLITION OPERATION.
7. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING DEMOLITION, CONSULT PROJECT ENGINEER AND UTILITY OWNER FOR IMMEDIATE ACTION.
8. DEMOLISH AND COMPLETELY REMOVE FROM SITE, MATERIAL INDICATED ON PLAN OR NOTES.
9. THE USE OF EXPLOSIVES IS NOT PERMITTED.
10. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.
11. CONTRACTOR IS TO PROVIDE APPROVED EROSION CONTROL/SEDIMENTATION BARRIERS TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL AS NEEDED ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE.
12. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF DEMOLITION SHALL BE RE-LANDSCAPED AND IRRIGATION SYSTEMS REPAIRED TO PREVIOUS WORKING CONDITIONS.
13. ALL UTILITIES LOCATED WITHIN THE LIMITS OF DEMOLITION SHALL BE REMOVED TO THE LIMITS OF DEMOLITION AND/OR R/W AND CAPPED (WHERE APPLICABLE) UNLESS OTHERWISE NOTED.
14. ALL EXISTING CURBING AND ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION SHALL SAW CUT AND REMOVED UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO FIELD VERIFY PRESENCE OF ALL ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION.
16. CONTRACTOR IS TO OBTAIN PROPER PERMITS PRIOR TO DEMOLITION OF EXISTING STRUCTURES.
17. CONTRACTOR TO INSTALL SAFETY FENCE AND PROPERLY SIGN/MARK AROUND WORK AND STAGING AREA TO PREVENT PEDESTRIAN TRAFFIC FROM ENTERING.
18. CONTRACTOR SHALL PROVIDE ADEQUATE MAINTENANCE OF TRAFFIC AROUND WORK AND STAGING AREA.
19. ALL STRIPING TO BE REMOVED SHALL BE HYDROBLASTED.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

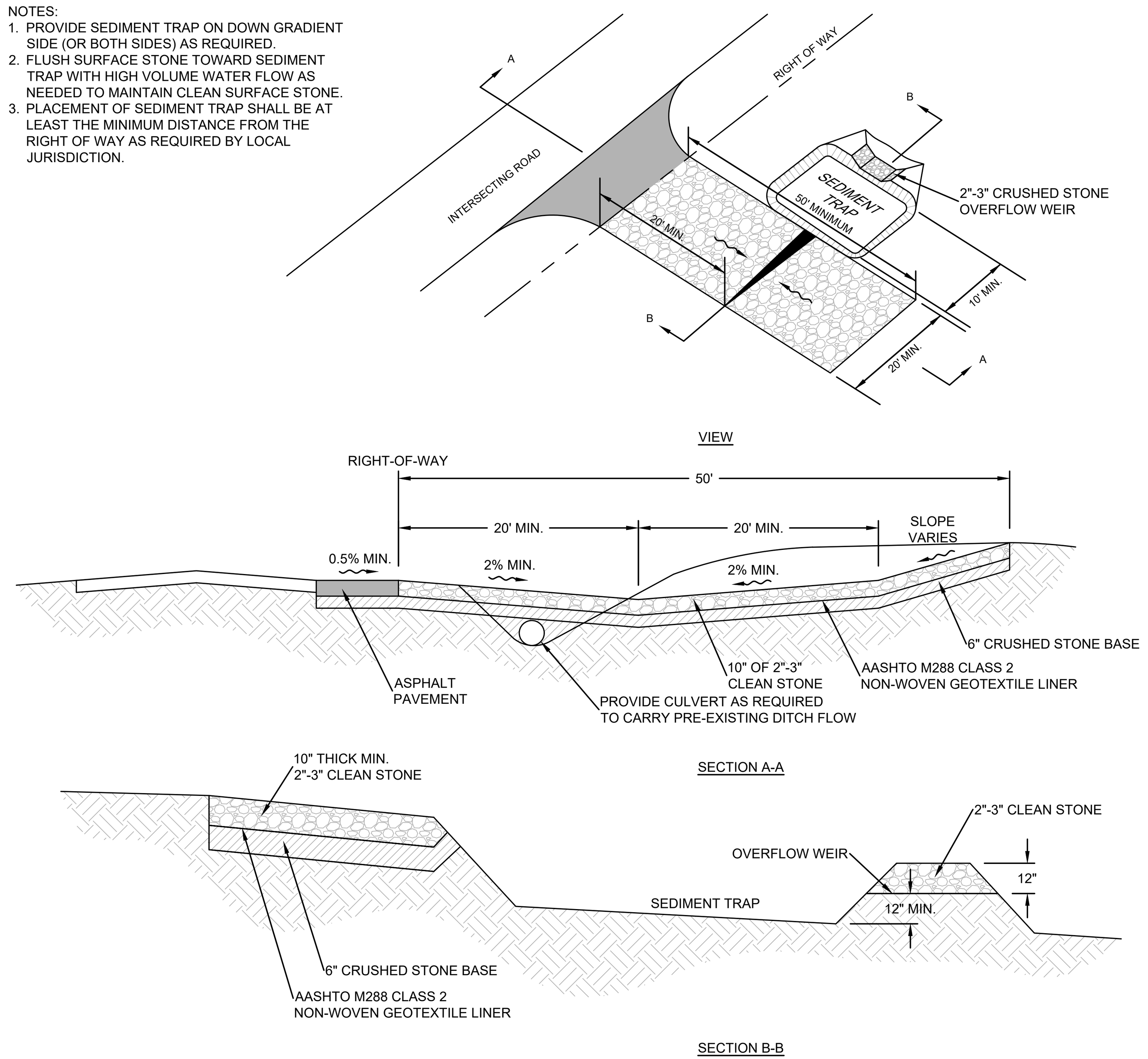
EROSION CONTROL & DEMOLITION PLAN

CHURCH SITE IMPROVEMENTS

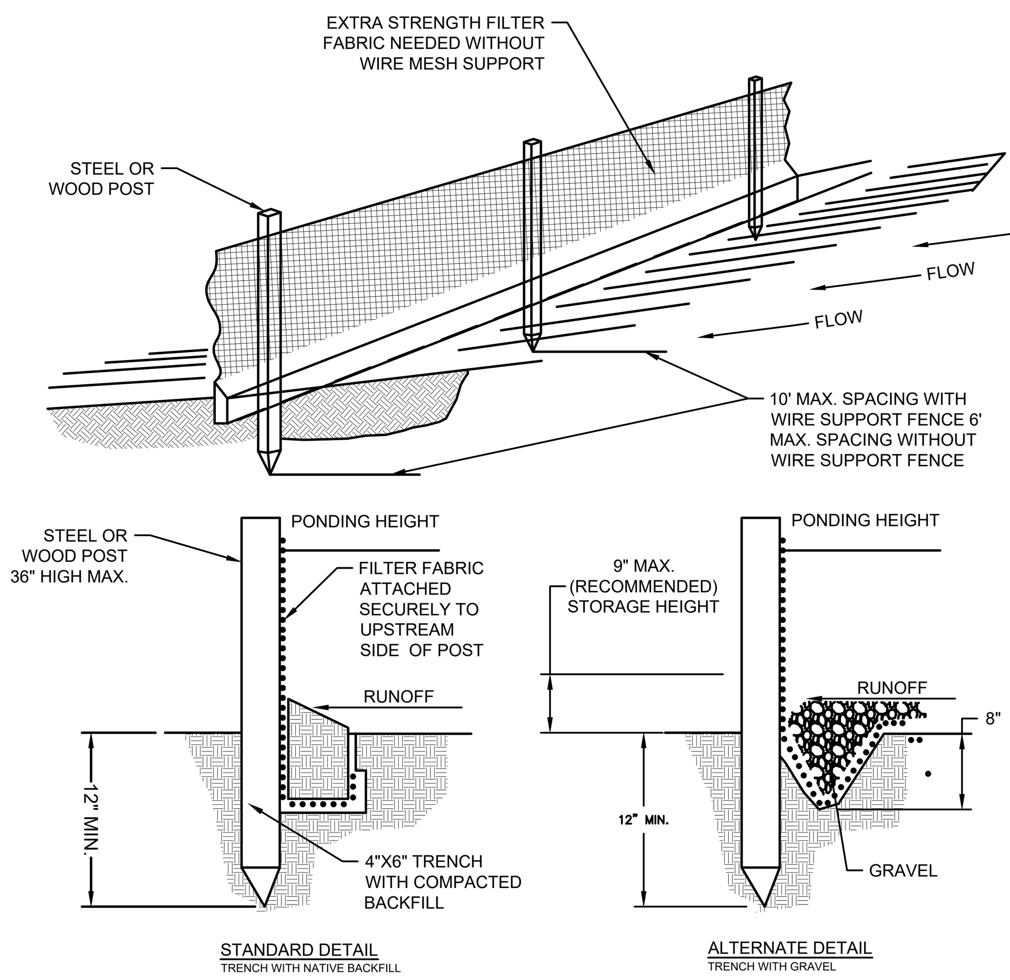
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
D-01

NOTES:
1. PROVIDE SEDIMENT TRAP ON DOWN GRADIENT SIDE (OR BOTH SIDES) AS REQUIRED.
2. FLUSH SURFACE STONE TOWARD SEDIMENT TRAP WITH HIGH VOLUME WATER FLOW AS NEEDED TO MAINTAIN CLEAN SURFACE STONE.
3. PLACEMENT OF SEDIMENT TRAP SHALL BE AT LEAST THE MINIMUM DISTANCE FROM THE RIGHT OF WAY AS REQUIRED BY LOCAL JURISDICTION.

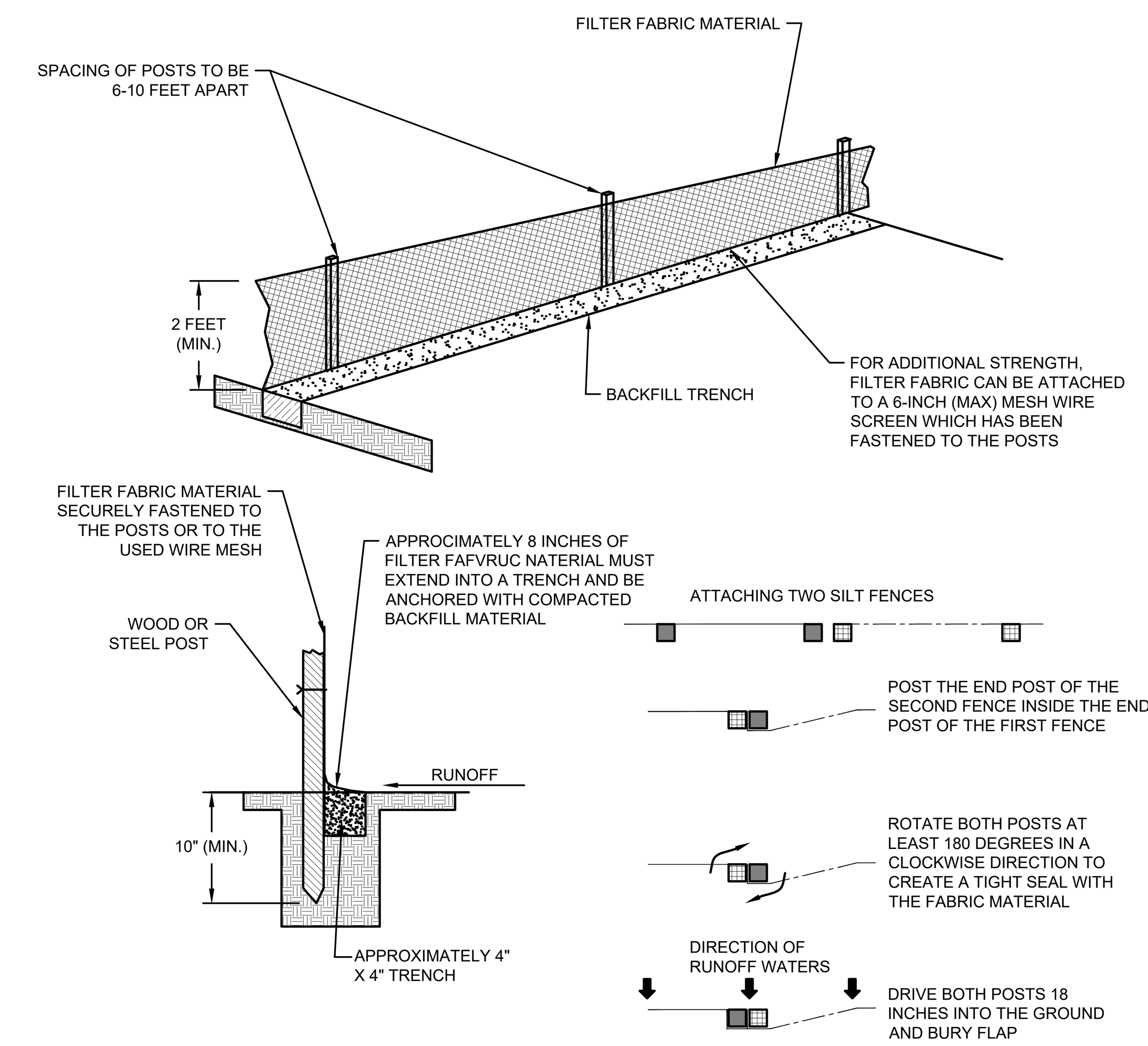


CONSTRUCTION ENTRANCE
NOT TO SCALE

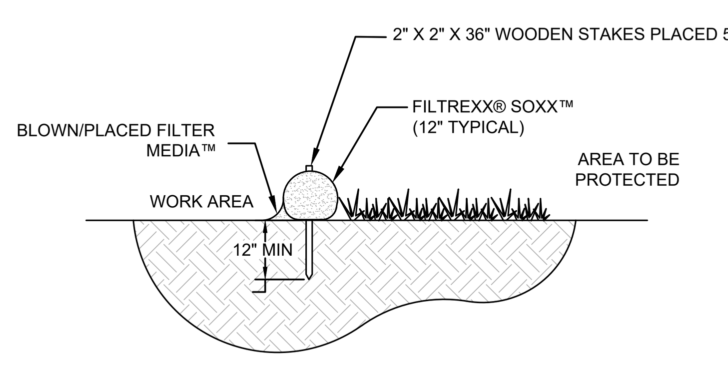


NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

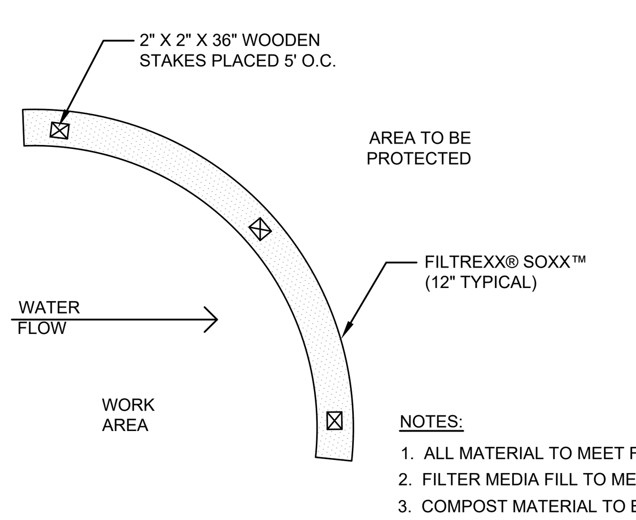
SILT FENCE DETAIL
NOT TO SCALE



SILT FENCE INSTALLATION DETAIL
NOT TO SCALE



SECTION

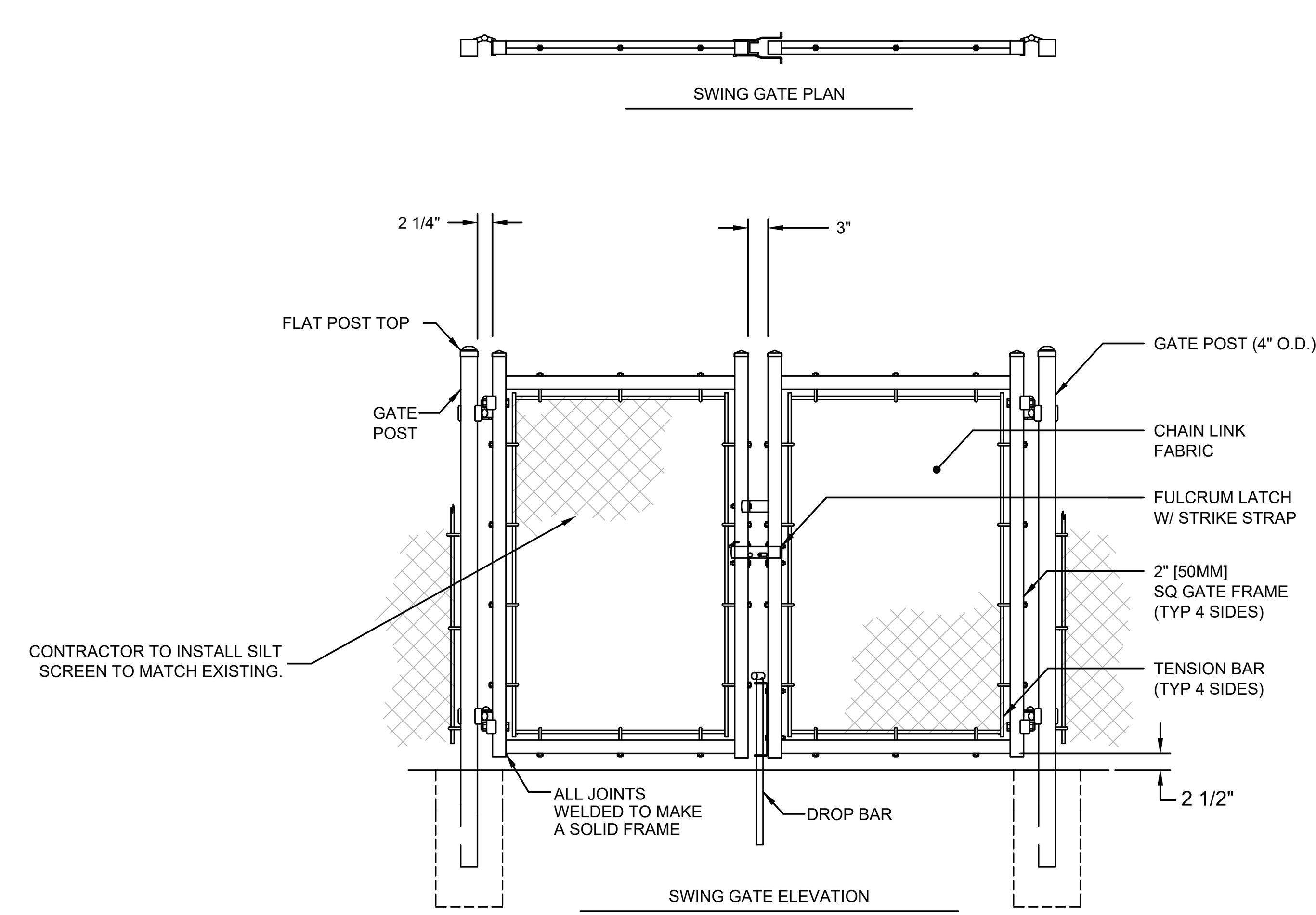


NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

PLAN

CONTRACTOR MAY USE SILT FENCE OF FILTREXX SOXX AS APPROPRIATE

FILTREXX SEDIMENT CONTROL
NOT TO SCALE



GATE NOTES:
1. GATE MATERIAL SHALL MATCH EXISTING GATES/FENCE.
2. BRACING SHALL BE PROVIDED.
3. GATES ARE MANUALLY OPERATED.

(FIRE DEPARTMENT ACCESSIBLE)

TEMPORARY 24" WIDE SWING GATES
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

EROSION CONTROL & DEMOLITION DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
D-02

I. GENERAL NOTES AND SPECIFICATIONS:

1. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE FLORIDA BUILDING CODE, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS AND SPECIFICATIONS AND ALL OTHER LOCAL, STATE AND FEDERAL REQUIREMENTS.

2. LOCATIONS, SIZE AND MATERIAL OF EXISTING UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS. NEITHER THE DEVELOPER, CLIENT, OWNER NOR THE ENGINEER OF RECORD GUARANTEES THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HORIZONTALLY AND VERTICALLY LOCATE AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL PHYSICALLY FIELD VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

3. ALL EXISTING UNDERGROUND OR ABOVEGROUND UTILITY PIPES, CABLES, DUCTS, EQUIPMENT, DEVICES, ETC. WITHIN OR OUTSIDE THE PROJECT CONSTRUCTION LIMITS WHICH ARE DAMAGED OR DISRUPTED AS A RESULT OF THE CONTRACTOR'S OPERATION, SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. REGARDLESS OF WHETHER THEY WERE SHOWN OR NOT SHOWN ON THE PLANS OR LOCATED OR NOT BY THE OWNER'S REPRESENTATIVE, THE UTILITY COMPANY, SUNSHINE STATE ONE-CALL OF FLORIDA, ETC.

4. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING ANY CONSTRUCTION WORK.

5. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

6. ALL DEFECTIVE WORK NOT ACCEPTED BY THE ENGINEER OF RECORD, BY THE OWNER'S REPRESENTATIVE, OR BY ANY GOVERNMENTAL PERMITTING REGULATORY AGENCY SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

7. ALL STAGING AREAS SHALL BE PROPERLY FENCED AND SECURED BY THE CONTRACTOR.

8. ALL AREAS WHICH ARE BEING EXCAVATED SHALL BE PROPERLY PROTECTED AND BARRICADED BY THE CONTRACTOR. ALL TRENCH WORK SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 C.F.R.S. 1926.650 SUBPART P AND THE FLORIDA TRENCH SAFETY ACT.

9. ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT, CURB AND GUTTERS, CURBS AND WALKS, SOD, LANDSCAPING, FENCE, ETC. DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER OR CLIENT.

10. TEMPORARY ASPHALT PAVEMENT SHALL BE APPLIED TO ALL TRENCHES, WITHIN AN EXISTING PAVED RIGHT 0F WAY, AT THE END OF EACH WORKDAY. PLATING MAY BE USED WITH THE RIGHT-OF-WAY OWNER'S PRIOR CONSENT.

11. PROVIDE FILL TO ENSURE THAT THE FINISH GRADE (INCLUDING SOD) IN LANDSCAPE AREAS ARE AT LEVEL OF CURBS AND/OR EDGE OF SIDEWALKS.

12. WHERE NEW GRADES BLEND INTO EXISTING GRADES IN LANDSCAPE AREAS PROVIDE A UNIFORM TRANSITION. PROTECT ALL EXISTING PAVEMENT AND LANDSCAPE AREAS THAT ARE TO REMAIN.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER AND SEWER SERVICE DURING THE CONSTRUCTION OF THE TIE-IN CONNECTION OF ALL PROPOSED WATER OR SANITARY SEWER SYSTEMS, TO ANY EXISTING WATER OR SANITARY MAINS AND SERVICE LINES. ABANDONMENT SHALL NOT OCCUR UNTIL THE PROPOSED WORK HAS BEEN APPROVED AND ACCEPTED FOR OPERATION BY THE ENGINEER OF RECORD AND THE LOCAL PUBLIC WORKS DEPARTMENT. ALL EXISTING FIRE HYDRANTS SHALL BE RECONNECTED TO THE PROPOSED WATER MAIN. PUBLIC WORKS DEPARTMENT FIELD OPERATIONS WILL COORDINATE WITH ENGINEER OF RECORD IF AN EXISTING FIRE HYDRANT SHALL BE REPLACED AS NEEDED OR REQUIRED.

14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE PUBLIC HEALTH AND ENSURE JOB SAFETY. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY & HEALTH AGENCY (OSHA) STANDARDS AND FEDERAL, STATE AND LOCAL GOVERNMENT SAFETY REQUIREMENTS.

15. THE CONTRACTOR SHALL ENSURE THAT OVERFLOWS OR RAW SEWAGE SPILLS DO NOT OCCUR DURING CONSTRUCTION OF PROPOSED SANITARY SEWER TIE-IN CONNECTIONS.

16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT STORM WATER POLLUTION PREVENTION AND EROSION CONTROL MEASURES AND PRACTICES DURING CONSTRUCTION IN ACCORDANCE WITH THE EROSION CONTROL PLAN/DETAILS AND THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT FOR CONSTRUCTION ACTIVITIES REQUIREMENTS.

17. CONTRACTOR SHALL ENSURE THAT ALL STORM WATER RUN-OFF WITHIN THE CONSTRUCTION AREA IS CONTAINED ON-SITE.

18. WHEN POWER POLES ARE ADJACENT TO ANY PROPOSED UTILITY, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION. THE SHORING AND SUPPORT METHODS SHALL BE APPROVED BY THE UTILITY COMPANY'S ENGINEERING DEPARTMENT.

19. DUE TO FEDERAL REGULATIONS, THE CONTRACTOR MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES AND MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE WITHIN THE PROJECT AREA.

20. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING SITE IMPROVEMENTS, FEATURES AND CONDITIONS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE FOLLOWING TOPOGRAPHIC BOUNDARY SURVEY SPECIFICALLY PREPARED FOR THIS PROJECT:

TITLE: "BOUNDARY AND TOPOGRAPHIC SURVEY"
DATE: 03/21/2023
ADDRESS: PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
(954) 572-1777

21. ALL ELEVATIONS SHOWN ARE BASED ON THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD88).

22. ALL UTILITY CONNECTIONS TO THE BLDG. SHALL BE CONSTRUCTED AND CAPPED OR PLUGGED FIVE FEET FROM THE PROPOSED BUILDING. CONTRACTOR SHALL PERFORM TIE-INS TO THE BUILDING. THE COST ASSOCIATED WITH THE TAPPING/PLUGGING OF THE UTILITIES SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.

23. CONTRACTOR SHALL COORDINATE WORK WITH OTHER UTILITY AND BUILDING TRADES WORKING ON THIS OR ADJACENT PROJECTS.

24. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF THE EXISTING SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL SHORING, SHEETING AND/OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY , EITHER PUBLIC OR PRIVATE, DURING CONSTRUCTION ACTIVITIES. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

25. AFTER LOCATING AND VERIFYING EXISTING UTILITY TIE IN POINTS, CONTRACTOR IS TO VERIFY THAT DESIGN COMPONENTS SUCH AS, BUT NOT LIMITED TO, PERCENT SLOPE, INVERT, TAP LOCATIONS, PIPE RUNS, INFRASTRUCTURE DEPTH, ETC. WILL STILL BE IN ACCORDANCE WITH THE ENGINEERING PLANS.

26. IF IT SHOULD BECOME NECESSARY TO STOP WORK FOR INDEFINITE PERIODS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE OR DETERIORATION OF THE WORK ALREADY PERFORMED.

II. PRE-CONSTRUCTION RESPONSIBILITIES:

1. 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.

2. CONTRACTOR MUST CONTACT THE ARCHITECT/ENGINEER OF RECORD TO ARRANGE FOR A PRE-CONSTRUCTION MEETING, A MINIMUM 2 BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

3. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA (1-800-432-4770) AND ALL KNOWN EXISTING UTILITY OWNERS AT LEAST 2 BUSINESS DAYS BEFORE DIGGING TO ALLOW FOR FIELD LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES IN THEIR EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

4. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.

5. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO ARRANGE FOR ANY REMOVAL, RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.

III. OBSERVATIONS AND TESTING:

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF PERFORMING ALL CIVIL RELATED TESTS. UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH TESTING UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO WITNESS THE TESTS.

2. THE ENGINEER OF RECORD WILL REQUIRE THAT THE FOLLOWING TESTS BE PERFORMED WITH ACCEPTABLE RESULTS:
   - A. SANITARY SEWAGE COLLECTION SYSTEM:
     - I. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE
     - II. INFILTRATION/EXFILTRATION TEST UP TO THE CONNECTING MANHOLE
     - III. PRESSURE TEST AS REQUIRED BY DRER
   - B. STORM DRAINAGE-(EXFILTRATION TRENCH DEPTH)
     - I. EXFILTRATION TRENCH DEPTH
     - II.LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE (IF APPLICABLE)
   - C. DRAINAGE WELL SPECIFIC CAPACITY TEST.
   - D. WATER SYSTEM-(PRESSURE TEST AND BACTERIOLOGICAL TEST)
   - E. SUBGRADE - SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK.
   - F. LIME ROCK BASE - SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT. (FLAT BOARDING ALSO REQUIRED.)
   - G. ASPHALT PAVEMENT
   - H. FINAL WALK-THROUGH INSPECTION - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPLICABLE REGULATORY AGENCIES FOR INSPECTION REQUIREMENTS.
   - I. CONCRETE FORMWORK AND ADA SLOPE VERIFICATIONS.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE FOLLOWING EVENTS:
   - A. PRIOR TO PLACING BALLAST ROCK WITHIN EXFILTRATION TRENCH AND PIPE RUNS TO MEASURE DEPTH AND WIDTH, AS WELL AS DIRECTIONS RESPECTIVELY.
   - B. PRIOR TO BACKFILLING WATER MAINS AND SERVICES
   - C. PRIOR TO BACKFILLING SANITARY SEWER MAINS AND SERVICES
   - D. AFTER COMPACTION OF LIMEROCK BASE AND PRIOR TO PLACEMENT OF FIRST LIFT OF ASPHALT
   - E. AFTER 2ND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS
   - F. INSTALLING CONNECTIONS TO EXISTING WATER AND SEWER MAINS/SERVICES AFTER SECOND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS.
   - G. AT SUBSTANTIAL COMPLETION
   - H. FINAL INSPECTION UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH THESE ACTIVITIES, UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO PERFORM AN INSPECTION.

4. SHOULD THE CONTRACTOR FAIL TO GIVE THE ENGINEER OF RECORD ADVANCE NOTICE OF TESTING AND INSPECTIONS AS SPECIFIED ABOVE, THE ENGINEER SHALL RESERVE THE RIGHT TO REFUSE ISSUANCE OF ANY CERTIFICATIONS OF COMPLETION AND FINAL INSPECTIONS, AND RESERVES THE RIGHT TO RECOMMEND THAT ANY CONTRACT AMOUNTS STILL HELD IN RETAINAGE NOT BE RELEASED. CITY INSPECTOR REPORTS SHALL NOT BE ACCEPTED AS A SUBSTITUTE FOR THE ENGINEER'S PRESENCE AT THE TESTING AND INSPECTION INTERVALS SPECIFIED ABOVE.

IV. SHOP DRAWINGS:

1. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS:
   - A. DRAINAGE STRUCTURES, INCLUDING CATCH BASINS, WELL BOXES, PUMPS, MANHOLES/INLET FRAMES/GRATES, BAFFLES, ETC.
   - B. ALL DRAINAGE PIPES.
   - C. TRENCH DRAINS.
   - D. EXFILTRATION FILTER FABRIC
   - E. ALL WATER AND SEWER SYSTEM COMPONENTS
   - F. ASPHALT PAVEMENT MIX DESIGN
   - G. LIMEROCK MATERIAL
   - H. CONCRETE MIX FOR PAVEMENT
   - I. MATERIAL SUBSTITUTION REQUESTS
   - J. EROSION CONTROL MATERIALS
   - K. FILL MATERIAL

2. ALL PRECAST STRUCTURAL DRAWINGS MUST BE SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED ENGINEER OF RECORD STATING THAT THE STRUCTURE(S) MEETS THE H20 LOAD RATING REQUIREMENTS. STRUCTURAL SHOP DRAWINGS WILL BE REJECTED AND NOT REVIEWED IF NOT SEALED BY A FLORIDA LICENSED ENGINEER. IN ADDITION, SOME CITIES, COUNTIES, STATE AND/OR NATIONAL REGULATORY AGENCIES REQUIRE THEIR OWN INDIVIDUAL REVIEW AND APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY SHOP DRAWING APPROVALS AS REQUIRED.

V. TEMPORARY FACILITIES:

1. TEMPORARY FACILITIES

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY, DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION, IF APPLICABLE.

C. CONTRACTOR SHALL OBTAIN THE ENGINEERING DESIGN AND PERMIT FOR SUCH FACILITIES AT THE CONTRACTOR'S SOLE COST.

2. TRAFFIC REGULATION

A. THE CONTRACTOR SHALL PROVIDE ALL MAINTENANCE OF TRAFFIC DURING CONSTRUCTION. TO INCLUDE BUT IS NOT LIMITED TO WARNING SIGNALS, SIGNS, LIGHTS AND FLAG PERSONS AS NECESSARY WITHIN PUBLIC RIGHT-OF-WAYS IN ACCORDANCE WITH THE LOCAL PUBLIC WORKS DEPARTMENT.

B. 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 AT ALL TIMES. SPECIAL PRECAUTION IS TO BE TAKEN IN PATHS OF EGRESS.

C. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE LOCAL PUBLIC WORKS DEPARTMENT.

VI. PROJECT CLOSE OUT:

1. CLEANING UP

A. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER AND THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN. UPON FINAL CLEANUP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH, AND THE PAVED AREAS SHALL BE BROOMED AND PRESSURE CLEANED.

B. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

C. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS AND ANY OTHER IMPROVEMENTS REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION WHICH EXISTED PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

D. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE 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 THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION. ANY ADVERSE EFFECTS OR BUILDUP IN PUBLIC INFRASTRUCTURE WILL BE CLEANED AND REDUCED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.

E. ALL DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATED MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENGINEER OF RECORD. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.

2. ALL PROPERTY MONUMENTS OR PERMANENT SURVEY REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

3. PROJECT RECORD DOCUMENTS

A. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS. PRIOR APPROVAL FROM THE ENGINEER OF RECORD IS REQUIRED FOR SAID FACILITIES.

B. AT THE COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL SUBMIT THREE (3) SIGNED & SEALED AS-BUILT DRAWINGS, SIGNED & SEALED BY A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. ADDITIONAL AS-BUILT DRAWINGS REQUIRED BY THE CITY, COUNTY, STATE AND/OR FEDERAL REGULATORY AGENCIES SHALL ALSO BE SUBMITTED ONCE REQUIRED. THE AS-BUILT DRAWINGS SHALL INDICATE LOCATION, SIZE, ELEVATION, MATERIAL, ETC., OF ALL WORK COMPLETED UNDER THIS CONTRACT AND OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.

VII. STORM DRAINAGE:

1. WHEN EXISTING MANHOLE RINGS, CATCH BASIN GRATE AND FRAMES, VALVE BOXES, PULL BOXES OR OTHER UTILITY CASTINGS ARE ENCOUNTERED WITHIN THE PROPOSED LIMITS OF WORK THE CONTRACTOR SHALL FIELD ADJUST THE EXISTING RING AND FRAME, GRATE AND FRAME, VALVE BOXES OR PULL BOXES TO MATCH THE PROPOSED ELEVATION. SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE INDICATED.

3. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE DOUBLE WALLED SMOOTH INTERIOR PIPE AND SHALL MEET THE REQUIREMENTS OF AASHTO M294 TYPE S, MPT AND ASTM D2321, D3212, F1417, F477, F667 OR AS NOTED ON THE CONSTRUCTION DRAWINGS.

4. CONTRACTOR SHALL VACUUM CLEAN AND REMOVE ALL SILT, SEDIMENT AND DEBRIS FROM ALL OF THE EXISTING AND PROPOSED DRAINAGE STRUCTURES AND PIPE NETWORK WITHIN THE PROJECT LIMITS PRIOR TO FINAL ACCEPTANCE OF DRAINAGE SYSTEM. ALL COST OF SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

5. ALL DRAINAGE WORK SHALL CONFORM TO THE GOVERNING JURISDICTIONAL AGENCY REGULATIONS AND STANDARDS

6. UNLESS OTHERWISE SPECIFIED ON THE PLANS, MINIMUM COVER OVER ALL STORM DRAINAGE PIPE SHALL BE 36-INCHES. CONTRACTOR SHALL AVOID ALL UNNECESSARY CROSSINGS BY HEAVY CONSTRUCTION EQUIPMENT DURING CONSTRUCTION.

7. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL CATCH BASINS, MANHOLES, FRAMES AND GRATES, RINGS AND COVERS, WITHIN PRIVATE PROPERTY, SHALL BE DESIGNED TO WITHSTAND AN AASHTO AND XDOT H20 LOAD RATING AND SHALL BE OBTAINED FROM PLAN SPECIFIED MANUFACTURERS OR APPROVED EQUIVALENT MANUFACTURER.

VIII. EARTHWORK AND PAVING:

1. ALL UNDERGROUND UTILITY WORK SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF SUB BASE. ANY SUBGRADE RE-WORK DUE TO UNDERGROUND INFRASTRUCTURE INCONSISTENCIES WILL BE DONE AT THE CONTRACTOR'S EXPENSE.

2. PROPOSED ASPHALT PAVEMENT SHALL BE CONNECTED TO EXISTING AS PER STANDARD DETAILS. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS ON NEW SIDEWALK OR NEW PAVEMENT.

3. SAW CUT EXISTING CONCRETE WALKS, CURB AND GUTTERS, AND ASPHALT OR CONCRETE PAVEMENT CAREFULLY AND IN A STRAIGHT LINE WHERE UNDERGROUND WORK IS REQUIRED. WHERE PROPOSED ASPHALT OR CONCRETE PAVEMENT, CURB, SIDEWALK, ETC. WILL MEET AN EXISTING LOCATION CUT CONCRETE WALKS, CONCRETE PAVEMENT, CURB AND GUTTERS AT NEAREST EXISTING JOINT.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley-Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

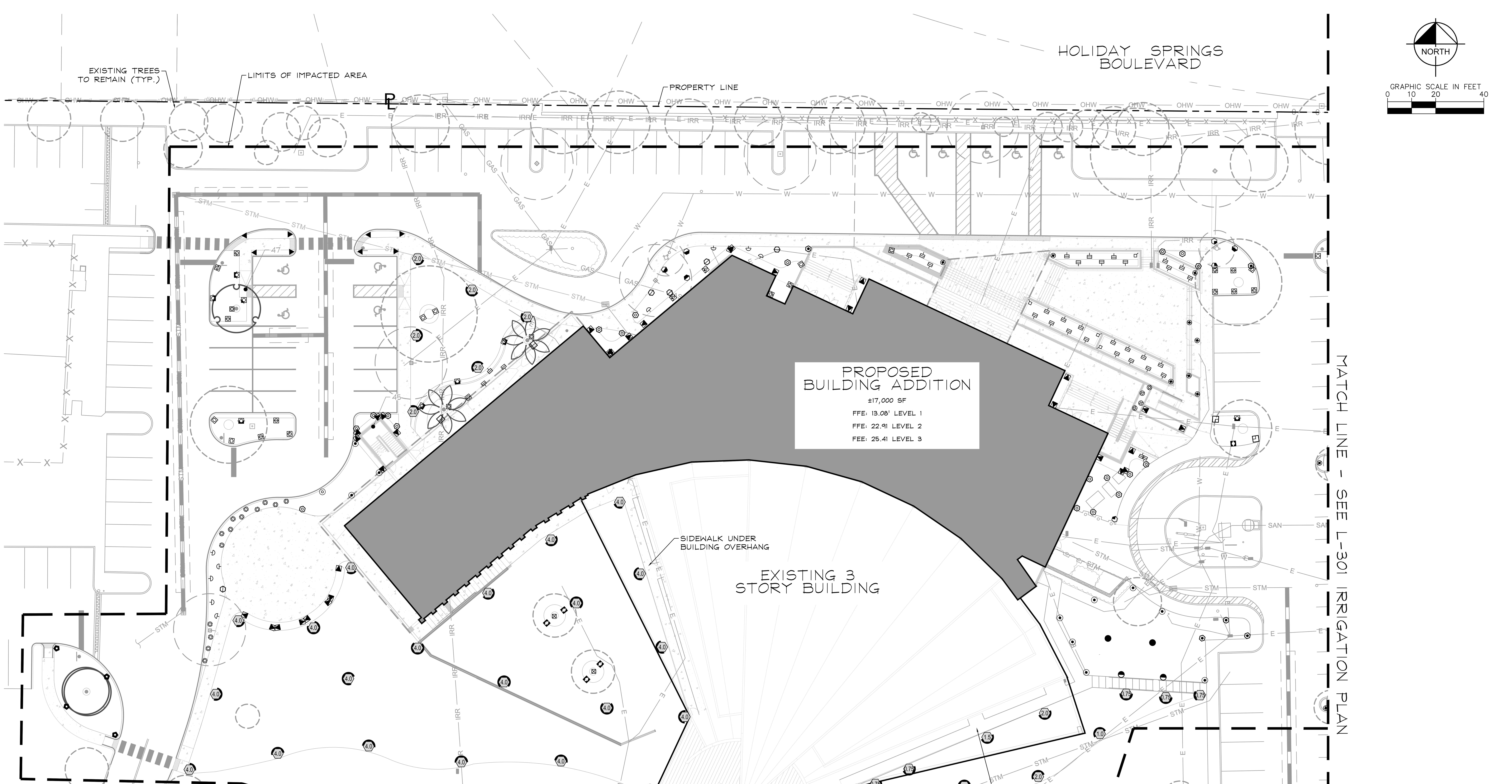
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000	DATE 7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

GENERAL NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
G-01



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
	Rain Bird 1804-PRS-1400 Flood

SYMBOL	MANUFACTURER/MODEL
0.75	Rain Bird 3504-PC 0.75
1.0	Rain Bird 3504-PC 1.0
1.5	Rain Bird 3504-PC 1.5
2.0	Rain Bird 3504-PC 2.0
4.0	Rain Bird 3504-PC 4.0

Valve Callout
\# Valve Number
\# Valve Flow
\#" Valve Size

No.	REVISIONS	DATE	BY

Kimley-Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

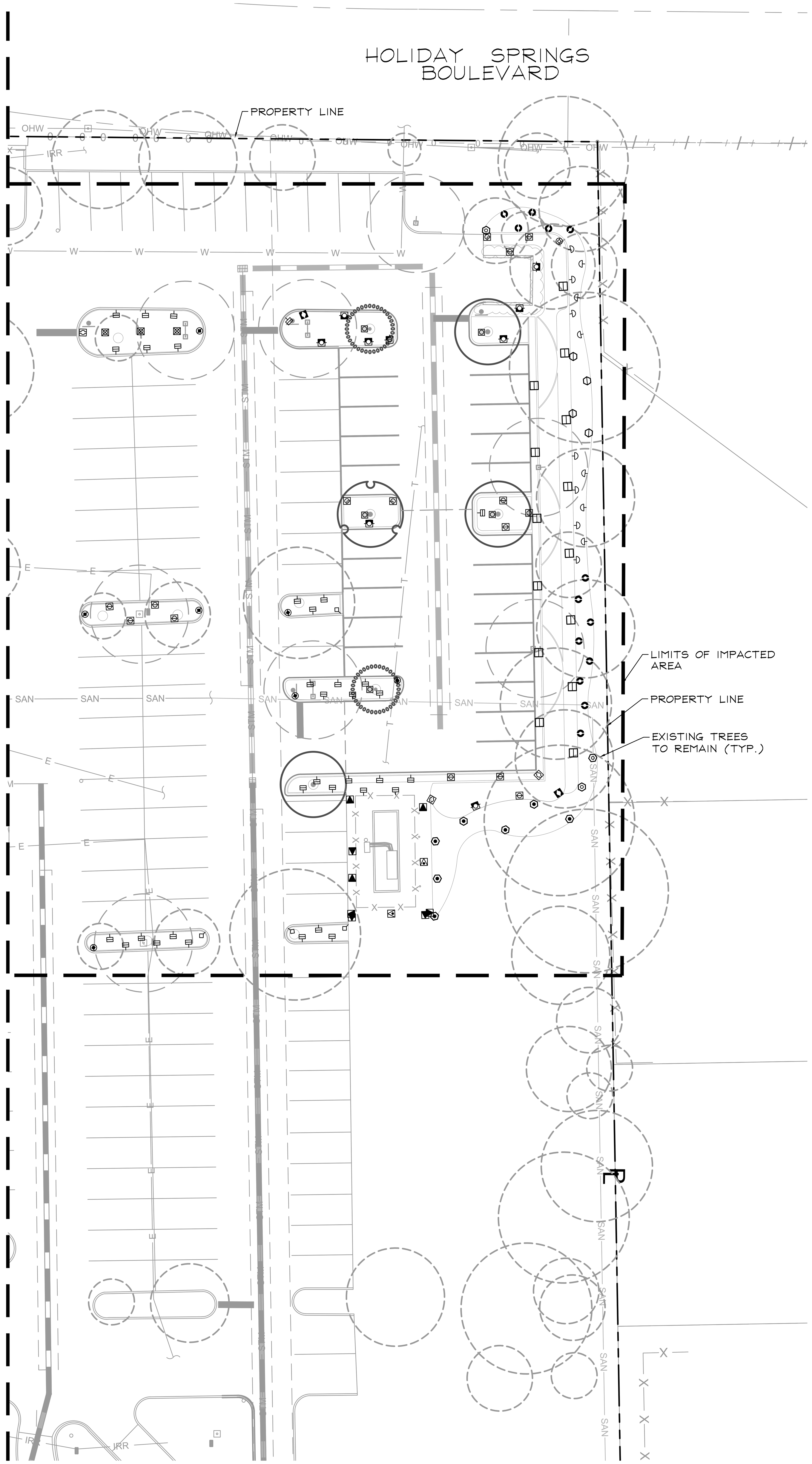
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-01



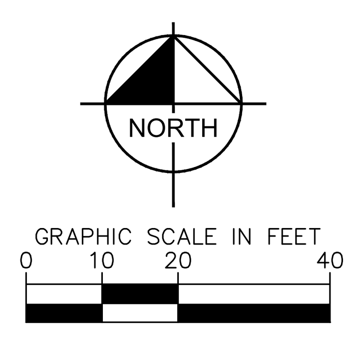
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	8	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	22	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	9	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	7	30
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	4	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	76	30
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	44	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	77	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	32	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	17	30
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	18	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	39	30
1401 1402 1404	Rain Bird 1804-PRS-1400 Flood Flood Bubbler 4in. popup with pressure regulating device. Install w/ PA-80 adapter.	8	20

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
0.75	Rain Bird 3504-PC 0.75 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	6	25	0.54	15'
1.0	Rain Bird 3504-PC 1.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	2	25	0.77	20'
1.5	Rain Bird 3504-PC 1.5 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	1	25	1.06	23'
2.0	Rain Bird 3504-PC 2.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	9	25	1.4	27'
4.0	Rain Bird 3504-PC 4.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	21	25	2.97	31'

Valve Callout
\# Valve Number
\# Valve Flow
\#" Valve Size

PLAN IS DIAGRAMMATIC. CONTRACTOR SHALL INSTALL ALL IRRIGATION EQUIPMENT IN LANDSCAPE OR TURF AREAS WITHIN PROJECT LIMITS.



IRRIGATION SYSTEM NOTES

1. CONTRACTOR SHALL REFER TO THE IRRIGATION DETAILS, IRRIGATION SCHEDULE, SPECIFICATIONS AND ALL CONTRACT DOCUMENTS FOR FURTHER AND COMPLETE INSTRUCTIONS.
2. IRRIGATION QUANTITIES ARE PROVIDED FOR CONVENIENCE. IN THE EVENT OF QUANTITY DISCREPANCIES THE DRAWING SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING.
3. ANY SUBSTITUTIONS FOR SPECIFIED IRRIGATION EQUIPMENT MUST BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL FIELD ADJUST LOCATION OF IRRIGATION EQUIPMENT AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR INTERFERE WITH EXISTING ABOVE GROUND ELEMENTS. ALL FIELD ADJUSTMENTS SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
5. CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LIMITS OF WORK AND EXISTING CONDITIONS AND VERIFY ALL INFORMATION. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IN WRITING WITHIN SEVEN CALENDAR DAYS OF NOTICE TO PROCEED.
6. IRRIGATION PLAN IS DIAGRAMMATIC. EQUIPMENT SHOWN ON IMPERVIOUS SURFACES IS FOR GRAPHIC CLARITY UNLESS OTHERWISE NOTED. CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITHIN LANDSCAPE AREAS IN PROPERTY LIMITS.

THE IRRIGATION SYSTEM IS DESIGNED TO OPERATE WITH A SOURCE PROVIDING xx GPM AT xx PSI.
SPRAY HEAD DESIGN PRESSURE: 30 PSI
BUBBLER DESIGN PRESSURE: 30 PSI
ROTOR DESIGN PRESSURE: 25 PSI

SLEEVE SIZE SCHEDULE (SCH 40)

PIPE SIZE (or combination of pipe sizes)	SLEEVE SIZE
1"	2"
1½"	4"
2"	4"
3"	6"
4"	8"
6"	12"

REVISIONS | No. | DATE | BY

Kimley-Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

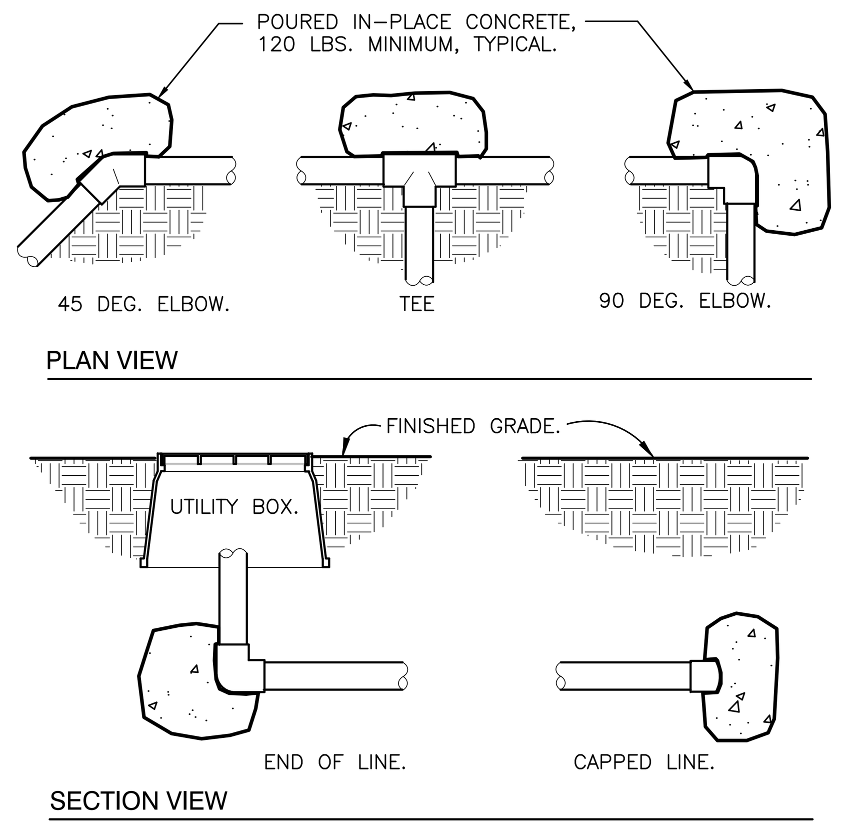
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION PLAN

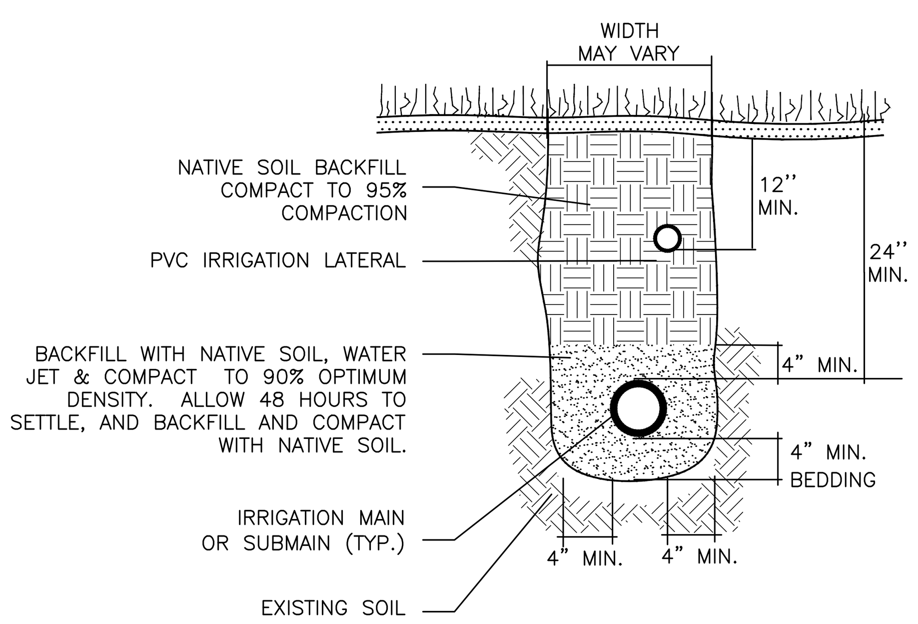
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-02



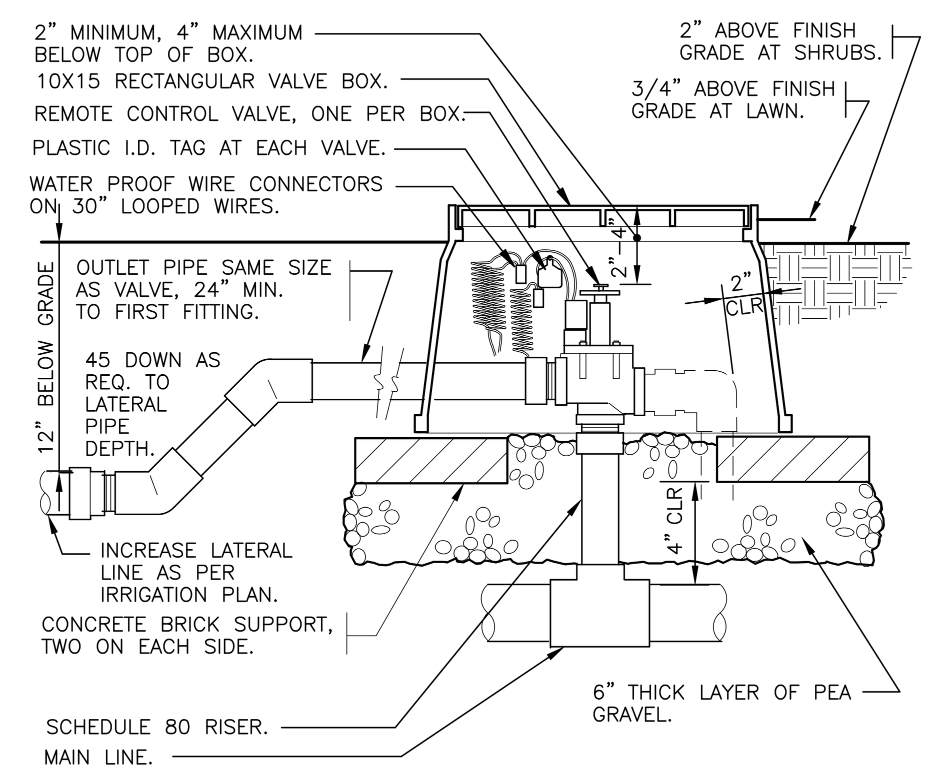
1 THRUST BLOCKING

3/4" = 1'-0" 32 8409.76-01



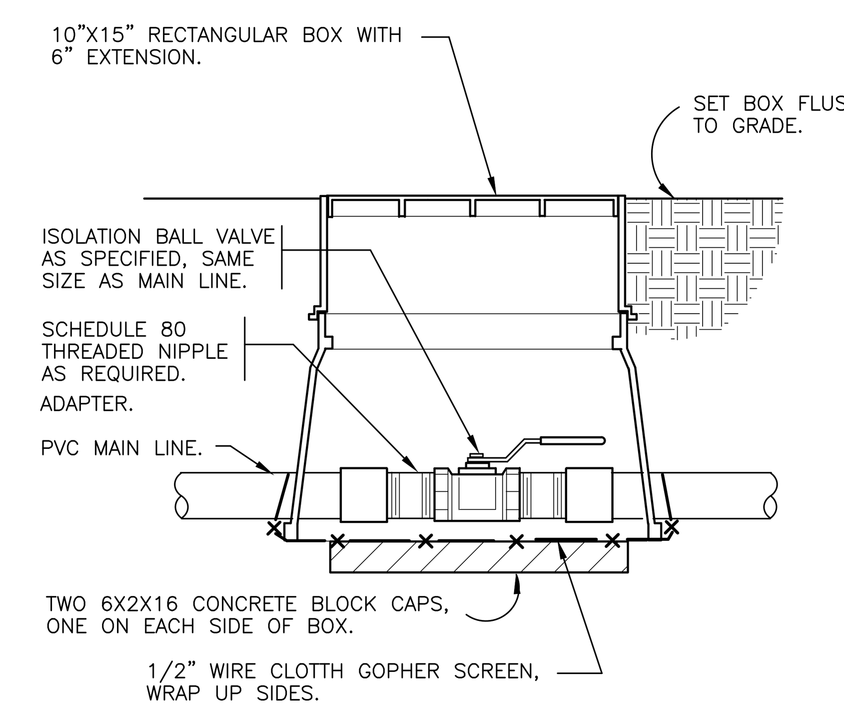
2 TRENCHING DETAIL

NOT TO SCALE 32 8409.76-03



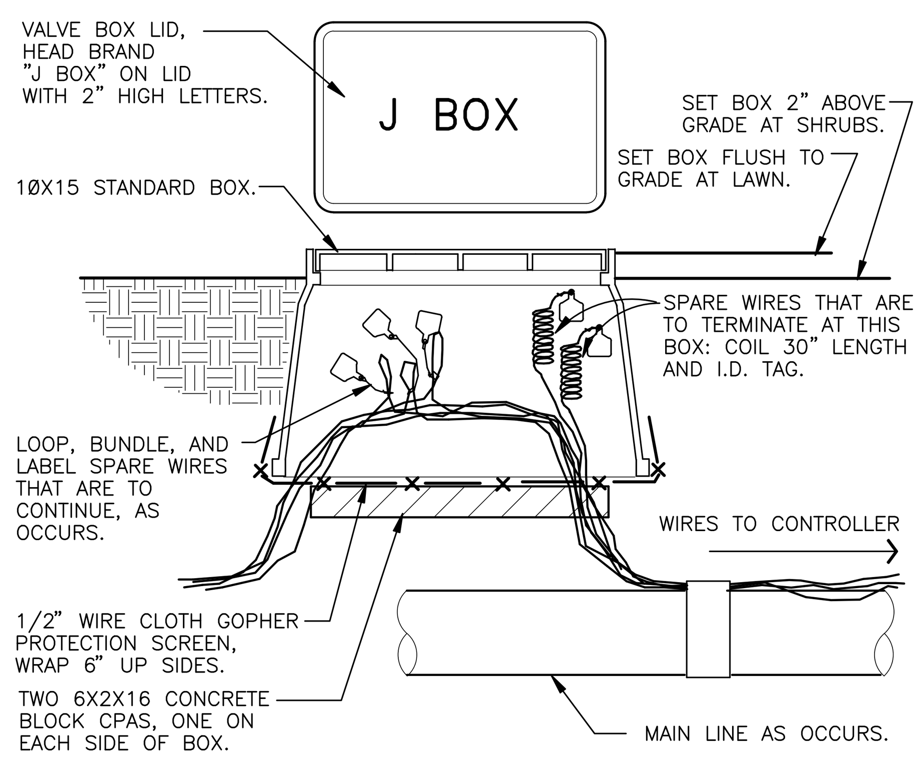
3 ELECTRIC REMOTE CONTROL VALVE

1 1/2" = 1'-0" 32 8406.13-01



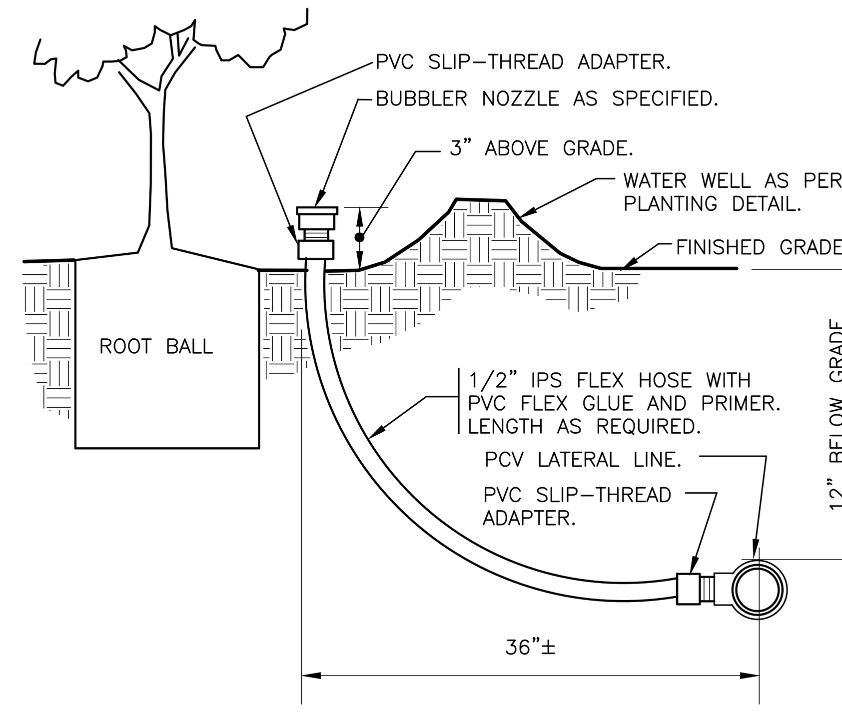
4 BRASS BALL ISOLATION VALVE

1 1/2" = 1'-0" 32 8406.33-02



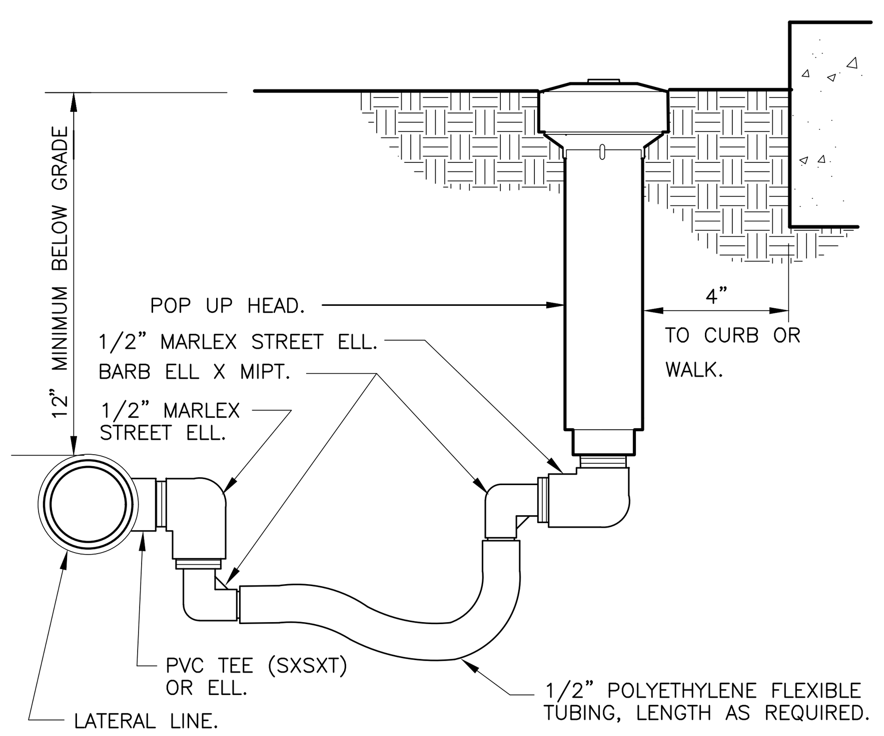
5 WIRE BUNDLE JUNCTION BOX

1 1/2" = 1'-0" 32 8409.79-01



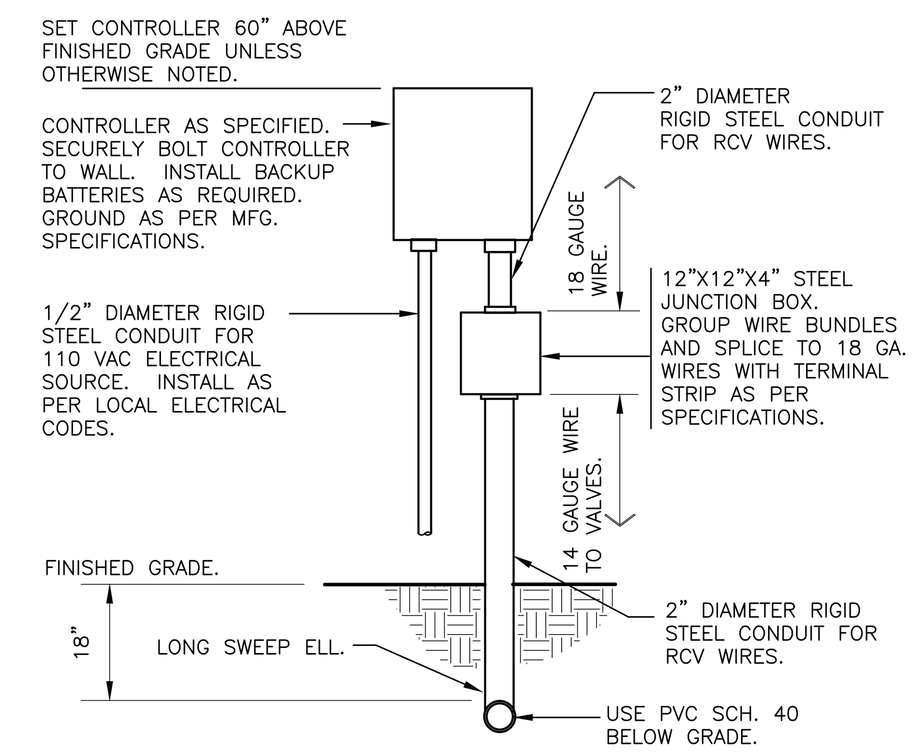
6 BUBBLER ON FLEX HOSE RISER

3" = 1'-0" DETAIL-FILE



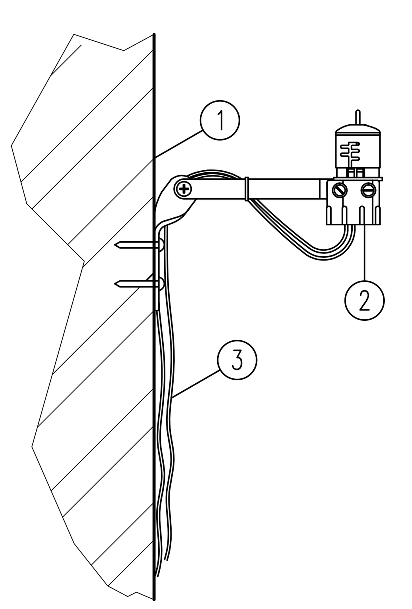
7 POP-UP SPRAY FLEX ASSEMBLY

3" = 1'-0" 32 8403.13-02



8 WALL MOUNT CONTROLLER

1" = 1'-0" 328409.13-02



1 EXTERIOR WALL (SEE NOTE)

2 MODEL MINI-CLIK

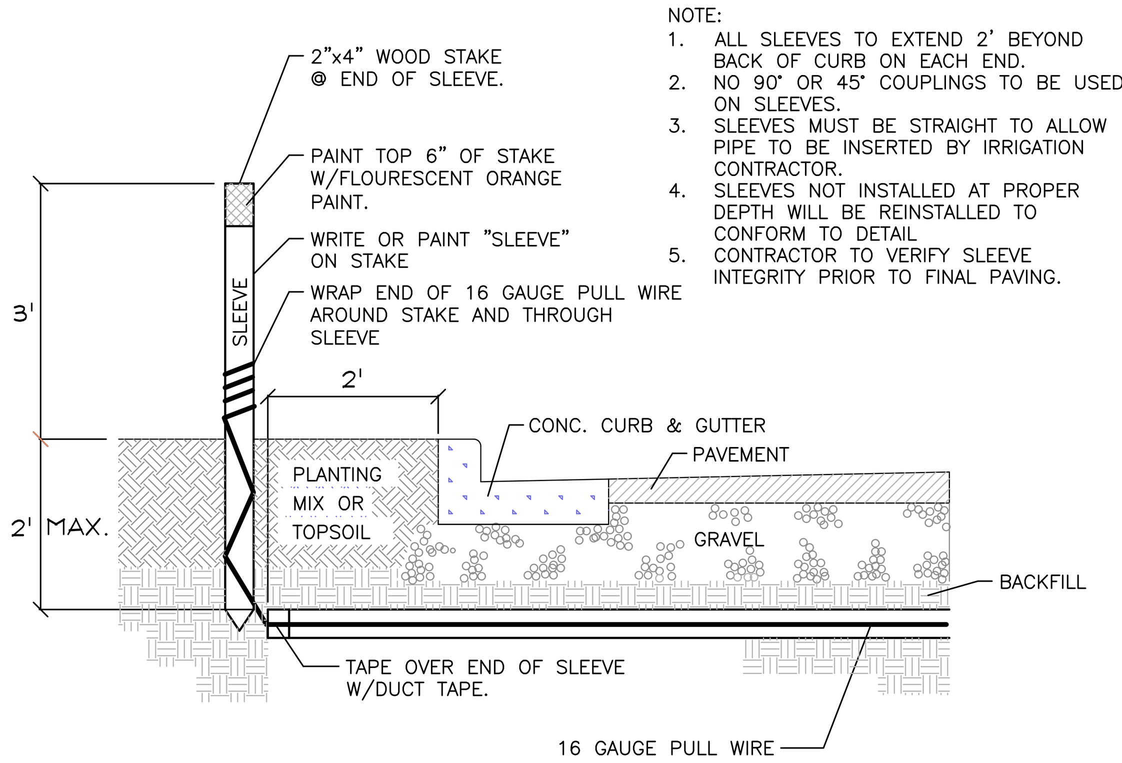
3 RUN LEAD WIRES TO CONTROLLER

NOTE:
MOUNT SENSOR ON SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY. COORDINATE MOUNTING WITH OWNER AND ARCHITECT.

9 RAIN SENSOR

3" = 1'-0"

NOTE:
1. ALL SLEEVES TO EXTEND 2' BEYOND BACK OF CURB ON EACH END.
2. NO 90° OR 45° COUPLINGS TO BE USED ON SLEEVES.
3. SLEEVES MUST BE STRAIGHT TO ALLOW PIPE TO BE INSERTED BY IRRIGATION CONTRACTOR.
4. SLEEVES NOT INSTALLED AT PROPER DEPTH WILL BE REINSTALLED TO CONFORM TO DETAIL
5. CONTRACTOR TO VERIFY SLEEVE INTEGRITY PRIOR TO FINAL PAVING.



10 IRRIGATION SLEEVING

NTS

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-03

Plotted By:Said, Najla Sheet Set:ABUNDANT LIFE CHURCH Layout:L-350 IRRIGATION DETAILS July 17, 2025 01:46:33pm K:\ft_civil\143 Jobs\143788000 abundant life church margate\Design\CADD\plansheets\Landscape\L-300 IRRIGATION PLAN.dwg

UNDERGROUND IRRIGATION SYSTEM

PART I: GENERAL

1.01 SCOPE

A. The work covered by this specification shall include the furnishing of all labor, materials, tools and equipment necessary to perform and complete the installation of an automatic irrigation system as specified herein and as shown on the drawings and any incidental work not shown or specified which can reasonably be determined to be part of the work and necessary to provide a complete and functional system.

B. The work covered by this specification also includes all permits, federal, state and local taxes and all other costs, both foreseeable and unforeseeable at the time of construction.

C. No deviation from these specifications, the accompanying drawings, or agreement is authorized or shall be made without prior written authorization signed by the Owner or his duly appointed representative.

1.02 QUALITY ASSURANCE

A. Installer Qualifications: A firm specializing in irrigation work with not less than five (5) years of experience in installing irrigation systems similar to those required for this project.

B. Coordination: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.

C. Inspection of Site: The Contractor shall acquaint himself with all site conditions, including underground utilities before construction is to begin. Contractor shall coordinate placement of underground materials with contractors previously working underground in the vicinity or those scheduled to do underground work in the vicinity. Contractor is responsible for minor adjustments in the layout of the work to accommodate existing facilities.

D. Protection of Existing Plants and Site Conditions: The Contractor shall take necessary precautions to protect site conditions to remain. Should damages be incurred, this Contractor shall repair the damage to its original condition at his own expense. Any disruption, destruction, or disturbance of any existing plant, tree, shrub, or turf, or any structure shall be completely restored to the satisfaction of the Owner and his representatives, solely at the Contractor's expense.

E. Protection of Work and Property: The Contractor shall be liable for and shall take the following actions as required with regard to damage to any of the Owner's property.

1. Any existing building, equipment, piping, pipe coverings, electrical systems, sewers, sidewalks, roads, grounds, landscaping or structure of any kind (including without limitation, damage from leaks in the piping system being installed or having been installed by Contractor) damaged by the Contractor, or by his agents, employees, or subcontractors, during the course of his work, whether through negligence or otherwise, shall be replaced or repaired by Contractor at his own expense in a manner satisfactory to Owner, which repair or replacement shall be a condition precedent to Owner's obligation to make final payment under the Contract.

2. Contractor shall also be responsible for damage to any work covered by these specifications before final acceptance of the work. He shall securely cover all openings into the systems and cover all apparatus, equipment and appliances, both before and after being set in place to prevent obstructions on the pipes and the breakage, misuse or disfigurement of the apparatus, equipment or appliance.

3. All trenching or other work under the leaf canopy of any and all trees shall be done by hand or by other methods so that no branches are damaged in any way.

   Buildings, walks, walls, and other property shall be protected from damage. Open ditches left exposed shall be flagged and barricaded by the Contractor by approved means. The Contractor shall restore disturbed areas to their original condition.

4. The Contractor shall be responsible for requesting the proper utility company to stake the exact location of any underground lines including but not limited to electric, gas, telephone service, water, and cable.

   The Contractor shall take whatever precautions are necessary to protect these underground lines from damage. In the event damage does occur, all damage shall be completely repaired to its original condition, at no additional cost to the Owner.

5. The Contractor shall request the Owner, in writing, to locate any private utilities (i.e., electrical service to outside lighting) before proceeding with any excavation. If, after such requests and necessary staking, private utilities which were not staked are encountered and damaged by the Contractor, they shall be repaired by the Owner at no cost to the Contractor. If the Contractor damages staked or located utilities, they shall be repaired at the Contractor's expense.

F. Codes and Inspections: The entire installation shall comply fully with all local and state laws and ordinances and with all established codes arrange for all necessary inspections and shall pay all fees and expenses in connection with same, as part of the work under this Contract. Upon completion of the work, he shall furnish to the "Owner" all inspection certificates customarily issued in connection with the class of work involved.

G. The Contractor shall keep on his work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Owner, or Owner's representative.

H. The superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.

I. The Owner's Landscape Architect or designated individual shall have full authority to approve or reject work performed by the Contractor. The Owner's Authorized Representative shall also have full authority to make field changes that are deemed necessary.

J. Final Acceptance: Final acceptance of the work may be obtained from the Owner upon the satisfactory completion of all work. Acceptance by the Landscape Architect and/or Owner in no way removes the Contractor of his responsibility to make further repairs, corrections and adjustments to eliminate any deficiencies which may later be discovered.

K. Guarantee: All work shall be guaranteed for one year from date of final acceptance against all defects in material, equipment and workmanship to the satisfaction of the Owner. Repairs, if required, shall be done promptly at no cost to the Owner.

1. The guarantee shall also cover repair of damage to any part of the premises resulting from leaks or workmanship, to the satisfaction of the Owner. The Contractor shall not be responsible for work damaged by others. Repairs, if required, shall be done promptly. The guarantee shall state the name of the Owner, provide full guarantee terms, effective and termination date, name and license number of Contractor providing guarantee, address, and telephone number. It shall be signed by the chief executive of the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.

2. If, within ten (10) days after mailing of written notice by the Owner to the Contractor requesting repairs or replacement resulting from a breach of warranty, the Contractor shall neglect to make or undertake with due diligence to make the same, the Owner may make such repairs at the Contractor's expense; provided, however, that in the case of emergency where, in the judgment of the Owner, delay would cause serious loss or damage, repairs or replacement may be made without notice being sent to the Contractor, and Contractor shall pay the cost thereof.

L. The Contractor shall provide full, 100% irrigation coverage in all areas designed with proposed plantings, in accordance with the site's governing permitting requirements and as designed.

M. On-site Observation: At any time during the installation of the irrigation system by the Contractor, the Owner or Landscape Architect may visit the site to observe work underway. Upon request, the Contractor shall be required to uncover specified work as directed by the Owner or material, workmanship or method of installation not meet the standards specified herein, the Contractor shall replace the work at his own expense.

N. Workmanship: All work shall be installed by qualified, skilled personnel, proficient in the trades required, in a neat, orderly, and responsible manner with recognized standards of workmanship. The Contractor shall have had considerable experience and demonstrated ability in the installation of sprinkler irrigation systems of this type.

1.04 SUBMITTALS

All materials shall be those specified and/or approved by the Landscape Architect.

A. Product Data: After the award of the Contract and prior to beginning work, the Contractor shall submit for approval by the Owner and Landscape Architect, two copies of the complete list of materials, manufacturer's technical data, and installation instructions which he proposes to install.

B. Commence no work before approval of material list and descriptive material by the Landscape Architect.

C. Record Drawings: The Contractor shall record on reproducibles, all changes that may be made during actual installation of the system. Provide controller sequencing and control valve locations.

1. Immediately upon installation of any piping, valves, wiring, sprinklers, etc., in locations other than shown on the original drawings or of sizes other than indicated, the Contractor shall clearly indicate such changes on a set of blueline prints. Records shall be made on a daily basis. All records shall be neat and subject to the approval of the Owner.

2. The Contractor shall also indicate on the record prints the location of all wire splices, original or due to repair, that are installed underground in a location other than the controller pedestal, remote control valve box, power source or connection to a valve-in-head sprinkler.

3. These drawings shall also serve as work progress sheets. The Contractor shall make neat and legible notations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for review and shall be kept in a location designated by the Owner's Representative.

4. Progress payment request and record drawing information must be approved by Landscape Architect before payment is made.

5. If in the opinion of the Owner or his representative, the record drawing information is not being properly or promptly recorded, construction payment may be stopped until the proper information has been recorded and submitted.

6. Before the date of the final site observation and approval, the Contractor shall deliver one set (copies) of reproducible record drawing plans and notes to the Landscape Architect. Record drawing information shall be approved by the Landscape Architect prior to submittal to Owner for final payments, including retentions.

D. Operations and Maintenance Manuals: The Contractor shall prepare and deliver to the Owner, or his designated representative within ten (10) calendar days prior to completion of construction, a hard cover binder with three rings containing the following information:

1. Index sheet stating the Contractor's address and business telephone number, list of equipment with name(2) and address(es) of local manufacturer's representative(s).

2. Catalog and parts sheets on every material and equipment installed under this Contract.

3. Complete operating and maintenance instruction on all major equipment. Include initial controller schedule and recommended schedule after establishment period.

4. Demonstrate to and provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Owner, or his designated representative at the conclusion of the project that this service has been rendered.

1.05 EXPLANATION OF DRAWINGS

A. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings and sleeves which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the work and plan his work accordingly, furnishing such offsets, fittings and sleeves as may be required to meet such conditions.

B. The drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features. Deviations shall be brought to the Landscape Architects attention.

C. All work called for a on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

D. The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been known in engineering. Such obstructions or differences should be brought to the attention of the Landscape Architect. In the event that notification is not performed, the Contractor shall assume full responsibility for any revision necessary.

E. If, in the opinion of the Landscape Architect, the labor furnished by the Contractor is incompetent, unskilled, or unreliable, his equipment inadequate, improper or unsafe, or if the Contractor shall fail to continuously and diligently execute the construction, the Landscape Architect or Owner shall, in writing, instruct the Contractor to remove all such causes of noncompliance and the Contractor shall promptly comply.

F. The Contractor shall be responsible for full and complete coverage of all irrigation areas. The Landscape Architect shall be notified of any necessary adjustments at no additional cost to the Owner. Any revisions to the irrigation system must be submitted and answered in written form, along with any change in Contract price. Layout may be modified, if necessary to obtain coverage. Spacing not to exceed 60% of the diameter.

PART II: PRODUCTS

2.01 MATERIALS

Material and equipment shall be supplied by the Contractor. No substitutions shall be allowed without the prior written approval of the Owner/Landscape Architect. The Contractor shall inspect all materials and equipment prior to installation, and defective materials shall be replaced with the proper materials and equipment. Those items used in the installation found to be defective, improperly installed or not as specified, shall be removed and the proper materials and equipment installed in the proper manner, as interpreted by the Owner/Landscape Architect. The Contractor shall remove all damaged and defective pipe and equipment from the site.

2.02 PIPING

A. General Provisions: All materials throughout the system shall be new and in perfect condition unless otherwise directed by the Landscape Architect.

B. Polyvinyl Chloride Pipe (PVC): (Where indicated on plan, use non-potable purple piping.)

1. Laterals: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220. All lateral piping less than 3" in diameter shall be Class 200 SDR-21.

2. Main Line Under Pressure: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220, Schedule 40 with belled end for solvent weld connection.

3. Pipe Markings: All PVC pipe shall bear the following markings:
   - o Manufacturer's Name
   - o Nominal Pipe Size
   - o Schedule or Class
   - o Pressure Rating of PSI
   - o NSF (National Sanitation Foundation) Approval
   - o Date of Extrusion

2.04 PVC JOINTS

Joints in PVC pipe smaller than 3" shall be solvent welded in accordance with the recommendations of the pipe manufacturer; the solvent cleaner and welding compound furnished with the pipe.

2.05 THREADED CONNECTIONS

A. Threaded PVC connections shall be made up using Teflon tape only.

B. Connection between mainline pipe fittings and automatic or manual control valves shall be made using Schedule 80 threaded fittings and nipples.

2.06 SOLVENT CEMENT

A. General: Provide solvent cement and primer for PVC solvent weld pipe and fittings recommended by the manufacturer. Pipe joints for solvent weld pipe to be belled end. Pipe joints for gasketted pipe to be intrical ring type. Insert gaskets will not be accepted.

B. Thrust Blocks: Main line piping 3" or greater in diameter shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations or, in the absence of specified recommendations by the pipe manufacturer. 3000 PSI concrete thrusts shall be properly installed at tees, elbows, 45's, crosses, reducers, plugs, caps and valves.

2.07 PIPE AND WIRE SLEEVES

A. Sleeves to be installed:

1. The Contractor shall install irrigation system pipe and wire sleeves conforming to the following:

   a. All pipe sleeves shall extend a minimum of 36" beyond the edges of pavement.

   b. All pipe sleeves to be installed beneath future/existing road surfaces shall be PVC pipe Schedule 40 or jack and bore steel pipe as per FDOT specifications, and as shown on plans.

   c. All irrigation system wires shall be sleeved seperately from main or lateral lines.

   d. All pipe sleeves shall be installed at the minimum depth specified for main lines, lateral lines, and electric wire.

   e. Contractor shall coordinate all pipe sleeve locations and depths prior to initiating installation of the irrigation system.

2.08 SPRINKLER HEADS

A. Spray Sprinklers: The sprinkler shall be a fixed spray type designed for in-ground installation. The nozzle shall elevate 6" (or as designated on plan) when in operation. The body of the sprinkler shall be constructed of non-corrosive heavy duty Cycolac. A filter screen shall be in the nozzle piston. All sprinkler parts shall be removable through the tip of the unit by removal of a threaded cap.

Riser mounted spray shall be as indicated on the plans. The sprinkler shall consist of a nozzle and body. The body of the riser-mount sprinkler shall be constructed of non-corrosive materials. A cone strainer shall be a separate part with the nozzle assembly to allow for easy flushing of the sprinkler. Maximum working pressure at the base of the sprinkler shall be 40 PSI.

(continued...)

2.09 AUTOMATIC CONTROL VALVE

The automatic remote control valves shall be as specified on the plans, or approved equal.

2.10 GATE VALVES

A. Gate valves for 3/4" through 2-1/2" shall be of brass or bronze construction, solid wedge, IPS threads, non-rising stem with wheel operating handle, for a continuous working pressure of 150 PSI.

B. Gate valves for 3" and larger: Iron body, brass or bronze mounted AWWA gate valves, with a clear waterway equal to the full nominal diameter of the valve, rubber gasket for a continuous working pressure of 150p PSI. Valve shall be equipped with a square operating nut.

2.11 VALVE BOXES

A. For gate valves, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

B. For control valves 3/4" through 2", the drip valve assemblies, use AMETEK #10-181-014 box with #10-181-015 locking lid, or sized as necessary to effectively house the equipment

C. For control wiring splices, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

2.12 IRRIGATION WIRING

A. Wiring used for connecting the electric control valves to the controllers shall be Type UF, 600 volt, single strand, solid copper with PVC insulation 4/64" thick. Size shall be 14 gauge, red for "hot" or lead wires, and common wire to be 14 gauge, white in color.

B. Contractor shall perform an ohm test on ground to assure adequate protection against surges and indirect lightning strikes.

2.13 MISCELLANEOUS MATERIALS

A. Drainage Backfill: Cleaned gravel or crushed stone, graded from 1" maximum to 3/4" minimum.

B. Metalized Underground Tape: The detectable, underground utility marking tape shall consist of a minimum: 5 mil (0.005") overall thickness; five-ply composition; ultra-high molecular weight, 100% virgin polyethylene; acid, alkaline and corrosion resistant; with no less than 150 pounds of tensile break strength per 6" width; color-code impregnated with color stable, lead-free, organic pigments suitable for direct burial. Tapes utilizing reprocessed plastics or resins shall not be acceptable. The detectable, underground utility marking tape shall have a 35 gauge (0.0035") solid aluminum foil, core encapsulated within a 2.55 mil (0.00255") polyethylene backing and a 0.6 mil (0.006") PET cover coating. The laminate on each side shall consist of a 0.75 mil (0.00075") layer of hot LPDE, poly-fusing the "sandwich" without use of adhesives.

2.14 AUTOMATIC CONTROL SYSTEM

An Independent Station Controller: Furnish a solid state controller, as specified on the plans. Each station shall be capable of timing from zero (0) minute to 99 minutes per station in one (1) minute increments.

Each station shall be capable of operating two (2) 7VA electric valve-in-head solenoids.

The stand-alone controller shall have two (2) possible programs.

The stand-alone controller shall provide global percentage increase/decrease (water budget) for all stations simultaneously, from ten (10) to two hundred (200) percent, in ten (10) percent increments.

All stations shall be able to be turned on/off manually buy operating timing mechanism or by manual switch at station output.

The stand-alone controller shall incorporate an integral MOV surge protection into the terminal block for each of its 24 VAC field wire outputs. Controller power input wires will also incorporate surge protection.

The control panel shall provide continuous display time. It shall have alphanumeric displays of descriptive English menus and legend identifiers with cursor selection of function and precision value adjustment by rotary dial input.

The stand-alone controller shall be UL listed and FCC approved.

The stand-alone controller shall have 117 VAC, 60 Hz input, 26.5 VAC, 60 Hz output for operating 24 VAC solenoids.

The stand-alone controller cabinet shall be a lockable and weather-resistant outdoor cabinet. Mount as noted on plans.

The controller shall be equipped with lightening protection, by the Contractor, on both the primary (120v) and each secondary (24v) circuit. The controller circuits shall be grounded to a copper clad grounding rod located at each controller.

The controller shall be equipped for a water conservation device. as specified.

PART III: EXECUTION

3.01 INSPECTION

The Contractor shall examine the areas and conditions under which landscape irrigation system is to be installed and notify the Landscape Architect in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect.

3.02 PREPARATION

The Contractor shall provide sleeves to accommodate piping under walks or paving. The Contractor shall coordinate with other trades and install to accurate levels prior to paving work. Cutting and patching of paving and concrete will not be permitted. The Contractor shall maintain all warning signs, shoring, barricades, flares and red lanterns, as required by any local codes, ordinances or permits.

3.03 TRENCHING AND BACKFILLING

A. Excavation: The Contractor shall stake out the location of each run of pipe, sprinkler heads, sprinkler valves and isolation valves prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space or backfilling and tamping. Trenches for pipe shall be cut to required grade lines, and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of the trenches shall be free of rock or other sharp edged objects. Minimum cover shall be as follows:

Pipe and Wire Depth

Pressure Mainline	18" at top of pipe from Finish Grade
Lateral Piping (rotor)	12" at top of pipe from Finish Grade
Lateral Piping (pop-up)	12" at top of pipe from Finish Grade
Control Wiring	Side of main Line

B. Minimum Clearances: All pipelines shall have a minimum clearance of six inches from each other and from lines of other crafts. Parallel lines shall not be installed directly over one another. No lateral line shall be installed in the main-line trench.

3.04 INSTALLATION OF PIPING

A. PVC Pipe and Joints: The Contractor shall not install solvent wild pipe when air temperature is below 40ø F. Installation shall be in accordance with the manufacturer's instructions.

1. Only the solvent recommended by the pipe manufacturer shall be used. All PVC pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer, and it shall be the Contractor's full responsibility to make arrangements with the pipe manufacturer for any field assistance that may be necessary. The Contractor shall assume full responsibility for the correct installation.

3.05 BACKFILLING PROCEDURES

Initial backfill on PVC lines shall be pulverized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. The Contractor shall coordinate the location of trees and shrubs with the routing of lines and final head locations.

A. Backfill and Compaction: The Contractor shall leave trenches slightly mounded to allow for settlement after the backfilling is completed. The Contractor shall clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required.

The Contractor shall carefully backfill excavated materials approved for backfilling, consisting of earth, loam, sand, and other approved materials, free of rock and debris over 1" in size. Backfill shall be compacted to original density of surrounding soil without dips, sunken areas, or irregularities.

The Contractor shall conform to DOT requirements for methods and required compaction percentages, for roads and paving.

The Contractor shall hand place the first 6" of backfill (or to top of pipe) and have it walked on so as to secure the position of the pipe and wire.

No wheel rolling will be allowed. The Contractor shall remove rock or debris extracted from backfill materials and dispose of offsite. The Contractor shall fill any voids left in backfill with approved backfill materials.

B. Existing Lawns: Where trenching is required across existing lawns, uniformly cut strips of sod 6" wider than trench. The Contractor shall remove sod in rolls of suitable size for handling and keep moistened until replanted. The Contractor shall replant sod within 48 hours after removal, roll and water generously. The Contractor shall resod any areas not in healthy condition equal to adjoining lawns 10 days after replanting.

C. Seeded Area: Trenching will be required across existing seeded areas, primarily roadway edging. The Contractor shall conform to the requirements of seeding, Section 02930 for the reseeding of the disturbed trench area.

D. Pavements: Jack and bore or directional bore piping under paving materials as per local regulatory codes. No cutting and patching of pavement will be permitted.

3.06 VALVES

A. Isolation Valves: Shall be sized corresponding to adjacent pipe size. Specified valve boxes shall be installed flush with finish grade in such a manner that surface forces applied to their exposed area will not be transmitted to the piping in which the valve is installed nor any other piping, wiring or other lines in the vicinity of said valves.

B. Gate Valves: Install where shown, in valve boxes.

C. Electric Control Valves: Shall be installed in specified valve boxes. The valve shall have 6" of 3/4" pea gravel installed below the bottom of the valve. If the valve box does not extend to the base of the valve, a valve box extension shall be installed. Electric control valves shall be installed where shown and grouped together where practical. The Contractor shall place no closer than 24" to walk edges, bikeway edges, buildings and walls. The Contractor shall adjust the valve to provide flow rate or rated operating pressure required for each sprinkler circuit.

3.07 CONDUIT AND SLEEVES

A. Conduit and Sleeves for Control Wiring and Main/Lateral Pipe: The Contractor shall provide and install where necessary. Contractor shall coordinate locations of previously installed sleeving with the General Site Contractor.

The Contractor shall coordinate installation of sleeves with work of other disciplines.

3.08 CONTROLS

A. The Contractor shall connect electric control valves to controllers in a clockwise sequence to correspond with station settings beginning with Stations 1, 2, 3, etc. Automatic controllers shall be provided and installed by the Contractor as noted on the drawings. All zones will be labeled on the controller.

B. Controllers shall be equipped with lightning protection and grounded to a standard 5/8" copper clad steel ground rod driven a minimum of 8' into the ground and clamped.

C. The electrical service to the controllers shall be performed by an electrical subcontractor in compliance with NEC requirements.

3.09 CONTROL WIRE

A. Control wiring between the controller and electric valves shall be buried in main line trenches or in separate trenches. Electrical connection at valve will allow for pigtail so solenoid can be removed from valve with sufficient slack to allow ends to be pulled 12" above ground for examination and cleaning.

B. An expansion loop shall be provided at every valve at 100' o.c. Expansion loop shall be formed by wrapping wire at least eight times around a 3/4" pipe and withdrawing pipe.

C. The wire shall be bundled and taped every ten feet. The wire shall be laid in the trench prior to installing the pipe being careful to install wire beneath and 6" to the side of the main pipe line.

D. Electrical connections to electric control valves shall be made with Rainbird Pen-Tite or Techdel GT-3-GEL - Tite connectors or equal.

Power Connections: Electrical connections to power and signal wires shall be made using 3M 82-A2 power cable splice kits.

3.10 SPRINKLER HEADS

A. General Provisions:

1. Sprinkler heads shall be installed as designated on the shop drawings. Heads shall be installed on flexible PVC. Top to be flush with finish grade or top of curb.

2. Spacing of heads shall not exceed the maximum indicated on the shop drawings (unless directed by the Landscape Architect). In no case shall the spacing exceed the maximum recommended by the manufacturer.

B. Head Types:

1. Pop-up- Rotary Sprinkler Heads: Shall be installed on flex joint and be set with top of head flush with finish grade. Heads installed at curb shall have 6" to 10" between perimeter of head and concrete. Heads placed at edge of pavement having no curb shall be installed 24" from edge of pavement.

2. Spray Pop-up Sprinkler Heads: Shall be installed on flexible PVC and be set with top of head flush with finished grade. Sprinkler heads placed adjacent to curbs will be installed 9" from concrete. Sprinkler heads placed adjacent to pavement having no curb shall be installed 24" from the edge of pavement.

3.11 COMPLETION

A. Flushing: Before sprinkler heads are set, the Contractor shall flush the lines thoroughly to make sure there is no foreign matter in the lines.

The Contractor shall flush the main lines from dead end fittings for a minimum of five minutes under a full head of pressure.

B. Testing: The Contractor shall notify Landscape Architect and Owner forty-eight (48) hours in advance of testing.

Prior to backfilling of main line fittings, Contractor shall fill the main line piping with water, in the presence of the Owner/Landscape Architect, taking care to purge the air from it by operating all the sprinkler control valves one or more times and/or such other means as may be necessary. A small, high pressure pump or other means of maintaining a continuous water supply shall be connected to the main line and set so as to maintain 100 PSI in the main line system for two (2) hours without interruption. When this has been accomplished and while the pressure in the system is still 100 PSI, leakage testing shall be performed in accordance with AWWA Standard C-600. Pressure readings shall be noted and make up water usage shall be recorded. Should the rate of make up water usage indicate significant leakage, the source of such leakage shall be found and corrected and the system then retested until the Owner/Landscape Architect is satisfied that the system is reasonably sound. Lateral line testing shall be conducted during the operating testing of the system by checking visually the ground surface until no leaks in this portion of the system are evident. Leaks shall be repaired or paid for by the Contractor at any time they appear during the warranty period.

C. Adjustment and Coverage of System: Coordinate pressure testing with adjustments and coverage test of system so both may occur at the same time. The Contractor shall balance and adjust the various components of the system so that the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

3.12 WARRANTY

A. The Contractor shall fully warrant the landscape irrigation system for a period of one (1) year after the written final acceptance and will receive a written confirmation from the Landscape Architect that the warranty period is in effect.

B. During the warranty period, the Contractor will enforce all manufacturer's and supplier's warranties as if made by the Contractor himself. Any malfunctions, deficiencies, breaks, damages, disrepair, or other disorder due to materials, workmanship, or installation by the Contractor and his suppliers shall be immediately and properly corrected to the proper order as directed by the Owner and/or Landscape Architect.

C. Any damages caused by system malfunction shall be the responsibility of the Contractor who shall make full and immediate restoration for said damages.

No. | REVISIONS | DATE | BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

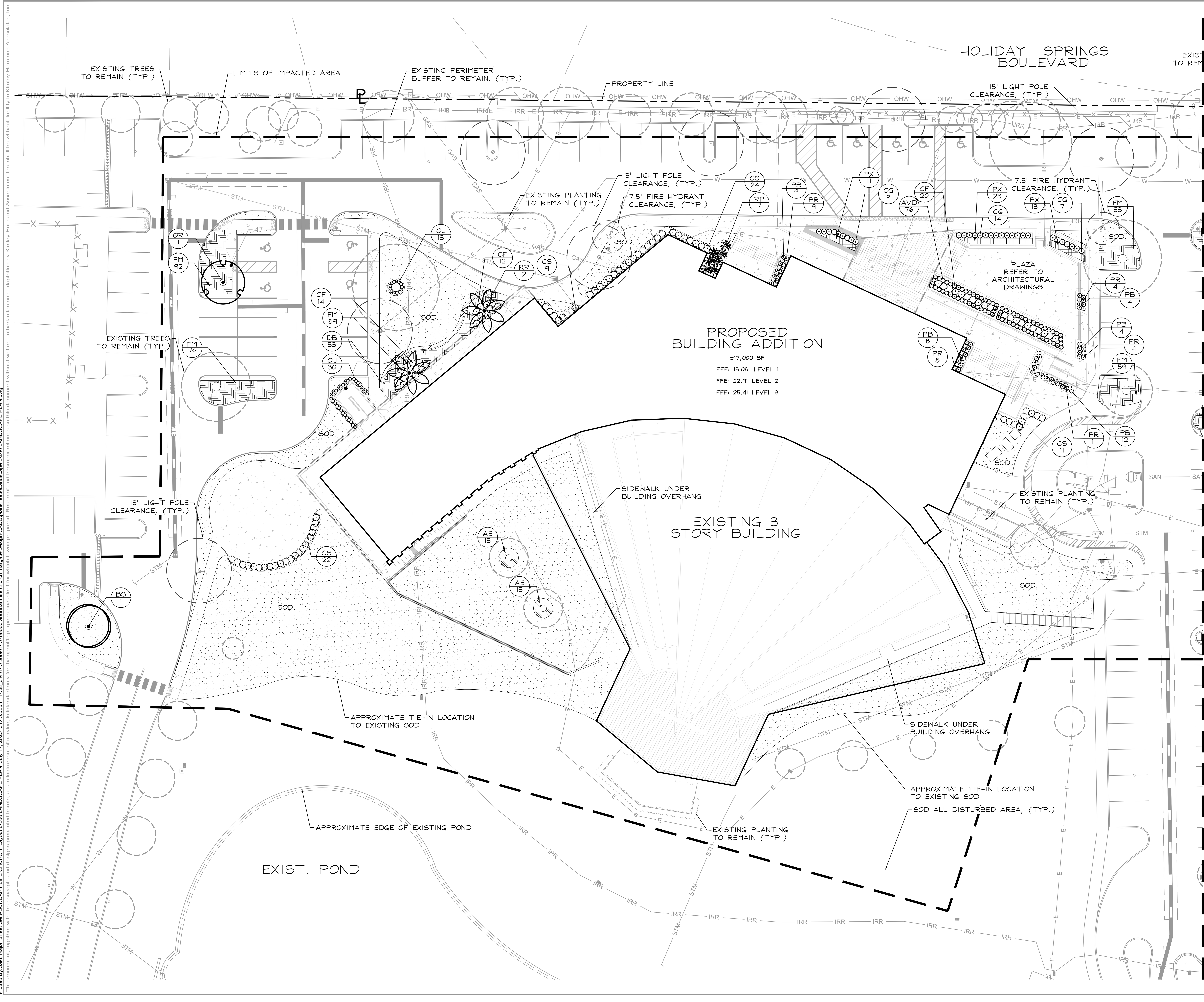
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-05



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

PLANT SCHEDULE

CODE	COMMON NAME
TREES	
BS	Gumbo Limbo
CE	Silver Buttonwood
QR	Southern Live Oak
QV	Southern Live Oak
PALM TREES	
RR	Royal Palm
SHRUBS	
AVD	Dwarf Variegated Ginger
CF	Red Sister Ti Plant 3 PPP Shade Grown
CG	Gold Dust Croton 3 PPP
CS	Small Leaf Clusia
OJ	Mondo Grass
PB	Butterfly Series Star Cluster
PR	Ruby Glow Star Cluster
RP	Lady Palm Shade Grown. 7 Stems min.
SHRUB AREAS	
AE	Cast Iron Plant Shade Grown
AZ	Variegated Shell Ginger
FM	Green Island Ficus
HN	Dwarf Firebush
MCA	Pink Muhly Grass
GROUND COVERS	
DB	Blueberry Flax Lily
PX	Xanadu Philodendron
SOD	St. Augustine Grass

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

REVISIONS | DATE | BY | No.

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

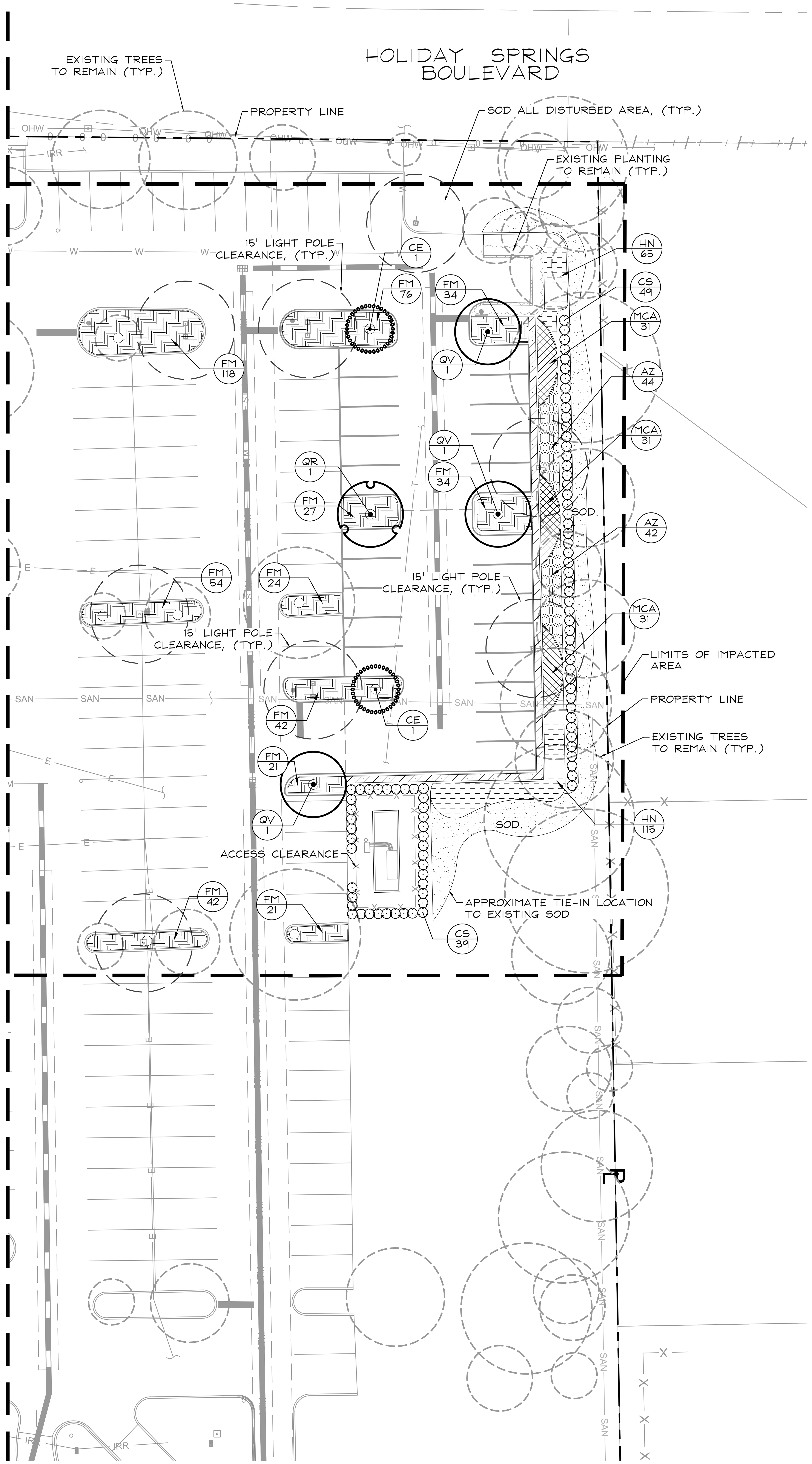
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-01



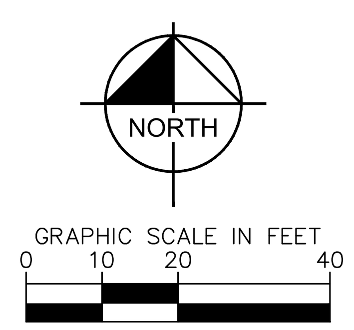
PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	QTY
TREES							
BS	Bursera simaruba	Gumbo Limbo	F.G.	3" Cal.	15' HT X 6' SPR	Yes	1
CE	Conocarpus erectus f. sericeus	Silver Buttonwood	F.G.	3" Cal.	12' HT x 5' SPR	Yes	2
QR	Quercus virginiana	Southern Live Oak	Relocated				2
QV	Quercus virginiana	Southern Live Oak	F.G.	3" Cal.	15' HT X 6' SPR	Yes	3
PALM TREES							
RR	Roystonea regia	Royal Palm	F.G.		22' OA	Yes	2

CODE	BOTANICAL NAME	COMMON NAME	CONT	O.C.	SIZE	NATIVE	QTY
SHRUBS							
AVD	Alpinia zerumbet 'Variegata Dwarf'	Dwarf Variegated Ginger	Cont.	24" O.C.	24" HT" X 24" SPR.	Florida Native	76
CF	Cordyline fruticosa 'Red Sister' 3 PPP Shade Grown	Red Sister Ti Plant	Cont.	24" O.C.	36" HT	Yes	46
CG	Codiaeum x 'Gold Dust' 3 PPP	Gold Dust Croton	Cont.	30" O.C.	30" HT	Yes	30
CS	Clusia guttifera	Small Leaf Clusia	Cont.	18" O.C.		Yes	154
OJ	Ophiopogon japonicus	Mondo Grass	Cont.	12" O.C.	18" HT. X 18" SPR.	Yes	43
PB	Pentas lanceolata 'Butterfly'	Butterfly Series Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	37
PR	Pentas lanceolata 'Ruby Glow'	Ruby Glow Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	36
RP	Rhapis excelsa Shade Grown. 7 Stems min.	Lady Palm	25 gal	As Shown	5' HT		7
SHRUB AREAS							
AE	Aspidistra elatior Shade Grown	Cast Iron Plant	Cont.	24" O.C.	15' HT. x 15' SPR.	Florida Friendly	30
AZ	Alpinia zerumbet 'Variegata'	Variegated Shell Ginger	Cont.	36" O.C.	24"x24"	Florida Friendly	86
FM	Ficus microcarpa	Green Island Ficus	Cont.	24" O.C.	18" HT. X 18" SPR.	Florida Friendly	907
HN	Hamelia nodosa	Dwarf Firebush	Cont.	24" O.C.	24" HT. X 24" SPR.	Yes	180
MCA	Muhlenbergia capillaris	Pink Muhly Grass	Cont.	30" O.C.	30" HT. x 30" SPR.	Yes	93
GROUND COVERS							
DB	Dianella tasmanica 'Blueberry'	Blueberry Flax Lily	Cont.	18" O.C.	12" HT	Florida Friendly	238
PX	Philodendron x 'Xanadu'	Xanadu Philodendron	Cont.	24" O.C.	18" X HT. X 18" SPR.	Florida Friendly	47
SOD	Stenotaphrum secundatum	St. Augustine Grass	Sod				± 6,577

City of Margate Code Compliane Chart

	Required	Provided
Section 40.704 - LANDSCAPING		
40.704.E.1.a - Materials, installation and irrigation requirements.		
A minimum of 50% of all required landscaping shall be South Florida native species	☑	☑
40.704.E.1.b - Materials, installation and irrigation requirements.		
Trees shall be planted at a Minimum of 12' Height and 2" DBH	☑	☑
Palm shall not exceed 25% of the requiered shade tree	☑	☑
40.704.G.1 - Required landscaping adjacent to other perimeters		
one (1) shade tree along the common property line for every for every seventy-five (75) linear feet or fractional part thereof. Impacted East {Property Buffer: 196 LF / 75 = 3	3	Satisfied with Existing Trees
40.704.H.1.g - Parking area and pedestrian zone interior landscaping		
There shall be one (1) shade tree and three (3) shrubs per two hundred (200) square feet, or fraction thereof, of interior landscaping in the VUA minus the landscape islands	☑	☑



No. | REVISIONS | DATE | BY

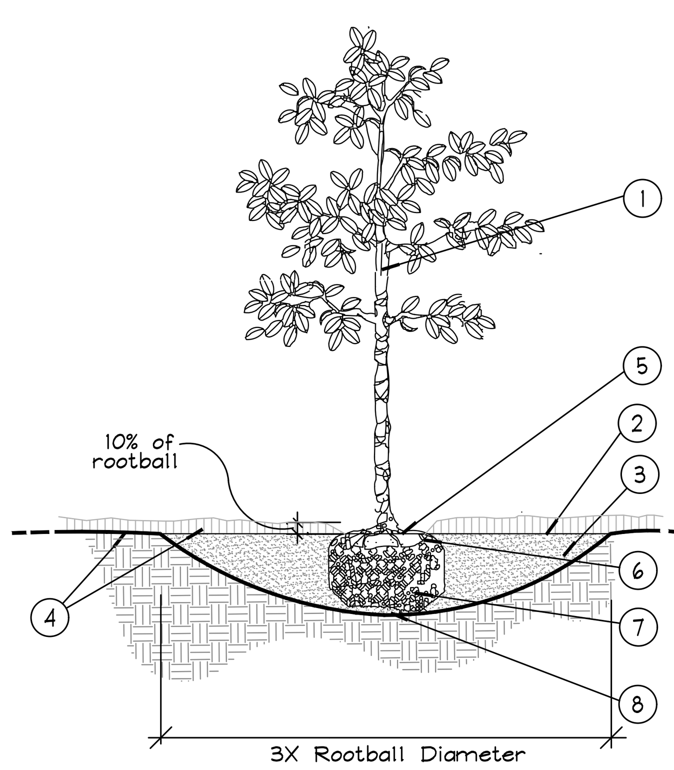
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-02



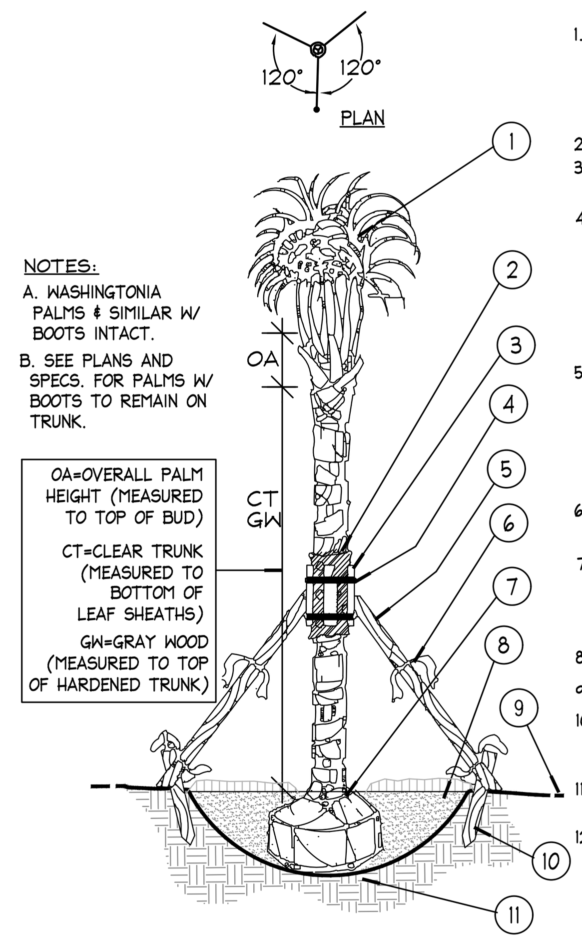
1. TRUNK
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW/ WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. B & B OR CONTAINER (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
7. REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL.
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

(A) Tree Planting
SECTION NTS



NOTES:

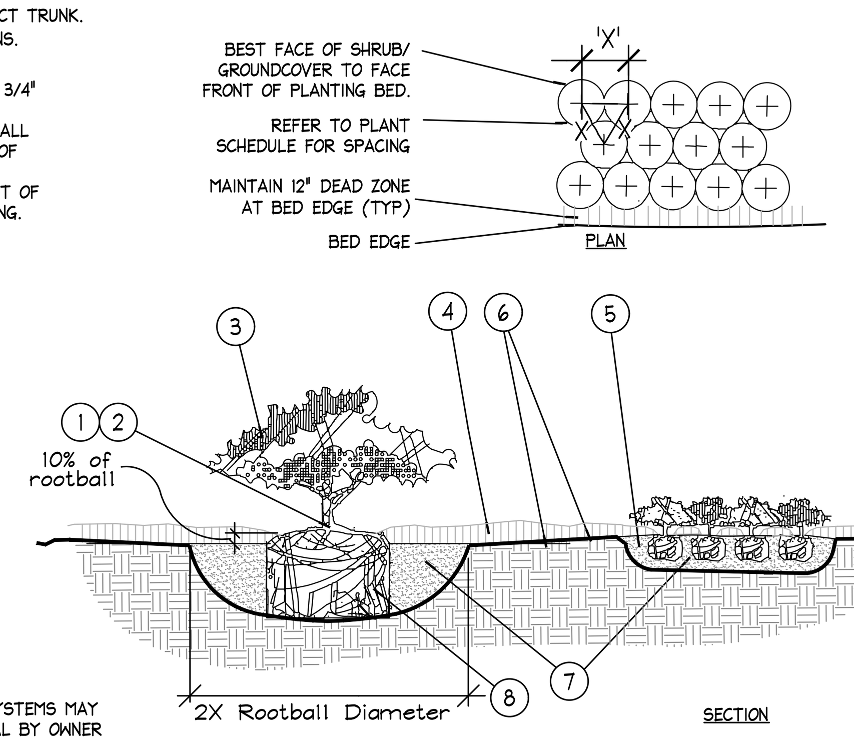
A. WASHINGTONIA PALMS & SIMILAR W/ BOOTS INTACT.
B. SEE PLANS AND SPECS. FOR PALMS W/ BOOTS TO REMAIN ON TRUNK.

OA=OVERALL PALM HEIGHT (MEASURED TO TOP OF BUD)
CT=CLEAR TRUNK (MEASURED TO BOTTOM OF LEAF SHEATHS)
GW=GRAY WOOD (MEASURED TO TOP OF HARDENED TRUNK)

1. MINIMUM OF NINE (9) GOOD PALM FRONDS; PRUNE AND TIE FRONDS WITH HEMP TWINE. SABAL PALMS TO BE SELECTIVELY "HURRICANE CUT", LEAVING ONLY NEWLY-EMERGING GROWTH.
2. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
3. FIVE (5) 18"L, 2X4 WOOD BATTENS. UNTREATED, #2
4. SECURE BATTENS WITH TWO (2) 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED PROPORTIONATELY TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
5. THREE (3) 8'L 2X4 SUPPORTS. NAIL (DRILL AND NAIL IF NECESSARY) TO BATTENS AND 2" X 4" STAKES. PALMS SHALL BE PLUMB VERTICALLY UNLESS OTHERWISE NOTED.
6. PROVIDE FLAGGING AT MIDPOINT AND BASE OF SUPPORTS.
7. TOP-MOST ROOT SHALL BE VISIBLE AT THE SURFACE OF THE ROOTBALL, SLIGHTLY ABOVE SURROUNDING GRADE.
8. 3" SPECIFIED MULCH
9. FINISH GRADE
10. 24"L (MIN.) 2X4 P.T. WOOD STAKES, NAIL TO SUPPORT POLES
11. PREPARED PLANTING SOIL AS SPECIFIED
12. ALTERNATE PALM ANCHORING SYSTEMS MAY BE SUBSTITUTED UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

(B) Palm Planting and Staking
SECTION NTS

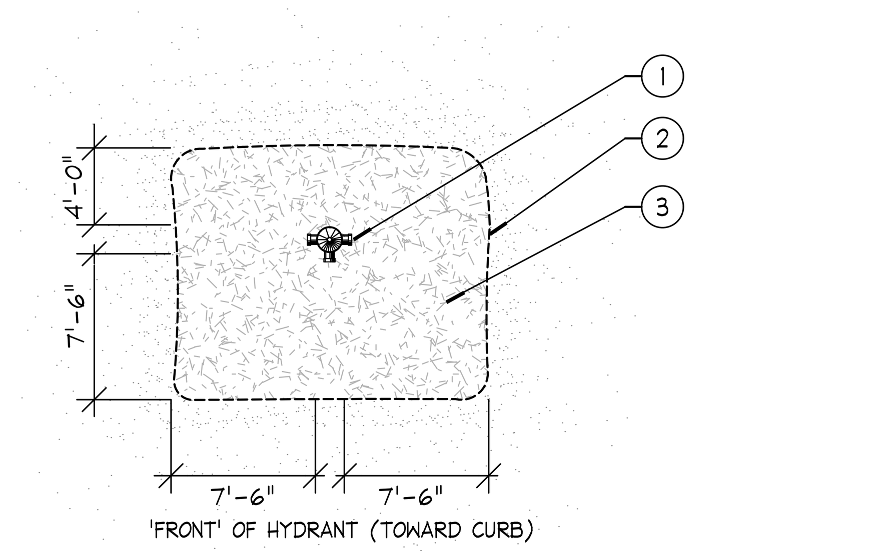


NOTES:

1. FIND POINT WHERE TOPMOST ROOT EMERGES FROM TRUNK WITHIN 2" OF SURFACE. CLEAR EXCESS SOIL IF NECESSARY.
2. TOP 10% OF SHRUB AND GROUNDCOVER ROOTBALLS TO BE PLANTED ABOVE THE LANDSCAPE GRADE. DO NOT COVER EXPOSED 10% ON SIDES WITH SOIL.
3. PRUNE ALL LIKE SHRUBS WITHIN A PLANTED MASS TO ACHIEVE A UNIFORM MASS/HEIGHT.
4. 3" MINIMUM MULCH AS SPECIFIED - DO NOT COVER ENTIRE SHRUB ROOTBALL OR CREATE 'WATER RINGS' ONLY COVER SIDES OF ROOTBALL WITH MULCH
5. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
6. FINISHED GRADE (SEE GRADING PLAN).
7. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
8. SCARIFY ROOTBALL SIDES AND BOTTOM.

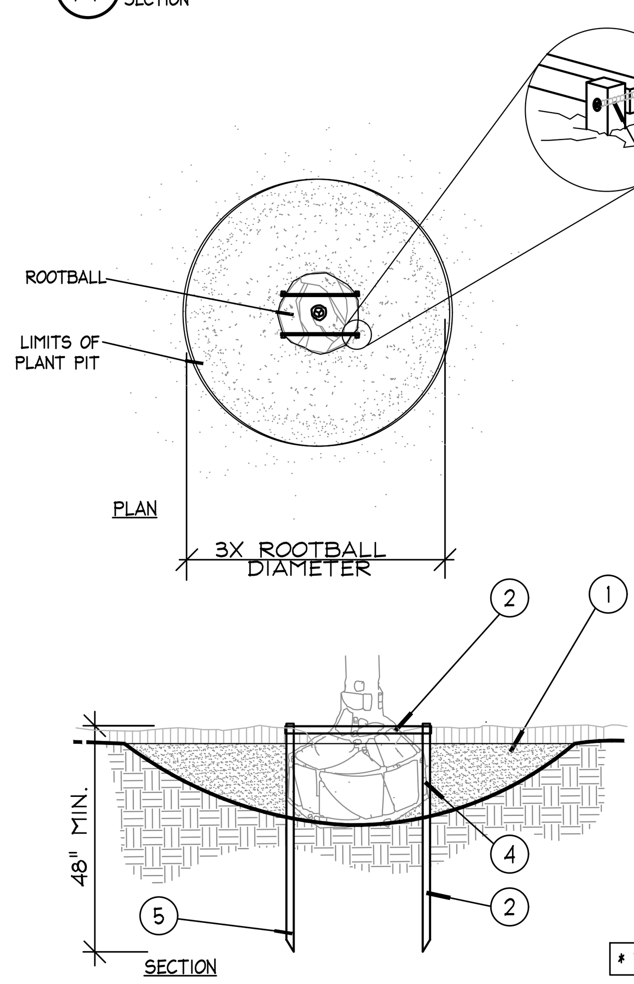
* ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

(C) Shrub / Groundcover Planting
PLAN/SECTION NTS



1. FIRE HYDRANT
2. NO PLANT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. PROVIDE A MULCH, 3" DEPTH MIN., SURROUNDING AREA INDICATED.

(D) Fire Hydrant Clear Zone
PLAN NTS



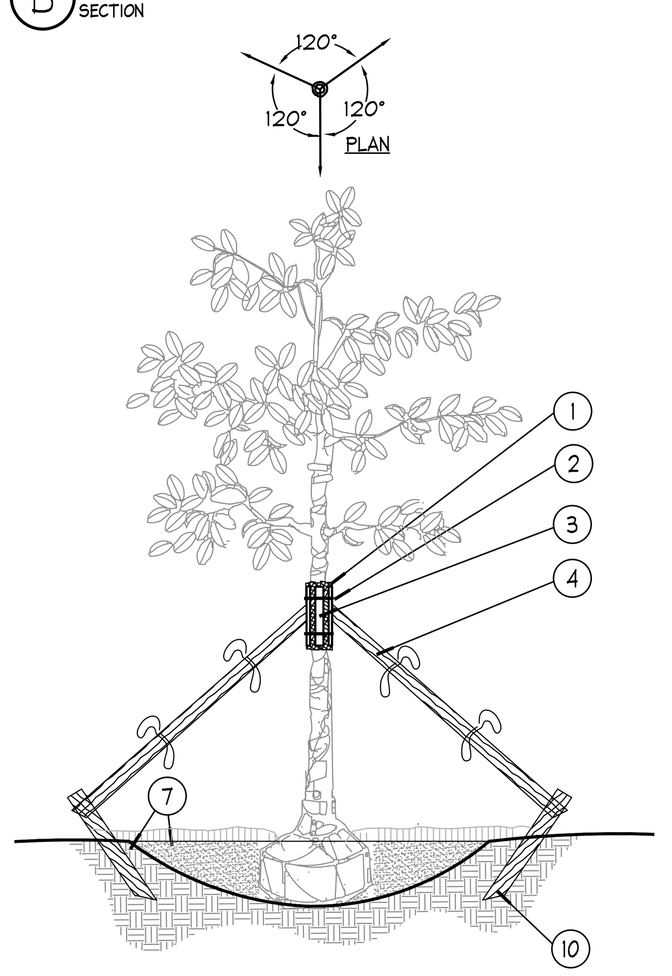
1. FINISH GRADE
2. HORIZONTAL 2X2 SCREWED TO 2X2 STAKE. ALL WOOD SHALL BE #2 UNTREATED.
3. 3-1/2" DRYWALL SCREW, THREAD SIZE 12, SHARP POINT, FULL THREAD, BLACK PHOSPHATE FINISH
4. VERTICAL STAKES SHALL ABUT SIDE OF ROOTBALL
5. STAKES TO EXTEND INTO NATIVE SOIL BY 1-1/2 X THE ROOTBALL DEPTH MIN.

NOTE:

IF SPATIAL REQUIREMENTS PRECLUDE STAKING WITH THIS METHOD, SUBMIT ALTERNATE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLING PLANT.

* Refer to details B and D for planting

(E) Staking - up to 65 gal. or B&B to 3-1/2" Cal.
PLAN/SECTION NTS



1. FIVE (5) LAYERS OF BURLAP TO PROTECT TRUNK
2. TWO STEEL BANDS TO SECURE BATTENS
3. FIVE 2 X 4 X 18"L WOOD BATTENS
4. THREE (3) 2" X 8' LODGE POLES. DRILL, USING GALVANIZED SCREWS, TO BATTENS AND 2" X 4" STAKES. NO SCREWS SHALL PENETRATE TREE. FLAG AT MIDPOINT AND AT BASE.
10. 2" x 4" x 3' (MIN), P.T. WOOD STAKES BURIED 3" BELOW FINISHED GRADE.
7. FINISHED GRADE (SEE GRADING PLAN)

NOTES:

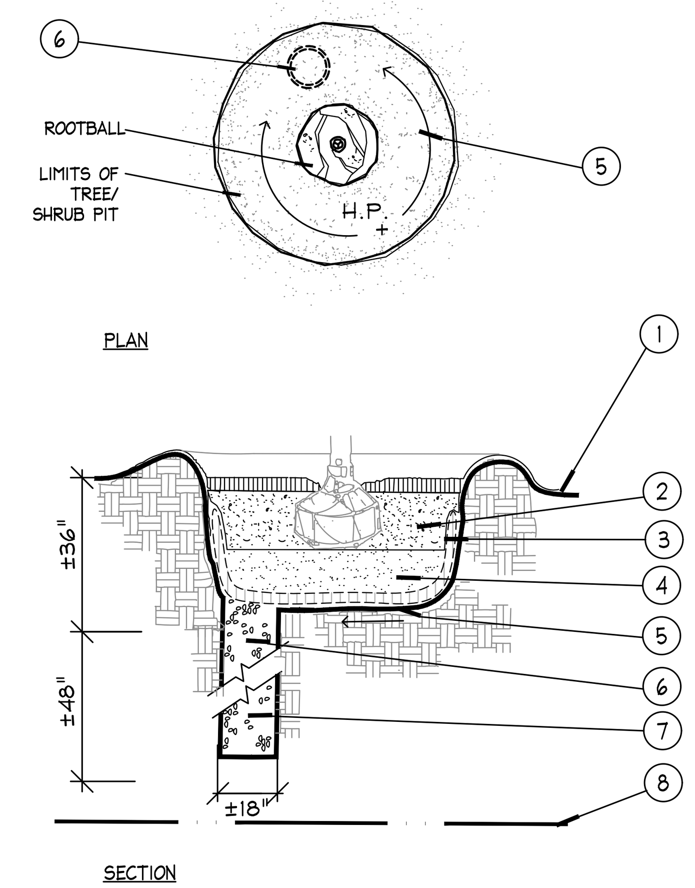
A. ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. ALTERNATE TREE ANCHORING SYSTEMS MAY BE SUBSTITUTED FOR WOOD STAKING SYSTEM UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

D. RUBBER HOSE/WIRE SYSTEMS ARE NOT ALLOWED.

* Refer to details B and D for planting

(F) Large Tree Staking - 100 Gal + or B&B 4" +
SECTION NTS



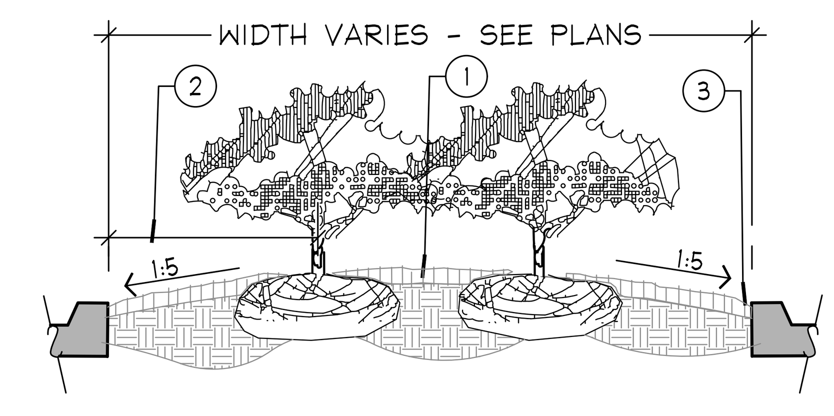
1. FINISH GRADE
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER
4. 12" CLEAN SAND, COMPACTED. ADJUST LAYER THICKNESS SO TOP OF ROOTBALL IS AT LEAST 1" ABOVE FINISHED GRADE.
5. SLOPE BOTTOM TO DRAIN
6. ±18"ø AUGURED HOLE PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
7. BACKFILL WITH 1/2" - 3/4" GRAVEL.
8. WATER TABLE. (DEPTH VARIES)

NOTE:

FOR A PARKING ISLAND PLANTING SITUATION, CONTRACTOR TO BACKFILL ENTIRE LENGTH OF PLANTING AREA TO WITHIN 6" OF BACK OF CURB OR EDGE OF PAVEMENT.

REFER TO NOTE 0.3 OF WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(G) Poor Drainage Condition
PLAN/SECTION NTS

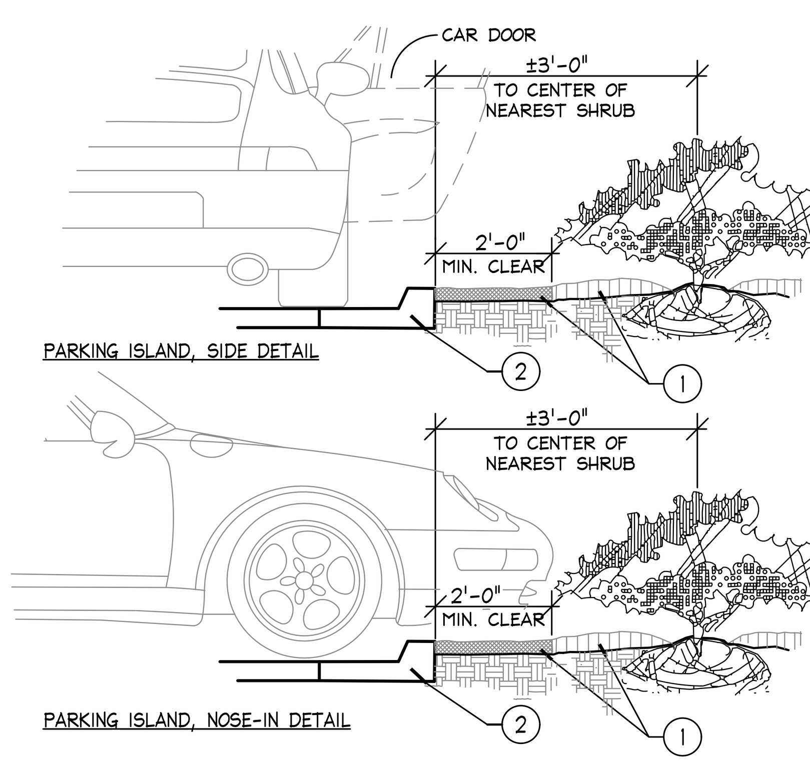


PLANTER ISLAND NOTES

1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS. SEE DETAIL 'I' FOR PLANTER MEDIANS ADJACENT TO PARKING SPACES.
3. 1" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

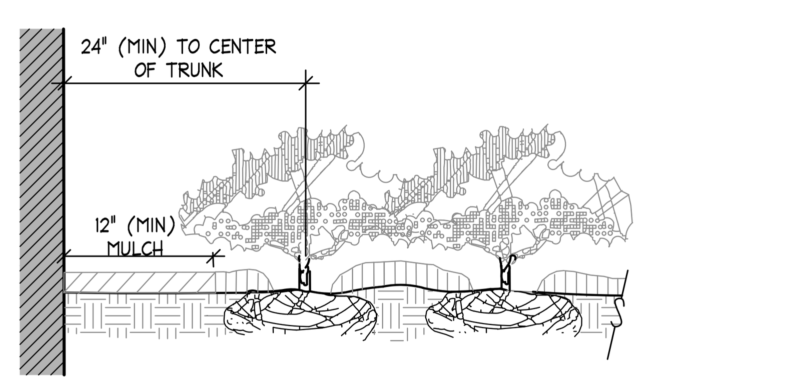
- EXCAVATE CONTINUOUS 36" DEEP (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.
- PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).
- ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

(H) Planted Parking Lot Islands / Medians
SECTION NTS



1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP.
   NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE
2. CURB OR PARKING LOT EDGE, BY OTHERS

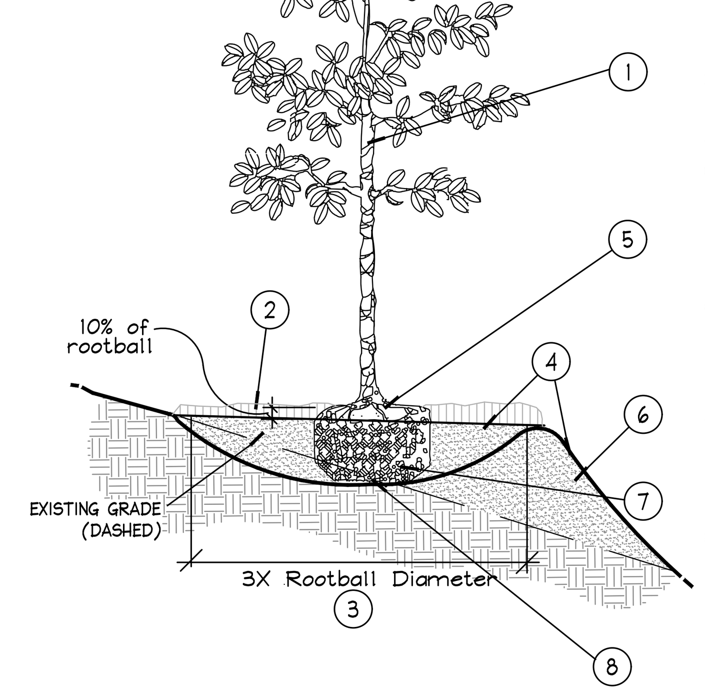
(I) Parking Space/Curb Planting
SECTION NTS



NOTES

* CLEAR ZONE: 24" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.

(J) Plantings Adjacent to Buildings
SECTION NTS



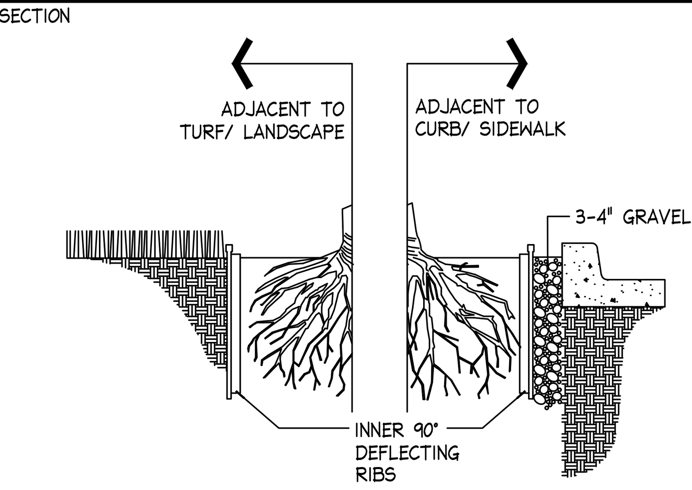
1. TREES, PALMS, AND LARGE SHRUBS (15 GAL OR GREATER) SHALL BE PLANTED IN SIMILAR MANNER
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW/ WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. BERM SOIL SO THAT TOP OF BERM IS JUST BELOW THE TOP 10% OF THE TOP OF THE ROOTBALL. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE.
7. B & B OR CONTAINER REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL. (SEE SPECIFICATIONS FOR OTHER ROOT BALL REQUIREMENTS)
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

(K) Planting on a Slope
SECTION NTS



LINEAR APPLICATION

ROOT BARRIER BY: Century Root Barrier (714)632-7083
(or) DeepRoot (800)458-7668
(or approved equal)

SIZE: 36" D
MATERIAL: POLYETHYLENE WITH ULTRAVIOLET INHIBITORS
THICKNESS: .085 IN. (min.)

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. INSTALL AS REQUIRED, PER PLAN NOTES.
3. SUBMIT PRODUCT DATA FOR APPROVAL.

(L) Root Barrier
Barrier Detail NTS

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT	143788000
DATE	07/17/2025
SCALE	AS SHOWN
DESIGNED BY	NS
DRAWN BY	NS
CHECKED BY	TCH

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

LANDSCAPE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-03

GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/ OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

D. MATERIALS

1. GENERAL

MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS' APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SUBMITTAL
MULCH	PRODUCT DATA
TOPSOIL MIX	AMENDMENT MIX/ PRODUCT DATA/ TEST RESULTS
PLANTS	PHOTOGRAPHS OF ONE (1) OF EACH SPECIES (OR TAGGED IN NURSERY) CLIENT-REQUESTED TAGGING MAY SUBSTITUTE PHOTOS. INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC.
FERTILIZER	PRODUCT DATA
INNOCULANT	PRODUCT DATA
HERBICIDE	PRODUCT DATA
STAKING/GUYING	FOR ALTERNATE TO DETAILS: SEND PRODUCT DATA, DETAIL

2. PLANT MATERIALS

A. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE

B. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 20% CLEAN FLORIDA MUCK AND 80% PARTS CLEAN SAND. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
2. MUCK (OR MUCKY PEAT) FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, AND OF A VERY HIGH ORGANIC CONTENT DERIVED FROM FLORIDA SOURCES; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.
3. SAND FOR USE IN PREPARING SOIL MIXTURE SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY THE OWNER.
4. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.
5. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

F. WATER

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). TYPE OF MATERIAL: "FLORIMULCH" OR SHREDDED, STERILE EUCALYPTUS MULCH

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.
3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.
4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.
5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB- BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, FLORIDA #1 OR BETTER.
2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.
4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO LOCATE UTILITIES.
3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.
4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
5. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE , PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.
6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.
8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
13. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A-300.
14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" TO ACHEIVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
16. MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.
17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
4. SODDING
   - A. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.
   - B. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.
   - C. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED - REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
6. LAWN MAINTENANCE:
   - A. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).
   - B. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

S. MAINTENANCE (ALTERNATE BID ITEM)

CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

U. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL 7 GALLON AND LARGER PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
2. THE LIFE AND SATISFACTORY CONDITION OF ALL OTHER PLANT MATERIAL (INCLUDING SOD) INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
3. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.
4. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

No. | REVISIONS | DATE | BY

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

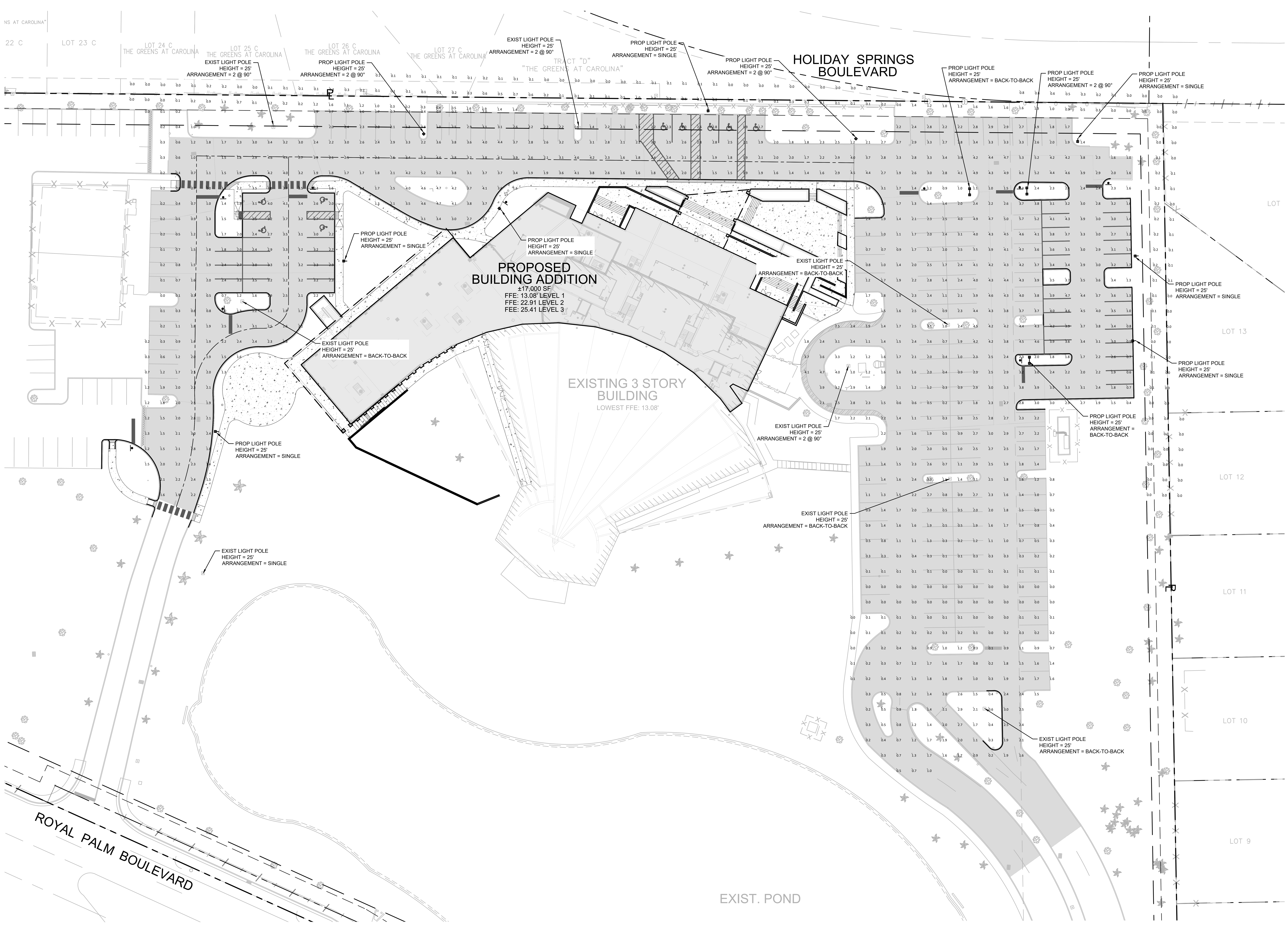
LICENSED PROFESSIONAL: THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-04



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

R/W	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-05 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION
	EXIST. SITE LIGHTING
	PROP. SITE LIGHTING

NOTES:

1. EXISTING LUMINAIRES ARE ASSUMED TO BE THE ETA2 (ENTABULATURE) 54L-750 T4 BY KIM LIGHTING.
2. LOCATIONS AND ARRANGEMENTS OF EXISTING SITE LIGHTING IS BASED ON SURVEY AND FIELD OBSERVATIONS. MOUNTING HEIGHT IS ASSUMED TO BE 25-FT PER THE MAXIMUM ALLOWABLE BY CITY OF MARGATE CODE
3. PROPOSED SITE LIGHTING IS DESIGNED TO COMPLY WITH CITY OF MARGATE CODE SEC. 40.705(G) (LEVEL 1) FOR PARKING AREAS IMPACTED BY THE PROPOSED SITE IMPROVEMENTS. NON-COMPLIANT EXISTING SITE AREAS ARE NOT ADDRESSED BY THE PROPOSED SITE LIGHTING LAYOUT.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
◇	5	90 Degree Angle	2 @ 90 degrees	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1262.7	25
	8	Single Head	Single	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1010.16	25
	7	Back-to-Back	Back-Back	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1767.78	25

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Lot Area	Illuminance	Fc	2.03	6.1	0.0	N.A.	N.A.
Property Limits	Illuminance	Fc	0.27	1.9	0.0	N.A.	N.A.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

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

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

PHOTOMETRICS PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-01

KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

Entablature®

FEATURES
- TIR Strike Optics
- Patented low profile luminaire
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Type 1, 2, 3, 4, 4W, 5W, 5QM, L, and R distributions
- 0 - 10V dimming drivers standard
- IP65 optical assembly

c UL us LISTED — BUY AMERICAN SOLUTIONS See Certification Specifications — ida DARK SKY APPROVED 2016 3000K and warmer CCTs only

CONTROL TECHNOLOGY
NX LIGHTING CONTROLS — wiSCAPE™

RELATED PRODUCTS

Ouro	Pavilion	PGL8

SPECIFICATIONS

CONSTRUCTION
- One piece die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- Solid barrier wall separates optical and electrical compartments
- Double-thick wall with gussets on the support-arm mounting end
- Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- One-piece die-cast, low copper (<0 6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange
- Optional clear 1/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimete
- Optional, fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens. CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance
- One-piece extruded aluminum arm with internal bolt guides and fully radiussed top and bottom
- Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief

CONSTRUCTION (CONTINUED)
- Arm is circular cut for specified round pole
- Optional cast, low copper aluminum horizontal slip-fitter with adaptor plate to secure the luminaire to 2" IPS pipe size arms
- Optional cast aluminum wall mount plate assembly. Attaches to the wall over the junction box. Luminaire attaches to the wall plate

OPTICS
- Optical cartridge system consisting of a die cast heat sink, LED Total Internal Reflection (TIR) optics, gasket and bezel plate
- Molded silicone gasket ensures a weather-proof seal around each individual LED
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Optional BackLight Control for complete control of unwanted backlight
- IP65 Optical assembly
- Type 1, 2, 3, 4, 4W, 5W, 5QM, R, and L standard distributions
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level
- Anodized aluminum heat sink modules

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

ELECTRICAL
- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts
  DF for 208, 240, 480 Line volts

CONTROLS
- 7-pin Receptacle and Button Photocell

CERTIFICATIONS AND LISTINGS
- Listed to UL1598 and CSA C22.2#250.0-24 for wet location and 40°C ambient temperatures
- IDA approved, 3000K and warmer CCTs only
- RoHS compliant
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	4,363–20,433
Wattage Range	88.7–178.2
Efficacy Range (LPW)	46.2–128.3
Reported Life (Hours)	L70/60,000
Weight	45 lbs 20.4 kg
EPS Side View	1.8

KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: ETA2-1A-750-35K8-3-CLR-SQ-UNV-BLT-7PR-SF-A4

CATALOG #

ETA2		54L-750	3K7	4		BC
Model	**Mounting**	**LED Engine**	**CCT/CRI [6]**	**Distribution**	**Lens Options**	**House Side Shield**
ETA2 Entablature 2.0 Large Fixture	1A Single Arm Mount	54L-560 54 LEDs - 11,000 Lumens	AM [1] Monochromatic Amber [1]	1 Type I	(Blank) No Lens	BC [7] Backlight Control
	1W Wall Mount	54L-750 54 LEDs - 14,000 Lumens	27K8 [2] 2700K, 80CRI	2 Type II	CLR [9] Clear Glass Lens	
	HSF Horizontal Slipfitter	81L-700 81 LEDs - 19,000 Lumens	27K9 [2] 2700K, 90CRI	3 Type III	CP [9] Clear Polycarbonate Lens	
			3K7 3000K, 70CRI	4 Type IV Forward		
			3K8 [2] 3000K, 80CRI	4W Type IV Wide		
			3K9 [2] 3000K, 90CRI	5W Type V Wide		
			35K8 [2] 3500K, 80CRI	5QM Type V Square Medium		
			35K9 [2] 3500K, 90CRI	R Corner Right		
			4K7 4000K, 70CRI	L Corner Left		
			4K8 [2] 4000K, 80CRI			
			4K9 [2] 4000K, 90CRI			
			5K7 5000K, 70CRI			
			5K8 [2] 5000K, 80CRI			
			5K9 [2] 5000K, 90CRI			

VSF 2B	UNV	BLS			
Mounting Options	**Voltage**	**Fixture Finish**	**Photocell Options**	**Fuse Options**	**Optional Entablatures**
VSF [8] Vertical Slipfitter Mount for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	UNV 120-277V	BLS Black Gloss Smooth	7PR 7-Pin Photocell Receptacle	SF Single Fuse 120, 277, 347 Line Volts	A1 Arch
SVSF [8] Vertical Slipfitter Mount square for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	347 347V	BLT Black Matte Textured	PC [10] Button Photocell	DF Double Fuse 208, 240, 480 Line Volts	A2 Broken Arch
3 Side Arm Mount 3" O.D. Pole	480 480V	DBS Dark Bronze Gloss Smooth			A3 Stepped Arch
3.5 Side Arm Mount 3.5" O.D. Pole		DBT Dark Bronze Matte Textured			A4 Stepped Brock Arch
4 Side Arm Mount 4" O.D. Pole		GTT Graphite Matte Textured			A5 Standard Entablature
5 Side Arm Mount 5" O.D. Pole		LGS Light Grey Gloss Smooth			P6 Peak
6 Side Arm Mount 6" O.D. Pole		LGT Light Grey Matte Textured			P7 Broken Peak
SQ Side Arm Mount Square Pole		PSS Platinum Silver Smooth			P8 Stepped Peak
		VGT Verde Green Matte Textured			P9 Stepped Broken Peak
		WHS White Gloss Smooth			P10 Stepped
		WHT White Matte Textured			See Page 5 for details
		Color Option			
		CC Custom Color			

Control Options	**Control Accessories [3]**
SCH-R Round Pole Mounted (Occupancy Sensor up to 16' to 30')	WIR-RME-L wiSCAPE 7-pin Module
SCH-S Square Pole Mounted (Occupancy Sensor up to 16' to 30')	NXOFM-1R1D-UNV NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming

Notes:
1 Turtle Friendly.
2 See Lumen Multiplier chart on Page 13 for lumen scaling factor. Consult factory for additional details.
3 Not available with other sensor or wireless control options
6 5-step MacAdam Ellipse Binning is standard. Consult factory for 3-step MacAdam Ellipse Binning
7 Not available with 5QM and 5W distributions
8 For all arm configurations, please refer to page 4. VSF/SVSF options ordered seperately.
9 Not Available with 81L-700
10 Not Available in 480V

KIM LIGHTING®

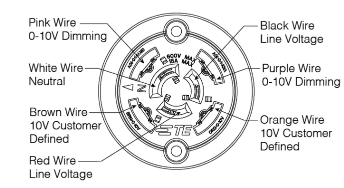
ETA2
ARCHITECTURAL AREA/SITE

SPECIFICATIONS (CONTINUED)

CONTROLS

BUTTON PHOTOCELL
- Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others

7PR
- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others
- Standard customer operation modes:
  1. Traditional on/off photoelectric control
  2. 5-pin wireless photoelectric control for added dimming feature
  3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use

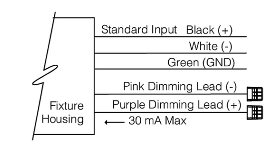


wiSCAPE™
- wiSCAPE™ wireless control modules allow an individual fixture to managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The wiSCAPE modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L
- wiSCAPE External Module,120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

NX LIGHTING CONTROLS
- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity.

DIMMING:
- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver



- Modular wiring harness in the service area provides user access to the dimming circuitry
- Dimming circuitry compatible with 0-10V, user-defined control devices
- Optional factory programmed dimming profile

POLE MOUNTED
ROUND POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'
SCH-R
- Round Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for round pole mounting. Pole diameter needed. Pole to be drilled in the field with provided installation instructions
- Ordering Example: SCH-R4[1]/277[2]/BL[3]

SQUARE POLE-MOUNTED OCCUPANCY SENSOR UP TO 30'
SCH-S
- Square Pole Mounted Occupancy Sensor up to 30' - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for square pole mounting
- Ordering Example: SCH-S/277[2]/BL[3]

ASTRODIM
- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times

OPTIONAL FUSING:
- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- High temperature fuse holders factory installed inside the fixture housing
- Fuse is included

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

KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

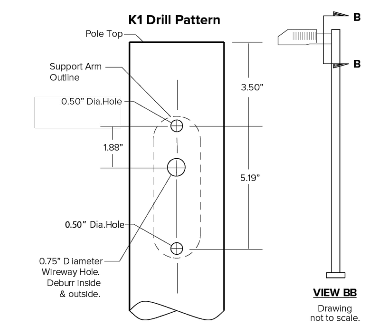
Configuration			EPA
	1A	1 Arm Side Mount	1.8
	1W	Single Wall Mount	n/a
	HSF	Horizontal Slipfitter	n/a

VSF/SVSF Configuration			
	1A		3T
	2B		3Y
	2L		4C

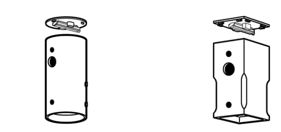
MOUNTING OPTIONS

SUPPORT ARM:
- Die-cast, low copper aluminum alloy, with splice access cover
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief
- The arm adapter is square or circular cut for specified pole size and shape
- For field wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment

Fixture Drilling Instructions:
For AR, CC, CCS, and ET Fixtures



OPTIONAL VERTICAL SLIP-FITTER (VSF/SVSF):
- Internally accessible slip-fitter attaches to a 2-3/8" x 4" long tenon and allows hands-free wiring and maintenance
- Available for round and square poles



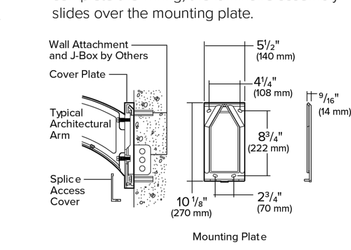
- For VSF arm configurations, please use 4". Mounting option on fixture ordering configuration. The optional VSF/SVSF will need to be ordered separately.
- SVSF use square configuration.

Ordering example for round:
- 2 A/ETA2/54L-500/35K8/3/CLR/**4.00**/UNV/BLT
- 1 VSF-2B

Ordering example for square:
- 2 1A/ETA2/54L-500/35K8/3/CLR/**SQ**/UNV/BLT
- 1 SVSF-2SB

VSF	SVSF
VSF-1A	SVF-1A
VSF-2B	SVF-2B
VSF-2L	SVSF-2L
VSF-3T	SVSF-3T
VSF-3Y	SVSF-3Y
VSF-4C	SVSF-4C

WALL MOUNT
1W
- A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color
- Optional Wall Mount: (CC is illustration the same for all site area?)
- Optional, cast aluminum mounting plate attaches to a wall over a junction box and the speed mount is bolted to the cover plate. To complete the wiring, the luminaire assembly slides over the mounting plate.

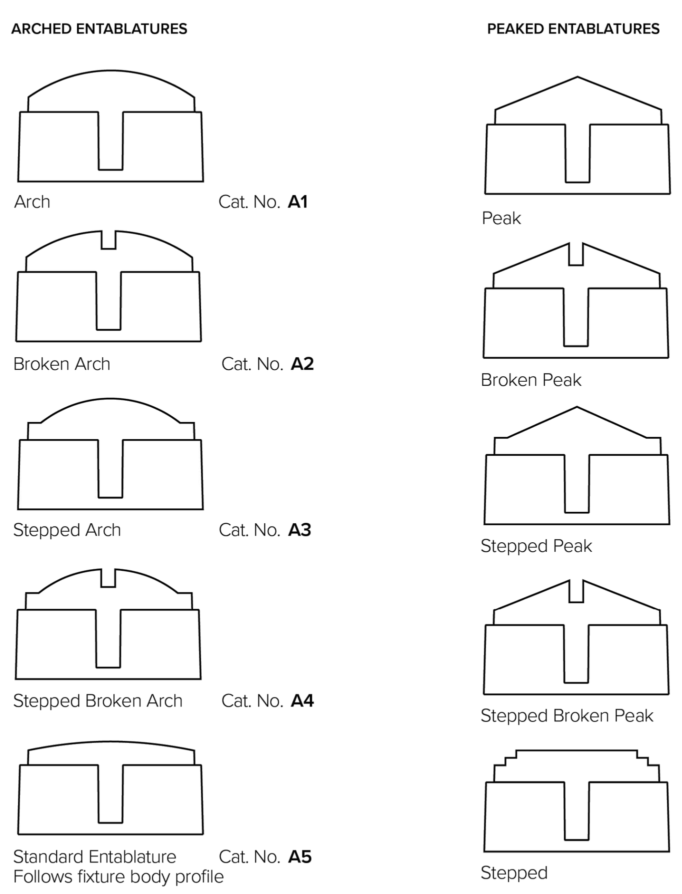


KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

OPTIONAL ENTABLATURES



KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS

NO LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	B	U	G	lm/w	4000K 70CRI Lumen	B	U	G	lm/w	5000K 70CRI Lumen	B	U	G	lm/w
54	11,000	560	1	10664	1	0	1	120.2	10802	1	0	1	121.7	11380	1	0	1	128.3
			1-BC	6020	0	0	0	67.8	6098	0	0	0	68.7	6424	0	0	1	72.4
			2	9651	2	0	2	108.8	9776	2	0	2	110.2	10299	2	0	2	116.1
			2-BC	5304	0	0	1	59.8	5373	0	0	1	60.6	5660	0	0	1	63.8
			3	9901	1	0	2	111.6	10029	1	0	2	113.0	10566	1	0	2	119.1
			3-BC	5426	0	0	2	61.2	5496	0	0	2	61.9	5791	0	0	2	65.3
			4	10301	1	0	2	116.1	10435	1	0	2	117.6	10994	1	0	2	123.9
			4-BC	7046	0	0	2	79.4	7138	0	0	2	80.4	7520	0	0	2	84.8
			4W	9545	1	0	2	107.6	9669	1	0	2	109.0	10186	1	0	2	114.8
			4W-BC	5724	0	0	2	64.5	5798	0	0	2	65.3	6108	0	0	2	68.8
			5W	9561	3	0	2	107.7	9685	3	0	2	109.1	10203	3	0	2	115.0
			5QM	10254	3	0	1	115.6	10387	3	0	1	117.1	10943	3	0	1	123.3
			R	10021	2	0	2	112.9	10151	2	0	2	114.4	10695	2	0	2	120.5
			L	10021	1	0	2	112.9	10151	1	0	2	114.4	10695	1	0	2	120.5
	14,000	750	1	14256	1	0	1	112.9	14441	1	0	1	114.4	15213	1	0	1	120.5
			1-BC	8048	0	0	1	63.7	8152	0	0	1	64.6	8588	0	0	1	68.0
			2	12901	2	0	2	102.2	13069	2	0	2	103.5	13768	2	0	2	109.0
			2-BC	7090	0	0	1	56.2	7183	0	0	1	56.9	7567	0	0	2	59.9
			3	13236	2	0	2	104.8	13407	2	0	2	106.2	14125	2	0	2	111.9
			3-BC	7254	0	0	2	57.4	7348	0	0	2	58.2	7741	0	0	2	61.3
			4	13771	1	0	3	109.1	13950	1	0	3	110.5	14696	1	0	3	116.4
			4-BC	9420	0	0	2	74.6	9542	0	0	2	75.6	10052	0	0	2	79.6
			4W	12760	2	0	3	101.1	12926	4	0	2	102.4	13618	2	0	3	107.8
			4W-BC	7652	0	0	2	60.6	7751	0	0	2	61.4	8166	0	0	2	64.7
			5W	12781	4	0	2	101.2	12947	2	0	3	102.5	13640	4	0	2	108.0
			5QM	13708	3	0	1	108.6	13886	3	0	1	110.0	14629	4	0	1	115.9
			R	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
			L	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
81	19,500	700	1	19820	2	0	1	111.2	20077	2	0	1	112.6	21151	2	0	1	118.7
			1-BC	11188	0	0	1	62.8	11334	0	0	1	63.6	11940	0	0	1	67.0
			2	17937	2	0	2	100.6	18169	2	0	2	101.9	19142	3	0	3	107.4
			2-BC	9858	0	0	2	55.3	9986	0	0	2	56.0	10520	0	0	2	59.0
			3	18402	2	0	3	103.2	18640	2	0	3	104.6	19638	2	0	3	110.2
			3-BC	10085	0	0	2	56.6	10216	0	0	2	57.3	10762	0	0	2	60.4
			4	19146	2	0	4	107.4	19395	2	0	4	108.8	20433	2	0	4	114.6
			4-BC	13096	0	0	3	73.5	13266	0	0	3	74.4	13976	0	0	3	78.4
			4W	17741	2	0	4	99.5	17971	2	0	4	100.8	18933	2	0	4	106.2
			4W-BC	10638	1	0	2	59.7	10776	1	0	3	60.5	11353	1	0	3	63.7
			5W	17769	4	0	2	99.7	18000	4	0	2	101.0	18963	4	0	2	106.4
			5QM	19058	4	0	2	106.9	19305	4	0	2	108.3	20338	4	0	2	114.1
			R	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	3	0	3	111.5
			L	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	2	0	3	111.5

KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

CLR LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	B	U	G	lm/w	4000K 70CRI Lumen	B	U	G	lm/w	5000K 70CRI Lumen	B	U	G	lm/w
54	11,000	560	1	8907	1	0	1	100.4	9023	1	0	1	101.7	9506	1	0	1	107.1
			1-BC	5028	0	0	0	56.7	5094	0	0	0	57.4	5366	0	0	0	60.5
			2	8061	1	0	2	90.8	8166	1	0	2	92.0	8603	1	0	2	97.0
			2-BC	4430	0	0	1	49.9	4488	0	0	1	50.6	4728	0	0	1	53.3
			3	8270	1	0	2	93.2	8377	1	0	2	94.4	8826	1	0	2	99.5
			3-BC	4532	0	0	1	51.1	4591	0	0	1	51.7	4837	0	0	2	54.5
			4	8605	1	0	2	97.0	8716	1	0	2	98.2	9183	1	0	2	103.5
			4-BC	5885	0	0	2	66.3	5962	0	0	2	67.2	6281	0	0	2	70.8
			4W	7973	1	0	2	89.9	8076	1	0	2	91.0	8509	1	0	2	95.9
			4W-BC	4781	0	0	2	53.9	4843	0	0	2	54.6	5102	0	0	2	57.5
			5W	7986	3	0	1	90.0	8089	3	0	1	91.2	8522	3	0	2	96.0
			5QM	8565	3	0	1	96.5	8676	3	0	1	97.8	9140	3	0	1	103.0
			R	8371	3	0	1	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
			L	8371	1	0	2	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
	14,000	750	1	11907	1	0	1	94.3	12062	1	0	1	95.5	12708	1	0	1	100.6
			1-BC	6722	0	0	1	53.2	6809	0	0	1	53.9	7174	0	0	1	56.8
			2	10776	2	0	2	85.3	10916	2	0	2	86.4	11500	2	0	2	91.1
			2-BC	5923	0	0	1	46.9	5999	0	0	1	47.5	6321	0	0	1	50.1
			3	11056	1	0	2	87.6	11199	1	0	2	88.7	11798	1	0	2	93.4
			3-BC	6059	0	0	2	48.0	6137	0	0	2	48.6	6466	0	0	2	51.2
			4	11503	1	0	2	91.1	11652	1	0	2	92.3	12276	1	0	2	97.2
			4-BC	7868	0	0	2	62.3	7970	0	0	2	63.1	8397	0	0	2	66.5
			4W	10658	1	0	2	84.4	10797	1	0	2	85.5	11375	1	0	3	90.1
			4W-BC	6391	0	0	2	50.6	6474	0	0	2	51.3	6821	0	0	2	54.0
			5W	10676	3	0	2	84.5	10814	3	0	2	85.6	11393	3	0	2	90.2
			5QM	11450	3	0	1	90.7	11598	3	0	1	91.9	12219	3	0	1	96.8
			R	11190	2	0	2	88.6	11335	2	0	2	89.8	11942	2	0	2	94.6
			L	11190	1	0	2	88.6	11335	1	0	2	89.8	11942	1	0	2	94.6

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES — LICENSE No. 97343 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-02

KIMLIGHTING®

ETA2

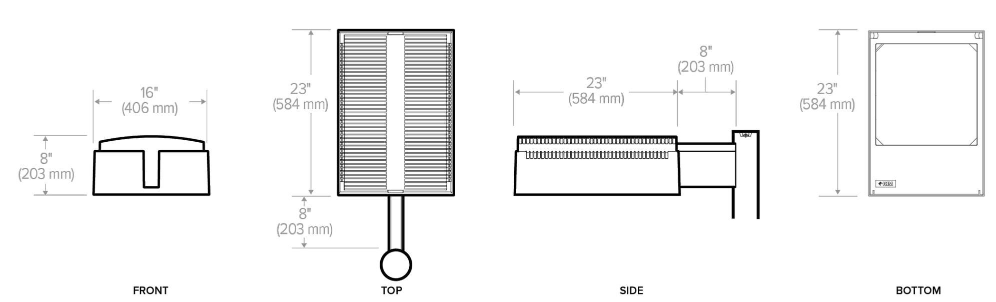
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

PL LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	3000K B	3000K U	3000K G	3000K lm/w	4000K 70CRI Lumen	4000K B	4000K U	4000K G	4000K lm/w	5000K 70CRI Lumen	5000K B	5000K U	5000K G	5000K lm/w
54	11,000	560	1	8772	1	0	1	98.9	8886	1	0	1	100.2	9362	1	0	1	105.5
			1-BC	4952	0	0	0	55.8	5016	0	0	0	56.5	5285	0	0	0	59.6
			2	7939	1	0	1	89.5	8042	1	0	2	90.6	8472	1	0	2	95.5
			2-BC	4363	0	0	1	49.2	4420	0	0	1	49.8	4656	0	0	1	52.5
			3	8145	1	0	2	91.8	8251	1	0	2	93.0	8692	1	0	2	98.0
			3-BC	4464	0	0	1	50.3	4522	0	0	1	51.0	4764	0	0	1	53.7
			4	8475	1	0	2	95.5	8584	1	0	2	96.7	9044	1	0	2	101.9
			4-BC	5797	0	0	2	65.3	5872	0	0	2	66.2	6186	0	0	2	69.7
			4W	7852	1	0	2	88.5	7954	1	0	2	89.6	8380	1	0	2	94.4
			4W-BC	4709	0	0	2	53.1	4770	0	0	2	53.8	5025	0	0	2	56.6
			5W	7865	3	0	1	88.6	7967	3	0	1	89.8	8393	3	0	2	94.6
			5QM	8435	3	0	1	95.1	8545	3	0	1	96.3	9002	3	0	1	101.5
			R	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
			L	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
	14,000	750	1	11727	1	0	1	92.9	11880	1	0	1	94.1	12515	1	0	1	99.1
			1-BC	6620	0	0	1	52.4	6706	0	0	1	53.1	7065	0	0	1	56.0
			2	10613	2	0	2	84.1	10751	2	0	2	85.1	11326	2	0	2	89.7
			2-BC	5833	0	0	1	46.2	5909	0	0	1	46.8	6225	0	0	1	49.3
			3	10888	1	0	2	86.2	11030	1	0	2	87.3	11620	1	0	2	92.0
			3-BC	5967	0	0	2	47.3	6045	0	0	2	47.9	6368	0	0	2	50.4
			4	11329	1	0	2	89.7	11476	1	0	2	90.9	12090	1	0	2	95.7
			4-BC	7749	0	0	2	61.4	7849	0	0	2	62.2	8270	0	0	2	65.5
			4W	10497	1	0	2	83.1	10633	1	0	2	84.2	11203	1	0	3	88.7
			4W-BC	6295	0	0	2	49.8	6376	0	0	2	50.5	6718	0	0	2	53.2
			5W	10514	3	0	2	83.3	10651	3	0	2	84.3	11221	3	0	2	88.9
			5QM	11277	3	0	1	89.3	11423	3	0	1	90.5	12034	3	0	1	95.3
			R	11021	2	0	2	87.3	11164	2	0	2	88.4	11761	2	0	2	93.1
			L	11021	1	0	2	87.3	11164	1	0	2	88.4	11761	1	0	2	93.1

DIMENSIONS



KIMLIGHTING®

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-1

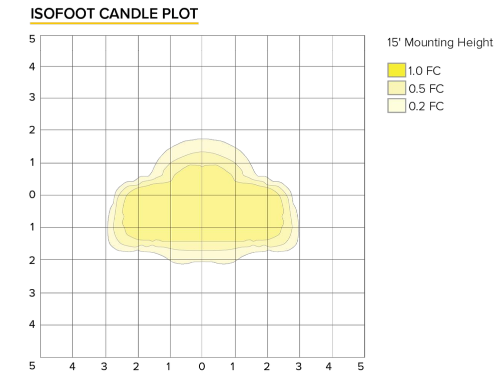
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	14440
Watts	126.27
Efficacy	114.4
IES Type	1
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12851	89.0%
Downward House Side	1589	11.0%
Downward Total	14440	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	14440	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-1-BC

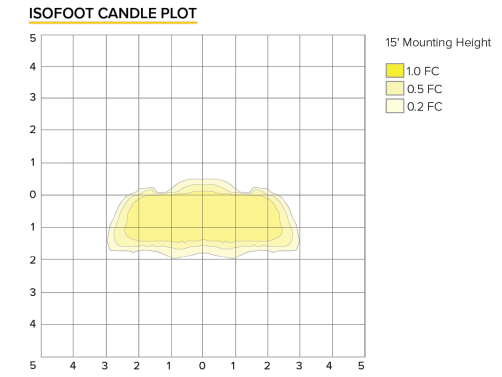
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	8151
Watts	126.27
Efficacy	64.6
IES Type	1
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8033	98.5%
Downward House Side	118	1.5%
Downward Total	8151	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	8151	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-2

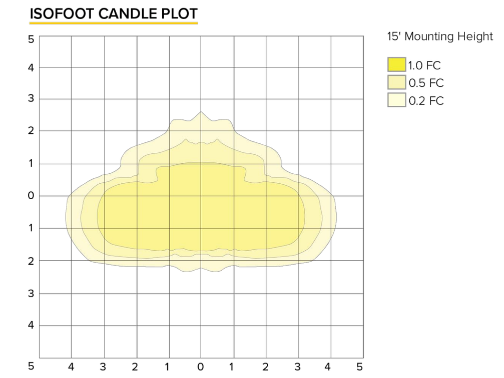
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13069
Watts	126.27
Efficacy	103.5
IES Type	2
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10825	82.8%
Downward House Side	2245	17.2%
Downward Total	13069	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13069	100%

ISOFOOT CANDLE PLOT



KIMLIGHTING®

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-2-BC

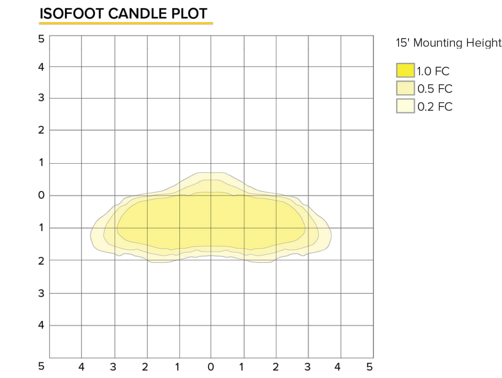
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7182
Watts	126.27
Efficacy	56.9
IES Type	2
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7019	97.7%
Downward House Side	163	2.3%
Downward Total	7182	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7182	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3

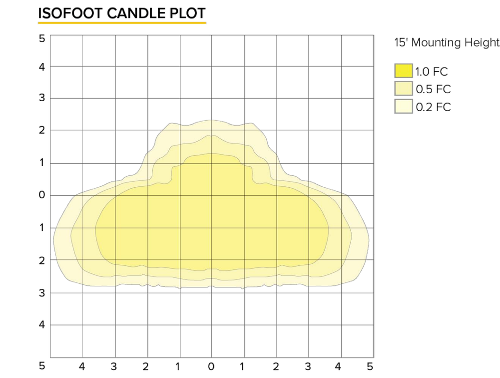
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13406
Watts	126.27
Efficacy	106.2
IES Type	3
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11502	85.8%
Downward House Side	1904	14.2%
Downward Total	13406	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13406	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3-BC

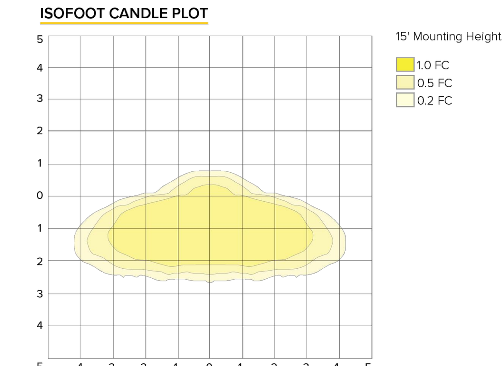
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7347
Watts	126.27
Efficacy	58.2
IES Type	3
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7108	96.7%
Downward House Side	239	3.3%
Downward Total	7347	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7347	100%

ISOFOOT CANDLE PLOT



KIMLIGHTING®

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4

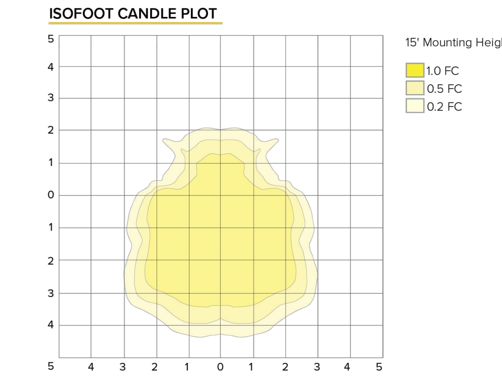
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13950
Watts	126.27
Efficacy	110.5
IES Type	4
BUG Rating	B1-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12630	87.6%
Downward House Side	1321	12.4%
Downward Total	13951	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13951	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4-BC

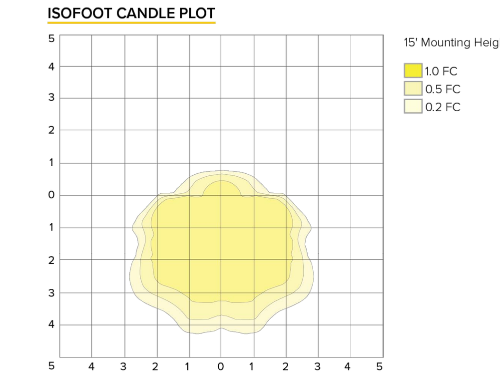
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	9542
Watts	126.27
Efficacy	75.6
IES Type	4
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	9312	87.6%
Downward House Side	231	12.4%
Downward Total	9543	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	9543	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4W

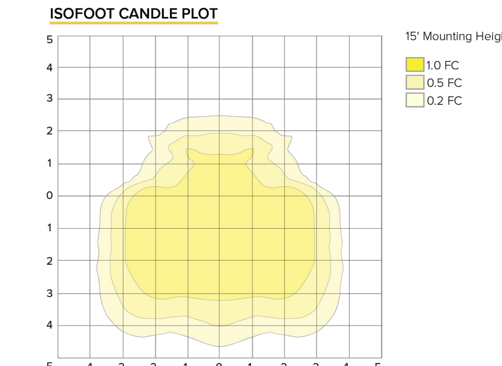
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12926
Watts	126.27
Efficacy	102.4
IES Type	4W
BUG Rating	B2-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11324	87.6%
Downward House Side	1602	12.4%
Downward Total	12926	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12926	100%

ISOFOOT CANDLE PLOT



KIMLIGHTING®

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4W-BC

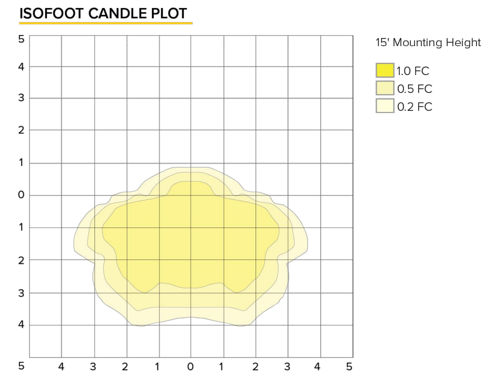
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7750
Watts	126.27
Efficacy	61.4
IES Type	4W
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7449	96.0%
Downward House Side	301	4.0%
Downward Total	7750	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7750	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5QM

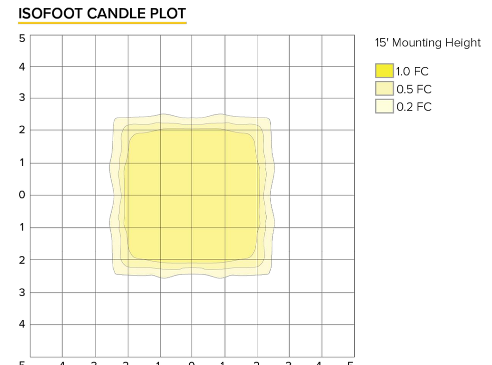
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13885
Watts	126.27
Efficacy	110.0
IES Type	5
BUG Rating	B3-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6943	50.0%
Downward House Side	6942	50.0%
Downward Total	13885	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13885	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5W

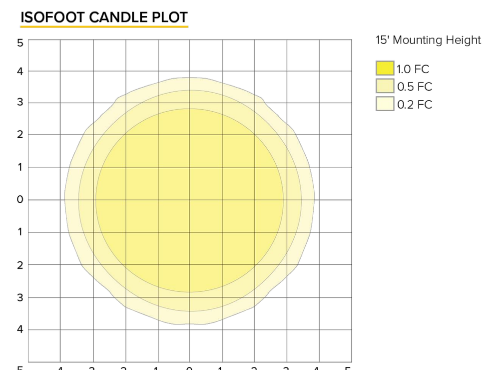
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12946
Watts	126.27
Efficacy	102.5
IES Type	5
BUG Rating	B4-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6473	50.0%
Downward House Side	6473	50.0%
Downward Total	12946	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12946	100%

ISOFOOT CANDLE PLOT



KIMLIGHTING®

ETA2

ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-R

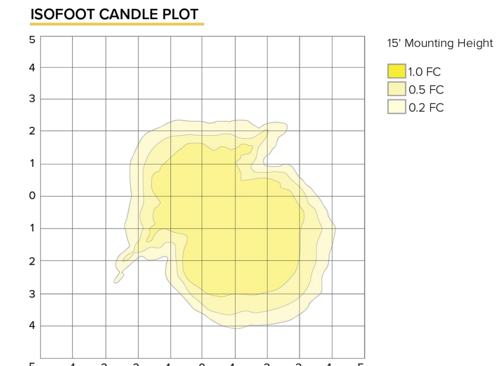
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13570
Watts	126.27
Efficacy	107.5
IES Type	R
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11231	82.8%
Downward House Side	2339	17.2%
Downward Total	13570	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13570	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-L

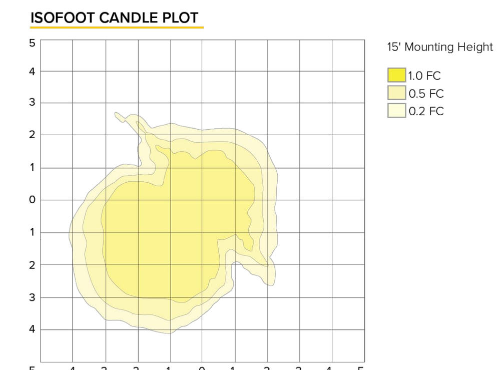
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13571
Watts	126.27
Efficacy	107.5
IES Type	L
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11523	84.9%
Downward House Side	2048	15.1%
Downward Total	13571	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13571	100%

ISOFOOT CANDLE PLOT



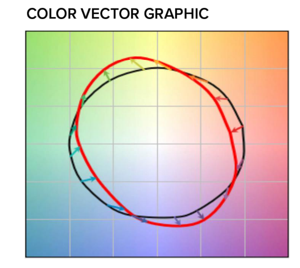
KIMLIGHTING®

ETA2

ARCHITECTURAL AREA/SITE

TM-30 DATA

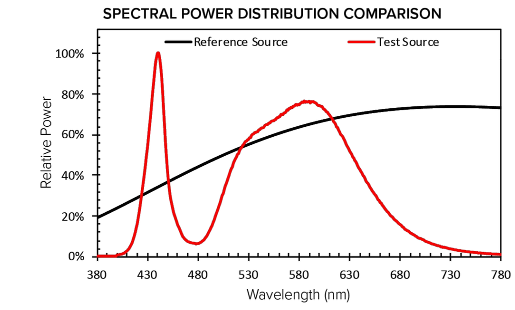
COLOR VECTOR GRAPHIC



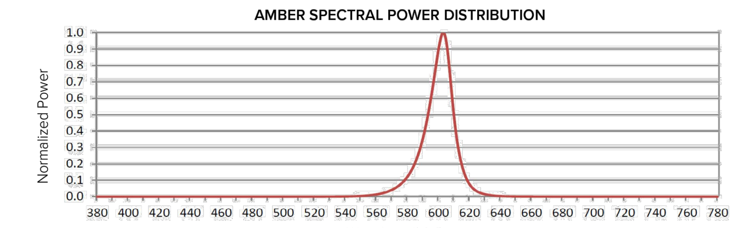
TEST SOURCE

R_f	68
R_g	99
CCT(K)	3947
D_{uv}	0.0004
x	0.3831
y	0.3793
CIE R_a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



AMBER SPECTRAL POWER DISTRIBUTION



ELECTRICAL DATA

LED Count	System Watts	Current	Line Voltage VAC	Line Voltage Hz	Amps AC 120	Amps AC 208	Amps AC 240	Amps AC 277	Amps AC 347	Amps AC 480	Min Power Factor	Max. THD (%)	Dimming Range	Source Current Out Min	Source Current Out Max	Absolute Voltage Min	Absolute Voltage Max
54 LEDs	88.7	560 mA	120-480	50/60	0.74	0.43	0.37	0.32	0.26	0.18	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	126.3	750 mA			1.05	0.61	0.53	0.46	0.36	0.26							
81 LEDs	178.2	700 mA			1.49	0.86	0.74	0.64	0.51	0.37							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°F)						
Ambient Temp.	0	25,000	36,000	50,000	100,000	Reported L70
25°C / 77°F	100%	94.22%	92.26%	89.84%	81.68%	>60khrs

CRI Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.9119	.7033
3500K	0.906	0.732
4000K	0.8941	.734
5000K	0.879	.7712
Scaling factor of 5000K 70CRI lumen packages		

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS

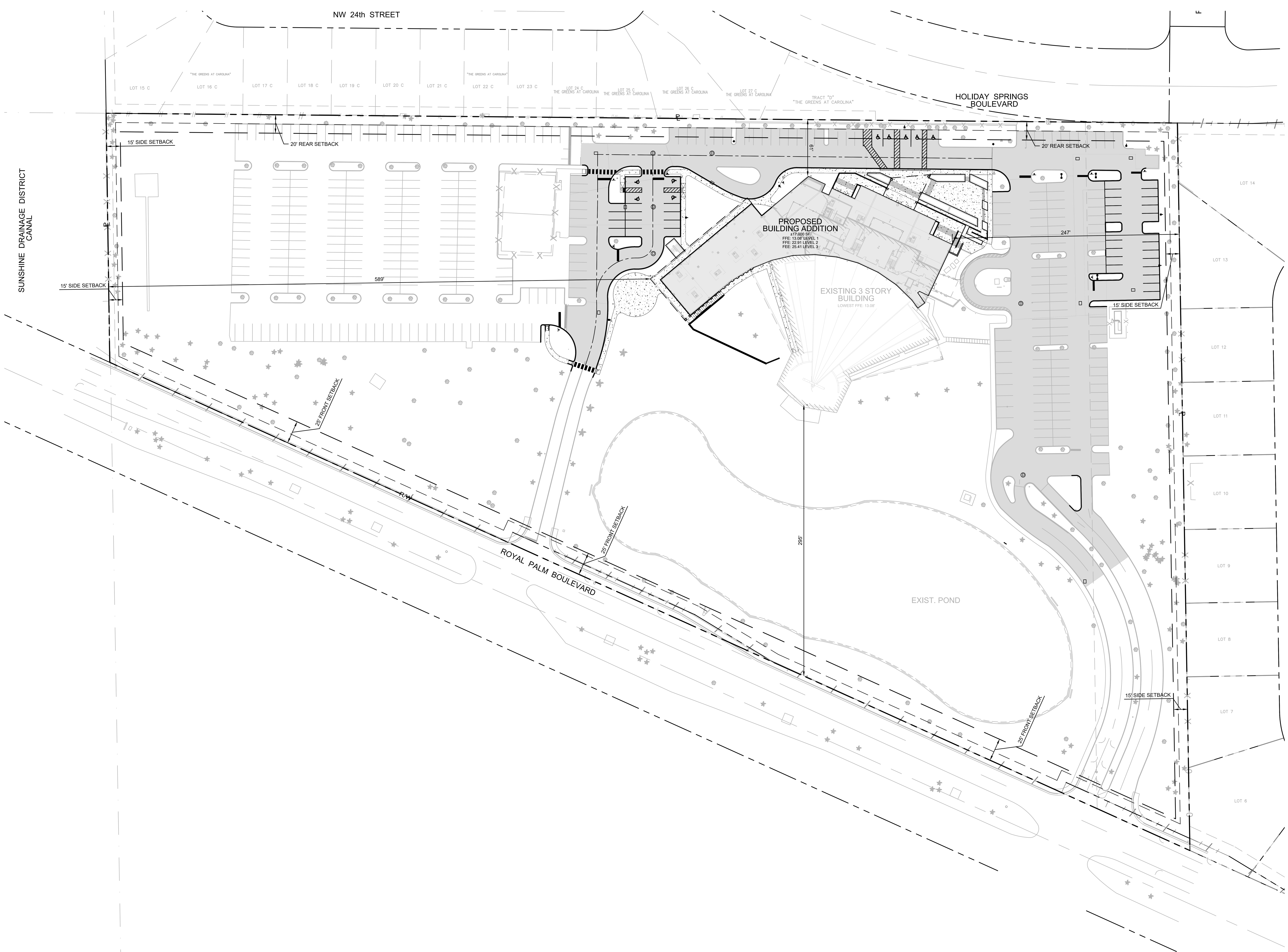
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SL-03



NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

R/W — ℄	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING

SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

OVERALL SITE PLAN

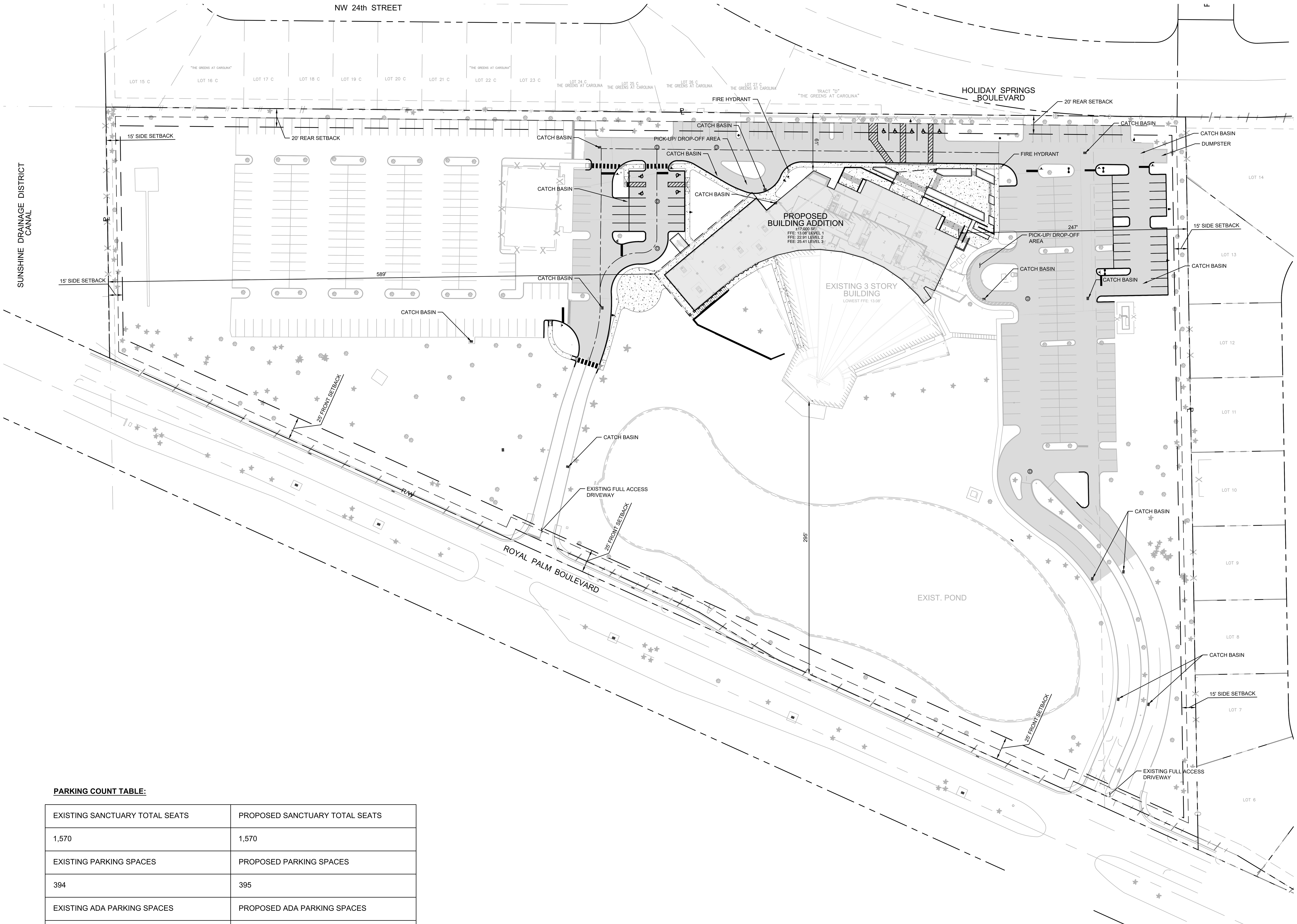
CHURCH SITE IMPROVEMENTS

PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER
SP-01



GRAPHIC SCALE IN FEET

0 25 50 100

LEGEND

R/W	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

PARKING COUNT TABLE:

EXISTING SANCTUARY TOTAL SEATS	PROPOSED SANCTUARY TOTAL SEATS
1,570	1,570
EXISTING PARKING SPACES	PROPOSED PARKING SPACES
394	395
EXISTING ADA PARKING SPACES	PROPOSED ADA PARKING SPACES
9	9
TOTAL EXISTING PARKING SPACES	TOTAL PROPOSED PARKING SPACES
403	404

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

REVISIONS | No. | DATE | BY

Kimley-Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

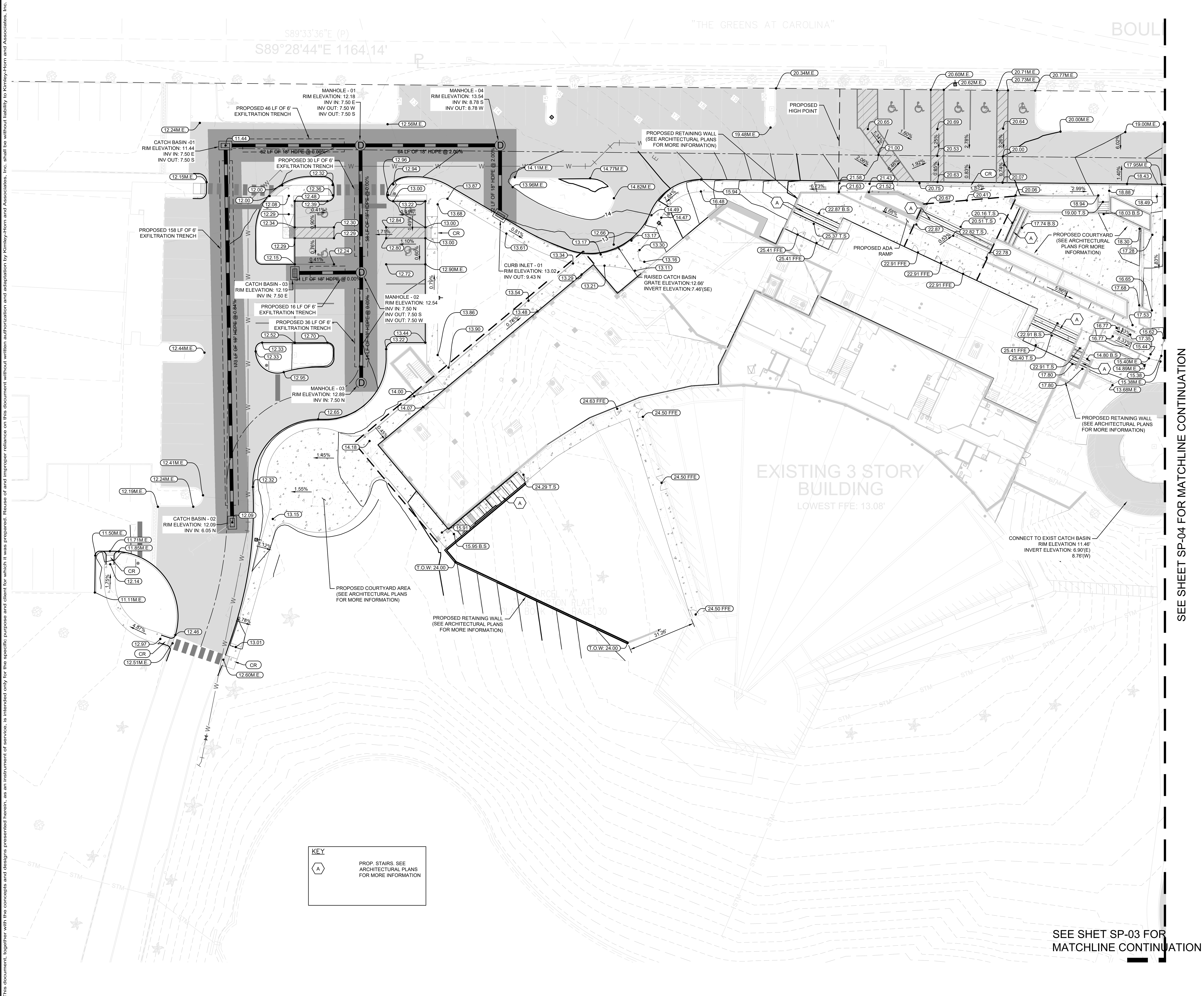
RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000 | DATE 7/23/2025 | SCALE AS SHOWN | DESIGNED BY RT | DRAWN BY KH | CHECKED BY ARM

MASTER PARKING PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-02



LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- MATCH EXIST. ELEVATION
- PROP. FINISHED FLOOR ELEVATION
- PROP. SPOT ELEVATION
- PROP. TOP OF STAIR ELEVATION
- PROP. BOTTOM OF STAIR ELEVATION
- PROP. CONTOURS
- EXIST. ELEVATION
- EXIST. CONTOURS
- PROP. GRADE BREAK
- PROP. FULL DEPTH PAVEMENT RESTORATION
- PROP. CONCRETE SIDEWALK
- PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
- PROP. BUILDING ADDITION
- PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.
16. REFER TO SP-03 FOR GRADING OF DRIVEWAY CONNECTION AREA

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

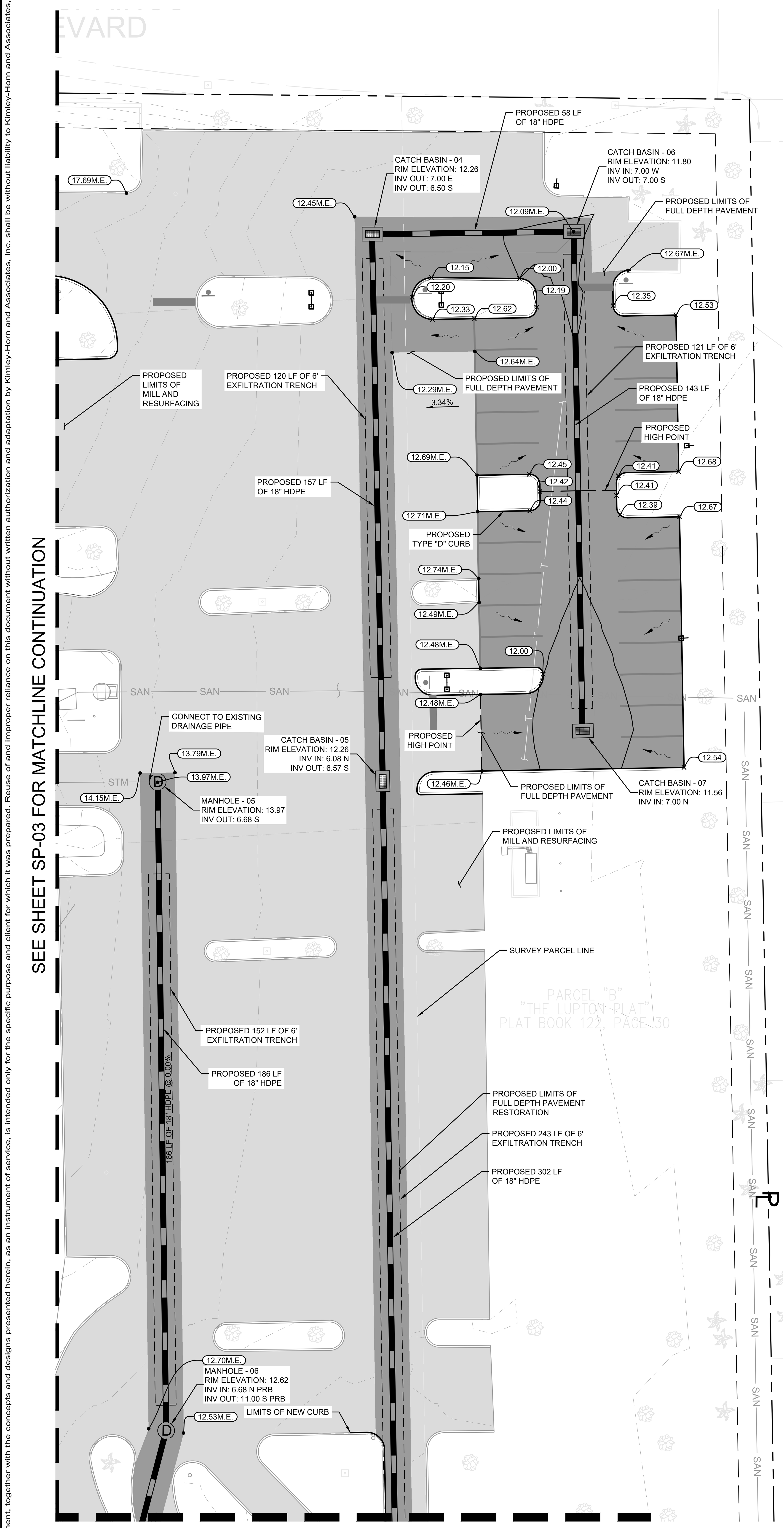
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

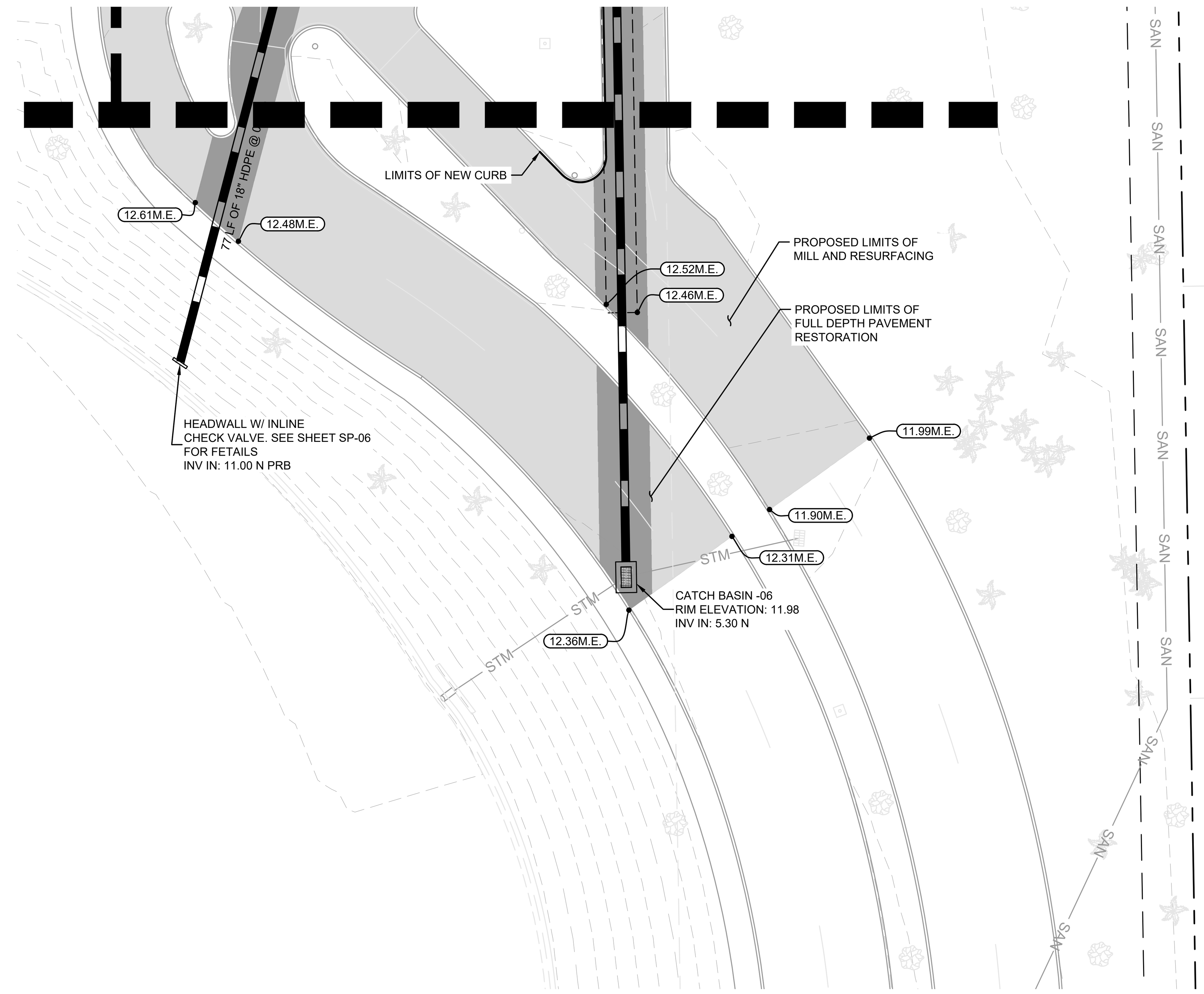
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-03



SEE LEFT FOR MATCHLINE CONTINUATION



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- 15.48M.E. MATCH EXIST. ELEVATION
- 15.48 FFE PROP. FINISHED FLOOR ELEVATION
- 15.48 PROP. SPOT ELEVATION
- 15.48 T.S PROP. TOP OF STAIR ELEVATION
- 15.48 B.S PROP. BOTTOM OF STAIR ELEVATION
- 15 PROP. CONTOURS
- 12.38 EXIST. ELEVATION
- 15 EXIST. CONTOURS
- PROP. GRADE BREAK
- PROP. FULL DEPTH PAVEMENT RESTORATION
- PROP. CONCRETE SIDEWALK
- PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
- PROP. BUILDING ADDITION
- PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

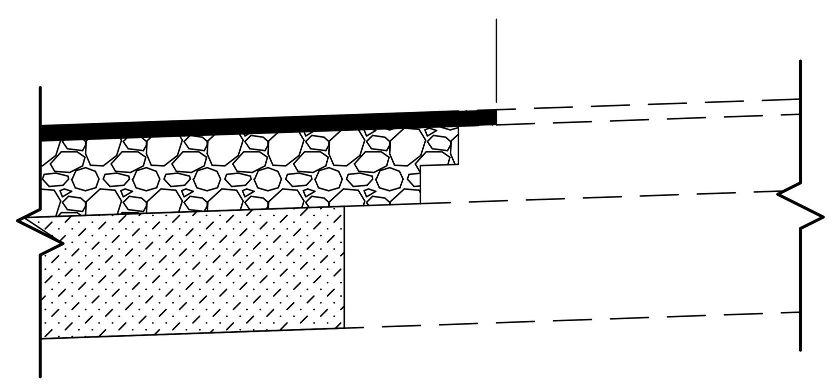
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

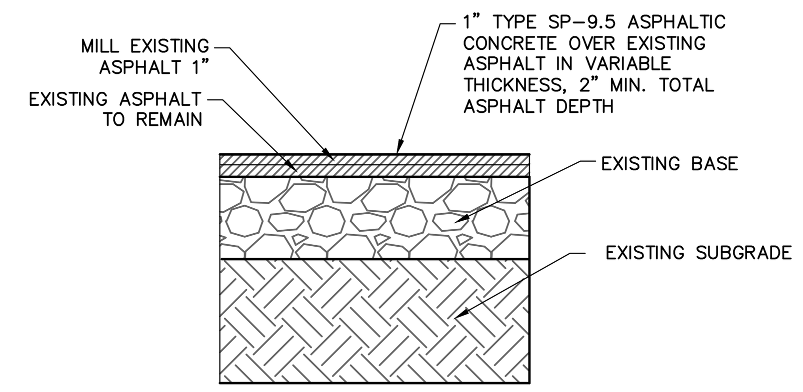
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

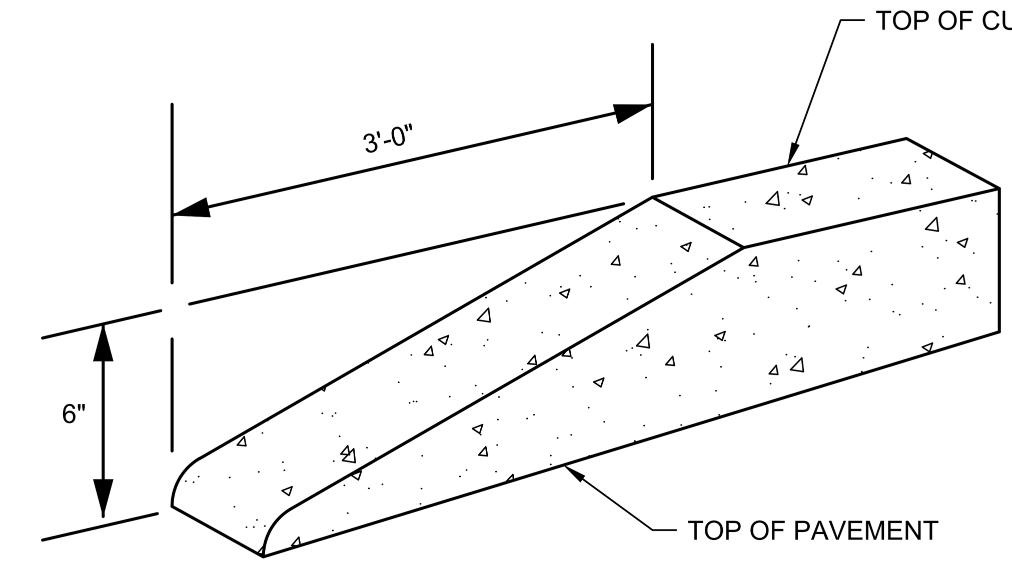
SHEET NUMBER
SP-04



CONNECTION TO EXISTING PAVEMENT DETAIL
NOT TO SCALE

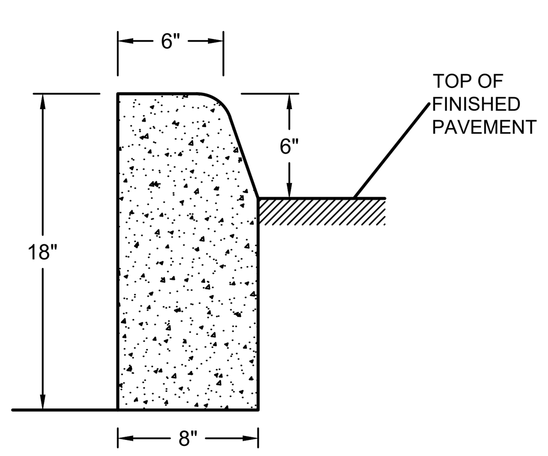


EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED
K-H
NOT TO SCALE

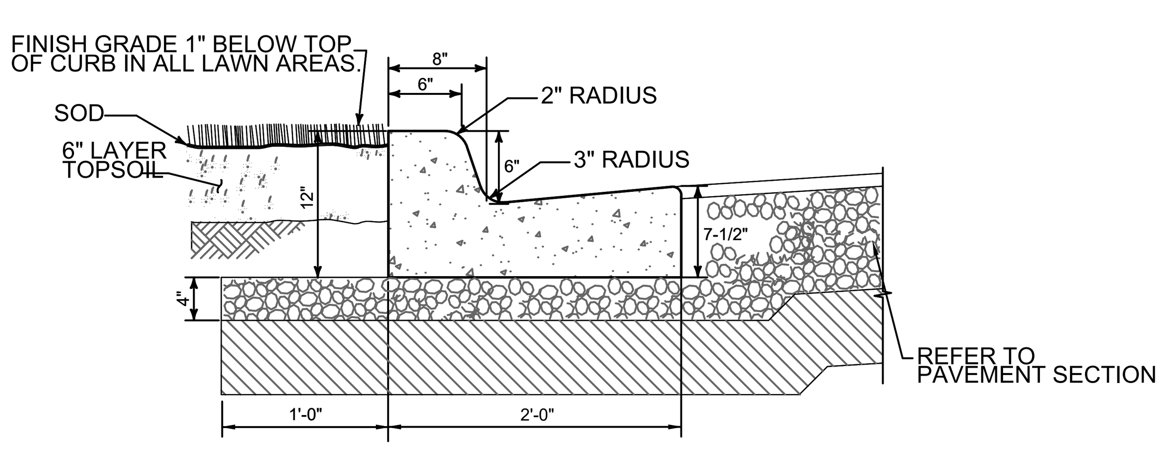


ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

STANDARD CURB TRANSITIONS
NOT TO SCALE

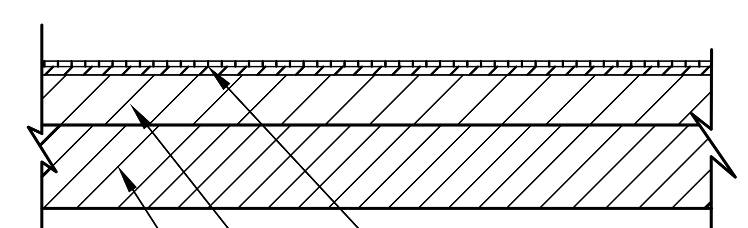


TYPE 'D' CURB
AS PER FDOT INDEX 300
NOT TO SCALE



NOTES:
1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

TYPE "F" CURB
NOT TO SCALE

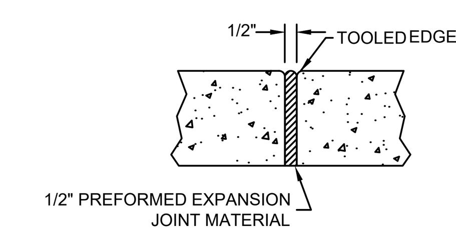


2" TYPE SP-12.5 OR S-1 ASPHALTIC CONCRETE SURFACE COURSE (1500 MARSHALL STABILITY) ABOVE BASE

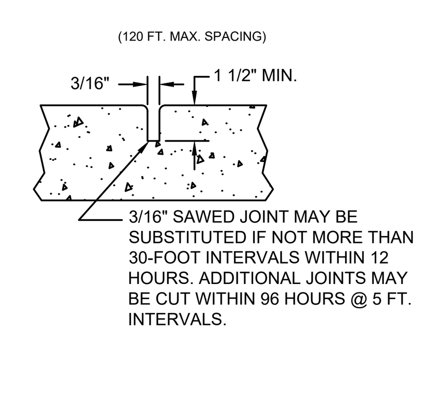
8" CRUSHED CONCRETE BASE (LDR 100) COMPACTED TO A MIN. OF 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-135)

12" STABILIZED SUB BASE (LBR 40) SHALL BE COMPACTED TO A MINIMUM OF 98% OF MAX. DENSITY PER AASHTO T-180 MODIFIED PROCTOR

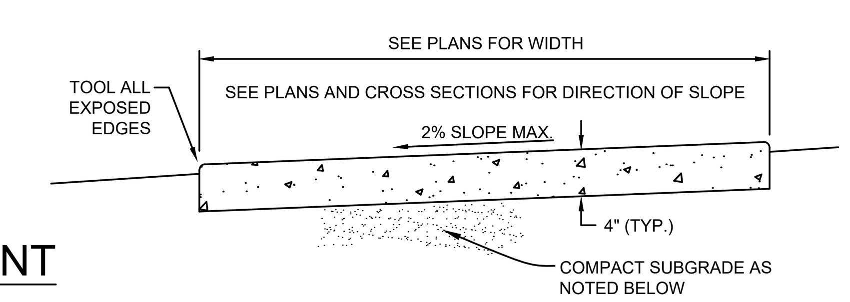
HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



EXPANSION JOINT
NOT TO SCALE



CONTRACTION JOINT
NOT TO SCALE



NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

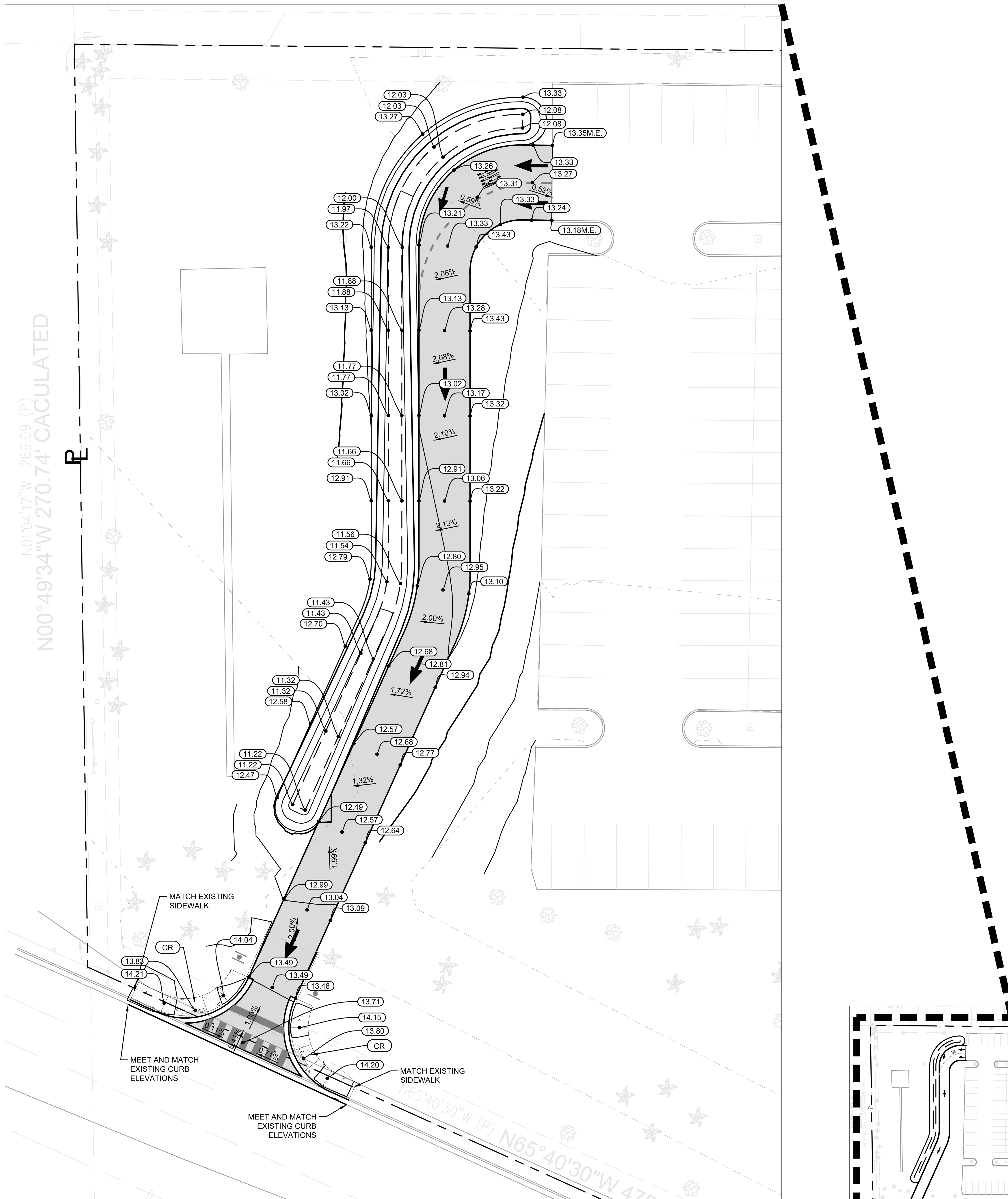
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

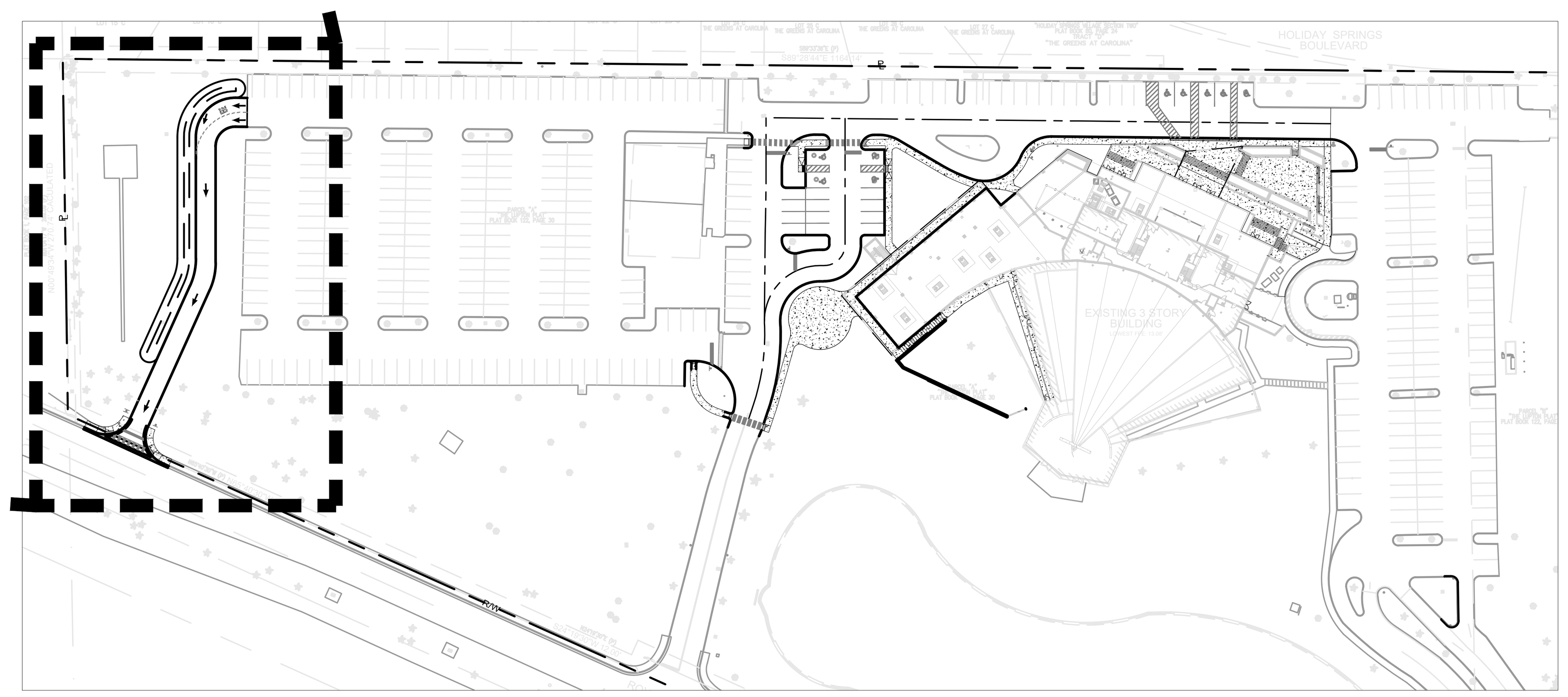
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING & GRADING DETAILS

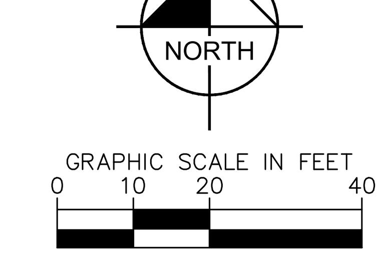
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-05





KEY MAP:



LEGEND

Symbol	Description
R/W ℞	PROPERTY LINE
	EXIST. RIGHT OF WAY
15.48M.E.	MATCH EXIST. ELEVATION
15.48 FFE	PROP. FINISHED FLOOR ELEVATION
15.48	PROP. SPOT ELEVATION
15.48 T.S	PROP. TOP OF STAIR ELEVATION
15.48 B.S	PROP. BOTTOM OF STAIR ELEVATION
15	PROP. CONTOURS
12.38	EXIST. ELEVATION
15	EXIST. CONTOURS
	PROP. GRADE BREAK
	PROP. FULL DEPTH PAVEMENT RESTORATION
	PROP. CONCRETE SIDEWALK
	PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
	PROP. BUILDING ADDITION
	PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
143788000	2/6/2025	AS SHOWN	RT	KH	ARM

PAVING GRADING & DRAINAGE PLAN

CHURCH SITE IMPROVEMENTS

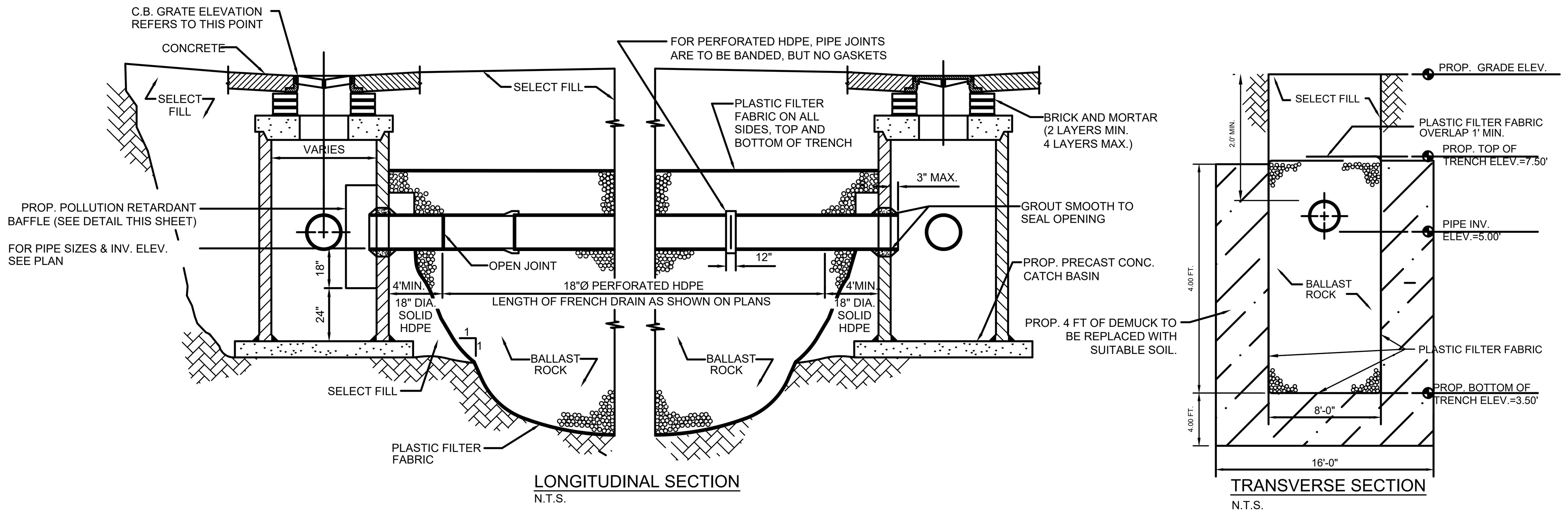
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SP-05

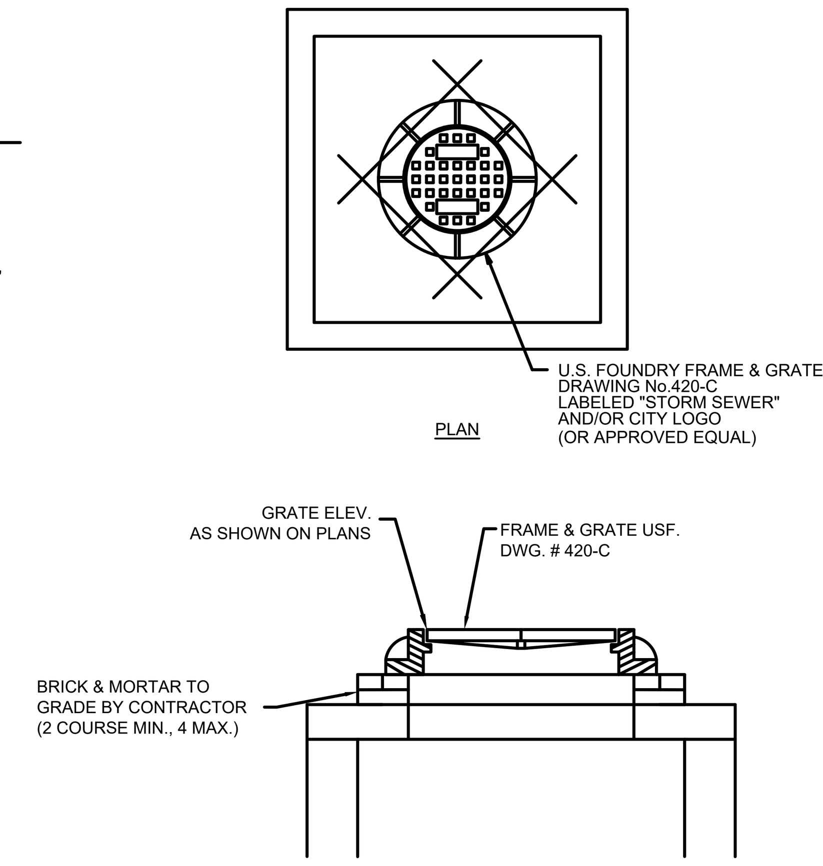


NOTES

1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

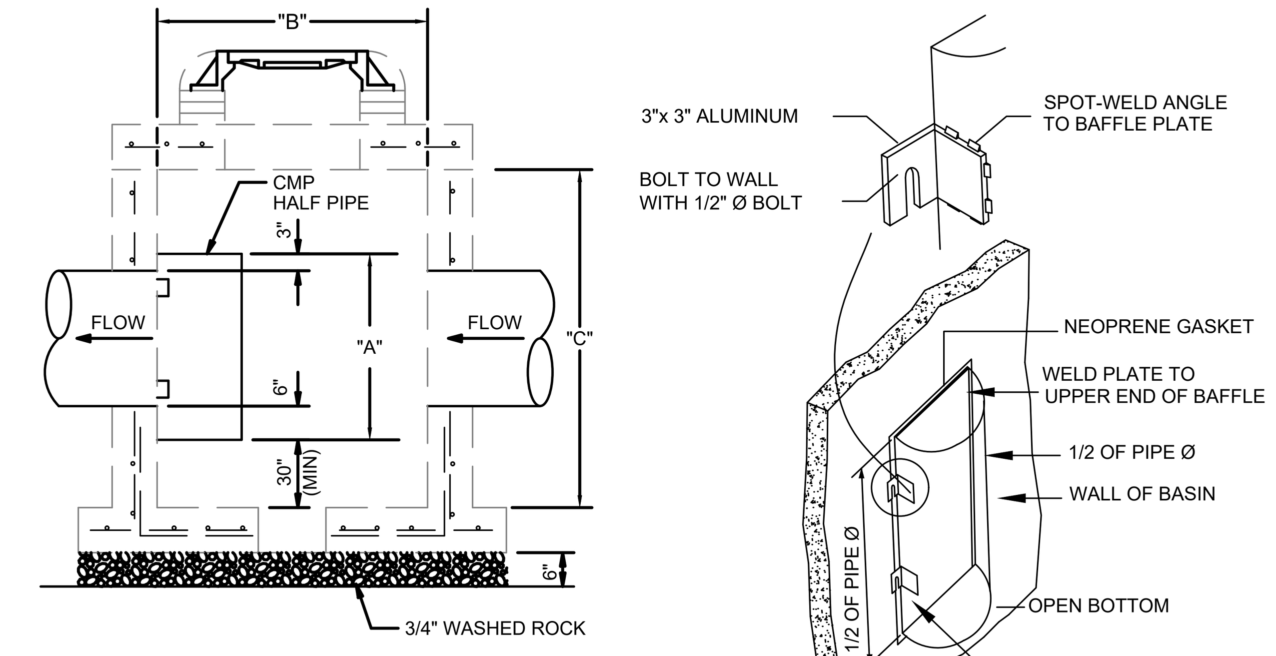
CATCH BASIN AND EXFILTRATION TRENCH DETAIL

NOT TO SCALE



STORM MANHOLE TOP

NOT TO SCALE



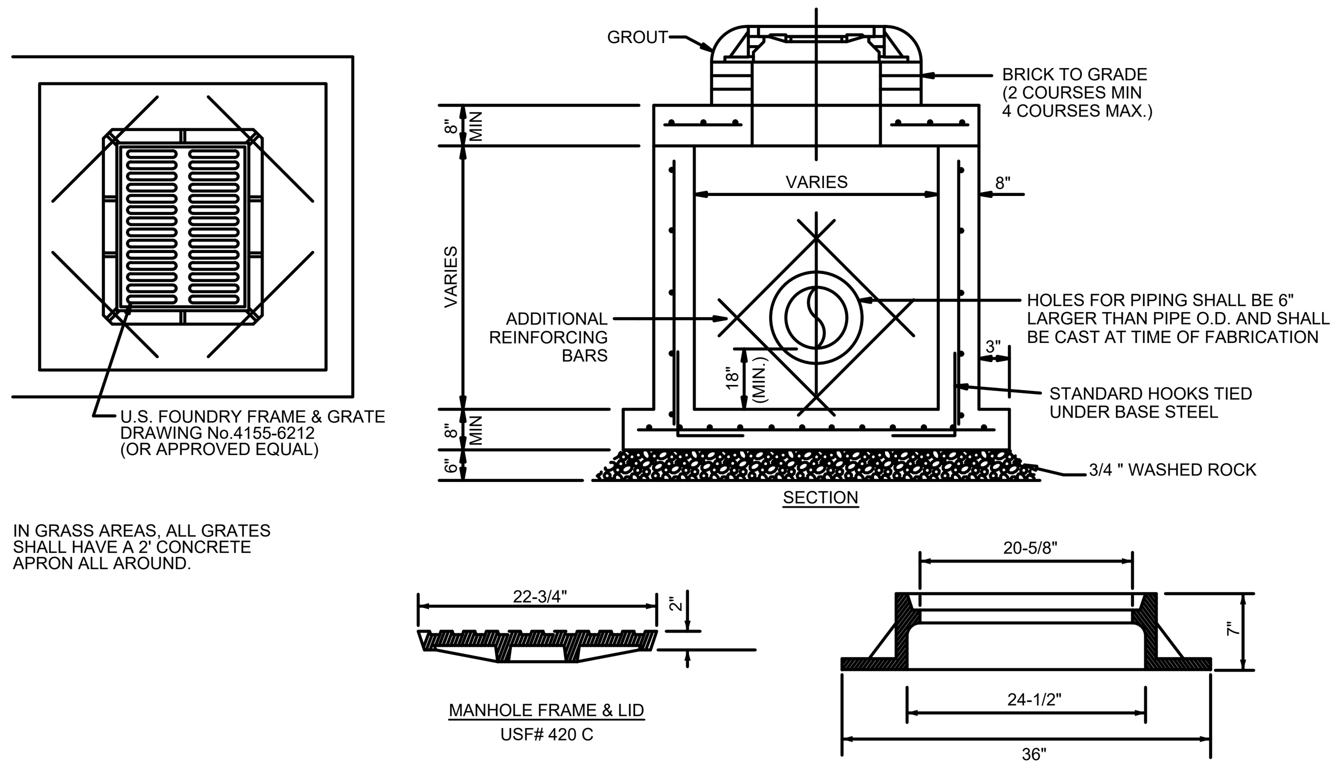
NOTES:

1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

PIPE	BAFFLE SCHEDULE		
DIAMETER	"A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

POLLUTION RETARDANT BAFFLE (PRB)

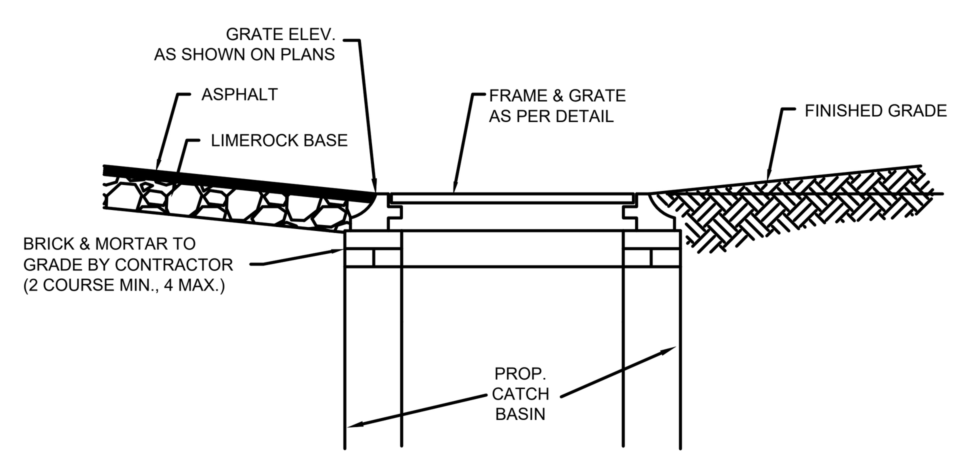
NOT TO SCALE



IN GRASS AREAS, ALL GRATES SHALL HAVE A 2' CONCRETE APRON ALL AROUND.

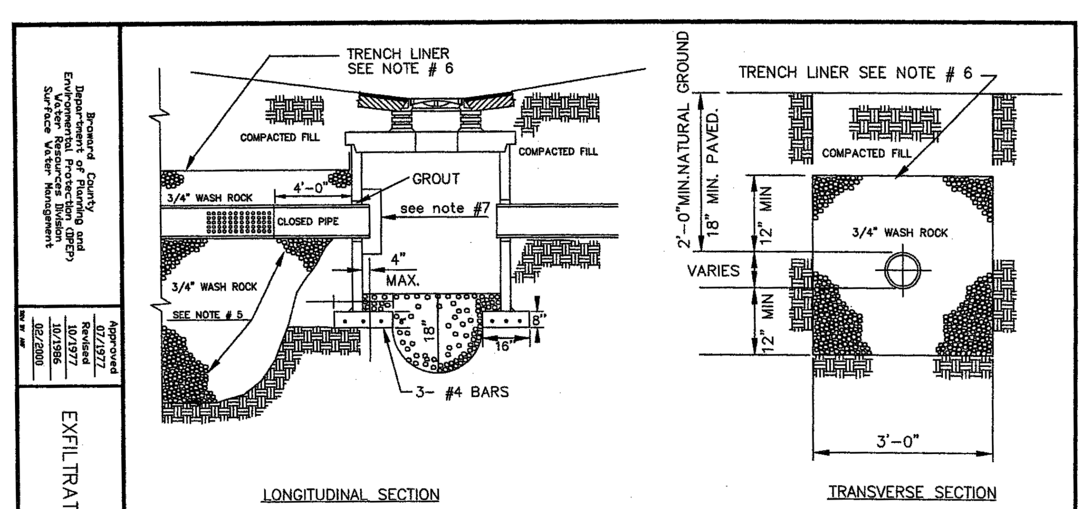
PRECAST DRAINAGE MANHOLE

NOT TO SCALE



CATCH BASIN TOP DETAIL

NOT TO SCALE



EXFILTRATION TRENCH DETAILS

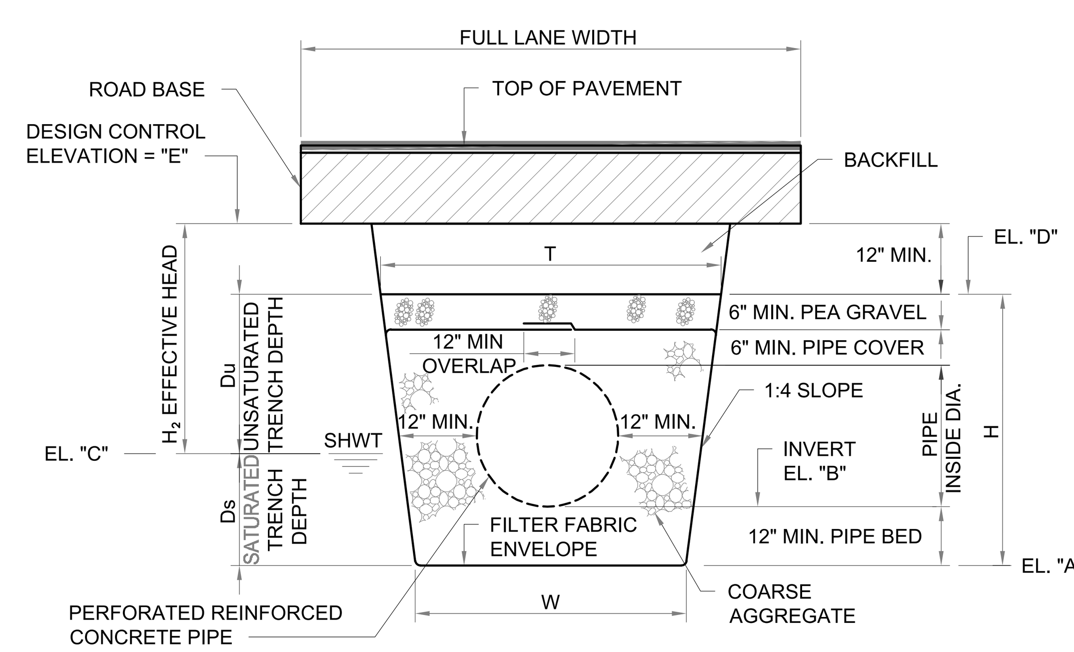
NOTES:

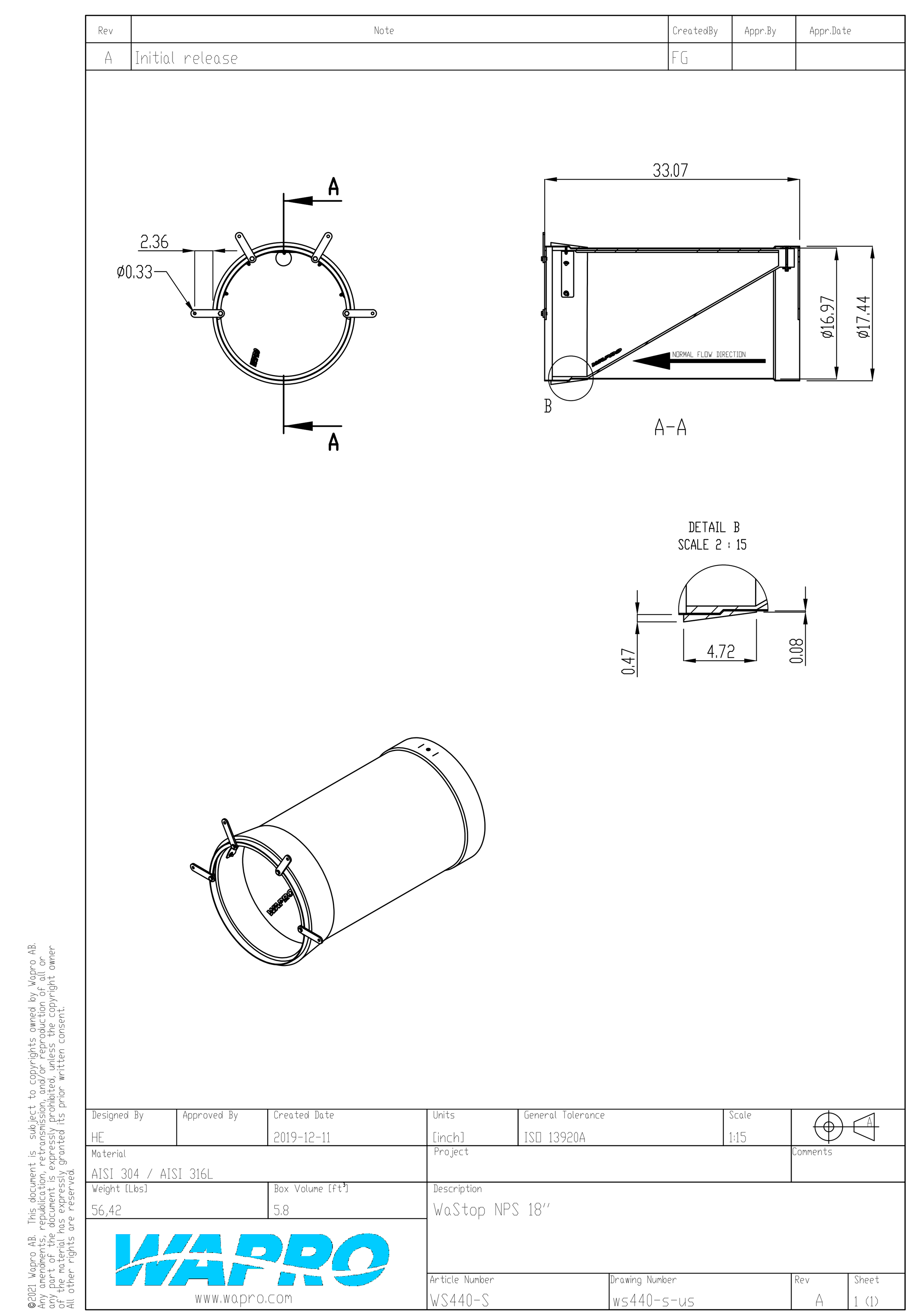
1.- FOR CATCH BASIN SEE G.D. 7.2 AND W.M. 4.3 THRU 4.5.
2.- DRAIN FIELD MAY BE OF SLOTTED CONCRETE PIPE OR PERFORATED METAL PIPE MEETING BROWARD COUNTY SPECIFICATIONS. OTHER TYPES OF DRAIN PIPE REQUIRE WATER RESOURCES DIVISION APPROVAL.
3.- PIPE SHALL TERMINATE 2 FT FROM END OF TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
4.- COVER PIPE ENDS WITH No. 10 GALVANIZED OR ALUMINUM SCREEN, OPENING NO LARGER THAN 1/2" X 1/2".
5.- BALLAST ROCK SHALL BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
6.- SLIDES AND TOP OF TRENCH TO BE LINED WITH ONE LAYER OF PLASTIC TYPE FILTER CLOTH OR APPROVED EQUAL. OVERLAP TRENCH LINING MATERIAL A MINIMUM OF TWO FEET AT TOP OF TRENCH
7.- INSTALL BAFFLE AS REQUIRED. (SEE W.M. PLATE 4.3)

TRENCH SCHEDULE

PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE





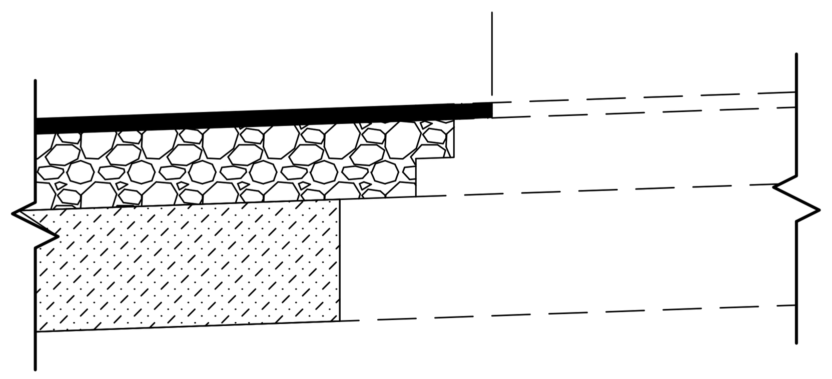
Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8201 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324
RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	5/29/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

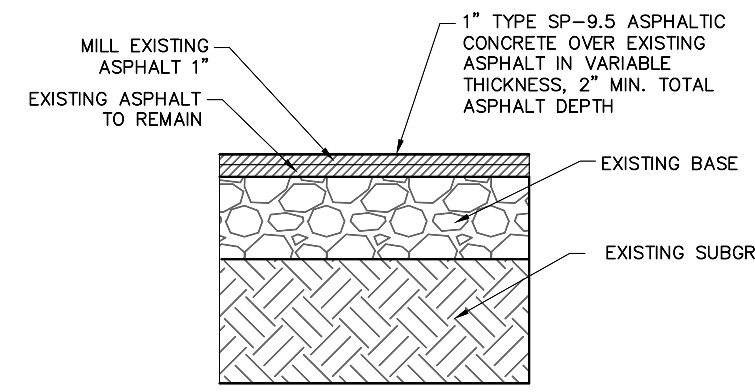
DRAINAGE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-06

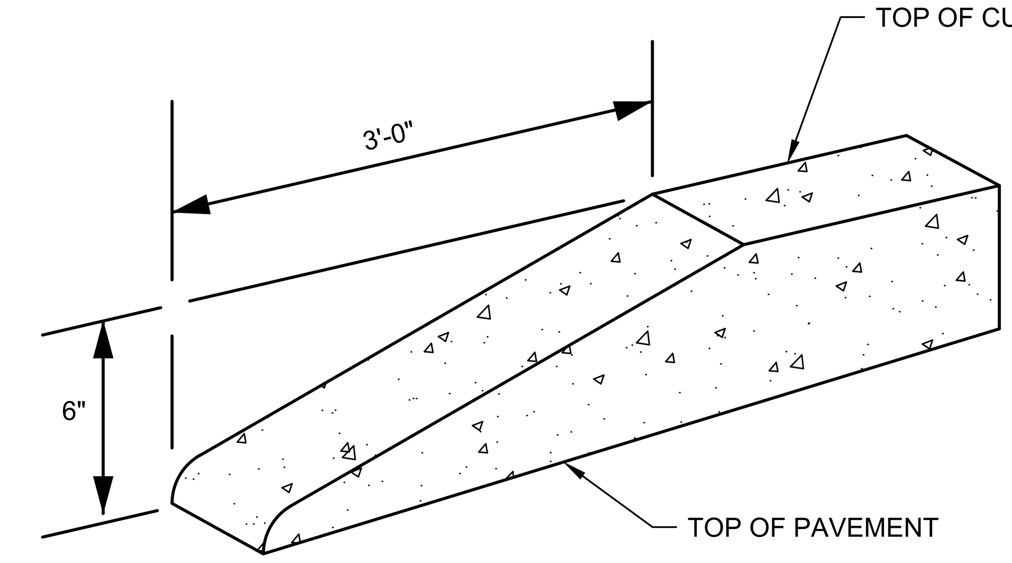


CONNECTION TO EXISTING PAVEMENT DETAIL
NOT TO SCALE



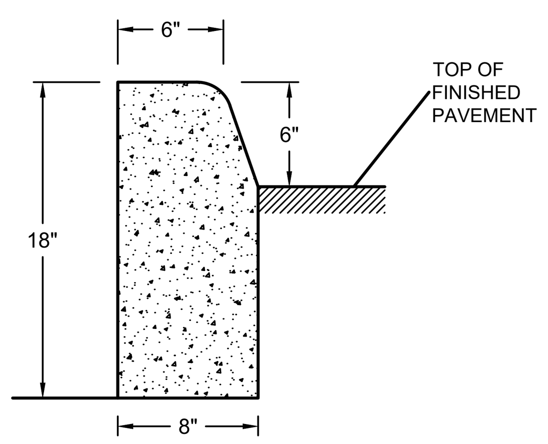
EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED
K-H

NOT TO SCALE

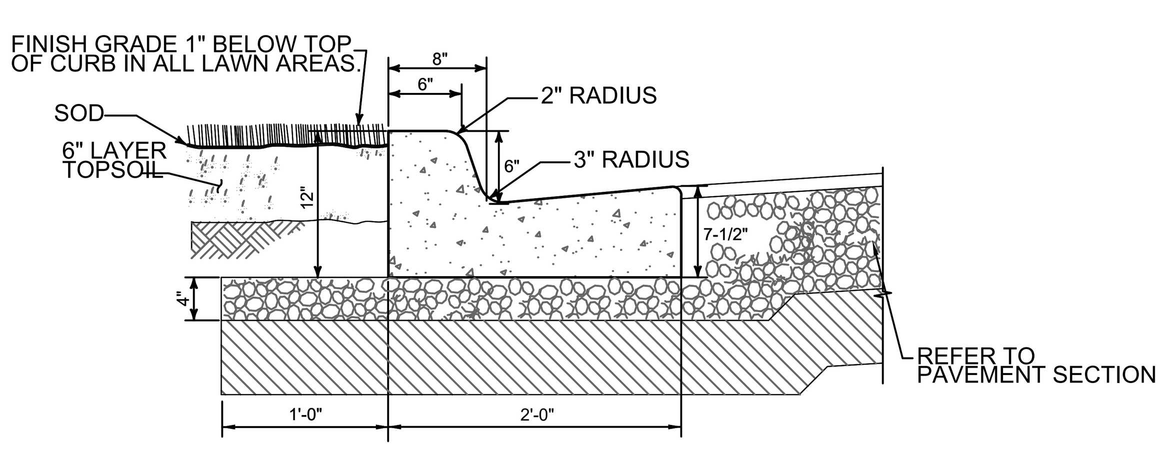


ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

STANDARD CURB TRANSITIONS
NOT TO SCALE

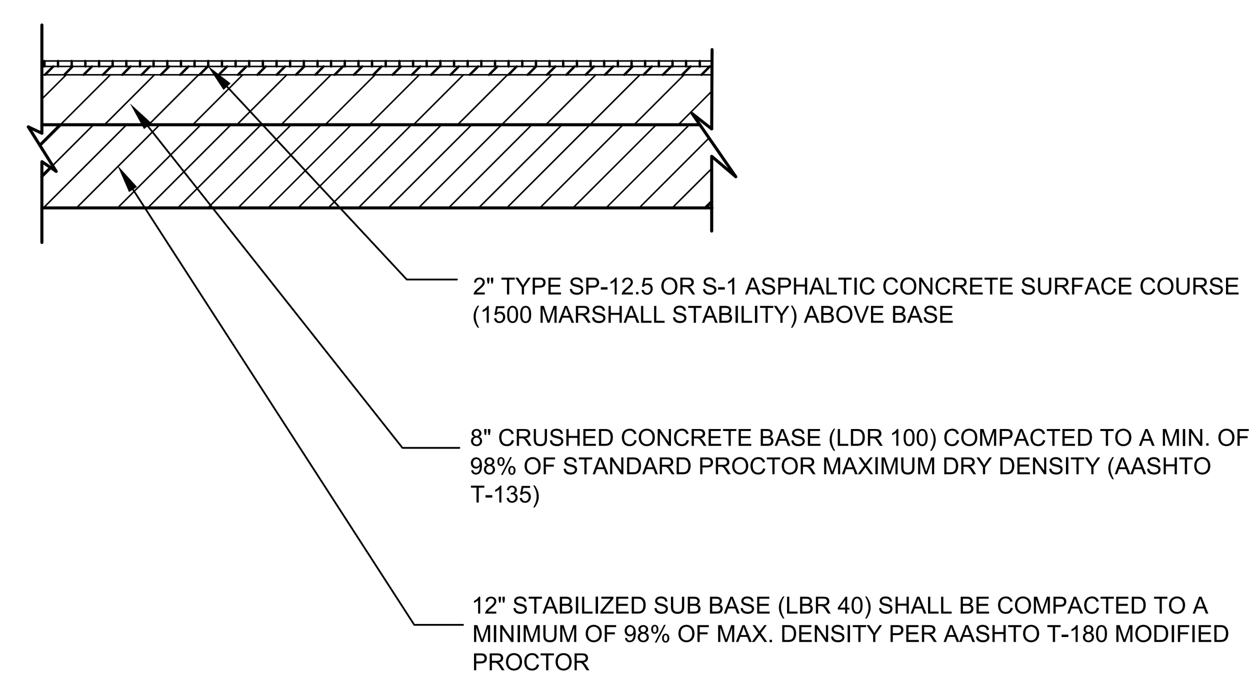


TYPE 'D' CURB
AS PER FDOT INDEX 300
NOT TO SCALE

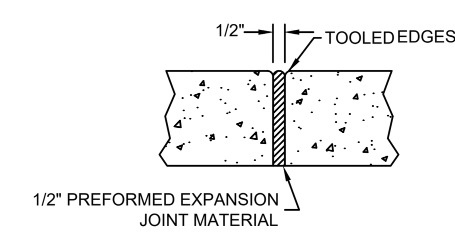


NOTES:
1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

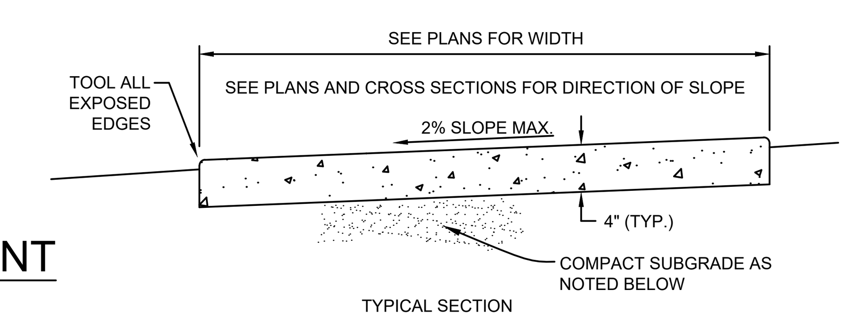
TYPE "F" CURB
NOT TO SCALE

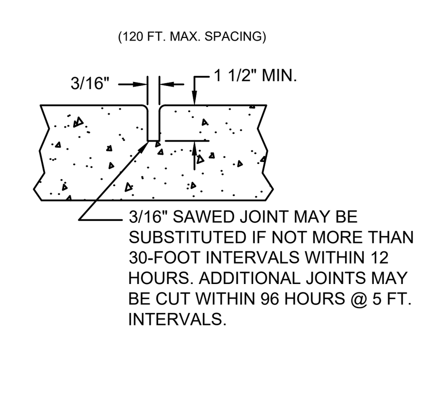


HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



EXPANSION JOINT
NOT TO SCALE





CONTRACTION JOINT
NOT TO SCALE

NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

No.	REVISIONS	DATE	BY

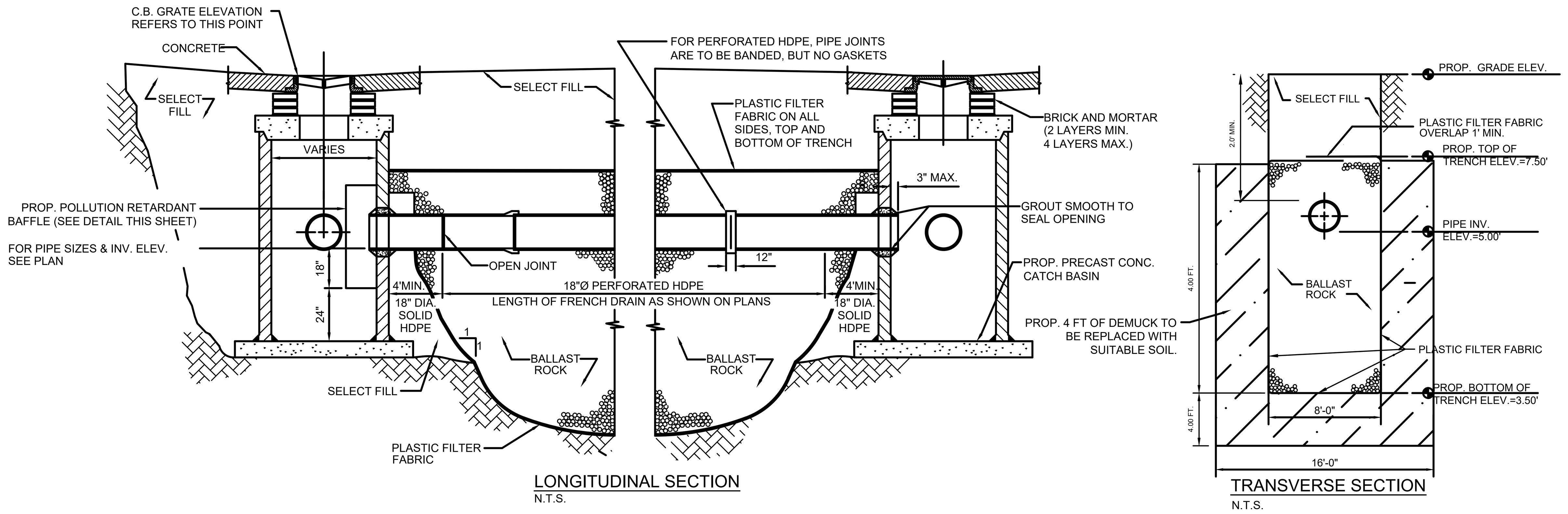
Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 2/6/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

PAVING & GRADING DETAILS

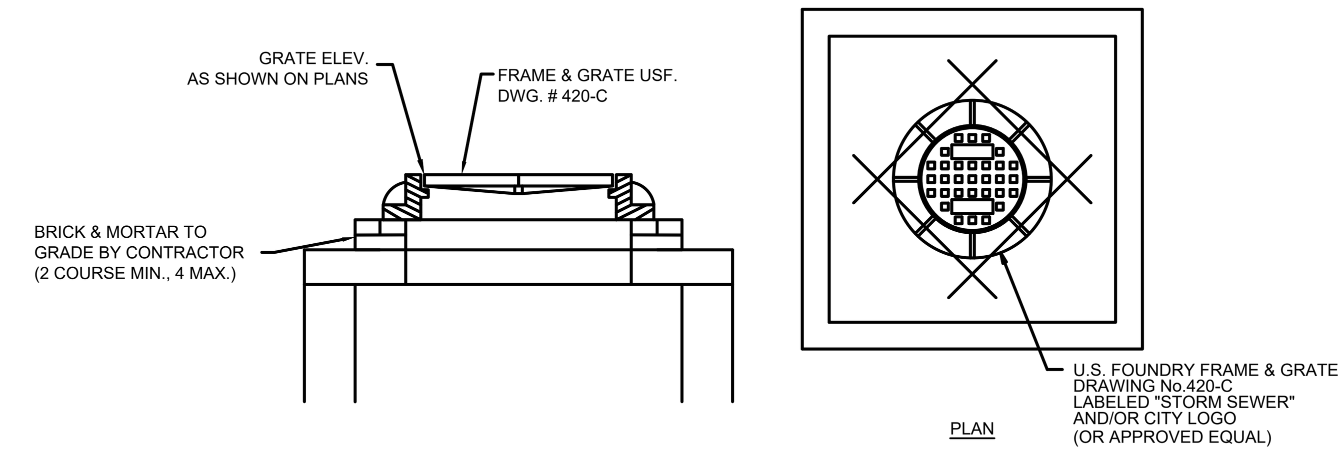
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-06

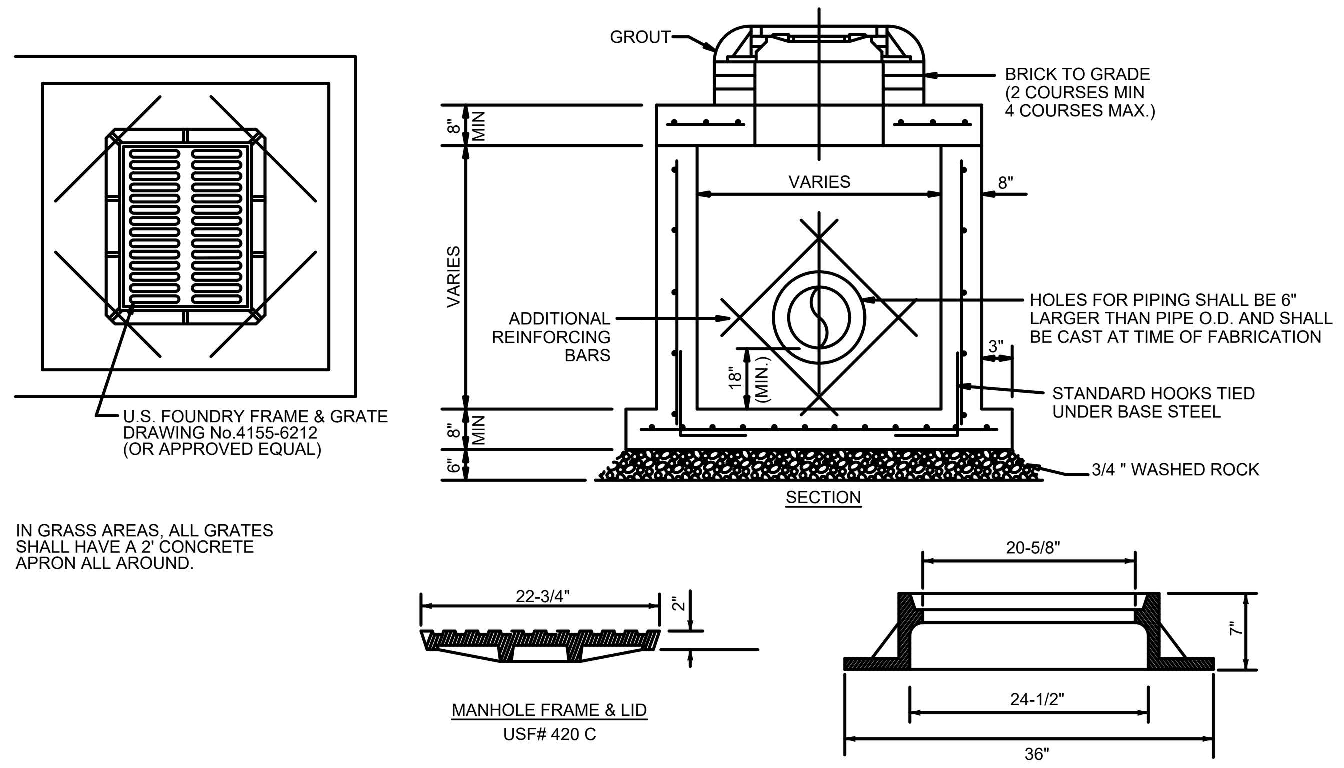


NOTES
1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

CATCH BASIN AND EXFILTRATION TRENCH DETAIL
NOT TO SCALE

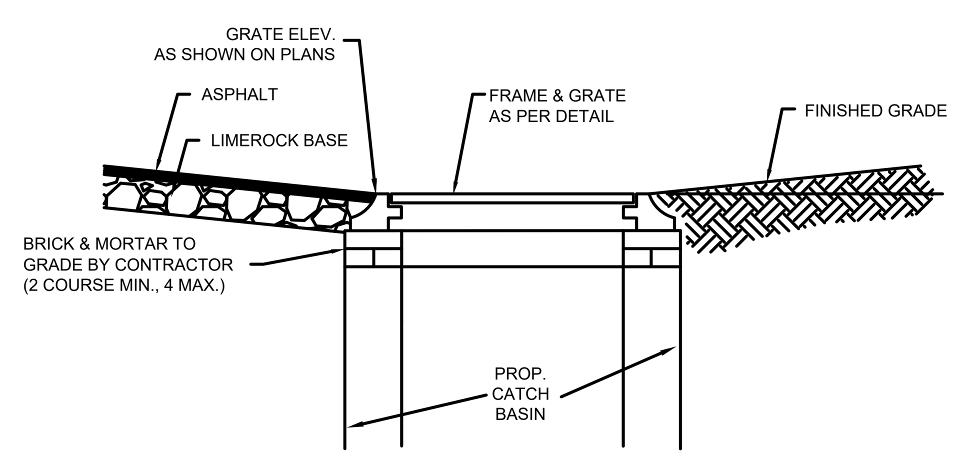


STORM MANHOLE TOP
NO TO SCALE

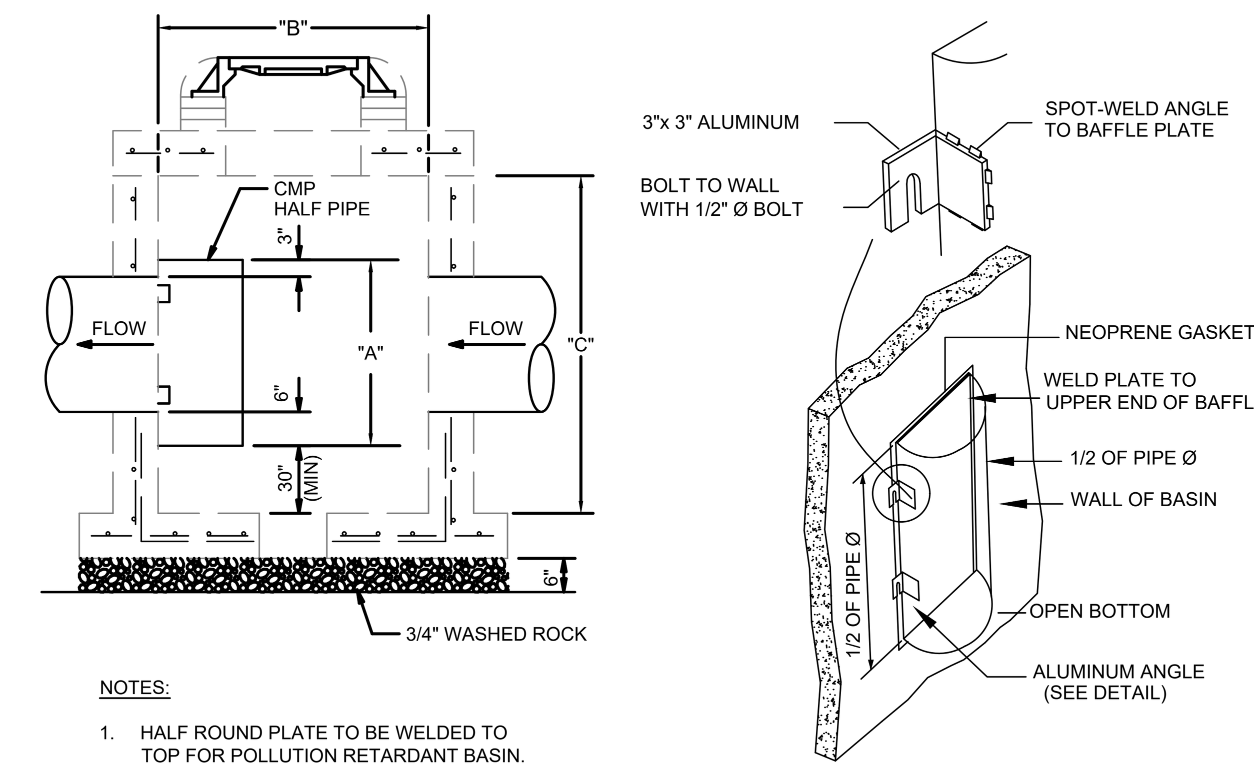


IN GRASS AREAS, ALL GRATES SHALL HAVE A 2' CONCRETE APRON ALL AROUND.

PRECAST DRAINAGE MANHOLE
NOT TO SCALE



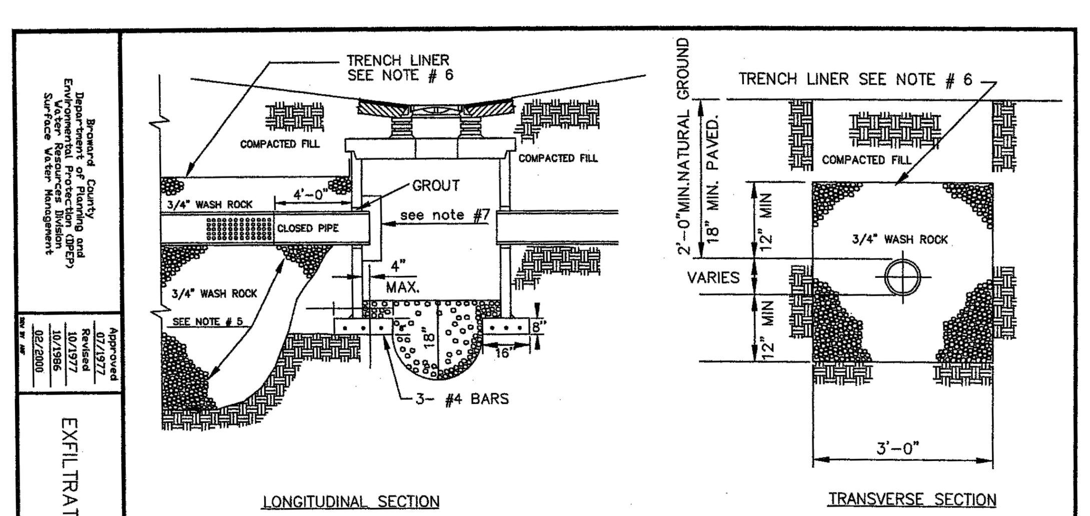
CATCH BASIN TOP DETAIL
NOT TO SCALE



NOTES:
1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

PIPE	BAFFLE SCHEDULE		
DIAMETER	"A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

POLLUTION RETARDANT BAFFLE (PRB)
NOT TO SCALE



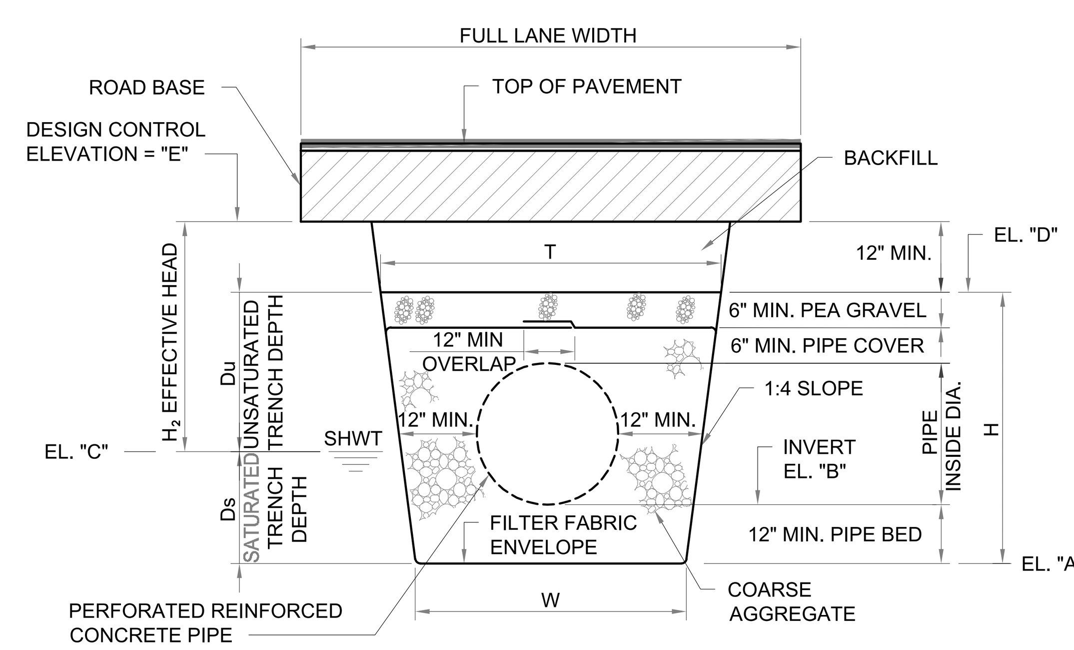
EXFILTRATION TRENCH DETAILS

NOTES:
1.– FOR CATCH BASIN SEE G.D. 7.2 AND W.M. 4.3 THRU 4.5.
2.– DRAIN FIELD MAY BE OF SLOTTED CONCRETE PIPE OR PERFORATED METAL PIPE MEETING BROWARD COUNTY SPECIFICATIONS. OTHER TYPES OF DRAIN PIPE REQUIRE WATER RESOURCES DIVISION APPROVAL.
3.– PIPE SHALL TERMINATE 2 FT FROM END OF TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
4.– COVER PIPE ENDS WITH No. 10 GALVANIZED OR ALUMINUM SCREEN, OPENING NO LARGER THAN 1/2" X 1/2".
5.– BALLAST ROCK SHALL BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
6.– SLIDES AND TOP OF TRENCH TO BE LINED WITH ONE LAYER OF PLASTIC TYPE FILTER CLOTH OR APPROVED EQUAL. OVERLAP TRENCH LINING MATERIAL A MINIMUM OF TWO FEET AT TOP OF TRENCH
7.– INSTALL BAFFLE AS REQUIRED. (SEE W.M. PLATE 4.3)

TRENCH SCHEDULE

PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE



No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
143788000	5/13/2025	AS SHOWN	RT	KH	ARM

DRAINAGE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-07

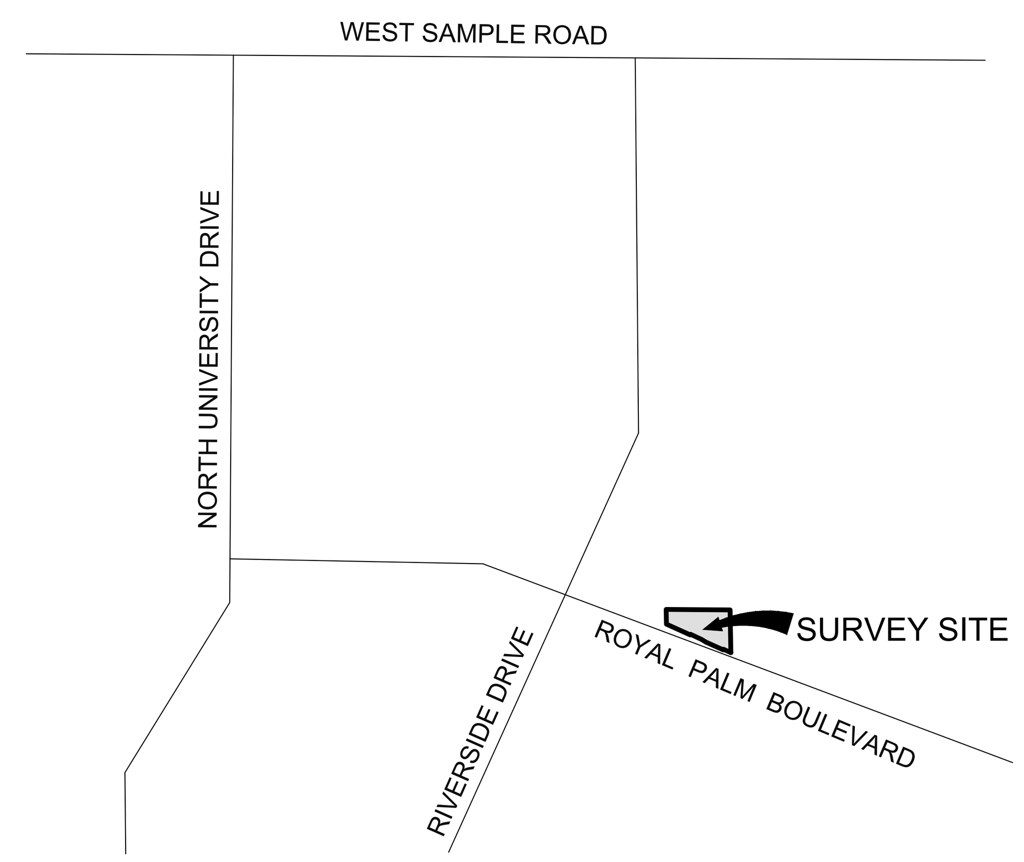
LEGAL DESCRIPTION:

PARCEL "A" AND "B" "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY, FLORIDA AND CONTAINING A TOTAL OF 610,532 SQUARE FEET (14.016 ACRES), MORE OR LESS.

NOTES:

1. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OR AN ELECTRONIC SIGNATURE AND ELECTRONIC SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. BROWARD COUNTY BENCHMARK #2279; ELEVATION: 8.408 FEET.
3. FLOOD ZONE: AE/X(0.2%)/X; BASE FLOOD ELEVATION: 12 FEET/NONE/NONE; PANEL #12011C0165H; COMMUNITY #120047; MAP DATE: 8/18/14.
4. THIS SITE LIES IN SECTION 26, TOWNSHIP 48 SOUTH, RANGE 41 EAST, BROWARD COUNTY, FLORIDA.
5. BEARINGS ARE BASED ON STATE PLANE COORDINATES AND ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1983 WITH 1990 ADJUSTMENT, FL-E ZONE, WITH THE NORTH LINE OF PARCEL "A" BEING S89°28'44"E.
6. REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND THE LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION OR CONSTRUCTION CONTACT BLOOD HOUND UNDERGROUND UTILITY LOCATIONS FOR FIELD VERIFICATION.
7. THIS SURVEY IS CERTIFIED EXCLUSIVELY TO: ABUNDANT LIFE CHURCH.
8. THE HORIZONTAL POSITIONAL ACCURACY OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.2'. THE VERTICAL ACCURACY OF ELEVATIONS OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.1'.
9. THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A COMMITMENT FOR TITLE INSURANCE. ONLY PLATTED OR KNOWN EASEMENTS ARE DEPICTED HEREON.
10. ALL RECORDED DOCUMENTS ARE PER BROWARD COUNTY PUBLIC RECORDS.
11. THE FLOOD ZONE DESIGNATION LINES DEPICTED HEREON ARE PLACED IN APPROXIMATE LOCATIONS, AS SCALED FROM THE IMAGE FROM THE FEMA.ORG WEBSITE.
12. THIS SITE CONTAINS 403 TOTAL CLEARLY IDENTIFIABLE PARKING SPACES (394 REGULAR & 9 DISABLED).
13. BOUNDARY CALCULATIONS PER COORDINATES ON THE LUPTON PLAT BOOK 122, PAGE 30.



CERTIFICATION:

I HEREBY CERTIFY: THAT THIS MAP OF SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA STATE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

☐ JOHN F. PULICE, PROFESSIONAL SURVEYOR AND MAPPER LS2691
☐ VICTOR R. GILBERT, PROFESSIONAL SURVEYOR AND MAPPER LS6274
☐ MICHAEL M. MOSSEY, PROFESSIONAL SURVEYOR AND MAPPER PSM5660
STATE OF FLORIDA

NO.	REVISIONS	BY
5		
4		
3		
2	#72824 -UPDATE SURVEY-6/19/24	J.S.
1	#71148 -ORIGINAL SURVEY-3/21/23	R.V.

ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: R.V.	SCALE: 1" = 40'	CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P.	SURVEY DATE: 6/1924	ORDER NO.: 72824

LEGEND & ABBREVIATIONS

	CONCRETE
	ASPHALT PAVEMENT
	BRICK PAVEMENT
10.00'	ELEVATION
	OVERHEAD WIRES
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND IRRIGATION LINE
	UNDERGROUND GAS LINE
	UNDERGROUND STORM SEWER LINE
	UNDERGROUND WATER LINE
—/—/—	NON-VEHICULAR ACCESS LINE
FPL	FLORIDA POWER & LIGHT COMPANY
LB	LICENSED BUSINESS
O.R.B.	OFFICIAL RECORDS BOOK
TP	TRAVERSE POINT (FOR FIELD INFORMATION ONLY)
(P)	PLATTED BEARINGS
	PALM
	TREE

0' 40' 80' 120'

GRAPHIC SCALE

1"=40'

SHEET 2 OF 2

THIS DOCUMENT IS NEITHER FULL NOR COMPLETE WITHOUT SHEETS 1 AND 2

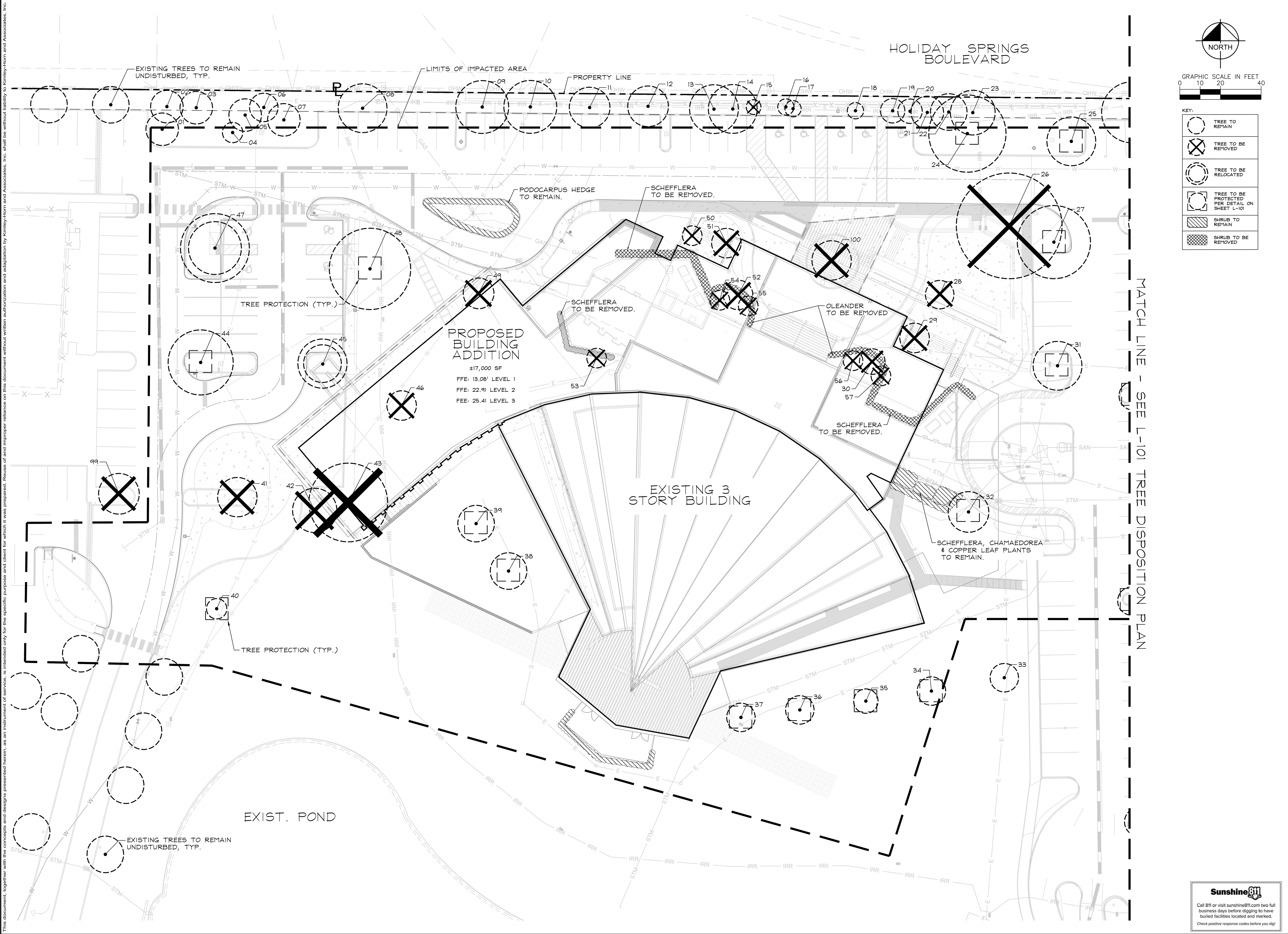
ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PLS

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: R.V.	SCALE: 1" = 40'	CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P.	SURVEY DATE: 6/19/24	ORDER NO.: 72824



No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

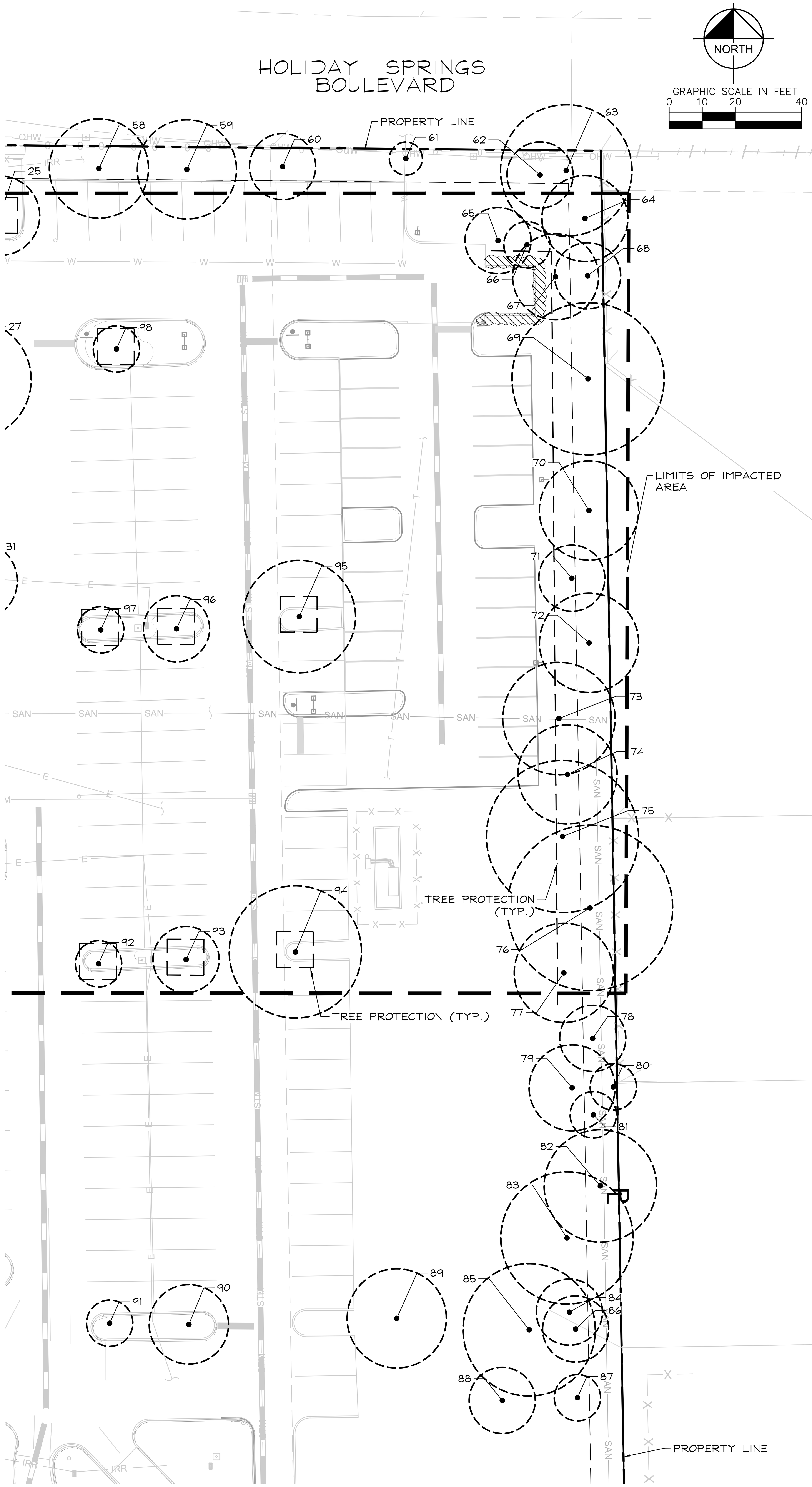
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

TREE DISPOSITION PLAN

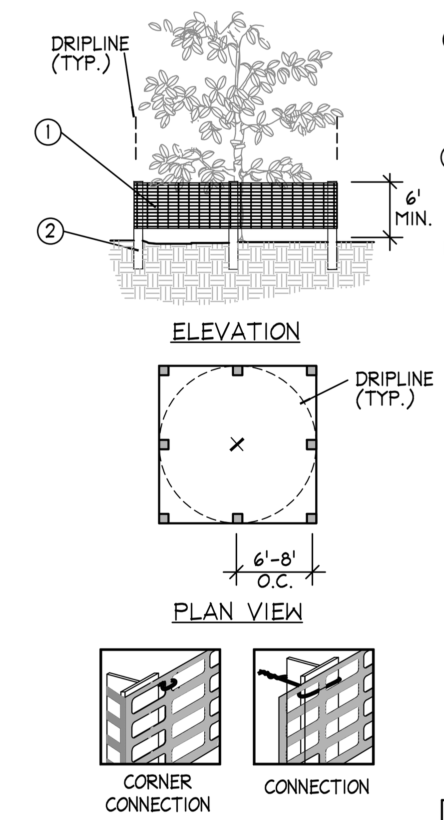
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
TD-01



TREE DISPOSITION LIST							
NO.	COMMON NAME	BOTANICAL NAME	DBH (in.)	SPREAD (ft.)	AREA (sf.)	HEIGHT (ft.)	DISPOSITION
1	Sabal Palm	Sabal palmetto		30	707		REMAIN
2	Live Oak	Quercus virginiana		30	707		REMAIN
3	Sabal Palm	Sabal palmetto		30	707		REMAIN
4	Sabal Palm	Sabal palmetto		10	79		REMAIN
5	Sabal Palm	Sabal palmetto		15	177		REMAIN
6	Mahogany	Swietenia mahagoni		15	177		REMAIN
7	Mahogany	Swietenia mahagoni		15	177		REMAIN
8	Mahogany	Swietenia mahagoni		25	491		REMAIN
9	Mahogany	Swietenia mahagoni		25	491		REMAIN
10	Mahogany	Swietenia mahagoni		25	491		REMAIN
11	Mahogany	Swietenia mahagoni		20	314		REMAIN
12	Mahogany	Swietenia mahagoni		20	314		REMAIN
13	Mahogany	Swietenia mahagoni		25	491		REMAIN
14	Japanese Privet	Ligustrum japonicum		25	491		REMAIN
15	**Stump**				0		**REMOVE**
16	Gumbo Limbo	Bursera simaruba		10	79		REMAIN
17	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
18	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
19	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
20	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
21	Japanese Privet	Ligustrum japonicum		15	177		REMAIN
22	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
23	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
24	Mahogany	Swietenia mahagoni		40	1257		REMAIN
25	Mahogany	Swietenia mahagoni		25	491		REMAIN
26	**Live Oak**	**Quercus virginiana**		50	1963		**REMOVE**
27	Live Oak	Quercus virginiana		35	962		REMAIN
28	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
29	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
30	**Royal Palm**	**Roystonia regia**		10	79		**REMOVE**
31	Live Oak	Quercus virginiana		25	491		REMAIN
32	Royal Palm	Roystonia regia		20	314		REMAIN
33	Royal Palm	Roystonia regia		15	177		REMAIN
34	Royal Palm	Roystonia regia		15	177		REMAIN
35	Royal Palm	Roystonia regia		10	79		REMAIN
36	Royal Palm	Roystonia regia		15	177		REMAIN
37	Royal Palm	Roystonia regia		15	177		REMAIN
38	Royal Palm	Roystonia regia		20	314		REMAIN
39	Royal Palm	Roystonia regia		20	314		REMAIN
40	Dahoon Holly	Ilex cassine		10	79		REMAIN
41	**Live Oak**	**Quercus virginiana**		20	314		**REMOVE**
42	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
43	**Live Oak**	**Quercus virginiana**		**40**	1257		**REMOVE**
44	Live Oak	Quercus virginiana		30	707		REMAIN
45	**Live Oak**	**Quercus virginiana**		25	491		**RELOCATE**
46	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
47	**Live Oak**	**Quercus virginiana**		30	707		**RELOCATE**
48	Live Oak	Quercus virginiana		40	1257		REMAIN
49	**Dahoon Holly**	**Ilex cassine**	**15**	**15**	177		**REMOVE**
50	**Live Oak**	**Quercus virginiana**		**10**	79		**REMOVE**
51	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
52	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
53	**Dahoon Holly**	**Ilex cassine**		**10**	79		**REMOVE**
54	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
55	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
56	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
57	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
58	Mahogany	Swietenia mahagoni		30	707		REMAIN
59	Mahogany	Swietenia mahagoni		30	707		REMAIN
60	Mahogany	Swietenia mahagoni		20	314		REMAIN
61	Sabal Palm	Sabal palmetto		10	79		REMAIN
62	Sabal Palm	Sabal palmetto		20	314		REMAIN
63	Live Oak	Quercus virginiana		40	1257		REMAIN
64	Live Oak	Quercus virginiana		25	491		REMAIN
65	Sabal Palm	Sabal palmetto		20	314		REMAIN
66	Sabal Palm	Sabal palmetto		15	177		REMAIN
67	Sabal Palm	Sabal palmetto		25	491		REMAIN
68	Live Oak	Quercus virginiana		20	314		REMAIN
69	Live Oak	Quercus virginiana		45	1590		REMAIN
70	Live Oak	Quercus virginiana		30	707		REMAIN
71	Live Oak	Quercus virginiana		20	314		REMAIN
72	Live Oak	Quercus virginiana		30	707		REMAIN
73	Live Oak	Quercus virginiana		35	962		REMAIN
74	Live Oak	Quercus virginiana		30	707		REMAIN
75	Live Oak	Quercus virginiana		45	1590		REMAIN
76	Live Oak	Quercus virginiana		50	1963		REMAIN
77	Live Oak	Quercus virginiana		30	707		REMAIN
78	Live Oak	Quercus virginiana		20	314		REMAIN
79	Southern Mangonlia	Magnolia grandiflora		25	491		REMAIN
80	Unknown	Unknown		15	177		REMAIN
81	Unknown	Unknown		15	177		REMAIN
82	Sabal Palm	Sabal palmetto		35	962		REMAIN
83	Live Oak	Quercus virginiana		40	1257		REMAIN
84	Unknown	Unknown		20	314		REMAIN
85	Mahogany	Swietenia mahagoni		40	1257		REMAIN
86	Unknown	Unknown		20	314		REMAIN
87	Unknown	Unknown		15	177		REMAIN
88	Unknown	Unknown		20	314		REMAIN
89	Live Oak	Quercus virginiana		30	707		REMAIN
90	Live Oak	Quercus virginiana		25	491		REMAIN
91	Live Oak	Quercus virginiana		15	177		REMAIN
92	Live Oak	Quercus virginiana		15	177		REMAIN
93	Live Oak	Quercus virginiana		20	314		REMAIN
94	Live Oak	Quercus virginiana		40	1257		REMAIN
95	Live Oak	Quercus virginiana		35	962		REMAIN
96	Live Oak	Quercus virginiana		20	314		REMAIN
97	Live Oak	Quercus virginiana		15	177		REMAIN
98	Live Oak	Quercus virginiana		15	177		REMAIN
99	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
100	**Pigmy Date Palm**	**Phoenix roebelenii**		**20**	314		**REMOVE**



1. 6'H "PERIMETER PLUS" CONSTRUCTION FENCE BY CONWED PLASTICS OR OWNER'S REPRESENTATIVE APPROVED EQUAL. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.

2. 8' TALL METAL "T" POSTS OR 2" x 2" X 8' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.

INSTALLATION NOTES:

A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.

B. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/4 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 8' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.

C. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).

D. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

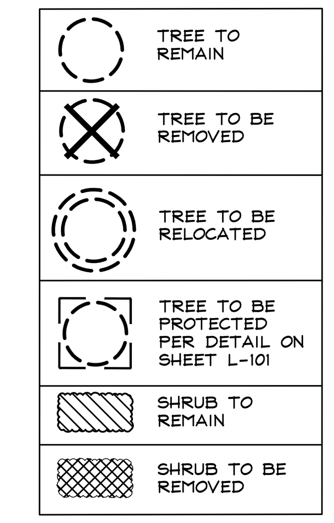
NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

A Tree/Shrub Protector

Barrier Detail

NTS

KEY:



ROOT PRUNING

1. THE LANDSCAPE ARCHITECT HAS OBSERVED TREES THAT COULD BE IMPACTED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
2. IF CONSTRUCTION ACTIVITIES OCCUR WITHIN THE DRIPLINE (OR THE HORIZONTAL EXTENT OF THE CANOPY) OF A TREE, THEN THAT TREE IS A CANDIDATE FOR ROOT PRUNING.
3. ROOT PRUNING MUST OCCUR PRIOR TO TRENCHING OPERATIONS TO INSURE THAT THE ROOTS ARE CUT CLEAN AND AT PROPER ANGLES AND NOT MECHANICALLY RIPPED FROM THE EARTH DURING CONSTRUCTION.
4. FOR TREES REQUIRING ROOT PRUNING, A TREE ASSESSMENT SHALL BE CONDUCTED AND A ROOT-PRUNING PLAN SHALL BE DEVELOPED BY A CERTIFIED ARBORIST OR CONSULTING ARBORIST. THIS PLAN SHOULD IDENTIFY:
   - MAXIMUM ALLOWABLE SIZE OF ROOTS TO BE CUT
   - ALLOWABLE PROXIMITY TO THE TRUNK FOR CUTS
   - TIME OF YEAR WHEN ROOT CUTTING IS ALLOWABLE (NOTE: IN FLORIDA, IT IS BEST TO AVOID ROOT PRUNING DURING TIMES OF THE MAY THROUGH SEPTEMBER, WHEN THE POTENTIAL FOR DAMAGING WIND LOADS ON TREES ARE GREATEST.)
   - METHOD FOR MAKING CUTS
   - MITIGATING CANOPY PRUNING
   - TYPE AND EXTENT OF NECESSARY STRUCTURAL SUPPORT
   - SCHEDULE FOR WATERING/FERTILIZATION AFTER PRUNING
5. IMPLEMENT THE ROOT PRUNING PLAN PER THE ARBORIST'S RECOMMENDATION.

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

TREE DISPOSITION SUMMARY	
TREES TO BE REMOVED	12
TREES TO BE RELOCATED	2
PALMS TO BE REMOVED	7

TREE MITIGATION SUMMARY	
TREE REMOVAL SUMMARY 6 LIVE OAKS (#26,41,42,43,50,99)= 4,241 SF 1 STUMP (#15) 4 SOUTHERN MAGNOLIAS (#54,55,56,57)= 314 SF 2 DAHOON HOLLIES (#49,53)= 255 SF	4,811 SF
PALM REMOVAL SUMMARY 6 ROYAL PALMS (#28,29,30,46,51,52)= 962 SF 1 PIGMY DATE PALM (#100)= 314 SF	1,276 SF
CANOPY PROVIDED PER SHEET L-201 1 GUMBO LIMBO @ 300 SF = 300 SF 3 LIVE OAKS @ 300 SF = 900 SF 2 SILVER BUTTON WOOD @200 SF = 400 SF 2 ROYAL PALMS @ 100 SF = 200 SF	1,800 SF

TREE MITIGATION COST	
SEC. 34-448.2.D. - PROCEDURES FOR DETERMINING TREE REPLACEMENT REQUIREMENTS. CONTRIBUTION OF \$2.00 PER SF OF LOST CANOPY (6,087 SF - 1,800 SF = 4,287 SF OF LOST CANOPY) 4,287 X 2 = \$ 8,574 CONTRIBUTION	\$8,574

BUILDING DEPARTMENT REVISION SET

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER
6667512
DATE: 07/17/2025

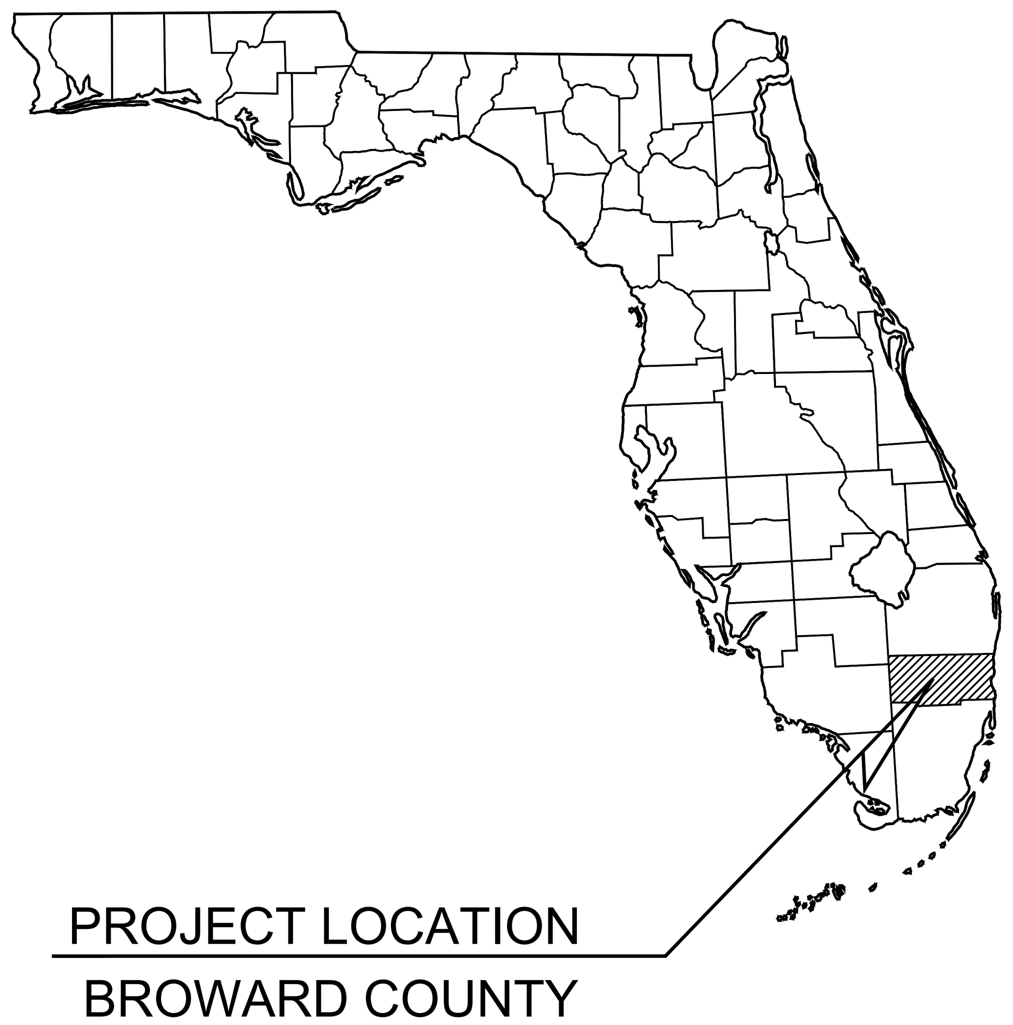
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

TREE DISPOSITION PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
TD-02



CIVIL ENGINEERING SET
FOR
ABUNDANT LIFE CHURCH

7955 ROYAL PALM BLVD., MARGATE FL, 33063
BROWARD COUNTY
JULY 2025

PROGRESS SET

PROJECT TEAM:

OWNER/DEVELOPER:
SEAN THOMAS
ABUNDANT LIFE CHURCH
7955 ROYAL PALM BLVD
MARGATE, FL, 33063

ARCHITECT:
SPACE DESIGN
108 SOUTH BROADWAY
EDMOND, OKLAHOMA, 73034
(405) 310-8866
CONTACT: THOMAS SMALL

SURVEYOR:
PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD SUNRISE,
FLORIDA 33351
(954) 572-1777
CONTACT: JOHN F. PULICE

LANDSCAPE:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100

CIVIL:
KIMLEY-HORN
8201 PETERS ROAD, SUITE 2200
PLANTATION, FL, 33324
(954) 535-5100
CONTACT: AARON MACKEY, P.E.

LIST OF CONTACTS:

ENGINEERING DIVISION
901 NW 66TH AVENUE SUITE A
MARGATE, FL 33063
(954) 972-0828

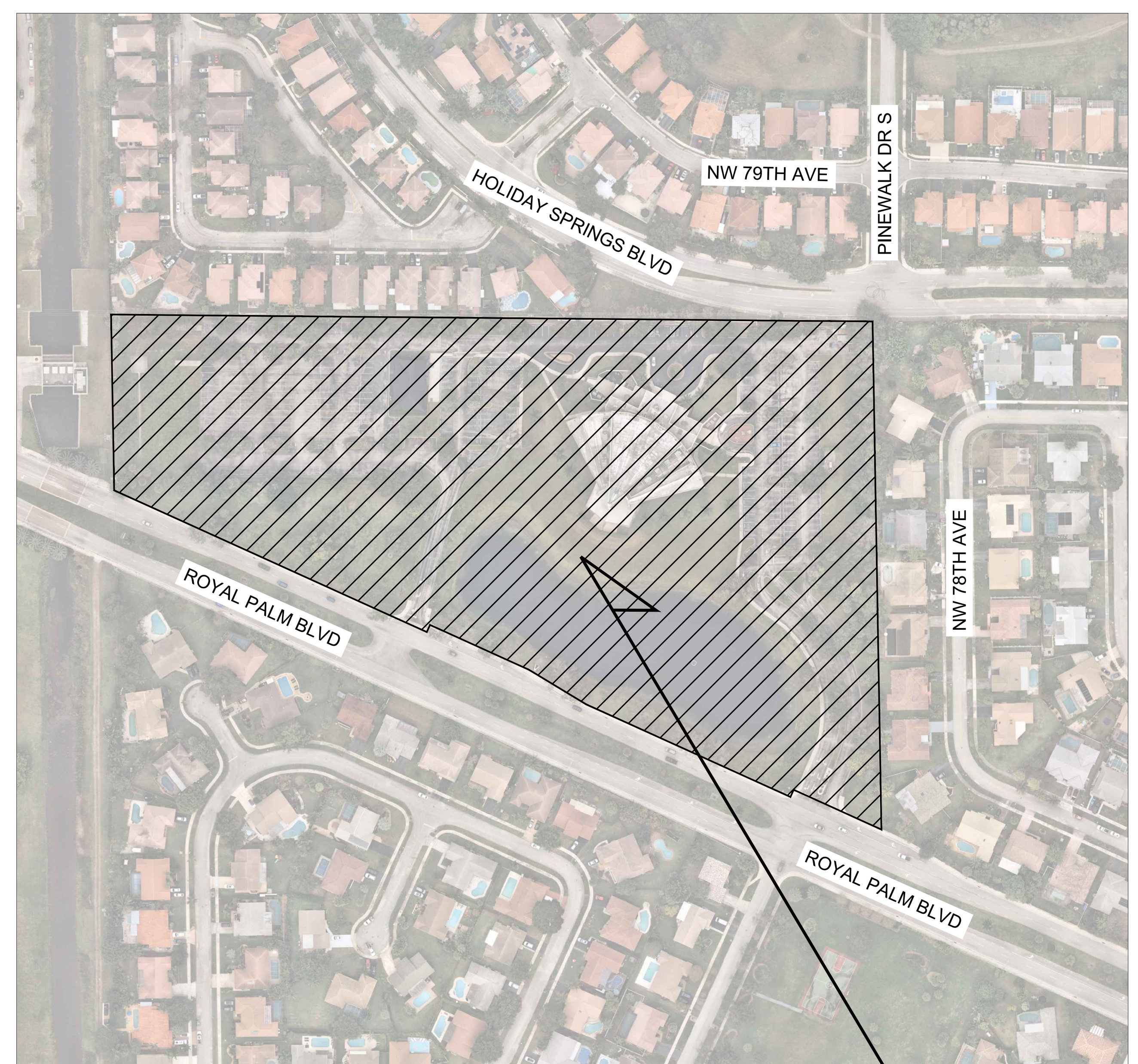
FIRE PROTECTION:
CITY OF MARGATE FIRE DEPARTMENT
1835 BANKS ROAD
MARGATE, FL 33063
(954) 971-4561

BROWARD COUNTY ENVIRONMENTAL PERMITTING DIVISION
1 N UNIVERSITY DR SUITE 203
PLANTATION, FL 33324
(954) 519-1260

BUILDING DEPARTMENT:
CITY OF MARGATE BUILDING DEPARTMENT
901 NW 66TH AVE B
MARGATE, FL 33063
(954) 970-3004

LEGAL DESCRIPTION

PARCEL "A", "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA. SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY FLORIDA.



VICINITY MAP

GRAPHIC SCALE IN FEET
0 100 200 400
SCALE: 1"=200'

NORTH

SUBJECT PROPERTY
7955 ROYAL PALM BLVD , MARGATE FL, 33063,

CIVIL ENGINEER:

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C-0	COVER SHEET
G-01	GENERAL NOTES
D-01	EROSION CONTROL & DEMOLITION PLAN
SP-01	OVERALL SITE PLAN
SP-02	MASTER PARKING PLAN
C-01	HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN
SP-03	PAVING GRADING & DRAINAGE PLAN
SP-04	PAVING GRADING & DRAINAGE PLAN
CS-01	CROSS SECTIONS
CWS-01	WATER & SEWER PLAN
D-02	EROSION CONTROL& DEMOLITION DETAILS
C-02	HORIZONTAL CONTROL, SIGNANGE & MARKING DETAILS
SP-05	PAVING & GRADING DETAILS
SP-06	DRAINAGE DETAILS
SL-01	PHOTOMETRICS PLAN
SL-02	PHOTOMETRICS DETAILS
SL-03	PHOTOMETRICS DETAILS
TD-01	TREE DISPOSITION PLAN
TD-02	TREE DISPOSITION PLAN
LP-01	LANDSCAPE PLAN
LP-02	LANDSCAPE PLAN
LP-03	LANDSCAPE DETAILS
LP-04	LANDSCAPE NOTES
IRR-01	IRRIGATION PLAN
IRR-02	IRRIGATION PLAN
IRR-03	IRRIGATION DETAILS
IRR-04	IRRIGATION NOTES
IRR-05	IRRIGATION NOTES
L-400	HARDSCAPE PLAN

Sunshine811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

ISSUED FOR DEVELOPMENT REVIEW COMMITTEE (DRC) - NOT FOR CONSTRUCTION JULY 23, 2025

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

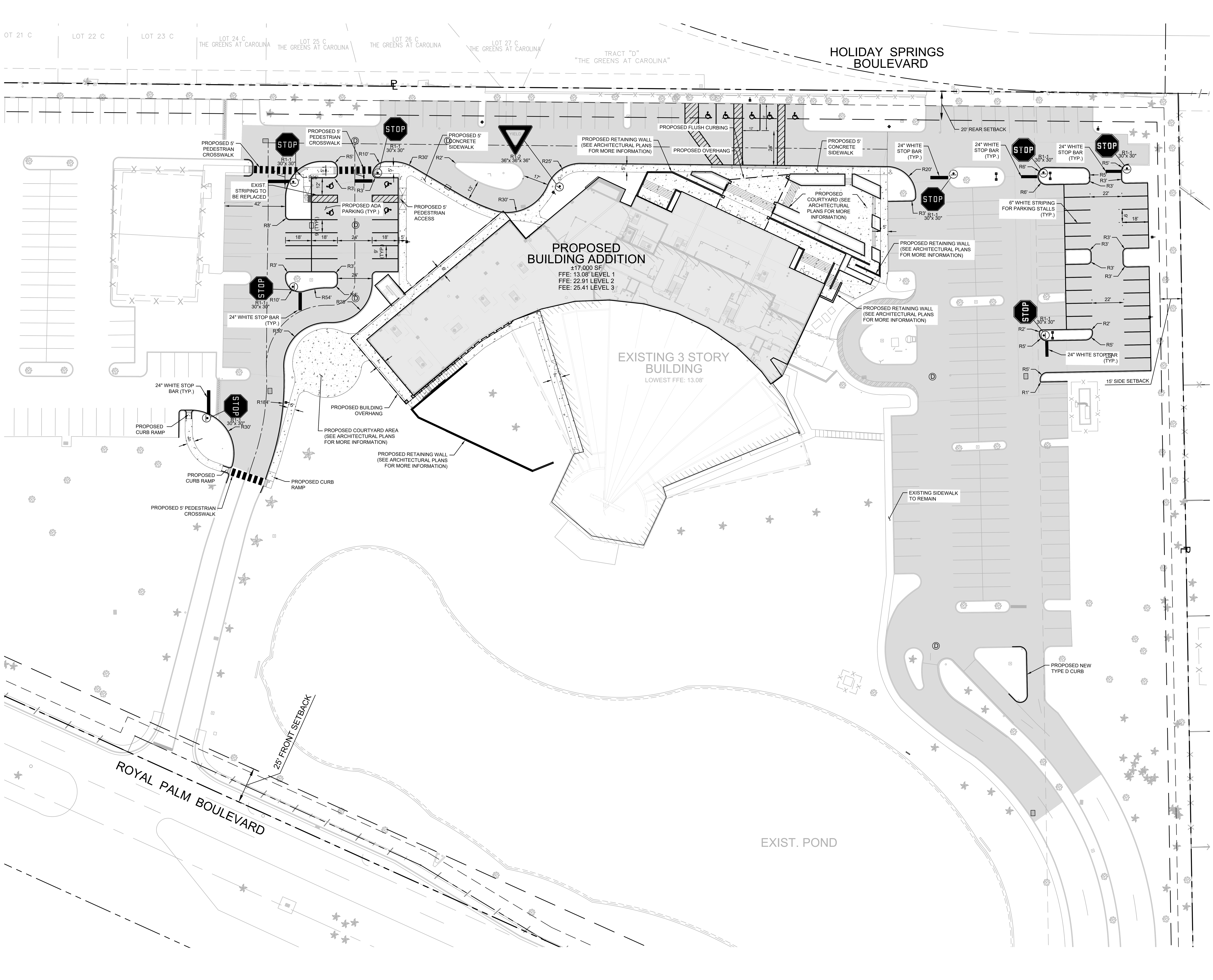
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

COVER SHEET

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-0



LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- PROP. ROAD CENTERLINE
- PROP. SIGN
- EXIST. SIGN
- ASPHALT PAVEMENT SEE SHEET SP-05 FOR DETAIL
- PROP. CONCRETE SIDEWALK
- PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

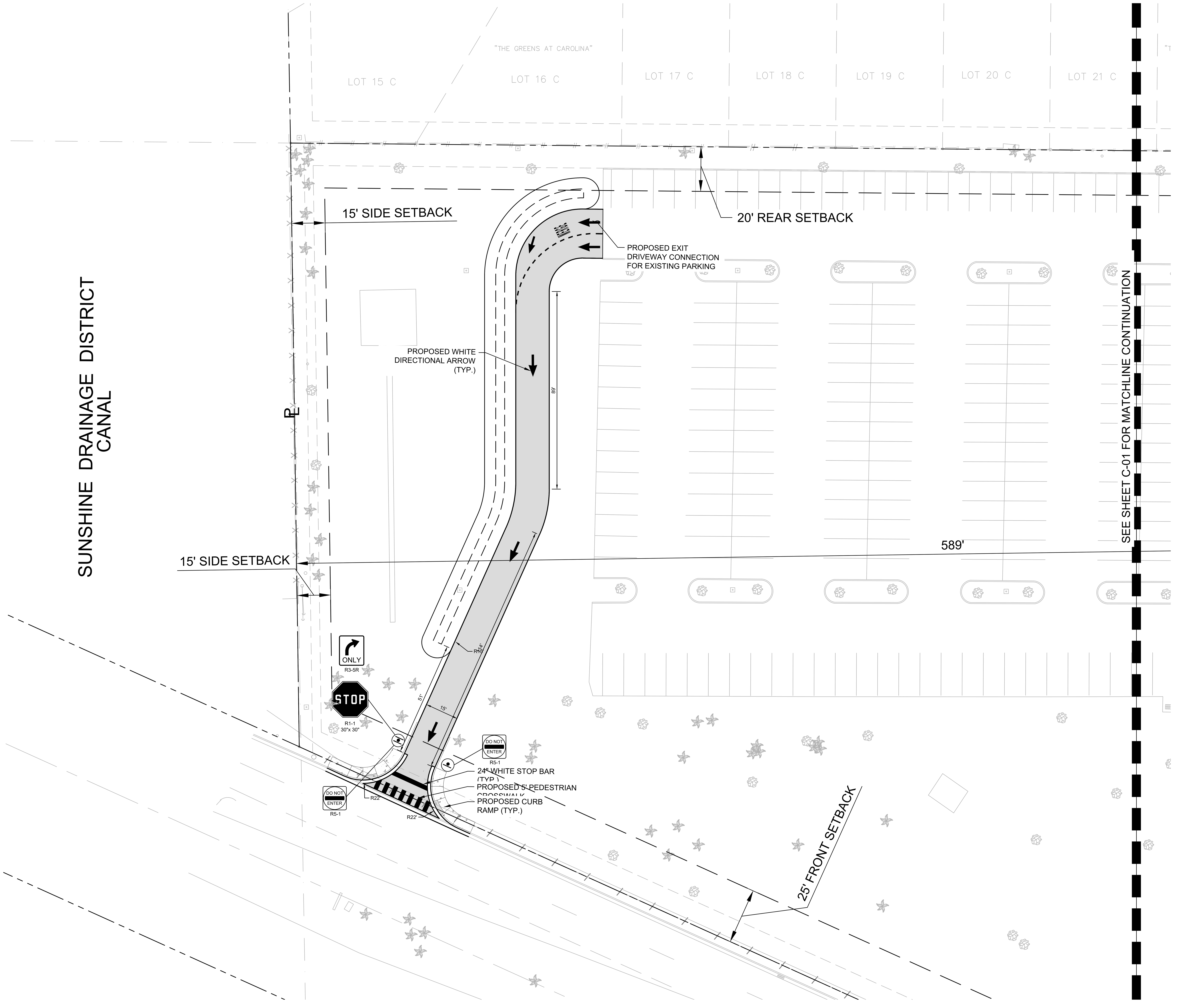
RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
C-01



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

R/W — ℙ —	PROPERTY LINE
— — —	EXIST. RIGHT OF WAY
— · —	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-06 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL PARKING LOT DIMENSIONS ARE TO THE FACE OF THE CURB AND/OR CENTER OF STRIPING.
7. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
8. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
9. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
10. REMOVAL OF EXISTING CURB AND SIDEWALK TO THE NEAREST JOINT.
11. TYPE 'D' CURB SHALL BE PER FDOT STANDARD PLANS INDEX 520-001.
12. ALL SIGNAGE SHALL COMPLY WITH BROWARD COUNTY ORDINANCES.
13. SITE CONSTRUCTION SHALL BE PER BROWARD COUNTY SPECIFICATIONS.
14. FOR ALL SIDEWALKS THE MAXIMUM CROSS SLOPE IS 2.0% AND THE MAXIMUM LONGITUDINAL SLOPE IS 5.0%
15. CURB RAMPS OUTSIDE OF PUBLIC RIGHT-OF- WAY SHALL COMPLY WITH THE FLORIDA BUILDING CODE SECTION 11-4.7 CURB RAMPS
16. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING

SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 2/6/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

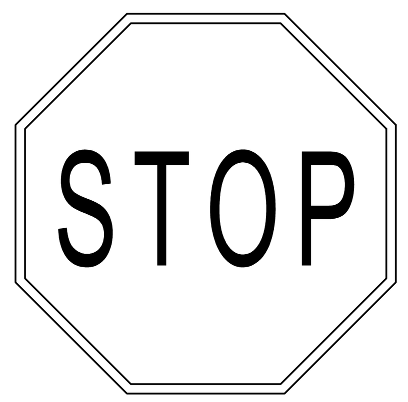
HORIZONTAL CONTROL, SIGNAGE & MARKING PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

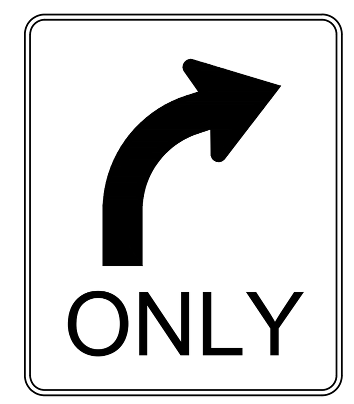
SHEET NUMBER
C-02

R1-1



R5-1

R3-5R

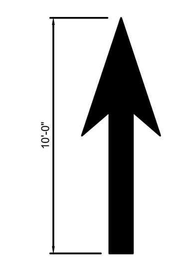


R6-1R

SIGNAGE
NOT TO SCALE

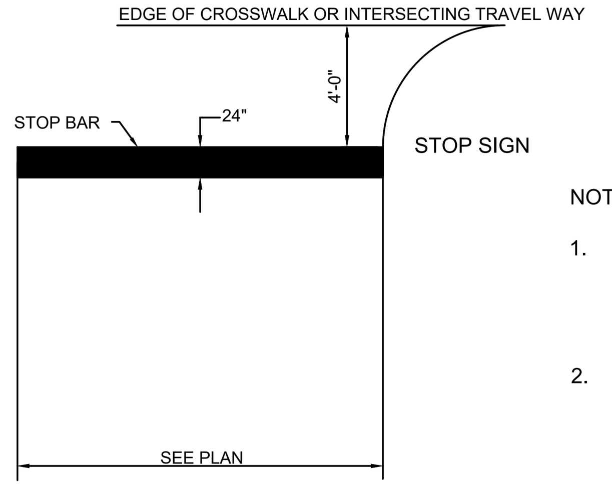
NOTES:

1. ARROWS SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE ARROWS ARE TO BE PAINTED RETROREFLECTIVE WHITE.
3. OPEN ARROWS SHALL CONSIST OF A 4" PERIMETER STRIPE.



SOLID ARROW MARKINGS
USED AT EXITS FROM THE PARKING LOT TO PUBLIC STREETS

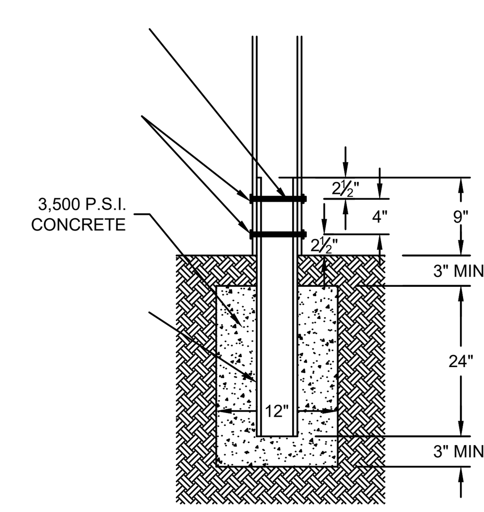
PAVEMENT MARKINGS
NOT TO SCALE



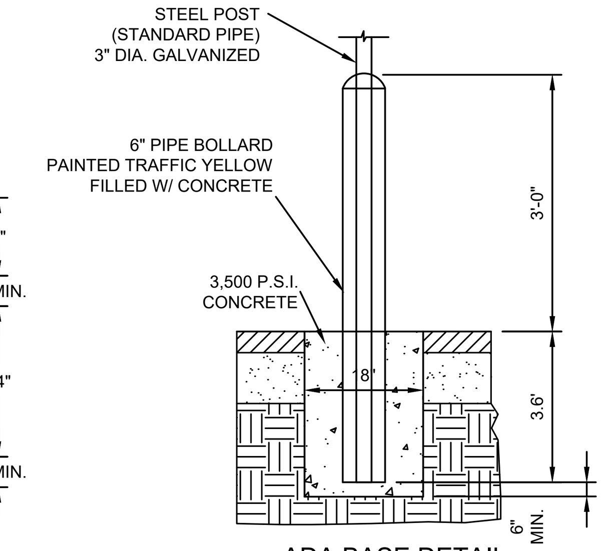
NOTE:

1. LINES SHALL BE APPLIED IN ACCORDANCE WITH SECTIONS 3B.16 AND 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE BARS ARE TO BE PAINTED WHITE RETROREFLECTIVE.

TYPICAL STOP BAR MARKING
NOT TO SCALE



BASE DETAIL IN LAWN OR LANDSCAPED AREAS



ADA BASE DETAIL IN PAVED AREAS

TYPICAL SIGN BASE
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

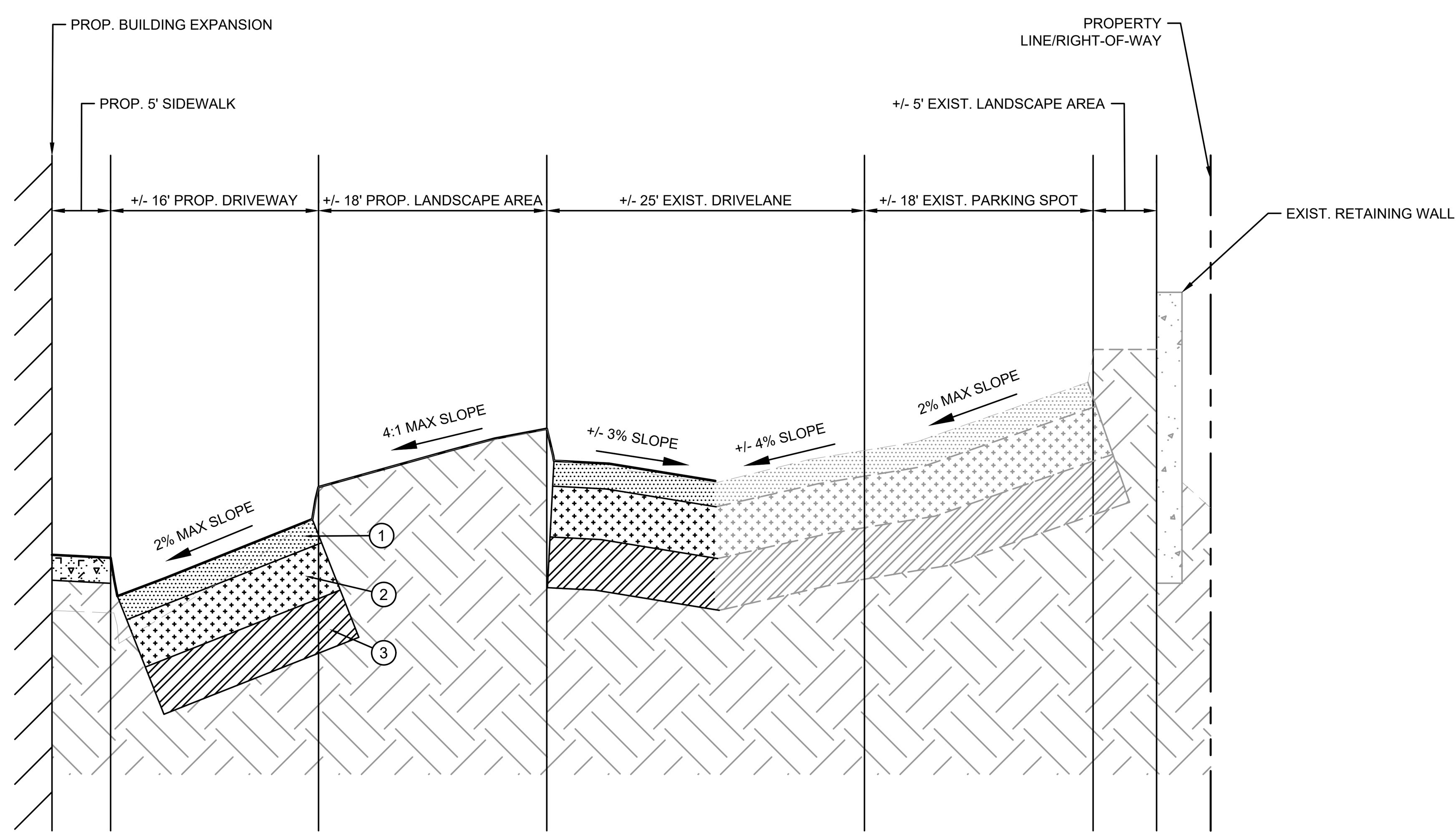
RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

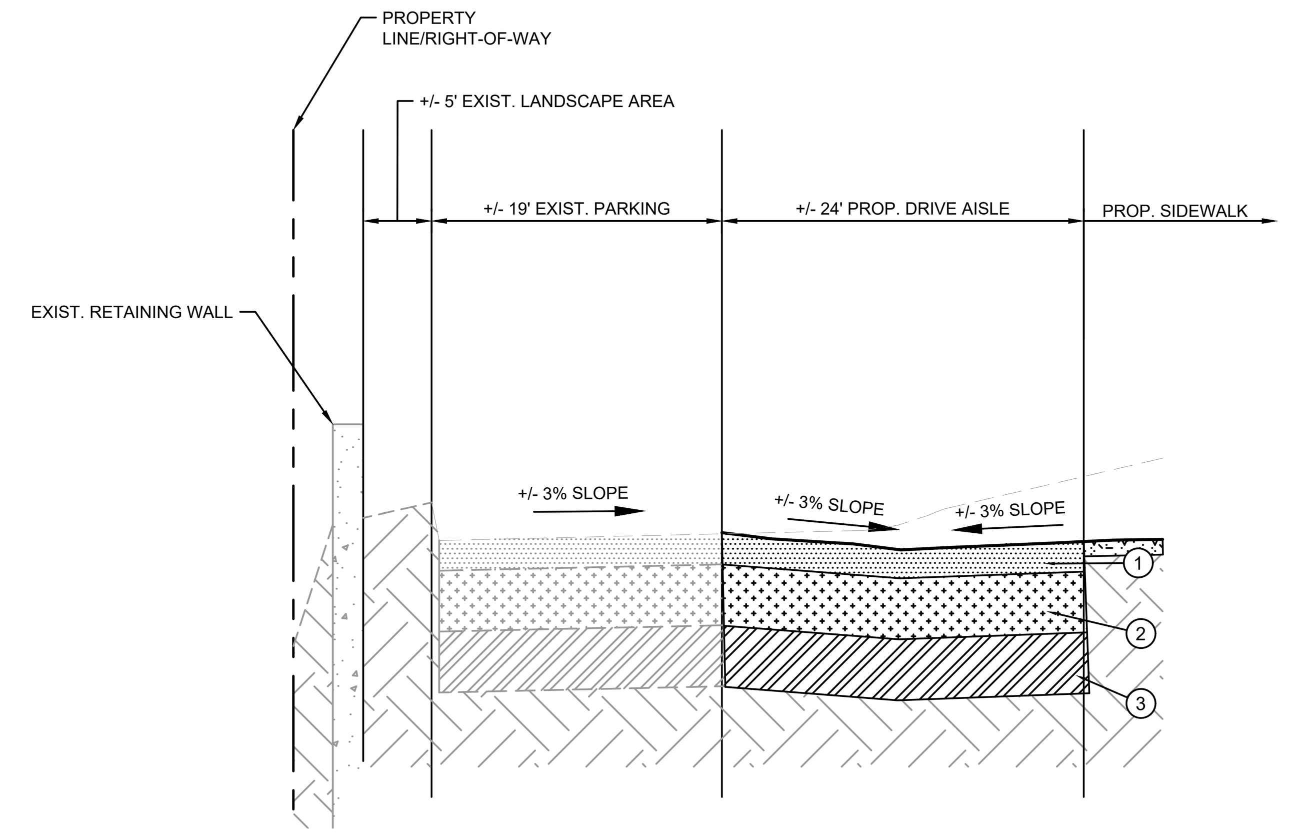
HORIZONTAL CONTROL, SIGNANGE & MARKING DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

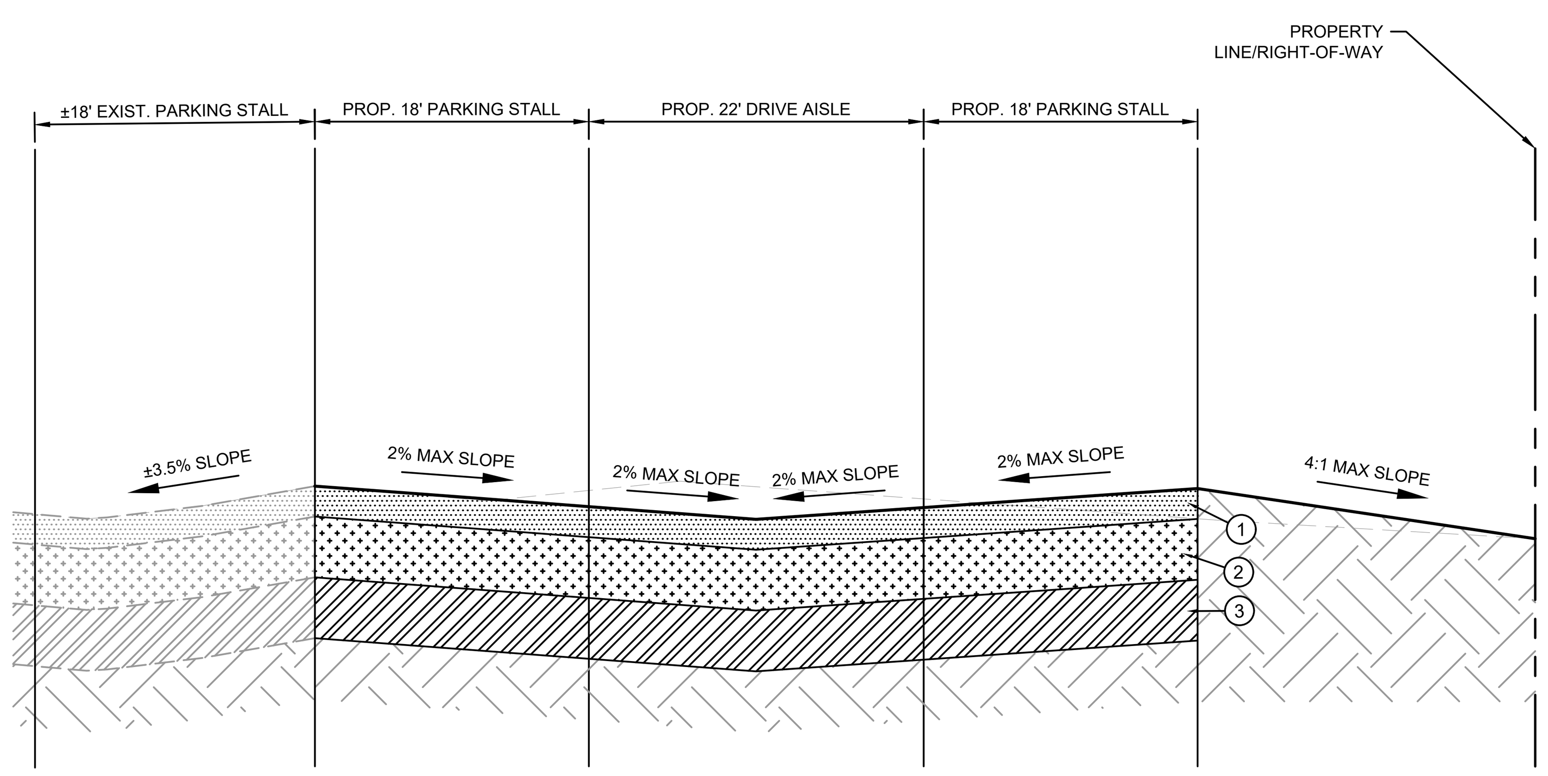
SHEET NUMBER
C-02



A
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



B
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE



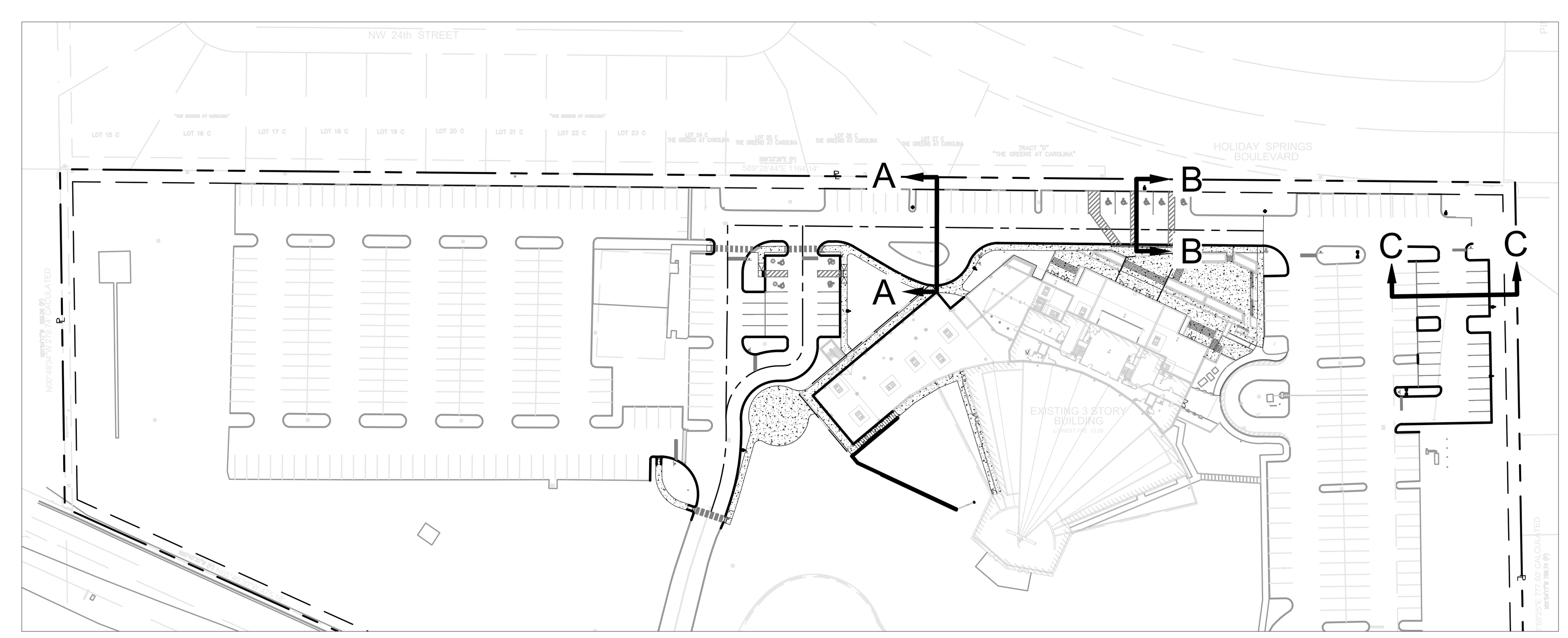
C
CS-1
PERIMETER CROSS SECTION
NOT TO SCALE

LEGEND:

1. FULL DEPTH PAVEMENT
2" SP-12.5 OR S-1 ASPHALTIC CONCRETE SURFACE COURSE (1500 MARSHALL STABILITY) ABOVE BASE

2. PROP. 8" CRUSHED CONCRETE BASE (LDR 100) COMPACTED TO A MIN. OF 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-135)

3. PROP. 12" STABILIZIED SUB BASE (LBR 40) COMPACTED TO A MIN. OF 98% OF MAX. DENSITY PER AASHTO T-180 MODIFIED PROCTOR



KEY MAP:

No.	REVISIONS	DATE	BY

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

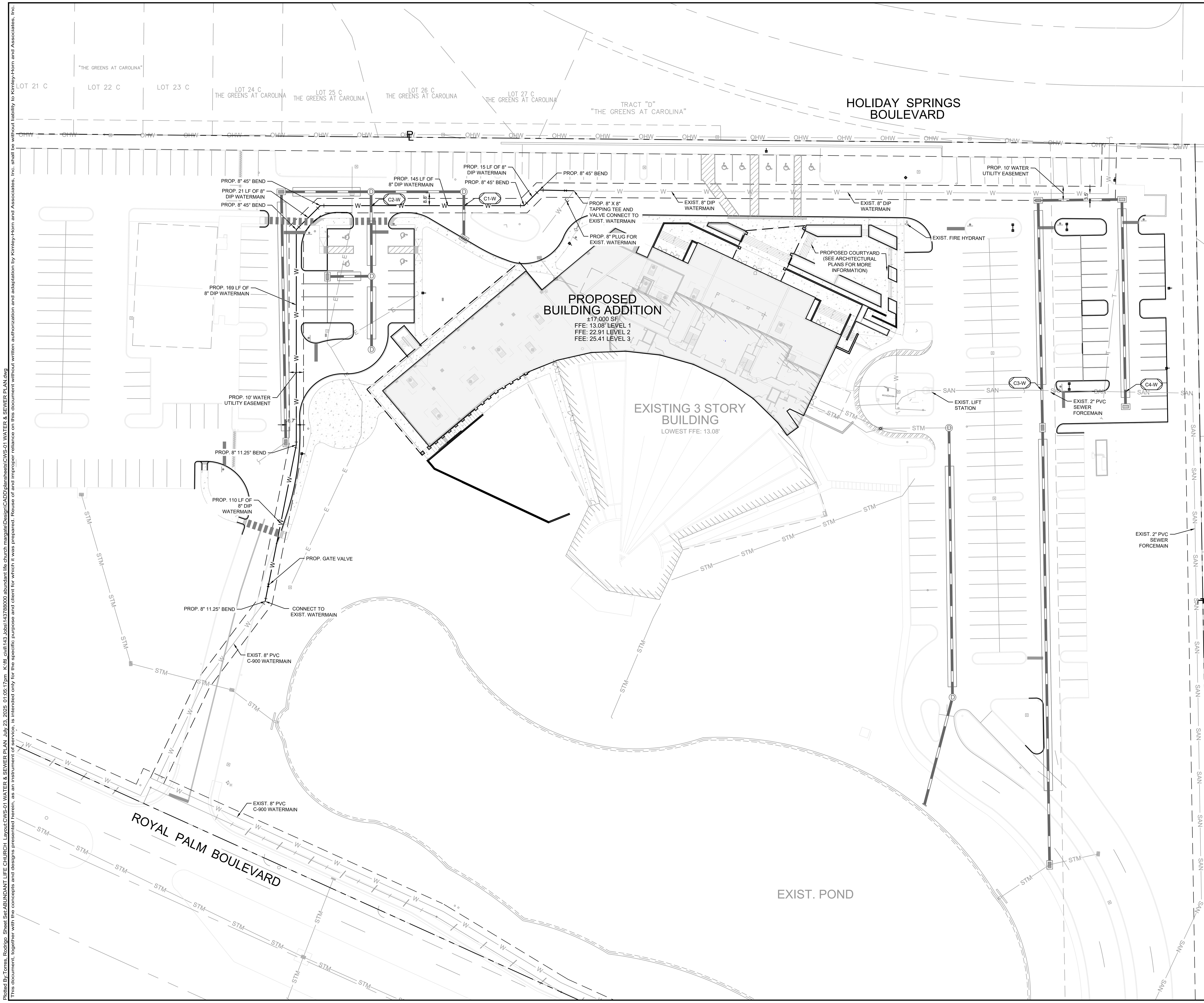
RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

CROSS SECTIONS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
CS-01



GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

RW — PL	PROPERTY LINE
	EXIST. RIGHT OF WAY
	EXIST. ROAD CENTERLINE
W	PROP. WATER LINE
	PROP. RIGHT OF WAY
SAN	EXIST. SANITARY SEWER LINE
W	EXIST. WATER LINE
	PROPOSED BUILDING ADDITION
	PROP. UTILITY EASEMENT

UTILITY CROSSING TABLE

C1-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 13.83' WATER TOP: 8.59' STORM BOT: 9.09' CLEARANCE: 0.50'
C2-W	PROP. 8" DIP WATER TO CROSS UNDER PROP. 18" HDPE STORM GRADE EL: 12.53' WATER TOP: 7.00' STORM BOT: 7.50' CLEARANCE: 0.50'
C3-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 12.25' SEWER BOT: 9.25' STORM TOP: 7.82' CLEARANCE: 1.73'
C4-W	EXIST. 2" PVC SEWER TO CROSS OVER PROP. 18" HDPE STORM GRADE EL: 11.66' SEWER BOT: 8.66' STORM TOP: 8.17' CLEARANCE: 0.49'

NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO NOTIFY ENGINEER OF ANY CONFLICTS.
2. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
4. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY THE POWER LINES.
5. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
6. ALL PIPES SHALL BE LAID IN DRY TRENCH. ALL MUCK OR UNSUITABLE MATERIALS IN TRENCHES, INLETS OR MANHOLES SHALL BE REMOVED.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

WATER & SEWER PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
CWS-01

SHEET NUMBER
CWS-02

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

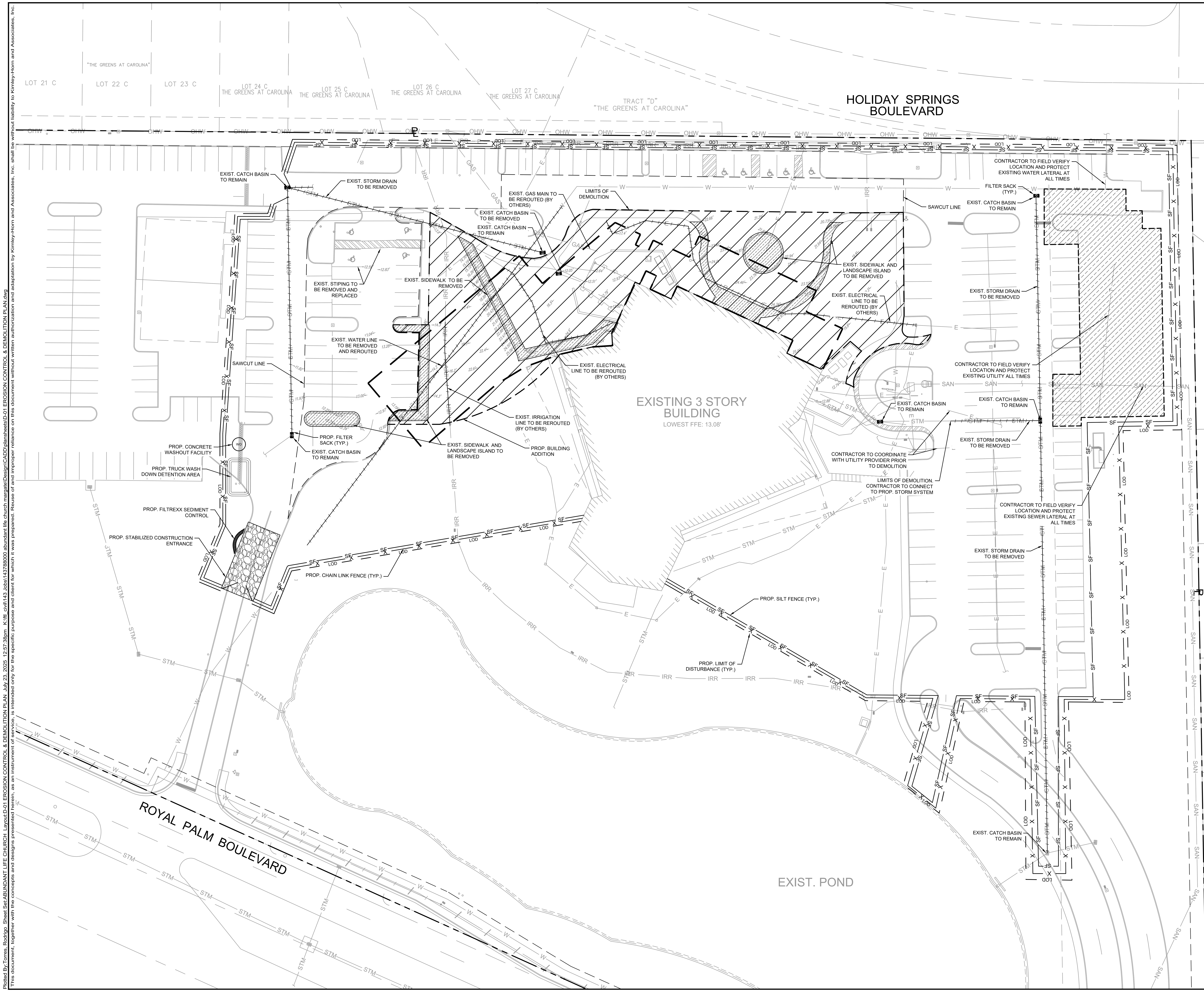
WATER & SEWER DETAILS

KHA PROJECT
143788000
DATE
5/19/2025
SCALE AS SHOWN
DESIGNED BY RR
DRAWN BY KH
CHECKED BY ARM

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

No.	REVISIONS	DATE	BY



GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

R/W	PROPERTY LINE
SF	SILT FENCE
X	CONSTRUCTION FENCE
LOD	LIMITS OF DISTURBANCE
	UTILITY TO BE REMOVED
	FILTER SACK
	EXISTING SIDEWALK, CURB, AND LANDSCAPE ISLANDS TO BE REMOVED
	LIMITS OF DEMOLITION
	PROPOSED BUILDING ADDITION

DEMOLITION NOTES:

1. ALL DEMOLITION SHALL BE WITHIN THE LIMITS OF DEMOLITION UNLESS OTHERWISE NOTED.
2. CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
3. PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN.
4. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
5. REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF SITE IN A LEGAL MANNER.
6. LOCATE EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES IN AREAS OF WORK IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING DEMOLITION OPERATION.
7. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING DEMOLITION, CONSULT PROJECT ENGINEER AND UTILITY OWNER FOR IMMEDIATE ACTION.
8. DEMOLISH AND COMPLETELY REMOVE FROM SITE, MATERIAL INDICATED ON PLAN OR NOTES.
9. THE USE OF EXPLOSIVES IS NOT PERMITTED.
10. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.
11. CONTRACTOR IS TO PROVIDE APPROVED EROSION CONTROL/SEDIMENTATION BARRIERS TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL AS NEEDED ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE.
12. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF DEMOLITION SHALL BE RE-LANDSCAPED AND IRRIGATION SYSTEMS REPAIRED TO PREVIOUS WORKING CONDITIONS.
13. ALL UTILITIES LOCATED WITHIN THE LIMITS OF DEMOLITION SHALL BE REMOVED TO THE LIMITS OF DEMOLITION AND/OR R/W AND CAPPED (WHERE APPLICABLE) UNLESS OTHERWISE NOTED.
14. ALL EXISTING CURBING AND ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION SHALL SAW CUT AND REMOVED UNLESS OTHERWISE NOTED.
15. CONTRACTOR TO FIELD VERIFY PRESENCE OF ALL ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION.
16. CONTRACTOR IS TO OBTAIN PROPER PERMITS PRIOR TO DEMOLITION OF EXISTING STRUCTURES.
17. CONTRACTOR TO INSTALL SAFETY FENCE AND PROPERLY SIGN/MARK AROUND WORK AND STAGING AREA TO PREVENT PEDESTRIAN TRAFFIC FROM ENTERING.
18. CONTRACTOR SHALL PROVIDE ADEQUATE MAINTENANCE OF TRAFFIC AROUND WORK AND STAGING AREA.
19. ALL STRIPING TO BE REMOVED SHALL BE HYDROBLASTED.

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

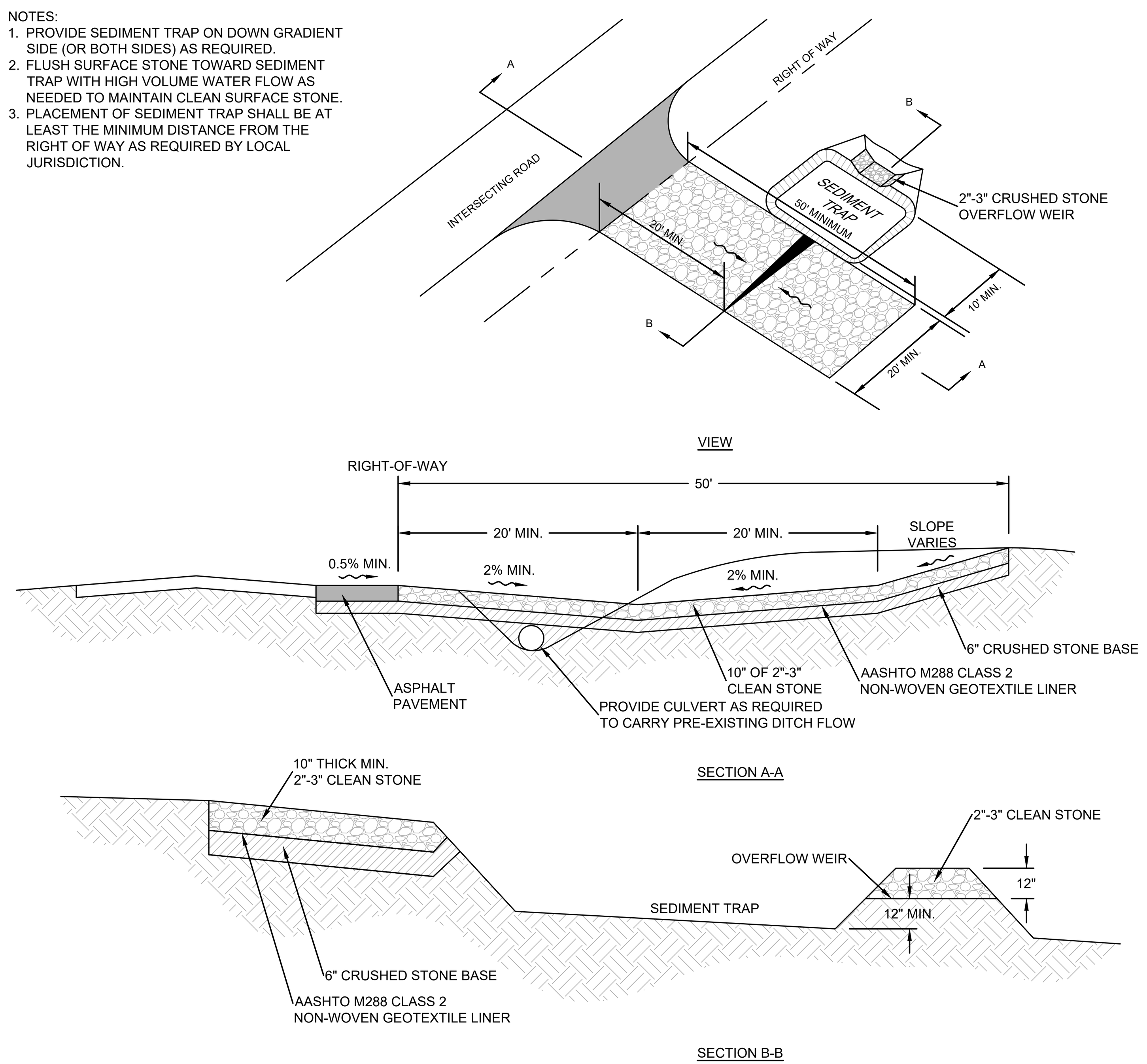
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

EROSION CONTROL & DEMOLITION PLAN

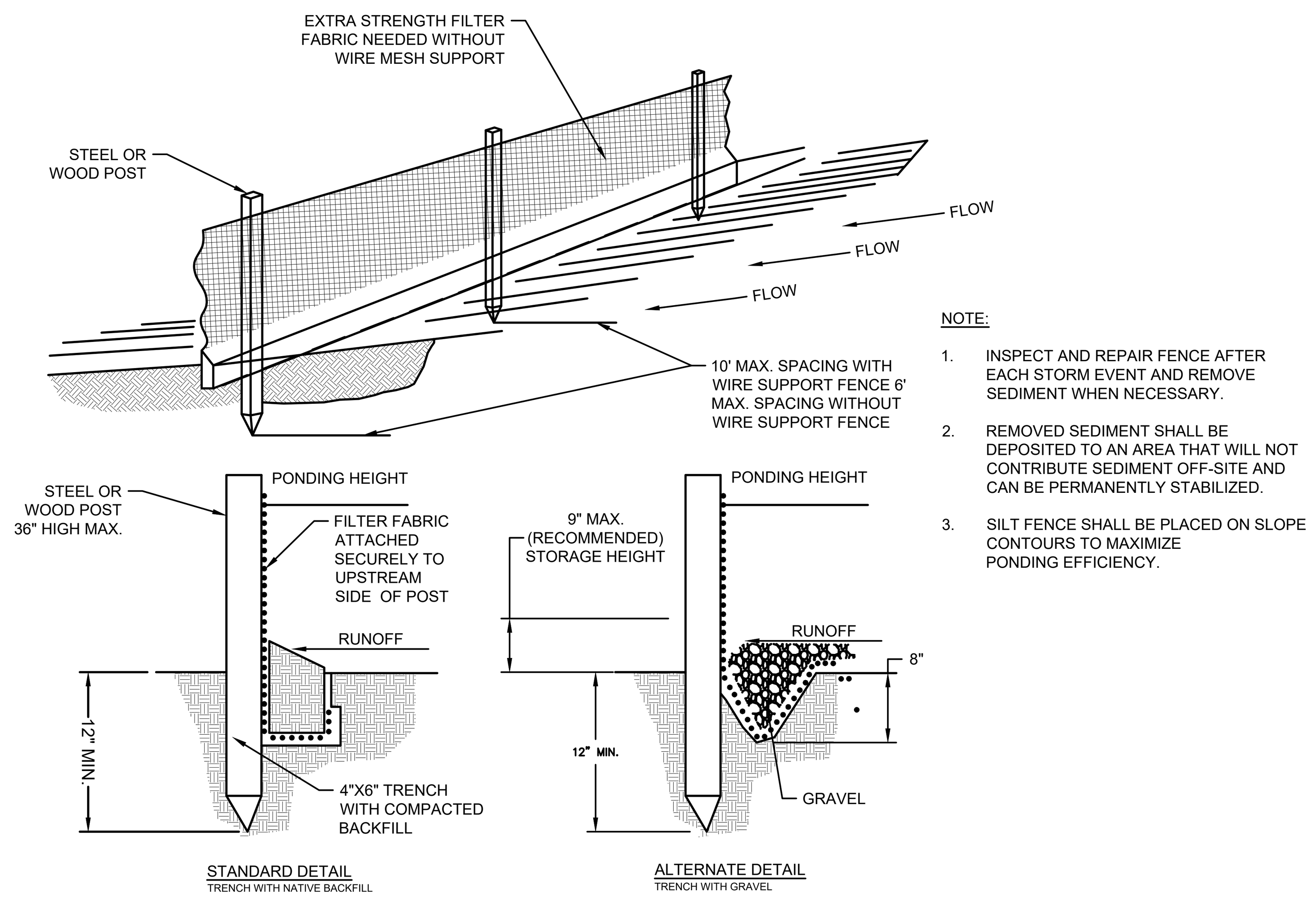
CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

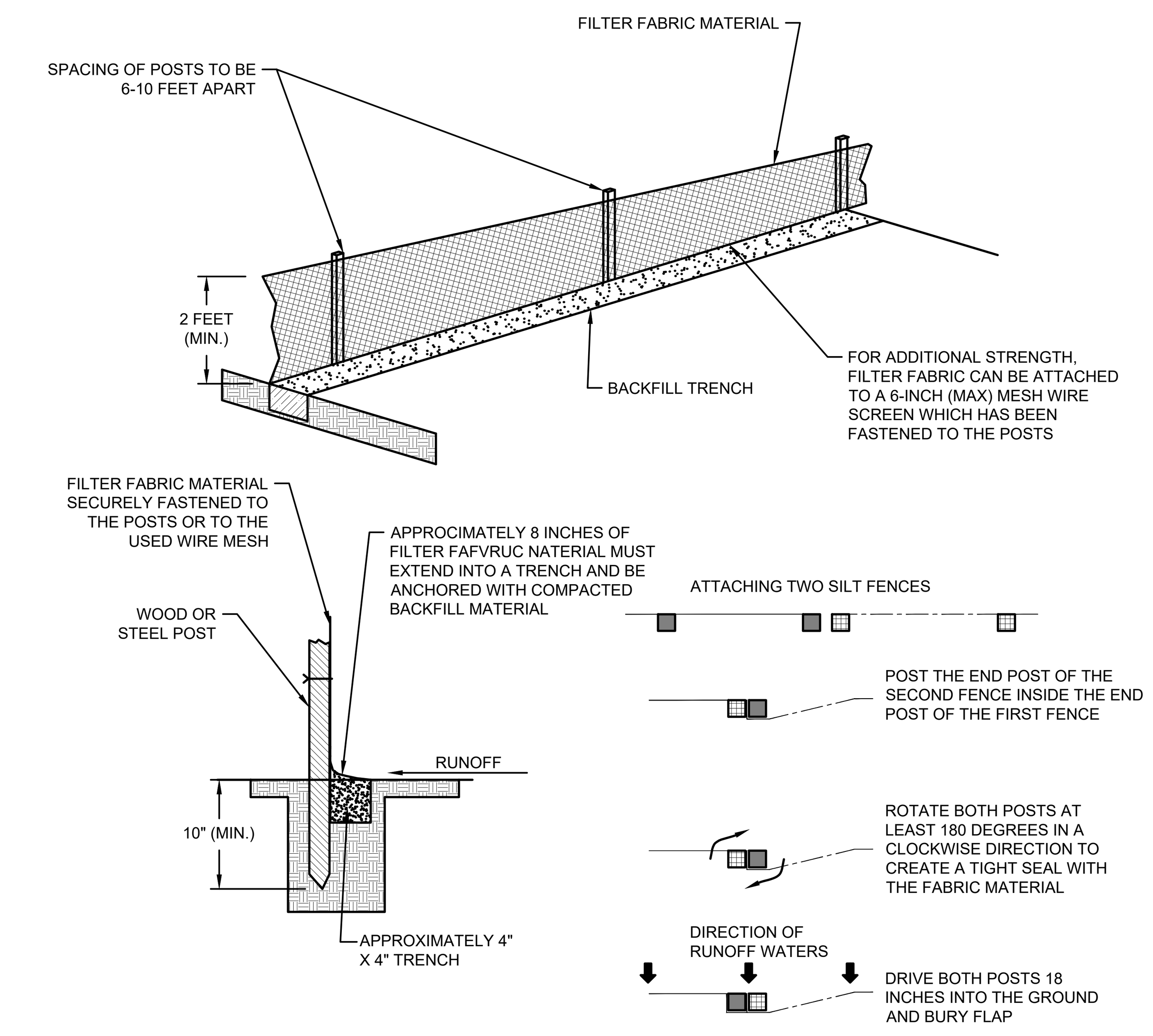
SHEET NUMBER
D-01



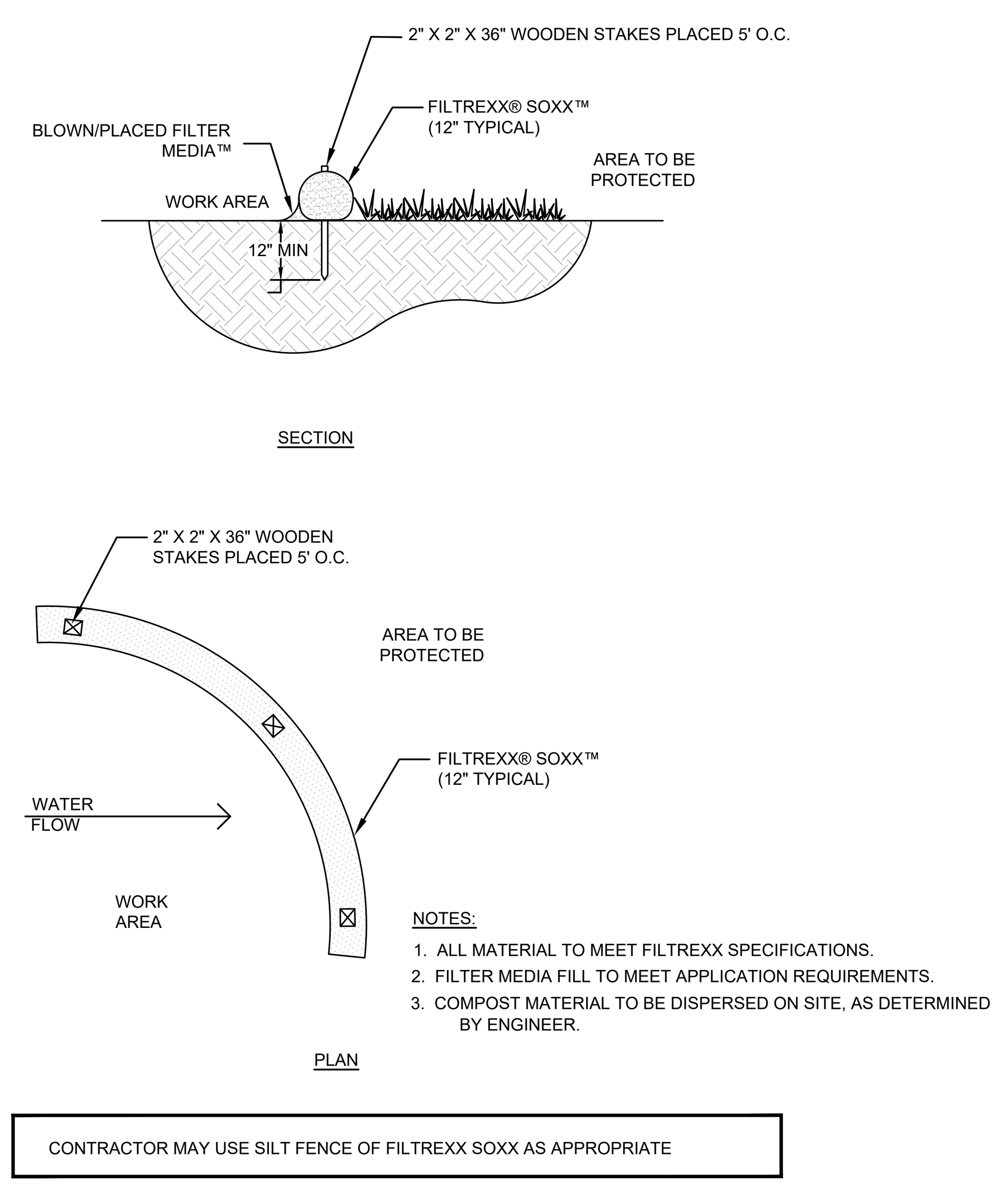
CONSTRUCTION ENTRANCE
NOT TO SCALE



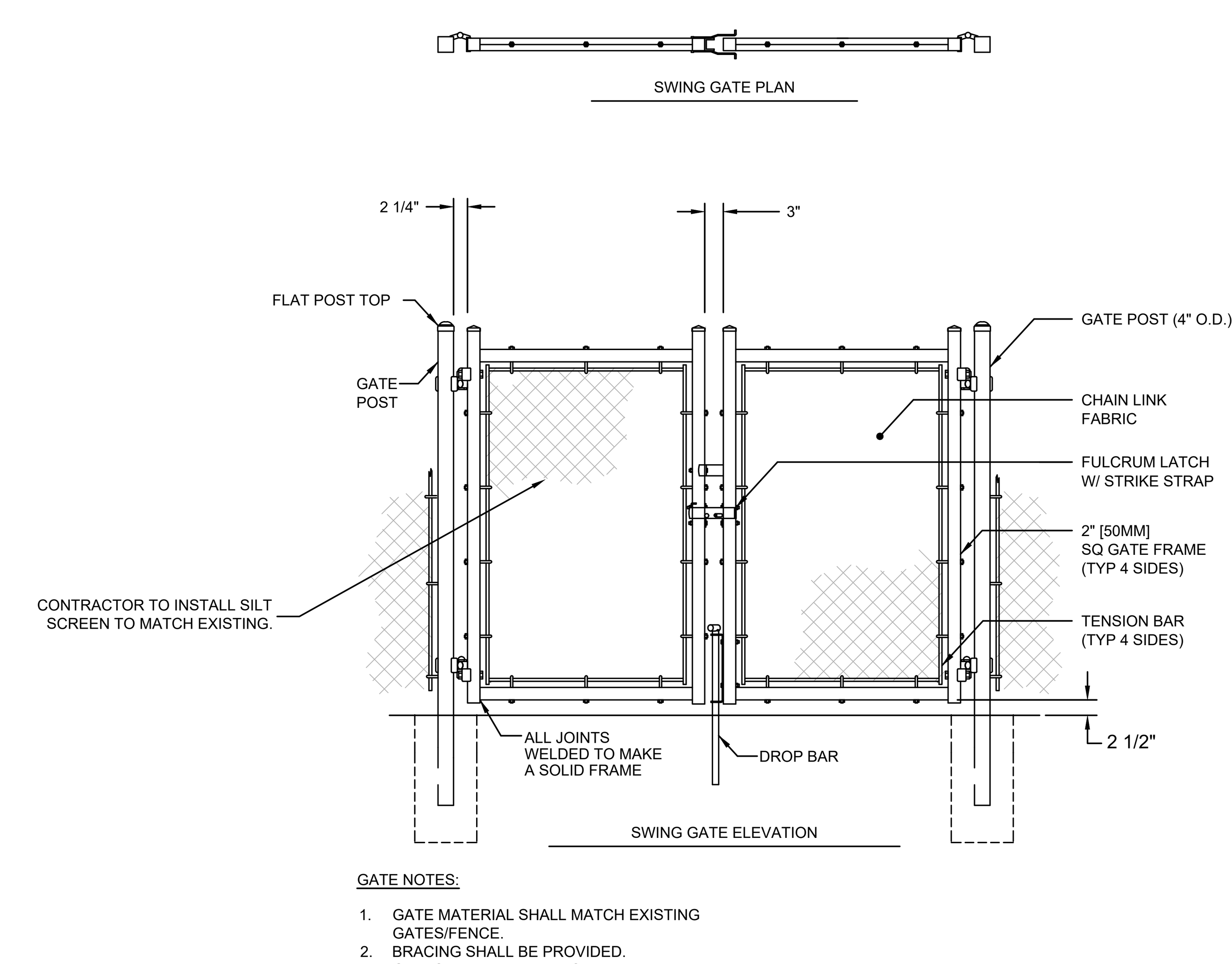
SILT FENCE DETAIL
NOT TO SCALE



SILT FENCE INSTALLATION DETAIL
NOT TO SCALE



FILTREXX SEDIMENT CONTROL
NOT TO SCALE



(FIRE DEPARTMENT ACCESSIBLE)

TEMPORARY 24" WIDE SWING GATES
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

EROSION CONTROL & DEMOLITION DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
D-02

I. GENERAL NOTES AND SPECIFICATIONS:

1. ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE FLORIDA BUILDING CODE, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS AND SPECIFICATIONS AND ALL OTHER LOCAL, STATE AND FEDERAL REQUIREMENTS.

2. LOCATIONS, SIZE AND MATERIAL OF EXISTING UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS. NEITHER THE DEVELOPER, CLIENT, OWNER NOR THE ENGINEER OF RECORD GUARANTEES THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HORIZONTALLY AND VERTICALLY LOCATE AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL PHYSICALLY FIELD VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

3. ALL EXISTING UNDERGROUND OR ABOVEGROUND UTILITY PIPES, CABLES, DUCTS, EQUIPMENT, DEVICES, ETC. WITHIN OR OUTSIDE THE PROJECT CONSTRUCTION LIMITS WHICH ARE DAMAGED OR DISRUPTED AS A RESULT OF THE CONTRACTOR'S OPERATION, SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. REGARDLESS OF WHETHER THEY WERE SHOWN OR NOT SHOWN ON THE PLANS OR LOCATED OR NOT BY THE OWNER'S REPRESENTATIVE, THE UTILITY COMPANY, SUNSHINE STATE ONE-CALL OF FLORIDA, ETC.

4. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING ANY CONSTRUCTION WORK.

5. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

6. ALL DEFECTIVE WORK NOT ACCEPTED BY THE ENGINEER OF RECORD, BY THE OWNER'S REPRESENTATIVE, OR BY ANY GOVERNMENTAL PERMITTING REGULATORY AGENCY SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

7. ALL STAGING AREAS SHALL BE PROPERLY FENCED AND SECURED BY THE CONTRACTOR.

8. ALL AREAS WHICH ARE BEING EXCAVATED SHALL BE PROPERLY PROTECTED AND BARRICADED BY THE CONTRACTOR. ALL TRENCH WORK SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 C.F.R.S. 1926.650 SUBPART P AND THE FLORIDA TRENCH SAFETY ACT.

9. ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT, CURB AND GUTTERS, CURBS AND WALKS, SOD, LANDSCAPING, FENCE, ETC. DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER OR CLIENT.

10. TEMPORARY ASPHALT PAVEMENT SHALL BE APPLIED TO ALL TRENCHES, WITHIN AN EXISTING PAVED RIGHT 0F WAY, AT THE END OF EACH WORKDAY. PLATING MAY BE USED WITH THE RIGHT-OF-WAY OWNER'S PRIOR CONSENT.

11. PROVIDE FILL TO ENSURE THAT THE FINISH GRADE (INCLUDING SOD) IN LANDSCAPE AREAS ARE AT LEVEL OF CURBS AND/OR EDGE OF SIDEWALKS.

12. WHERE NEW GRADES BLEND INTO EXISTING GRADES IN LANDSCAPE AREAS PROVIDE A UNIFORM TRANSITION. PROTECT ALL EXISTING PAVEMENT AND LANDSCAPE AREAS THAT ARE TO REMAIN.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER AND SEWER SERVICE DURING THE CONSTRUCTION OF THE TIE-IN CONNECTION OF ALL PROPOSED WATER OR SANITARY SEWER SYSTEMS, TO ANY EXISTING WATER OR SANITARY MAINS AND SERVICE LINES. ABANDONMENT SHALL NOT OCCUR UNTIL THE PROPOSED WORK HAS BEEN APPROVED AND ACCEPTED FOR OPERATION BY THE ENGINEER OF RECORD AND THE LOCAL PUBLIC WORKS DEPARTMENT. ALL EXISTING FIRE HYDRANTS SHALL BE RECONNECTED TO THE PROPOSED WATER MAIN. PUBLIC WORKS DEPARTMENT FIELD OPERATIONS WILL COORDINATE WITH ENGINEER OF RECORD IF AN EXISTING FIRE HYDRANT SHALL BE REPLACED AS NEEDED OR REQUIRED.

14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE PUBLIC HEALTH AND ENSURE JOB SAFETY. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY & HEALTH AGENCY (OSHA) STANDARDS AND FEDERAL, STATE AND LOCAL GOVERNMENT SAFETY REQUIREMENTS.

15. THE CONTRACTOR SHALL ENSURE THAT OVERFLOWS OR RAW SEWAGE SPILLS DO NOT OCCUR DURING CONSTRUCTION OF PROPOSED SANITARY SEWER TIE-IN CONNECTIONS.

16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT STORM WATER POLLUTION PREVENTION AND EROSION CONTROL MEASURES AND PRACTICES DURING CONSTRUCTION IN ACCORDANCE WITH THE EROSION CONTROL PLAN/DETAILS AND THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT FOR CONSTRUCTION ACTIVITIES REQUIREMENTS.

17. CONTRACTOR SHALL ENSURE THAT ALL STORM WATER RUN-OFF WITHIN THE CONSTRUCTION AREA IS CONTAINED ON-SITE.

18. WHEN POWER POLES ARE ADJACENT TO ANY PROPOSED UTILITY, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION. THE SHORING AND SUPPORT METHODS SHALL BE APPROVED BY THE UTILITY COMPANY'S ENGINEERING DEPARTMENT.

19. DUE TO FEDERAL REGULATIONS, THE CONTRACTOR MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES AND MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE WITHIN THE PROJECT AREA.

20. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING SITE IMPROVEMENTS, FEATURES AND CONDITIONS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE FOLLOWING TOPOGRAPHIC BOUNDARY SURVEY SPECIFICALLY PREPARED FOR THIS PROJECT:

TITLE: "BOUNDARY AND TOPOGRAPHIC SURVEY"
DATE: 03/21/2023
ADDRESS: PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
(954) 572-1777

21. ALL ELEVATIONS SHOWN ARE BASED ON THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD88).

22. ALL UTILITY CONNECTIONS TO THE BLDG. SHALL BE CONSTRUCTED AND CAPPED OR PLUGGED FIVE FEET FROM THE PROPOSED BUILDING. CONTRACTOR SHALL PERFORM TIE-INS TO THE BUILDING. THE COST ASSOCIATED WITH THE TAPPING/PLUGGING OF THE UTILITIES SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.

23. CONTRACTOR SHALL COORDINATE WORK WITH OTHER UTILITY AND BUILDING TRADES WORKING ON THIS OR ADJACENT PROJECTS.

24. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF THE EXISTING SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL SHORING, SHEETING AND/OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY , EITHER PUBLIC OR PRIVATE, DURING CONSTRUCTION ACTIVITIES. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

25. AFTER LOCATING AND VERIFYING EXISTING UTILITY TIE IN POINTS, CONTRACTOR IS TO VERIFY THAT DESIGN COMPONENTS SUCH AS, BUT NOT LIMITED TO, PERCENT SLOPE, INVERT, TAP LOCATIONS, PIPE RUNS, INFRASTRUCTURE DEPTH, ETC. WILL STILL BE IN ACCORDANCE WITH THE ENGINEERING PLANS.

26. IF IT SHOULD BECOME NECESSARY TO STOP WORK FOR INDEFINITE PERIODS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE OR DETERIORATION OF THE WORK ALREADY PERFORMED.

II. PRE-CONSTRUCTION RESPONSIBILITIES:

1. 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.

2. CONTRACTOR MUST CONTACT THE ARCHITECT/ENGINEER OF RECORD TO ARRANGE FOR A PRE-CONSTRUCTION MEETING, A MINIMUM 2 BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

3. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA (1-800-432-4770) AND ALL KNOWN EXISTING UTILITY OWNERS AT LEAST 2 BUSINESS DAYS BEFORE DIGGING TO ALLOW FOR FIELD LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES IN THEIR EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.

4. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.

5. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO ARRANGE FOR ANY REMOVAL, RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.

III. OBSERVATIONS AND TESTING:

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF PERFORMING ALL CIVIL RELATED TESTS. UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH TESTING UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO WITNESS THE TESTS.

2. THE ENGINEER OF RECORD WILL REQUIRE THAT THE FOLLOWING TESTS BE PERFORMED WITH ACCEPTABLE RESULTS:
   - A. SANITARY SEWAGE COLLECTION SYSTEM:
     - I. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE
     - II. INFILTRATION/EXFILTRATION TEST UP TO THE CONNECTING MANHOLE
     - III. PRESSURE TEST AS REQUIRED BY DRER
   - B. STORM DRAINAGE-(EXFILTRATION TRENCH DEPTH)
     - I. EXFILTRATION TRENCH DEPTH
     - II.LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE (IF APPLICABLE)
   - C. DRAINAGE WELL SPECIFIC CAPACITY TEST.
   - D. WATER SYSTEM-(PRESSURE TEST AND BACTERIOLOGICAL TEST)
   - E. SUBGRADE - SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK.
   - F. LIME ROCK BASE - SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT. (FLAT BOARDING ALSO REQUIRED.)
   - G. ASPHALT PAVEMENT
   - H. FINAL WALK-THROUGH INSPECTION - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPLICABLE REGULATORY AGENCIES FOR INSPECTION REQUIREMENTS.
   - I. CONCRETE FORMWORK AND ADA SLOPE VERIFICATIONS.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE FOLLOWING EVENTS:
   - A. PRIOR TO PLACING BALLAST ROCK WITHIN EXFILTRATION TRENCH AND PIPE RUNS TO MEASURE DEPTH AND WIDTH, AS WELL AS DIRECTIONS RESPECTIVELY.
   - B. PRIOR TO BACKFILLING WATER MAINS AND SERVICES
   - C. PRIOR TO BACKFILLING SANITARY SEWER MAINS AND SERVICES
   - D. AFTER COMPACTION OF LIMEROCK BASE AND PRIOR TO PLACEMENT OF FIRST LIFT OF ASPHALT
   - E. AFTER 2ND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS
   - F. INSTALLING CONNECTIONS TO EXISTING WATER AND SEWER MAINS/SERVICES AFTER SECOND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS.
   - G. AT SUBSTANTIAL COMPLETION
   - H. FINAL INSPECTION UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH THESE ACTIVITIES, UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO PERFORM AN INSPECTION.

4. SHOULD THE CONTRACTOR FAIL TO GIVE THE ENGINEER OF RECORD ADVANCE NOTICE OF TESTING AND INSPECTIONS AS SPECIFIED ABOVE, THE ENGINEER SHALL RESERVE THE RIGHT TO REFUSE ISSUANCE OF ANY CERTIFICATIONS OF COMPLETION AND FINAL INSPECTIONS, AND RESERVES THE RIGHT TO RECOMMEND THAT ANY CONTRACT AMOUNTS STILL HELD IN RETAINAGE NOT BE RELEASED. CITY INSPECTOR REPORTS SHALL NOT BE ACCEPTED AS A SUBSTITUTE FOR THE ENGINEER'S PRESENCE AT THE TESTING AND INSPECTION INTERVALS SPECIFIED ABOVE.

IV. SHOP DRAWINGS:

1. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS:
   - A. DRAINAGE STRUCTURES, INCLUDING CATCH BASINS, WELL BOXES, PUMPS, MANHOLES/INLET FRAMES/GRATES, BAFFLES, ETC.
   - B. ALL DRAINAGE PIPES.
   - C. TRENCH DRAINS.
   - D. EXFILTRATION FILTER FABRIC
   - E. ALL WATER AND SEWER SYSTEM COMPONENTS
   - F. ASPHALT PAVEMENT MIX DESIGN
   - G. LIMEROCK MATERIAL
   - H. CONCRETE MIX FOR PAVEMENT
   - I. MATERIAL SUBSTITUTION REQUESTS
   - J. EROSION CONTROL MATERIALS
   - K. FILL MATERIAL

2. ALL PRECAST STRUCTURAL DRAWINGS MUST BE SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED ENGINEER OF RECORD STATING THAT THE STRUCTURE(S) MEETS THE H20 LOAD RATING REQUIREMENTS. STRUCTURAL SHOP DRAWINGS WILL BE REJECTED AND NOT REVIEWED IF NOT SEALED BY A FLORIDA LICENSED ENGINEER. IN ADDITION, SOME CITIES, COUNTIES, STATE AND/OR NATIONAL REGULATORY AGENCIES REQUIRE THEIR OWN INDIVIDUAL REVIEW AND APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY SHOP DRAWING APPROVALS AS REQUIRED.

V. TEMPORARY FACILITIES:

1. TEMPORARY FACILITIES

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY, DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION, IF APPLICABLE.

C. CONTRACTOR SHALL OBTAIN THE ENGINEERING DESIGN AND PERMIT FOR SUCH FACILITIES AT THE CONTRACTOR'S SOLE COST.

2. TRAFFIC REGULATION

A. THE CONTRACTOR SHALL PROVIDE ALL MAINTENANCE OF TRAFFIC DURING CONSTRUCTION. TO INCLUDE BUT IS NOT LIMITED TO WARNING SIGNALS, SIGNS, LIGHTS AND FLAG PERSONS AS NECESSARY WITHIN PUBLIC RIGHT-OF-WAYS IN ACCORDANCE WITH THE LOCAL PUBLIC WORKS DEPARTMENT.

B. 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 AT ALL TIMES. SPECIAL PRECAUTION IS TO BE TAKEN IN PATHS OF EGRESS.

C. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE LOCAL PUBLIC WORKS DEPARTMENT.

VI. PROJECT CLOSE OUT:

1. CLEANING UP

A. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER AND THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN. UPON FINAL CLEANUP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH, AND THE PAVED AREAS SHALL BE BROOMED AND PRESSURE CLEANED.

B. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

C. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS AND ANY OTHER IMPROVEMENTS REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION WHICH EXISTED PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.

D. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE 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 THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION. ANY ADVERSE EFFECTS OR BUILDUP IN PUBLIC INFRASTRUCTURE WILL BE CLEANED AND REDUCED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.

E. ALL DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATED MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENGINEER OF RECORD. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.

2. ALL PROPERTY MONUMENTS OR PERMANENT SURVEY REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

3. PROJECT RECORD DOCUMENTS

A. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS. PRIOR APPROVAL FROM THE ENGINEER OF RECORD IS REQUIRED FOR SAID FACILITIES.

B. AT THE COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL SUBMIT THREE (3) SIGNED & SEALED AS-BUILT DRAWINGS, SIGNED & SEALED BY A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. ADDITIONAL AS-BUILT DRAWINGS REQUIRED BY THE CITY, COUNTY, STATE AND/OR FEDERAL REGULATORY AGENCIES SHALL ALSO BE SUBMITTED ONCE REQUIRED. THE AS-BUILT DRAWINGS SHALL INDICATE LOCATION, SIZE, ELEVATION, MATERIAL, ETC., OF ALL WORK COMPLETED UNDER THIS CONTRACT AND OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.

VII. STORM DRAINAGE:

1. WHEN EXISTING MANHOLE RINGS, CATCH BASIN GRATE AND FRAMES, VALVE BOXES, PULL BOXES OR OTHER UTILITY CASTINGS ARE ENCOUNTERED WITHIN THE PROPOSED LIMITS OF WORK THE CONTRACTOR SHALL FIELD ADJUST THE EXISTING RING AND FRAME, GRATE AND FRAME, VALVE BOXES OR PULL BOXES TO MATCH THE PROPOSED ELEVATION. SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE INDICATED.

3. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE DOUBLE WALLED SMOOTH INTERIOR PIPE AND SHALL MEET THE REQUIREMENTS OF AASHTO M294 TYPE S, MPT AND ASTM D2321, D3212, F1417, F477, F667 OR AS NOTED ON THE CONSTRUCTION DRAWINGS.

4. CONTRACTOR SHALL VACUUM CLEAN AND REMOVE ALL SILT, SEDIMENT AND DEBRIS FROM ALL OF THE EXISTING AND PROPOSED DRAINAGE STRUCTURES AND PIPE NETWORK WITHIN THE PROJECT LIMITS PRIOR TO FINAL ACCEPTANCE OF DRAINAGE SYSTEM. ALL COST OF SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.

5. ALL DRAINAGE WORK SHALL CONFORM TO THE GOVERNING JURISDICTIONAL AGENCY REGULATIONS AND STANDARDS

6. UNLESS OTHERWISE SPECIFIED ON THE PLANS, MINIMUM COVER OVER ALL STORM DRAINAGE PIPE SHALL BE 36-INCHES. CONTRACTOR SHALL AVOID ALL UNNECESSARY CROSSINGS BY HEAVY CONSTRUCTION EQUIPMENT DURING CONSTRUCTION.

7. UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL CATCH BASINS, MANHOLES, FRAMES AND GRATES, RINGS AND COVERS, WITHIN PRIVATE PROPERTY, SHALL BE DESIGNED TO WITHSTAND AN AASHTO AND XDOT H20 LOAD RATING AND SHALL BE OBTAINED FROM PLAN SPECIFIED MANUFACTURERS OR APPROVED EQUIVALENT MANUFACTURER.

VIII. EARTHWORK AND PAVING:

1. ALL UNDERGROUND UTILITY WORK SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF SUB BASE. ANY SUBGRADE RE-WORK DUE TO UNDERGROUND INFRASTRUCTURE INCONSISTENCIES WILL BE DONE AT THE CONTRACTOR'S EXPENSE.

2. PROPOSED ASPHALT PAVEMENT SHALL BE CONNECTED TO EXISTING AS PER STANDARD DETAILS. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS ON NEW SIDEWALK OR NEW PAVEMENT.

3. SAW CUT EXISTING CONCRETE WALKS, CURB AND GUTTERS, AND ASPHALT OR CONCRETE PAVEMENT CAREFULLY AND IN A STRAIGHT LINE WHERE UNDERGROUND WORK IS REQUIRED. WHERE PROPOSED ASPHALT OR CONCRETE PAVEMENT, CURB, SIDEWALK, ETC. WILL MEET AN EXISTING LOCATION CUT CONCRETE WALKS, CONCRETE PAVEMENT, CURB AND GUTTERS AT NEAREST EXISTING JOINT.

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley-Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

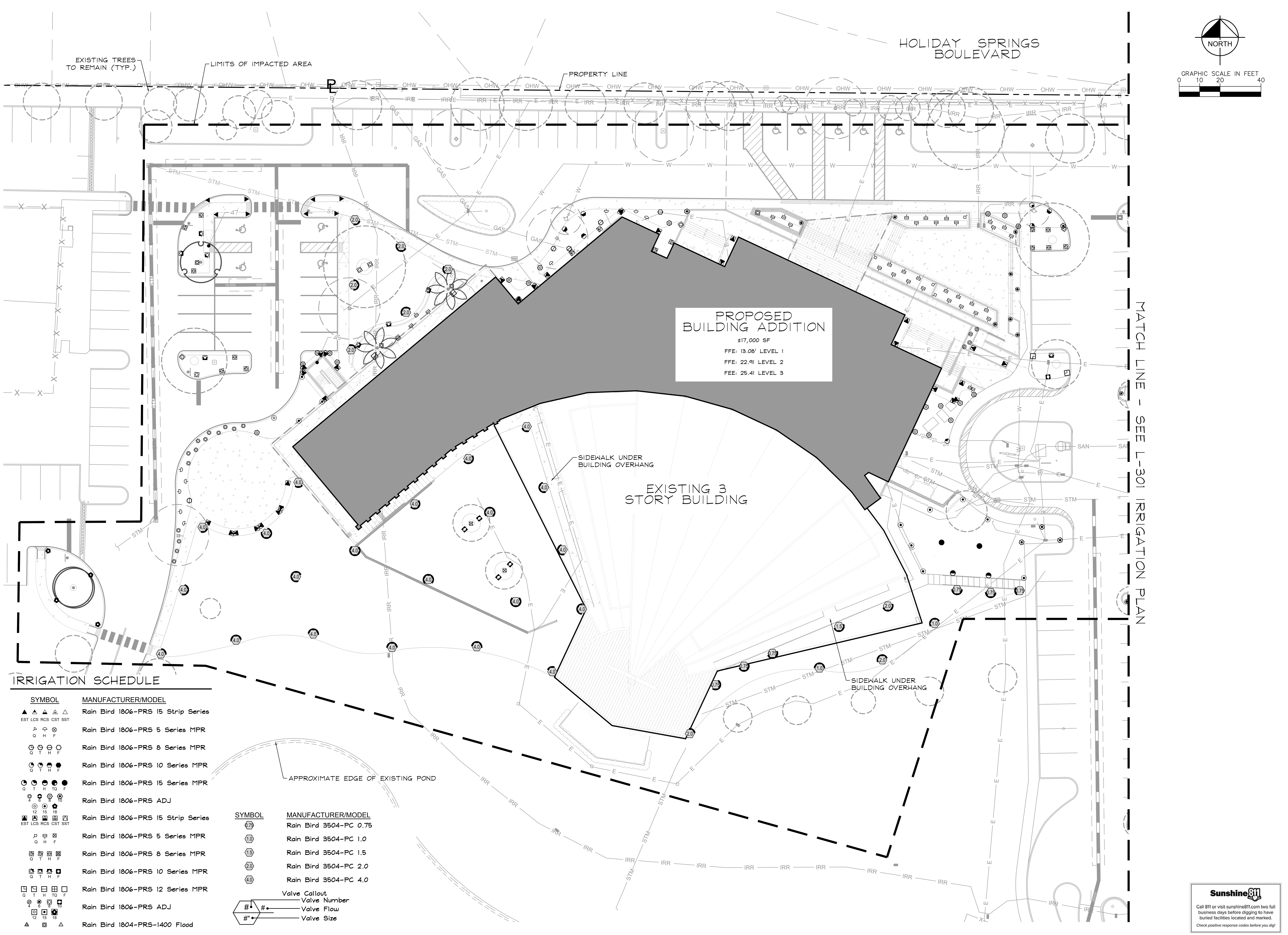
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

GENERAL NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
G-01



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series
Q H F	Rain Bird 1806-PRS 5 Series MPR
Q T H F	Rain Bird 1806-PRS 8 Series MPR
Q T H F	Rain Bird 1806-PRS 10 Series MPR
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ
	Rain Bird 1804-PRS-1400 Flood

SYMBOL	MANUFACTURER/MODEL
0.75	Rain Bird 3504-PC 0.75
1.0	Rain Bird 3504-PC 1.0
1.5	Rain Bird 3504-PC 1.5
2.0	Rain Bird 3504-PC 2.0
4.0	Rain Bird 3504-PC 4.0

Valve Callout
Valve Number
Valve Flow
#" Valve Size

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT	143788000
DATE	07/17/2025
SCALE	AS SHOWN
DESIGNED BY	NS
DRAWN BY	NS
CHECKED BY	TCH

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

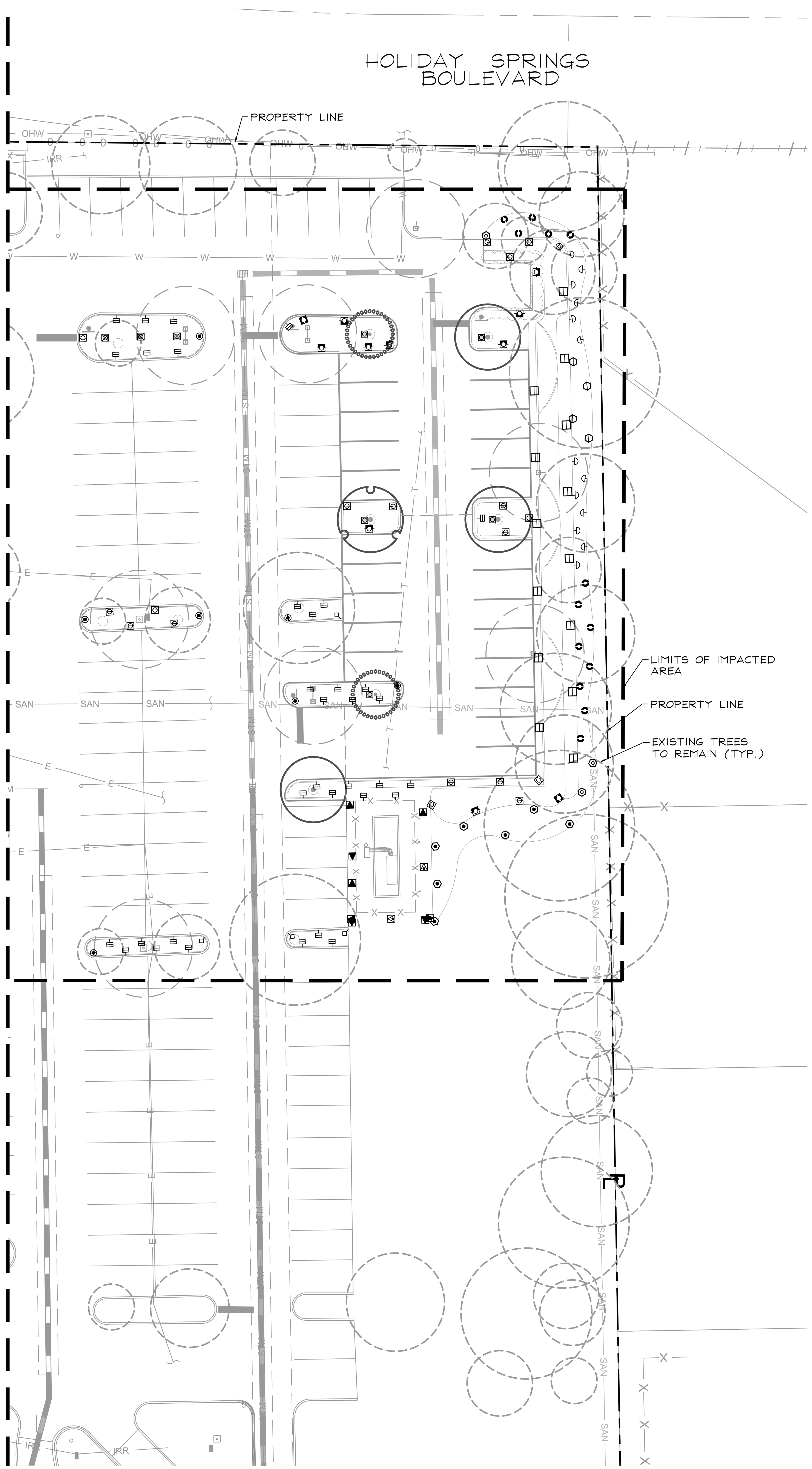
IRRIGATION PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-01

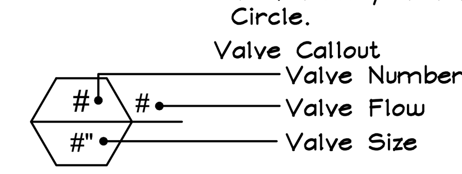
No.	REVISIONS	DATE	BY



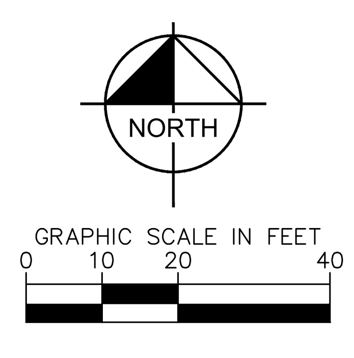
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	8	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	22	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	9	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	7	30
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	4	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	76	30
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	44	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	77	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	32	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	17	30
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	18	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Shrub Spray 6in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. With Pressure Regulating Device.	39	30
1401 1402 1404	Rain Bird 1804-PRS-1400 Flood Flood Bubbler 4in. popup with pressure regulating device. Install w/ PA-80 adapter.	8	20

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
0.75	Rain Bird 3504-PC 0.75 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	6	25	0.54	15'
1.0	Rain Bird 3504-PC 1.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	2	25	0.77	20'
1.5	Rain Bird 3504-PC 1.5 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	1	25	1.06	23'
2.0	Rain Bird 3504-PC 2.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	9	25	1.4	27'
4.0	Rain Bird 3504-PC 4.0 Turf Rotor, 4in. Pop-Up. Adjustable and Full Circle.	21	25	2.97	31'



PLAN IS DIAGRAMMATIC. CONTRACTOR SHALL INSTALL ALL IRRIGATION EQUIPMENT IN LANDSCAPE OR TURF AREAS WITHIN PROJECT LIMITS.



IRRIGATION SYSTEM NOTES

1. CONTRACTOR SHALL REFER TO THE IRRIGATION DETAILS, IRRIGATION SCHEDULE, SPECIFICATIONS AND ALL CONTRACT DOCUMENTS FOR FURTHER AND COMPLETE INSTRUCTIONS.
2. IRRIGATION QUANTITIES ARE PROVIDED FOR CONVENIENCE. IN THE EVENT OF QUANTITY DISCREPANCIES THE DRAWING SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING.
3. ANY SUBSTITUTIONS FOR SPECIFIED IRRIGATION EQUIPMENT MUST BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL FIELD ADJUST LOCATION OF IRRIGATION EQUIPMENT AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR INTERFERE WITH EXISTING ABOVE GROUND ELEMENTS. ALL FIELD ADJUSTMENTS SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
5. CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LIMITS OF WORK AND EXISTING CONDITIONS AND VERIFY ALL INFORMATION. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IN WRITING WITHIN SEVEN CALENDAR DAYS OF NOTICE TO PROCEED.
6. IRRIGATION PLAN IS DIAGRAMMATIC. EQUIPMENT SHOWN ON IMPERVIOUS SURFACES IS FOR GRAPHIC CLARITY UNLESS OTHERWISE NOTED. CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITHIN LANDSCAPE AREAS IN PROPERTY LIMITS.

THE IRRIGATION SYSTEM IS DESIGNED TO OPERATE WITH A SOURCE PROVIDING xx GPM AT xx PSI.

SPRAY HEAD DESIGN PRESSURE: 30 PSI
BUBBLER DESIGN PRESSURE: 30 PSI
ROTOR DESIGN PRESSURE: 25 PSI

SLEEVE SIZE SCHEDULE (SCH 40)

PIPE SIZE (or combination of pipe sizes)	SLEEVE SIZE
1"	2"
1½"	4"
2"	4"
3"	6"
4"	8"
6"	12"

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

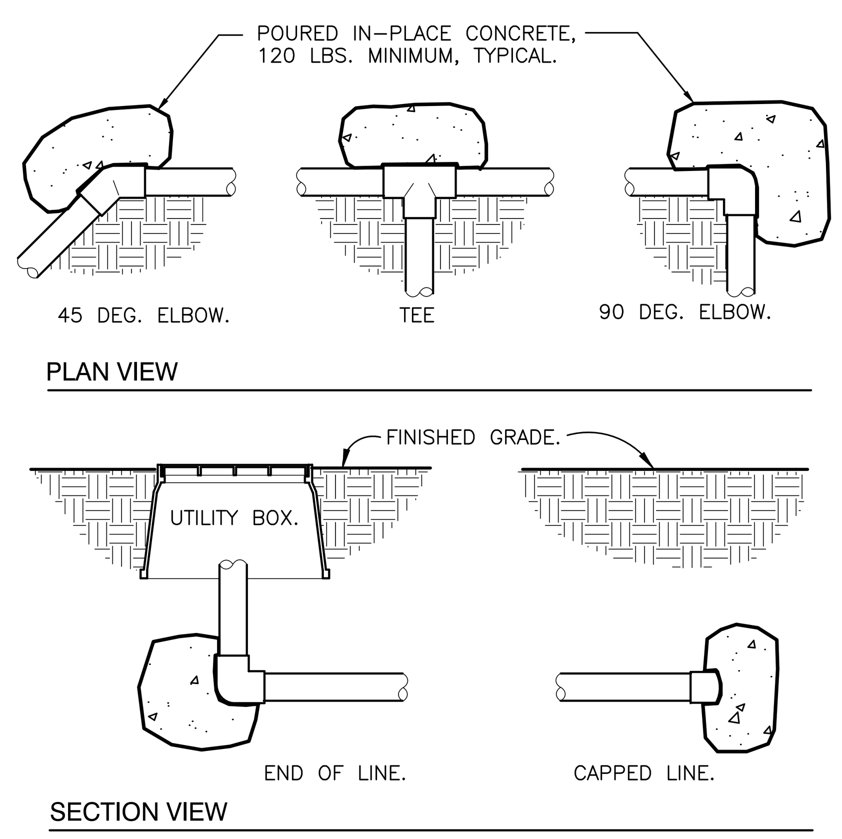
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

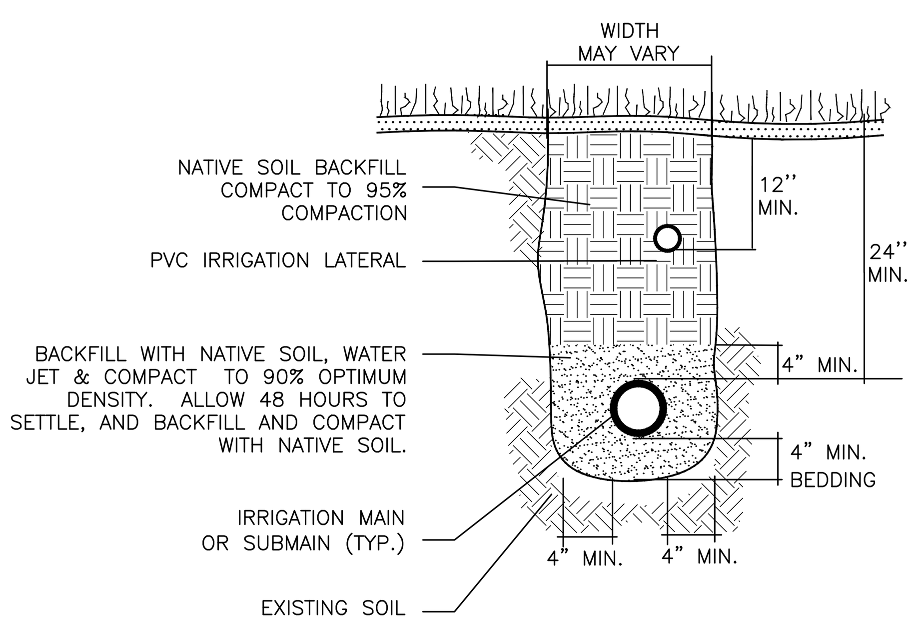
IRRIGATION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

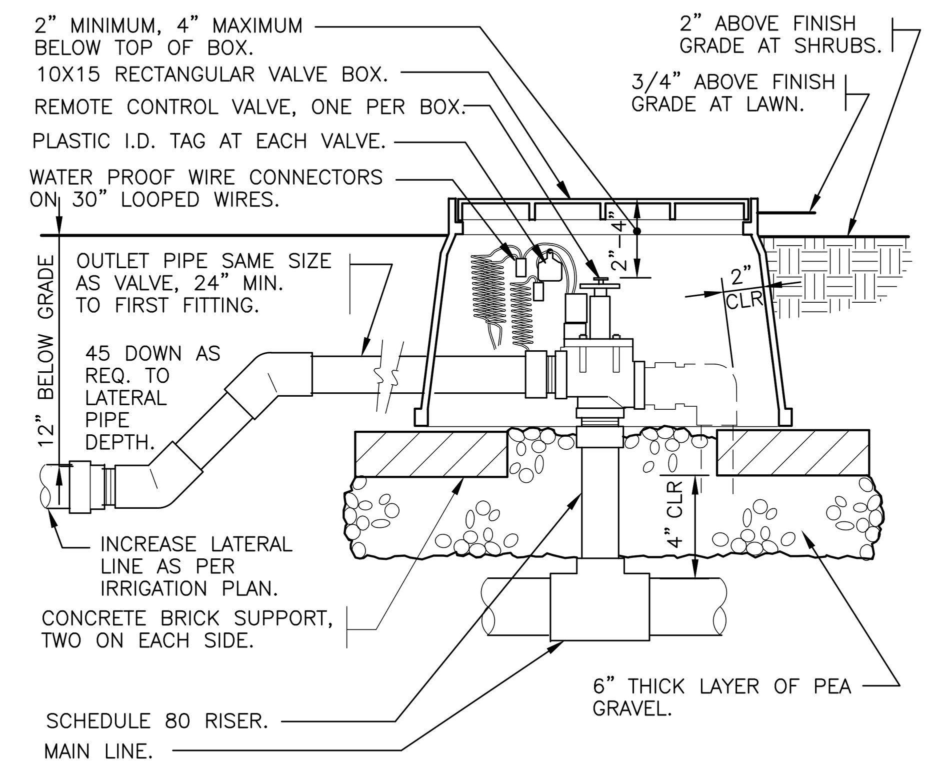
SHEET NUMBER
IRR-02



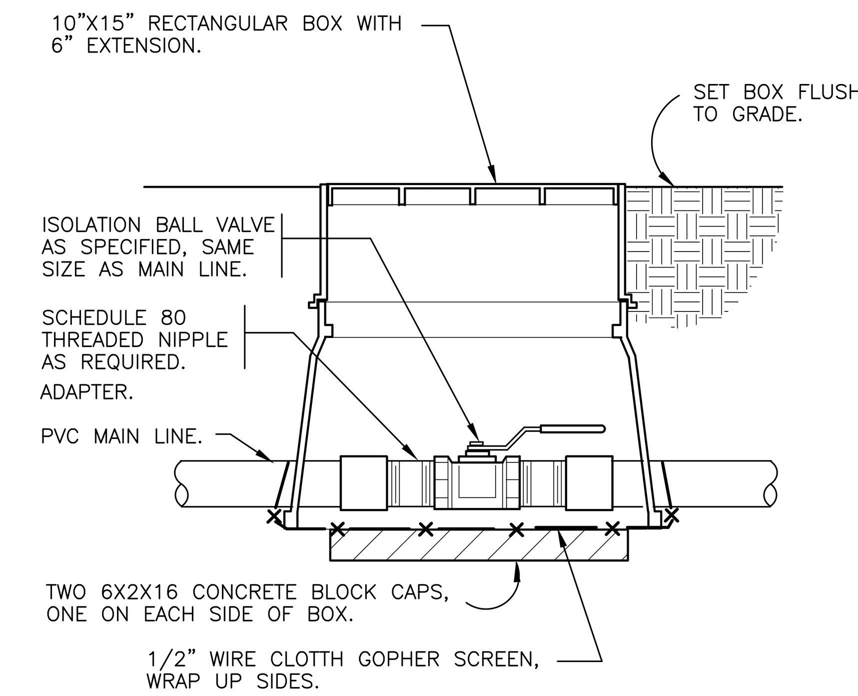
1 THRUST BLOCKING
3/4" = 1'-0" 32 8409.76-01



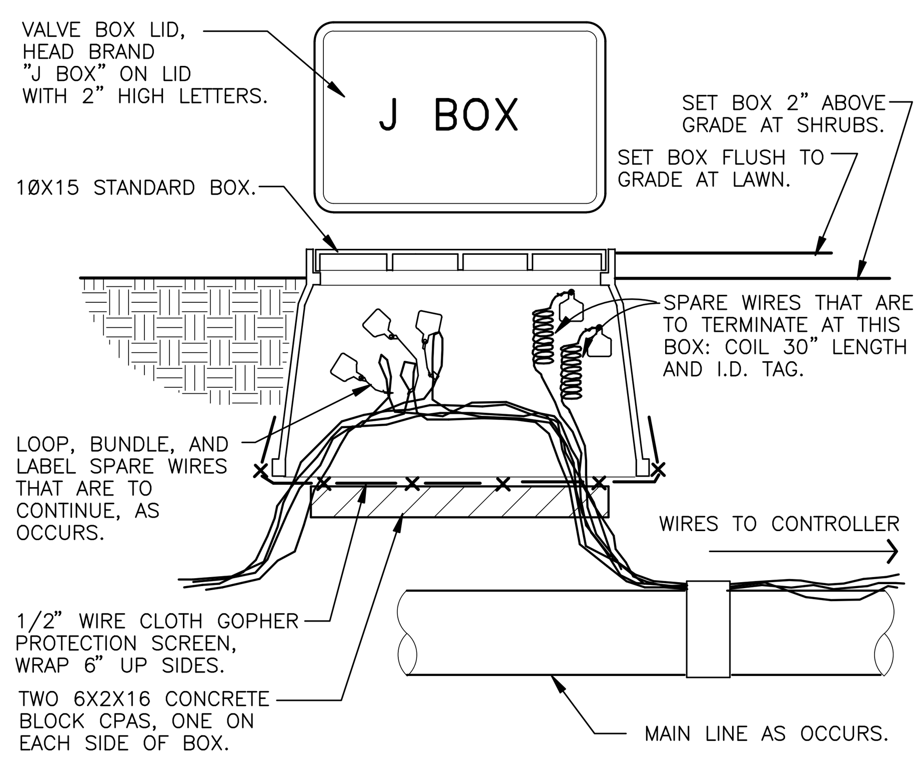
2 TRENCHING DETAIL
NOT TO SCALE 32 8409.76-03



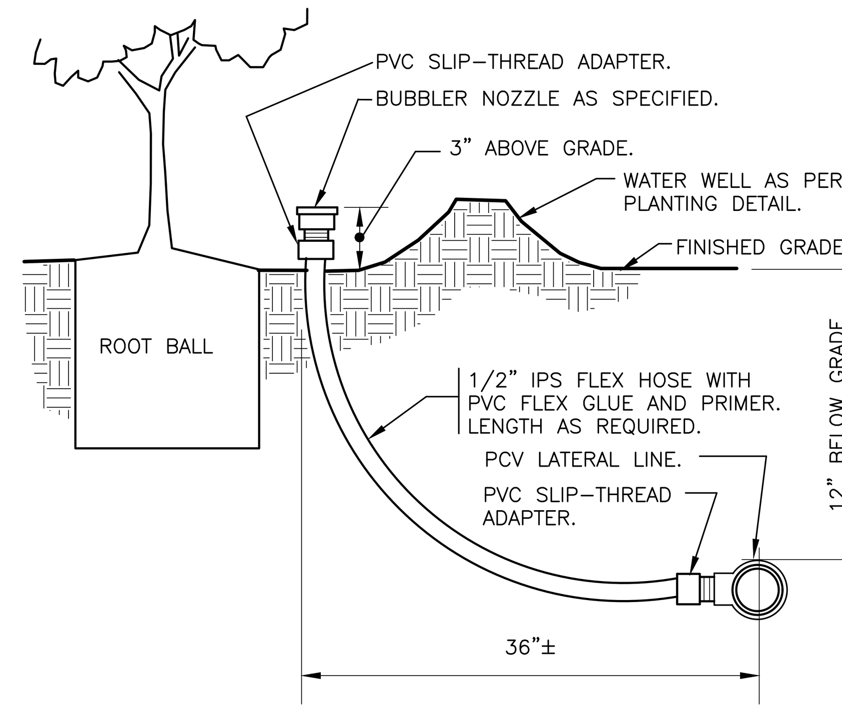
3 ELECTRIC REMOTE CONTROL VALVE
1 1/2" = 1'-0" 32 8406.13-01



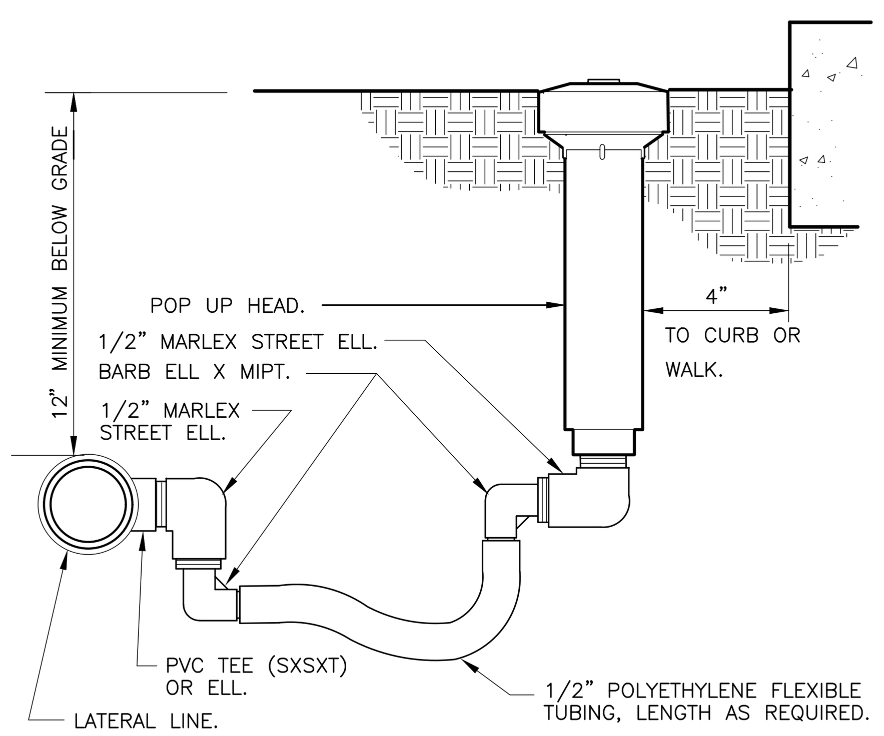
4 BRASS BALL ISOLATION VALVE
1 1/2" = 1'-0" 32 8406.33-02



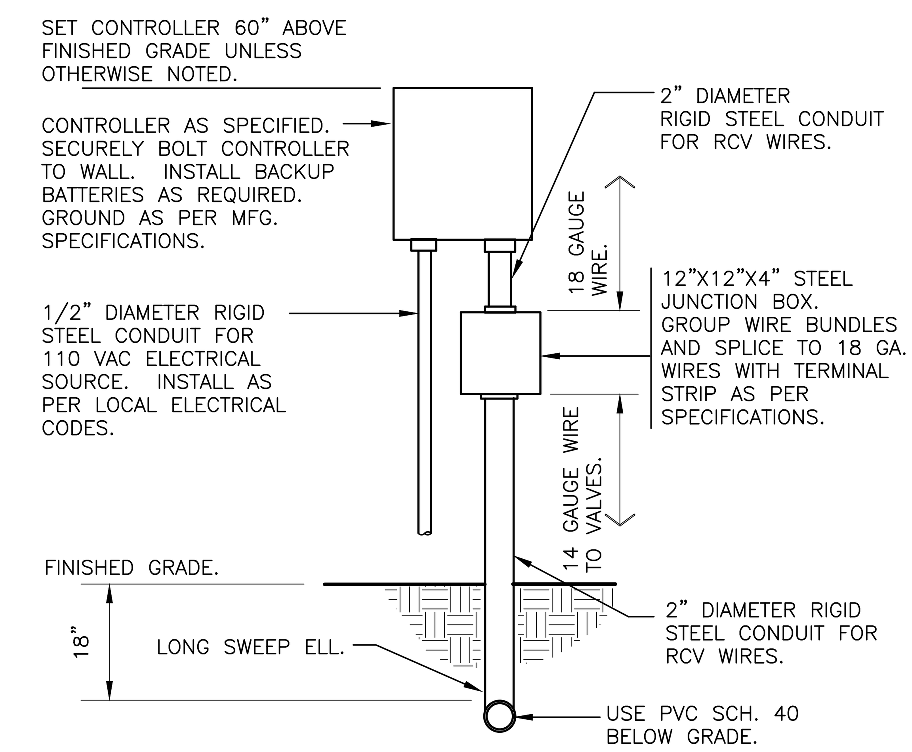
5 WIRE BUNDLE JUNCTION BOX
1 1/2" = 1'-0" 32 8409.79-01



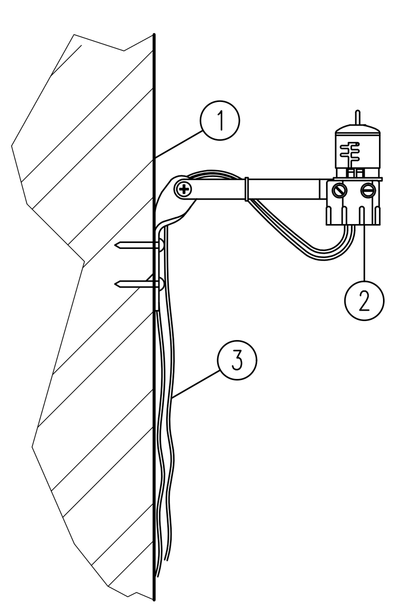
6 BUBBLER ON FLEX HOSE RISER
3" = 1'-0" DETAIL-FILE



7 POP-UP SPRAY FLEX ASSEMBLY
3" = 1'-0" 32 8403.13-02



8 WALL MOUNT CONTROLLER
1" = 1'-0" 328409.13-02



1 EXTERIOR WALL (SEE NOTE)

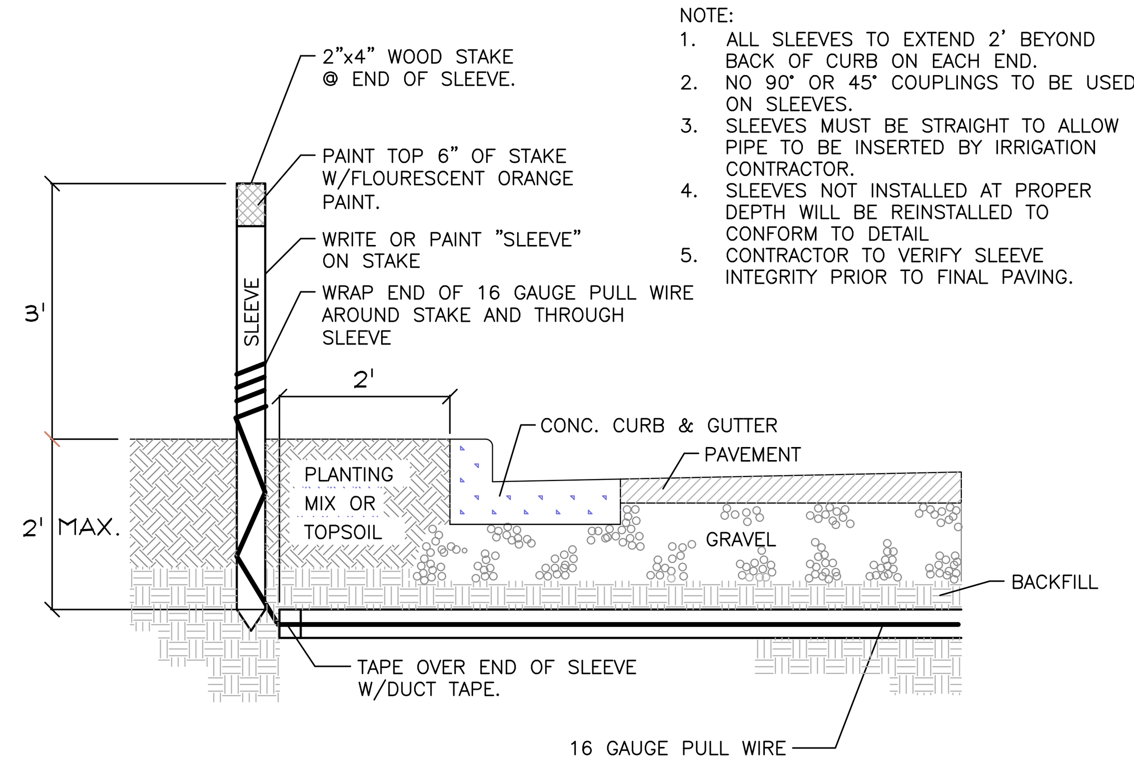
2 MODEL MINI-CLIK

3 RUN LEAD WIRES TO CONTROLLER

NOTE:
MOUNT SENSOR ON SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY. COORDINATE MOUNTING WITH OWNER AND ARCHITECT.

9 RAIN SENSOR
3" = 1'-0"

NOTE:
1. ALL SLEEVES TO EXTEND 2' BEYOND BACK OF CURB ON EACH END.
2. NO 90° OR 45° COUPLINGS TO BE USED ON SLEEVES.
3. SLEEVES MUST BE STRAIGHT TO ALLOW PIPE TO BE INSERTED BY IRRIGATION CONTRACTOR.
4. SLEEVES NOT INSTALLED AT PROPER DEPTH WILL BE REINSTALLED TO CONFORM TO DETAIL.
5. CONTRACTOR TO VERIFY SLEEVE INTEGRITY PRIOR TO FINAL PAVING.



10 IRRIGATION SLEEVING
NTS

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-03

UNDERGROUND IRRIGATION SYSTEM

PART I: GENERAL

1.01 SCOPE

A. The work covered by this specification shall include the furnishing of all labor, materials, tools and equipment necessary to perform and complete the installation of an automatic irrigation system as specified herein and as shown on the drawings and any incidental work not shown or specified which can reasonably be determined to be part of the work and necessary to provide a complete and functional system.

B. The work covered by this specification also includes all permits, federal, state and local taxes and all other costs, both foreseeable and unforeseeable at the time of construction.

C. No deviation from these specifications, the accompanying drawings, or agreement is authorized or shall be made without prior written authorization signed by the Owner or his duly appointed representative.

1.02 QUALITY ASSURANCE

A. Installer Qualifications: A firm specializing in irrigation work with not less than five (5) years of experience in installing irrigation systems similar to those required for this project.

B. Coordination: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.

C. Inspection of Site: The Contractor shall acquaint himself with all site conditions, including underground utilities before construction is to begin. Contractor shall coordinate placement of underground materials with contractors previously working underground in the vicinity or those scheduled to do underground work in the vicinity. Contractor is responsible for minor adjustments in the layout of the work to accommodate existing facilities.

D. Protection of Existing Plants and Site Conditions: The Contractor shall take necessary precautions to protect site conditions to remain. Should damages be incurred, this Contractor shall repair the damage to its original condition at his own expense. Any disruption, destruction, or disturbance of any existing plant, tree, shrub, or turf, or any structure shall be completely restored to the satisfaction of the Owner and his representatives, solely at the Contractor's expense.

E. Protection of Work and Property: The Contractor shall be liable for and shall take the following actions as required with regard to damage to any of the Owner's property.

1. Any existing building, equipment, piping, pipe coverings, electrical systems, sewers, sidewalks, roads, grounds, landscaping or structure of any kind (including without limitation, damage from leaks in the piping system being installed or having been installed by Contractor) damaged by the Contractor, or by his agents, employees, or subcontractors, during the course of his work, whether through negligence or otherwise, shall be replaced or repaired by Contractor at his own expense in a manner satisfactory to Owner, which repair or replacement shall be a condition precedent to Owner's obligation to make final payment under the Contract.

2. Contractor shall also be responsible for damage to any work covered by these specifications before final acceptance of the work. He shall securely cover all openings into the systems and cover all apparatus, equipment and appliances, both before and after being set in place to prevent obstructions on the pipes and the breakage, misuse or disfigurement of the apparatus, equipment or appliance.

3. All trenching or other work under the leaf canopy of any and all trees shall be done by hand or by other methods so that no branches are damaged in any way.

   Buildings, walks, walls, and other property shall be protected from damage. Open ditches left exposed shall be flagged and barricaded by the Contractor by approved means. The Contractor shall restore disturbed areas to their original condition.

4. The Contractor shall be responsible for requesting the proper utility company to stake the exact location of any underground lines including but not limited to electric, gas, telephone service, water, and cable.

   The Contractor shall take whatever precautions are necessary to protect these underground lines from damage. In the event damage does occur, all damage shall be completely repaired to its original condition, at no additional cost to the Owner.

5. The Contractor shall request the Owner, in writing, to locate any private utilities (i.e., electrical service to outside lighting) before proceeding with any excavation. If, after such requests and necessary staking, private utilities which were not staked are encountered and damaged by the Contractor, they shall be repaired by the Owner at no cost to the Contractor. If the Contractor damages staked or located utilities, they shall be repaired at the Contractor's expense.

F. Codes and Inspections: The entire installation shall comply fully with all local and state laws and ordinances and with all established codes arrange for all necessary inspections and shall pay all fees and expenses in connection with same, as part of the work under this Contract. Upon completion of the work, he shall furnish to the "Owner" all inspection certificates customarily issued in connection with the class of work involved.

G. The Contractor shall keep on his work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Owner, or Owner's representative.

H. The superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.

I. The Owner's Landscape Architect or designated individual shall have full authority to approve or reject work performed by the Contractor. The Owner's Authorized Representative shall also have full authority to make field changes that are deemed necessary.

J. Final Acceptance: Final acceptance of the work may be obtained from the Owner upon the satisfactory completion of all work. Acceptance by the Landscape Architect and/or Owner in no way removes the Contractor of his responsibility to make further repairs, corrections and adjustments to eliminate any deficiencies which may later be discovered.

K. Guarantee: All work shall be guaranteed for one year from date of final acceptance against all defects in material, equipment and workmanship to the satisfaction of the Owner. Repairs, if required, shall be done promptly at no cost to the Owner.

1. The guarantee shall also cover repair of damage to any part of the premises resulting from leaks or workmanship, to the satisfaction of the Owner. The Contractor shall not be responsible for work damaged by others. Repairs, if required, shall be done promptly. The guarantee shall state the name of the Owner, provide full guarantee terms, effective and termination date, name and license number of Contractor providing guarantee, address, and telephone number. It shall be signed by the chief executive of the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.

2. If, within ten (10) days after mailing of written notice by the Owner to the Contractor requesting repairs or replacement resulting from a breach of warranty, the Contractor shall neglect to make or undertake with due diligence to make the same, the Owner may make such repairs at the Contractor's expense; provided, however, that in the case of emergency where, in the judgment of the Owner, delay would cause serious loss or damage, repairs or replacement may be made without notice being sent to the Contractor, and Contractor shall pay the cost thereof.

L. The Contractor shall provide full, 100% irrigation coverage in all areas designed with proposed plantings, in accordance with the site's governing permitting requirements and as designed.

M. On-site Observation: At any time during the installation of the irrigation system by the Contractor, the Owner or Landscape Architect may visit the site to observe work underway. Upon request, the Contractor shall be required to uncover specified work as directed by the Owner or material, workmanship or method of installation not meet the standards specified herein, the Contractor shall replace the work at his own expense.

N. Workmanship: All work shall be installed by qualified, skilled personnel, proficient in the trades required, in a neat, orderly, and responsible manner with recognized standards of workmanship. The Contractor shall have had considerable experience and demonstrated ability in the installation of sprinkler irrigation systems of this type.

1.04 SUBMITTALS

All materials shall be those specified and/or approved by the Landscape Architect.

A. Product Data: After the award of the Contract and prior to beginning work, the Contractor shall submit for approval by the Owner and Landscape Architect, two copies of the complete list of materials, manufacturer's technical data, and installation instructions which he proposes to install.

B. Commence no work before approval of material list and descriptive material by the Landscape Architect.

C. Record Drawings: The Contractor shall record on reproducibles, all changes that may be made during actual installation of the system. Provide controller sequencing and control valve locations.

1. Immediately upon installation of any piping, valves, wiring, sprinklers, etc., in locations other than shown on the original drawings or of sizes other than indicated, the Contractor shall clearly indicate such changes on a set of blueline prints. Records shall be made on a daily basis. All records shall be neat and subject to the approval of the Owner.

2. The Contractor shall also indicate on the record prints the location of all wire splices, original or due to repair, that are installed underground in a location other than the controller pedestal, remote control valve box, power source or connection to a valve-in-head sprinkler.

3. These drawings shall also serve as work progress sheets. The Contractor shall make neat and legible notations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for review and shall be kept in a location designated by the Owner's Representative.

4. Progress payment request and record drawing information must be approved by Landscape Architect before payment is made.

5. If in the opinion of the Owner or his representative, the record drawing information is not being properly or promptly recorded, construction payment may be stopped until the proper information has been recorded and submitted.

6. Before the date of the final site observation and approval, the Contractor shall deliver one set (copies) of reproducible record drawing plans and notes to the Landscape Architect. Record drawing information shall be approved by the Landscape Architect prior to submittal to Owner for final payments, including retentions.

D. Operations and Maintenance Manuals: The Contractor shall prepare and deliver to the Owner, or his designated representative within ten (10) calendar days prior to completion of construction, a hard cover binder with three rings containing the following information:

1. Index sheet stating the Contractor's address and business telephone number, list of equipment with name(2) and address(es) of local manufacturer's representative(s).

2. Catalog and parts sheets on every material and equipment installed under this Contract.

3. Complete operating and maintenance instruction on all major equipment. Include initial controller schedule and recommended schedule after establishment period.

4. Demonstrate to and provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Owner, or his designated representative at the conclusion of the project that this service has been rendered.

1.05 EXPLANATION OF DRAWINGS

A. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings and sleeves which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the work and plan his work accordingly, furnishing such offsets, fittings and sleeves as may be required to meet such conditions.

B. The drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features. Deviations shall be brought to the Landscape Architects attention.

C. All work called for a on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

D. The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been known in engineering. Such obstructions or differences should be brought to the attention of the Landscape Architect. In the event that notification is not performed, the Contractor shall assume full responsibility for any revision necessary.

E. If, in the opinion of the Landscape Architect, the labor furnished by the Contractor is incompetent, unskilled, or unreliable, his equipment inadequate, improper or unsafe, or if the Contractor shall fail to continuously and diligently execute the construction, the Landscape Architect or Owner shall, in writing, instruct the Contractor to remove all such causes of noncompliance and the Contractor shall promptly comply.

F. The Contractor shall be responsible for full and complete coverage of all irrigation areas. The Landscape Architect shall be notified of any necessary adjustments at no additional cost to the Owner. Any revisions to the irrigation system must be submitted and answered in written form, along with any change in Contract price. Layout may be modified, if necessary to obtain coverage. Spacing not to exceed 60% of the diameter.

PART II: PRODUCTS

2.01 MATERIALS

Material and equipment shall be supplied by the Contractor. No substitutions shall be allowed without the prior written approval of the Owner/Landscape Architect. The Contractor shall inspect all materials and equipment prior to installation, and defective materials shall be replaced with the proper materials and equipment. Those items used in the installation found to be defective, improperly installed or not as specified, shall be removed and the proper materials and equipment installed in the proper manner, as interpreted by the Owner/Landscape Architect. The Contractor shall remove all damaged and defective pipe and equipment from the site.

2.02 PIPING

A. General Provisions: All materials throughout the system shall be new and in perfect condition unless otherwise directed by the Landscape Architect.

B. Polyvinyl Chloride Pipe (PVC): (Where indicated on plan, use non-potable purple piping.)

1. Laterals: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220. All lateral piping less than 3" in diameter shall be Class 200 SDR-21.

2. Main Line Under Pressure: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220, Schedule 40 with belled end for solvent weld connection.

3. Pipe Markings: All PVC pipe shall bear the following markings:
   - o Manufacturer's Name
   - o Nominal Pipe Size
   - o Schedule or Class
   - o Pressure Rating of PSI
   - o NSF (National Sanitation Foundation) Approval
   - o Date of Extrusion

2.04 PVC JOINTS

Joints in PVC pipe smaller than 3" shall be solvent welded in accordance with the recommendations of the pipe manufacturer; the solvent cleaner and welding compound furnished with the pipe.

2.05 THREADED CONNECTIONS

A. Threaded PVC connections shall be made up using Teflon tape only.

B. Connection between mainline pipe fittings and automatic or manual control valves shall be made using Schedule 80 threaded fittings and nipples.

2.06 SOLVENT CEMENT

A. General: Provide solvent cement and primer for PVC solvent weld pipe and fittings recommended by the manufacturer. Pipe joints for solvent weld pipe to be belled end. Pipe joints for gasketted pipe to be intrical ring type. Insert gaskets will not be accepted.

B. Thrust Blocks: Main line piping 3" or greater in diameter shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations or, in the absence of specified recommendations by the pipe manufacturer. 3000 PSI concrete thrusts shall be properly installed at tees, elbows, 45's, crosses, reducers, plugs, caps and valves.

2.07 PIPE AND WIRE SLEEVES

A. Sleeves to be installed:

1. The Contractor shall install irrigation system pipe and wire sleeves conforming to the following:

   a. All pipe sleeves shall extend a minimum of 36" beyond the edges of pavement.

   b. All pipe sleeves to be installed beneath future/existing road surfaces shall be PVC pipe Schedule 40 or jack and bore steel pipe as per FDOT specifications, and as shown on plans.

   c. All irrigation system wires shall be sleeved seperately from main or lateral lines.

   d. All pipe sleeves shall be installed at the minimum depth specified for main lines, lateral lines, and electric wire.

   e. Contractor shall coordinate all pipe sleeve locations and depths prior to initiating installation of the irrigation system.

2.08 SPRINKLER HEADS

A. Spray Sprinklers: The sprinkler shall be a fixed spray type designed for in-ground installation. The nozzle shall elevate 6" (or as designated on plan) when in operation. The body of the sprinkler shall be constructed of non-corrosive heavy duty Cycolac. A filter screen shall be in the nozzle piston. All sprinkler parts shall be removable through the tip of the unit by removal of a threaded cap.

Riser mounted spray shall be as indicated on the plans. The sprinkler shall consist of a nozzle and body. The body of the riser-mount sprinkler shall be constructed of non-corrosive materials. A cone strainer shall be a separate part with the nozzle assembly to allow for easy flushing of the sprinkler. Maximum working pressure at the base of the sprinkler shall be 40 PSI.

(continued...)

No. | REVISIONS | DATE | BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-04

2.09 AUTOMATIC CONTROL VALVE

The automatic remote control valves shall be as specified on the plans, or approved equal.

2.10 GATE VALVES

A. Gate valves for 3/4" through 2-1/2" shall be of brass or bronze construction, solid wedge, IPS threads, non-rising stem with wheel operating handle, for a continuous working pressure of 150 PSI.

B. Gate valves for 3" and larger: Iron body, brass or bronze mounted AWWA gate valves, with a clear waterway equal to the full nominal diameter of the valve, rubber gasket for a continuous working pressure of 150p PSI. Valve shall be equipped with a square operating nut.

2.11 VALVE BOXES

A. For gate valves, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

B. For control valves 3/4" through 2", the drip valve assemblies, use AMETEK #10-181-014 box with #10-181-015 locking lid, or sized as necessary to effectively house the equipment

C. For control wiring splices, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

2.12 IRRIGATION WIRING

A. Wiring used for connecting the electric control valves to the controllers shall be Type UF, 600 volt, single strand, solid copper with PVC insulation 4/64" thick. Size shall be 14 gauge, red for "hot" or lead wires, and common wire to be 14 gauge, white in color.

B. Contractor shall perform an ohm test on ground to assure adequate protection against surges and indirect lightning strikes.

2.13 MISCELLANEOUS MATERIALS

A. Drainage Backfill: Cleaned gravel or crushed stone, graded from 1" maximum to 3/4" minimum.

B. Metalized Underground Tape: The detectable, underground utility marking tape shall consist of a minimum: 5 mil (0.005") overall thickness; five-ply composition; ultra-high molecular weight, 100% virgin polyethylene; acid, alkaline and corrosion resistant; with no less than 150 pounds of tensile break strength per 6" width; color-code impregnated with color stable, lead-free, organic pigments suitable for direct burial. Tapes utilizing reprocessed plastics or resins shall not be acceptable. The detectable, underground utility marking tape shall have a 35 gauge (0.0035") solid aluminum foil, core encapsulated within a 2.55 mil (0.00255") polyethylene backing and a 0.6 mil (0.006") PET cover coating. The laminate on each side shall consist of a 0.75 mil (0.00075") layer of hot LPDE, poly-fusing the "sandwich" without use of adhesives.

2.14 AUTOMATIC CONTROL SYSTEM

An Independent Station Controller: Furnish a solid state controller, as specified on the plans. Each station shall be capable of timing from zero (0) minute to 99 minutes per station in one (1) minute increments.

Each station shall be capable of operating two (2) 7VA electric valve-in-head solenoids.

The stand-alone controller shall have two (2) possible programs.

The stand-alone controller shall provide global percentage increase/decrease (water budget) for all stations simultaneously, from ten (10) to two hundred (200) percent, in ten (10) percent increments.

All stations shall be able to be turned on/off manually buy operating timing mechanism or by manual switch at station output.

The stand-alone controller shall incorporate an integral MOV surge protection into the terminal block for each of its 24 VAC field wire outputs. Controller power input wires will also incorporate surge protection.

The control panel shall provide continuous display time. It shall have alphanumeric displays of descriptive English menus and legend identifiers with cursor selection of function and precision value adjustment by rotary dial input.

The stand-alone controller shall be UL listed and FCC approved.

The stand-alone controller shall have 117 VAC, 60 Hz input, 26.5 VAC, 60 Hz output for operating 24 VAC solenoids.

The stand-alone controller cabinet shall be a lockable and weather-resistant outdoor cabinet. Mount as noted on plans.

The controller shall be equipped with lightening protection, by the Contractor, on both the primary (120v) and each secondary (24v) circuit. The controller circuits shall be grounded to a copper clad grounding rod located at each controller.

The controller shall be equipped for a water conservation device. as specified.

PART III: EXECUTION

3.01 INSPECTION

The Contractor shall examine the areas and conditions under which landscape irrigation system is to be installed and notify the Landscape Architect in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect.

3.02 PREPARATION

The Contractor shall provide sleeves to accommodate piping under walks or paving. The Contractor shall coordinate with other trades and install to accurate levels prior to paving work. Cutting and patching of paving and concrete will not be permitted. The Contractor shall maintain all warning signs, shoring, barricades, flares and red lanterns, as required by any local codes, ordinances or permits.

3.03 TRENCHING AND BACKFILLING

A. Excavation: The Contractor shall stake out the location of each run of pipe, sprinkler heads, sprinkler valves and isolation valves prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space or backfilling and tamping. Trenches for pipe shall be cut to required grade lines, and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of the trenches shall be free of rock or other sharp edged objects. Minimum cover shall be as follows:

<u>Pipe and Wire Depth</u>

Pressure Mainline	18" at top of pipe from Finish Grade
Lateral Piping (rotor)	12" at top of pipe from Finish Grade
Lateral Piping (pop-up)	12" at top of pipe from Finish Grade
Control Wiring	Side of main Line

B. Minimum Clearances: All pipelines shall have a minimum clearance of six inches from each other and from lines of other crafts. Parallel lines shall not be installed directly over one another. No lateral line shall be installed in the main-line trench.

3.04 INSTALLATION OF PIPING

A. PVC Pipe and Joints: The Contractor shall not install solvent wild pipe when air temperature is below 40ø F. Installation shall be in accordance with the manufacturer's instructions.

1. Only the solvent recommended by the pipe manufacturer shall be used. All PVC pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer, and it shall be the Contractor's full responsibility to make arrangements with the pipe manufacturer for any field assistance that may be necessary. The Contractor shall assume full responsibility for the correct installation.

3.05 BACKFILLING PROCEDURES

Initial backfill on PVC lines shall be pulverized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. The Contractor shall coordinate the location of trees and shrubs with the routing of lines and final head locations.

A. Backfill and Compaction: The Contractor shall leave trenches slightly mounded to allow for settlement after the backfilling is completed. The Contractor shall clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required.

The Contractor shall carefully backfill excavated materials approved for backfilling, consisting of earth, loam, sand, and other approved materials, free of rock and debris over 1" in size. Backfill shall be compacted to original density of surrounding soil without dips, sunken areas, or irregularities.

The Contractor shall conform to DOT requirements for methods and required compaction percentages, for roads and paving.

The Contractor shall hand place the first 6" of backfill (or to top of pipe) and have it walked on so as to secure the position of the pipe and wire.

No wheel rolling will be allowed. The Contractor shall remove rock or debris extracted from backfill materials and dispose of offsite. The Contractor shall fill any voids left in backfill with approved backfill materials.

B. Existing Lawns: Where trenching is required across existing lawns, uniformly cut strips of sod 6" wider than trench. The Contractor shall remove sod in rolls of suitable size for handling and keep moistened until replanted. The Contractor shall replant sod within 48 hours after removal, roll and water generously. The Contractor shall resod any areas not in healthy condition equal to adjoining lawns 10 days after replanting.

C. Seeded Area: Trenching will be required across existing seeded areas, primarily roadway edging. The Contractor shall conform to the requirements of seeding, Section 02930 for the reseeding of the disturbed trench area.

D. Pavements: Jack and bore or directional bore piping under paving materials as per local regulatory codes. No cutting and patching of pavement will be permitted.

3.06 VALVES

A. Isolation Valves: Shall be sized corresponding to adjacent pipe size. Specified valve boxes shall be installed flush with finish grade in such a manner that surface forces applied to their exposed area will not be transmitted to the piping in which the valve is installed nor any other piping, wiring or other lines in the vicinity of said valves.

B. Gate Valves: Install where shown, in valve boxes.

C. Electric Control Valves: Shall be installed in specified valve boxes. The valve shall have 6" of 3/4" pea gravel installed below the bottom of the valve. If the valve box does not extend to the base of the valve, a valve box extension shall be installed. Electric control valves shall be installed where shown and grouped together where practical. The Contractor shall place no closer than 24" to walk edges, bikeway edges, buildings and walls. The Contractor shall adjust the valve to provide flow rate or rated operating pressure required for each sprinkler circuit.

3.07 CONDUIT AND SLEEVES

A. Conduit and Sleeves for Control Wiring and Main/Lateral Pipe: The Contractor shall provide and install where necessary. Contractor shall coordinate locations of previously installed sleeving with the General Site Contractor.

The Contractor shall coordinate installation of sleeves with work of other disciplines.

3.08 CONTROLS

A. The Contractor shall connect electric control valves to controllers in a clockwise sequence to correspond with station settings beginning with Stations 1, 2, 3, etc. Automatic controllers shall be provided and installed by the Contractor as noted on the drawings. All zones will be labeled on the controller.

B. Controllers shall be equipped with lightning protection and grounded to a standard 5/8" copper clad steel ground rod driven a minimum of 8' into the ground and clamped.

C. The electrical service to the controllers shall be performed by an electrical subcontractor in compliance with NEC requirements.

3.09 CONTROL WIRE

A. Control wiring between the controller and electric valves shall be buried in main line trenches or in separate trenches. Electrical connection at valve will allow for pigtail so solenoid can be removed from valve with sufficient slack to allow ends to be pulled 12" above ground for examination and cleaning.

B. An expansion loop shall be provided at every valve at 100' o.c. Expansion loop shall be formed by wrapping wire at least eight times around a 3/4" pipe and withdrawing pipe.

C. The wire shall be bundled and taped every ten feet. The wire shall be laid in the trench prior to installing the pipe being careful to install wire beneath and 6" to the side of the main pipe line.

D. Electrical connections to electric control valves shall be made with Rainbird Pen-Tite or Techdel GT-3-GEL - Tite connectors or equal.

Power Connections: Electrical connections to power and signal wires shall be made using 3M 82-A2 power cable splice kits.

3.10 SPRINKLER HEADS

A. General Provisions:

1. Sprinkler heads shall be installed as designated on the shop drawings. Heads shall be installed on flexible PVC. Top to be flush with finish grade or top of curb.

2. Spacing of heads shall not exceed the maximum indicated on the shop drawings (unless directed by the Landscape Architect). In no case shall the spacing exceed the maximum recommended by the manufacturer.

B. Head Types:

1. Pop-up- Rotary Sprinkler Heads: Shall be installed on flex joint and be set with top of head flush with finish grade. Heads installed at curb shall have 6" to 10" between perimeter of head and concrete. Heads placed at edge of pavement having no curb shall be installed 24" from edge of pavement.

2. Spray Pop-up Sprinkler Heads: Shall be installed on flexible PVC and be set with top of head flush with finished grade. Sprinkler heads placed adjacent to curbs will be installed 9" from concrete. Sprinkler heads placed adjacent to pavement having no curb shall be installed 24" from the edge of pavement.

3.11 COMPLETION

A. Flushing: Before sprinkler heads are set, the Contractor shall flush the lines thoroughly to make sure there is no foreign matter in the lines.

The Contractor shall flush the main lines from dead end fittings for a minimum of five minutes under a full head of pressure.

B. Testing: The Contractor shall notify Landscape Architect and Owner forty-eight (48) hours in advance of testing.

Prior to backfilling of main line fittings, Contractor shall fill the main line piping with water, in the presence of the Owner/Landscape Architect, taking care to purge the air from it by operating all the sprinkler control valves one or more times and/or such other means as may be necessary. A small, high pressure pump or other means of maintaining a continuous water supply shall be connected to the main line and set so as to maintain 100 PSI in the main line system for two (2) hours without interruption. When this has been accomplished and while the pressure in the system is still 100 PSI, leakage testing shall be performed in accordance with AWWA Standard C-600. Pressure readings shall be noted and make up water usage shall be recorded. Should the rate of make up water usage indicate significant leakage, the source of such leakage shall be found and corrected and the system then retested until the Owner/Landscape Architect is satisfied that the system is reasonably sound. Lateral line testing shall be conducted during the operating testing of the system by checking visually the ground surface until no leaks in this portion of the system are evident. Leaks shall be repaired or paid for by the Contractor at any time they appear during the warranty period.

C. Adjustment and Coverage of System: Coordinate pressure testing with adjustments and coverage test of system so both may occur at the same time. The Contractor shall balance and adjust the various components of the system so that the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

3.12 WARRANTY

A. The Contractor shall fully warrant the landscape irrigation system for a period of one (1) year after the written final acceptance and will receive a written confirmation from the Landscape Architect that the warranty period is in effect.

B. During the warranty period, the Contractor will enforce all manufacturer's and supplier's warranties as if made by the Contractor himself. Any malfunctions, deficiencies, breaks, damages, disrepair, or other disorder due to materials, workmanship, or installation by the Contractor and his suppliers shall be immediately and properly corrected to the proper order as directed by the Owner and/or Landscape Architect.

C. Any damages caused by system malfunction shall be the responsibility of the Contractor who shall make full and immediate restoration for said damages.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

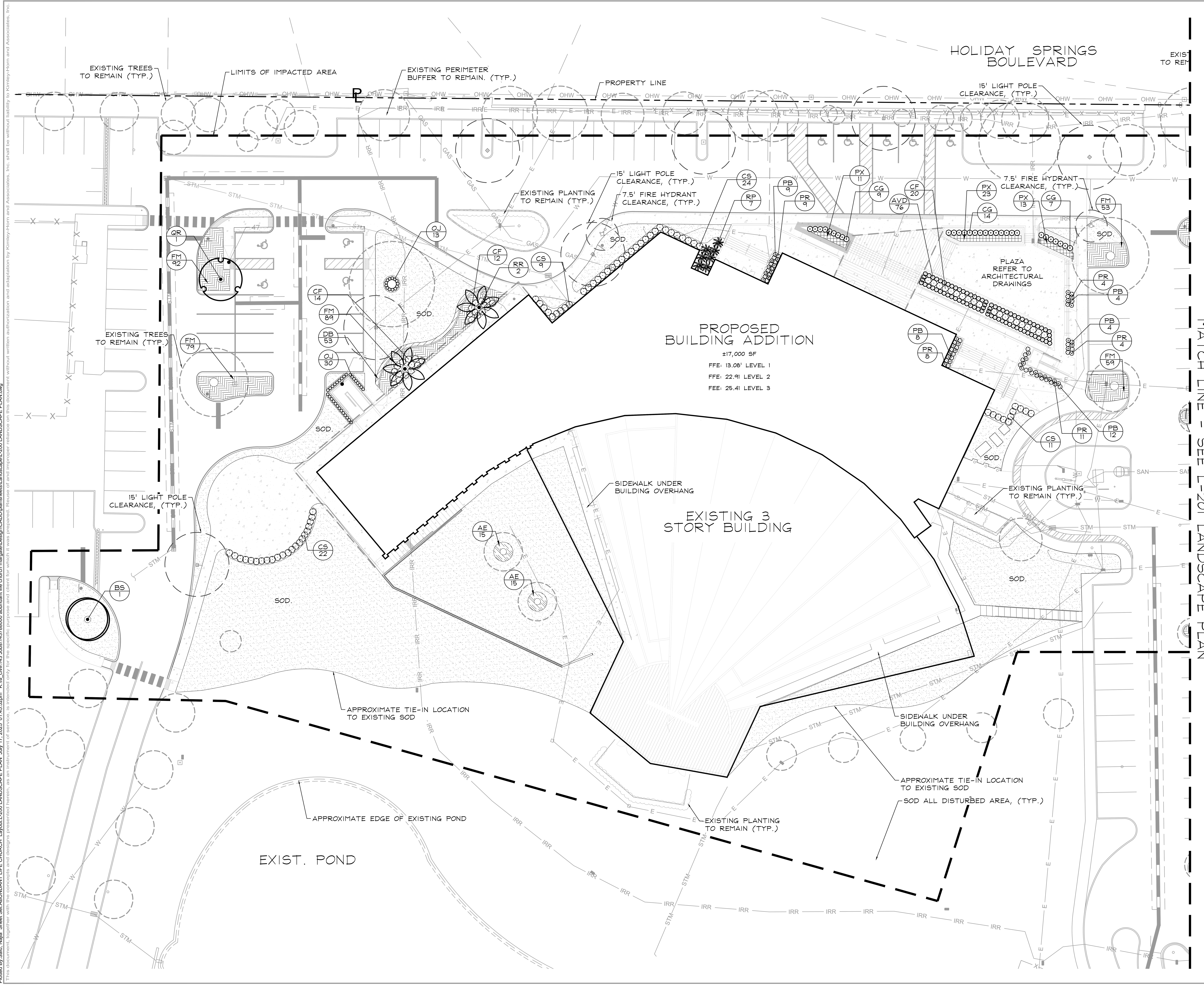
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

IRRIGATION NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
IRR-05

Plotted By:Said, Najla Sheet Set:ABUNDANT LIFE CHURCH Layout:L-352 IRRIGATION NOTES July 17, 2025 01:46:43pm K:\ftl_civil\143 Jobs\143788000 abundant life church margate\Design\CADD\plansheets\Landscape\L-300 IRRIGATION PLAN.dwg



PLANT SCHEDULE

CODE	COMMON NAME
TREES	
BS	Gumbo Limbo
CE	Silver Buttonwood
QR	Southern Live Oak
QV	Southern Live Oak
PALM TREES	
RR	Royal Palm
SHRUBS	
AVD	Dwarf Variegated Ginger
CF	Red Sister Ti Plant 3 PPP Shade Grown
CG	Gold Dust Croton 3 PPP
CS	Small Leaf Clusia
OJ	Mondo Grass
PB	Butterfly Series Star Cluster
PR	Ruby Glow Star Cluster
RP	Lady Palm Shade Grown. 7 Stems min.
SHRUB AREAS	
AE	Cast Iron Plant Shade Grown
AZ	Variegated Shell Ginger
FM	Green Island Ficus
HN	Dwarf Firebush
MCA	Pink Muhly Grass
GROUND COVERS	
DB	Blueberry Flax Lily
PX	Xanadu Philodendron
SOD	St. Augustine Grass

REVISIONS | No. | DATE | BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

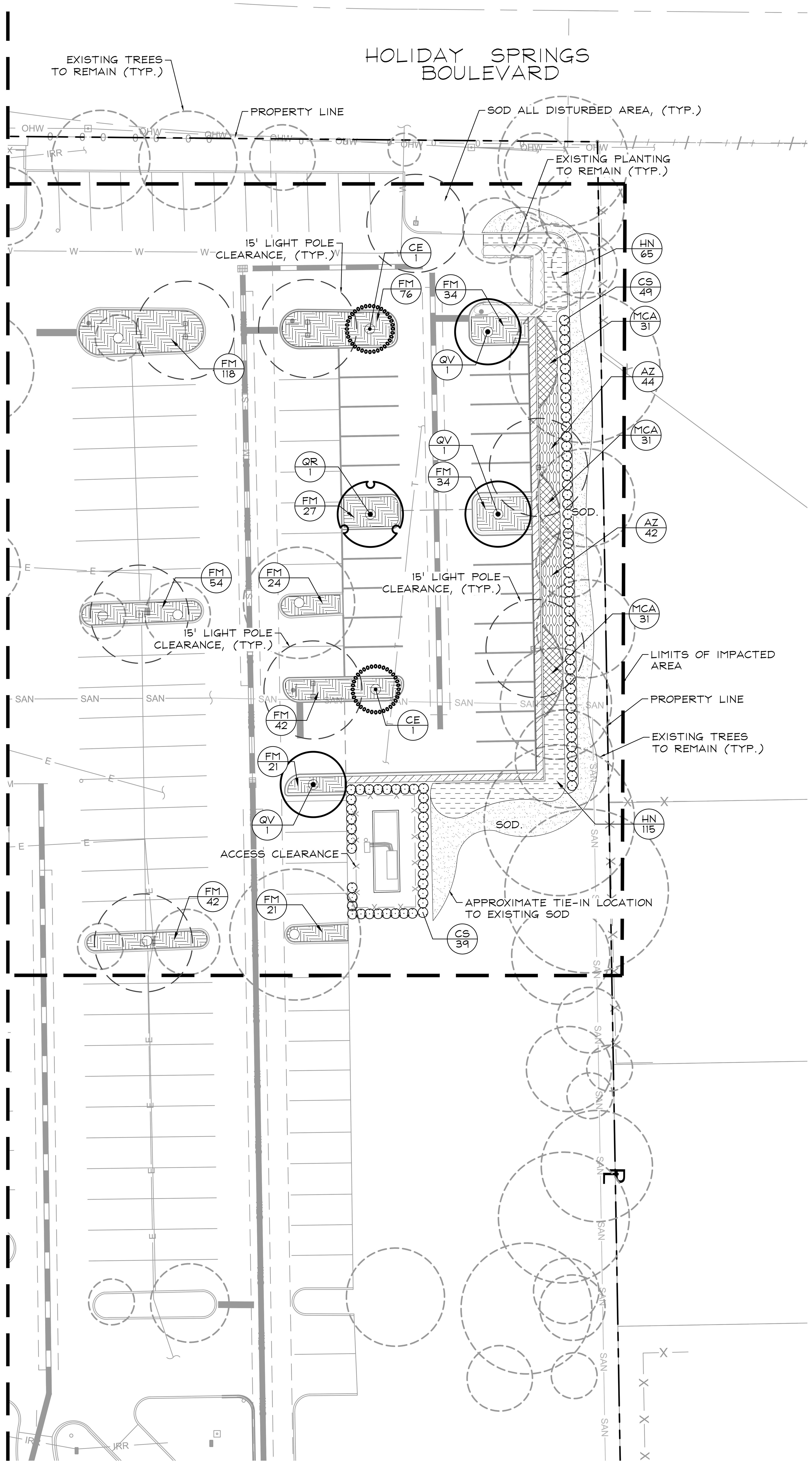
LANDSCAPE PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-01

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!



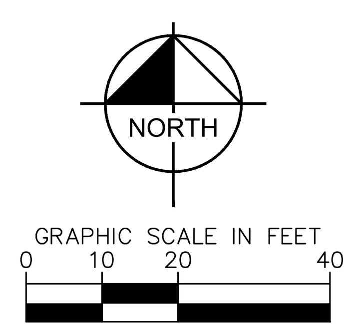
PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	QTY
TREES							
BS	Bursera simaruba	Gumbo Limbo	F.G.	3" Cal.	15' HT X 6' SPR	Yes	1
CE	Conocarpus erectus f. sericeus	Silver Buttonwood	F.G.	3" Cal.	12' HT x 5' SPR	Yes	2
QR	Quercus virginiana	Southern Live Oak	Relocated				2
QV	Quercus virginiana	Southern Live Oak	F.G.	3" Cal.	15' HT X 6' SPR	Yes	3
PALM TREES							
RR	Roystonea regia	Royal Palm	F.G.		22' OA	Yes	2

CODE	BOTANICAL NAME	COMMON NAME	CONT	O.C.	SIZE	NATIVE	QTY
SHRUBS							
AVD	Alpinia zerumbet 'Variegata Dwarf'	Dwarf Variegated Ginger	Cont.	24" O.C.	24" HT" X 24" SPR.	Florida Native	76
CF	Cordyline fruticosa 'Red Sister' 3 PPP Shade Grown	Red Sister Ti Plant	Cont.	24" O.C.	36" HT	Yes	46
CG	Codiaeum x 'Gold Dust' 3 PPP	Gold Dust Croton	Cont.	30" O.C.	30" HT	Yes	30
CS	Clusia guttifera	Small Leaf Clusia	Cont.	18" O.C.		Yes	154
OJ	Ophiopogon japonicus	Mondo Grass	Cont.	12" O.C.	18" HT. X 18" SPR.	Yes	43
PB	Pentas lanceolata 'Butterfly'	Butterfly Series Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	37
PR	Pentas lanceolata 'Ruby Glow'	Ruby Glow Star Cluster	Cont.	18" OC	18" HT. X 18" SPR.	Florida Friendly	36
RP	Rhapis excelsa Shade Grown. 7 Stems min.	Lady Palm	25 gal	As Shown	5' HT		7
SHRUB AREAS							
AE	Aspidistra elatior Shade Grown	Cast Iron Plant	Cont.	24" O.C.	15' HT. x 15' SPR.	Florida Friendly	30
AZ	Alpinia zerumbet 'Variegata'	Variegated Shell Ginger	Cont.	36" O.C.	24"x24"	Florida Friendly	86
FM	Ficus microcarpa	Green Island Ficus	Cont.	24" O.C.	18" HT. X 18" SPR.	Florida Friendly	907
HN	Hamelia nodosa	Dwarf Firebush	Cont.	24" O.C.	24" HT. X 24" SPR.	Yes	180
MCA	Muhlenbergia capillaris	Pink Muhly Grass	Cont.	30" O.C.	30" HT. x 30" SPR.	Yes	93
GROUND COVERS							
DB	Dianella tasmanica 'Blueberry'	Blueberry Flax Lily	Cont.	18" O.C.	12" HT	Florida Friendly	238
PX	Philodendron x 'Xanadu'	Xanadu Philodendron	Cont.	24" O.C.	18" X HT. X 18" SPR.	Florida Friendly	47
SOD	Stenotaphrum secundatum	St. Augustine Grass	Sod				± 6,577

City of Margate Code Compliane Chart

	Required	Provided
Section 40.704 - LANDSCAPING		
40.704.E.1.a - Materials, installation and irrigation requirements.		
A minimum of 50% of all required landscaping shall be South Florida native species	✓	✓
40.704.E.1.b - Materials, installation and irrigation requirements.		
Trees shall be planted at a Minimum of 12' Height and 2" DBH	✓	✓
Palm shall not exceed 25% of the requiered shade tree	✓	✓
40.704.G.1 - Required landscaping adjacent to other perimeters		
one (1) shade tree along the common property line for every for every seventy-five (75) linear feet or fractional part thereof. Impacted East {Property Buffer: 196 LF / 75 = 3	3	Satisfied with Existing Trees
40.704.H.1.g - Parking area and pedestrian zone interior landscaping		
There shall be one (1) shade tree and three (3) shrubs per two hundred (200) square feet, or fraction thereof, of interior landscaping in the VUA minus the landscape islands	✓	✓



No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

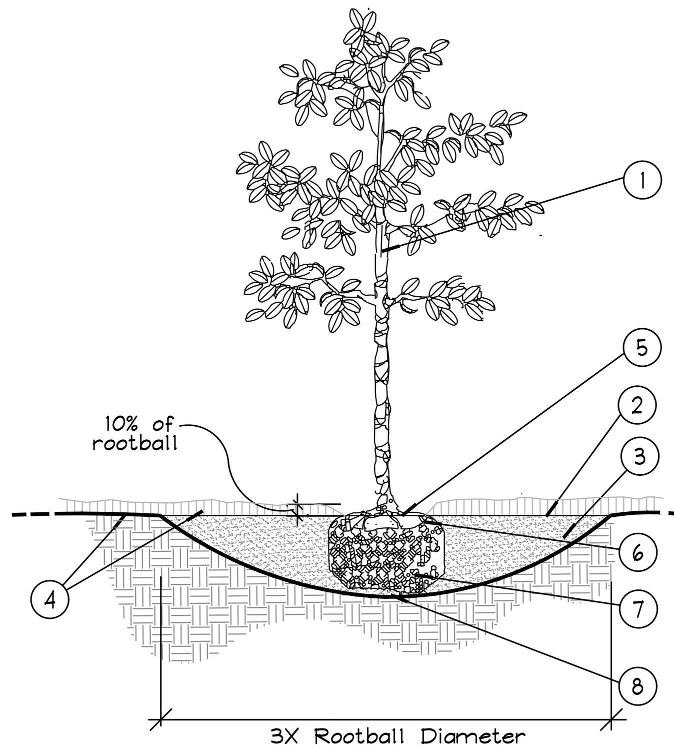
KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-02



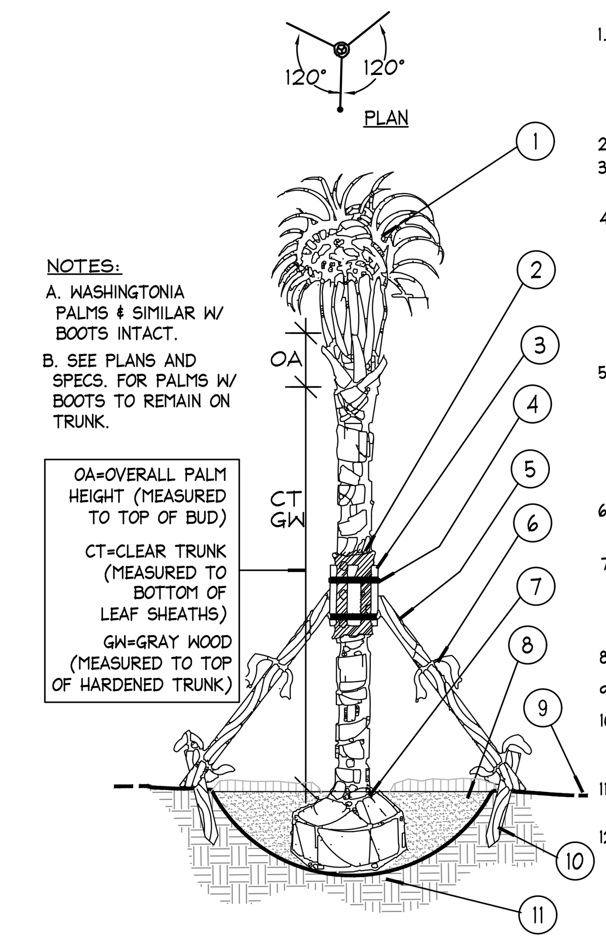
1. TRUNK
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW/ WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. B & B OR CONTAINER (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
7. REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL.
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

A Tree Planting
SECTION NTS



NOTES:

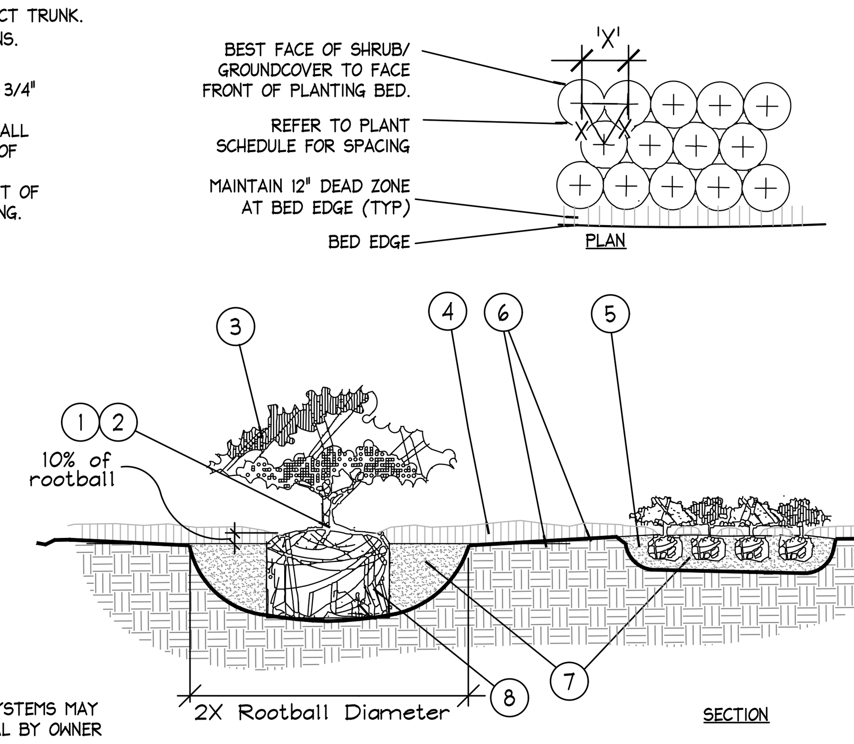
A. WASHINGTONIA PALMS & SIMILAR W/ BOOTS INTACT.
B. SEE PLANS AND SPECS. FOR PALMS W/ BOOTS TO REMAIN ON TRUNK.

OA=OVERALL PALM HEIGHT (MEASURED TO TOP OF BUD)
CT=CLEAR TRUNK (MEASURED TO BOTTOM OF LEAF SHEATHS)
GW=GRAY WOOD (MEASURED TO TOP OF HARDENED TRUNK)

1. MINIMUM OF NINE (9) GOOD PALM FRONDS; PRUNE AND TIE FRONDS WITH HEMP TWINE. SABAL PALMS TO BE SELECTIVELY "HURRICANE CUT", LEAVING ONLY NEWLY-EMERGING GROWTH.
2. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
3. FIVE (5) 18"L, 2X4 WOOD BATTENS. UNTREATED, #2
4. SECURE BATTENS WITH TWO (2) 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED PROPORTIONATELY TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
5. THREE (3) 8'L 2X4 SUPPORTS. NAIL (DRILL AND NAIL IF NECESSARY) TO BATTENS AND 2" X 4" STAKES. PALMS SHALL BE PLUMB VERTICALLY UNLESS OTHERWISE NOTED.
6. PROVIDE FLAGGING AT MIDPOINT AND BASE OF SUPPORTS.
7. TOP-MOST ROOT SHALL BE VISIBLE AT THE SURFACE OF THE ROOTBALL, SLIGHTLY ABOVE SURROUNDING GRADE.
8. 3" SPECIFIED MULCH
9. FINISH GRADE
10. 24"L (MIN.) 2X4 P.T. WOOD STAKES, NAIL TO SUPPORT POLES
11. PREPARED PLANTING SOIL AS SPECIFIED
12. ALTERNATE PALM ANCHORING SYSTEMS MAY BE SUBSTITUTED UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

B Palm Planting and Staking
SECTION NTS

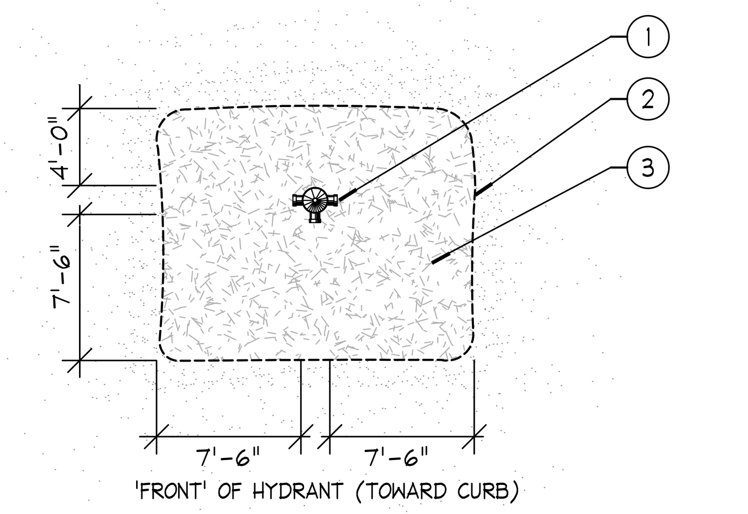


NOTES:

1. FIND POINT WHERE TOPMOST ROOT EMERGES FROM TRUNK WITHIN 2" OF SURFACE. CLEAR EXCESS SOIL IF NECESSARY.
2. TOP 10% OF SHRUB AND GROUNDCOVER ROOTBALLS TO BE PLANTED ABOVE THE LANDSCAPE GRADE. DO NOT COVER EXPOSED 10% ON SIDES WITH SOIL.
3. PRUNE ALL LIKE SHRUBS WITHIN A PLANTED MASS TO ACHIEVE A UNIFORM MASS/HEIGHT.
4. 3" MINIMUM MULCH AS SPECIFIED - DO NOT COVER ENTIRE SHRUB ROOTBALL OR CREATE 'WATER RINGS' ONLY COVER SIDES OF ROOTBALL WITH MULCH
5. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
6. FINISHED GRADE (SEE GRADING PLAN).
7. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
8. SCARIFY ROOTBALL SIDES AND BOTTOM.

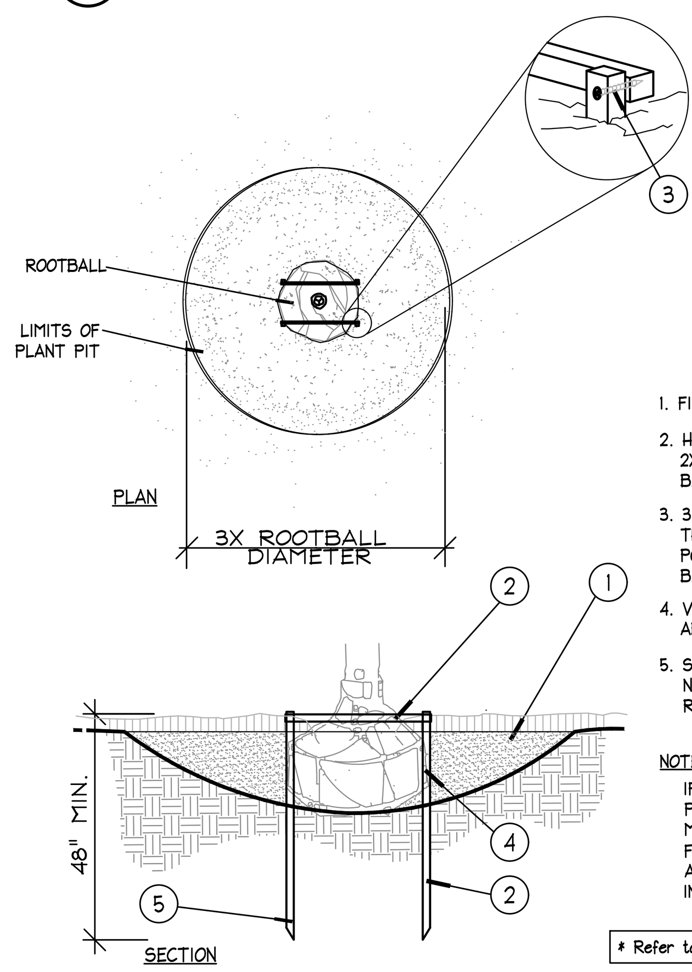
* ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

C Shrub / Groundcover Planting
PLAN/SECTION NTS



1. FIRE HYDRANT
2. NO PLANT MATERIAL SHALL BE PLACED WITHIN SHOWN RADIUS OF ALL PROPOSED OR EXISTING FIRE HYDRANTS. CONTRACTOR SHALL ADJUST PLANT MATERIAL SO THAT NO CONFLICTS WITH FIRE HYDRANTS OCCUR ON SITE.
3. PROVIDE A MULCH, 3" DEPTH MIN., SURROUNDING AREA INDICATED.

D Fire Hydrant Clear Zone
PLAN NTS



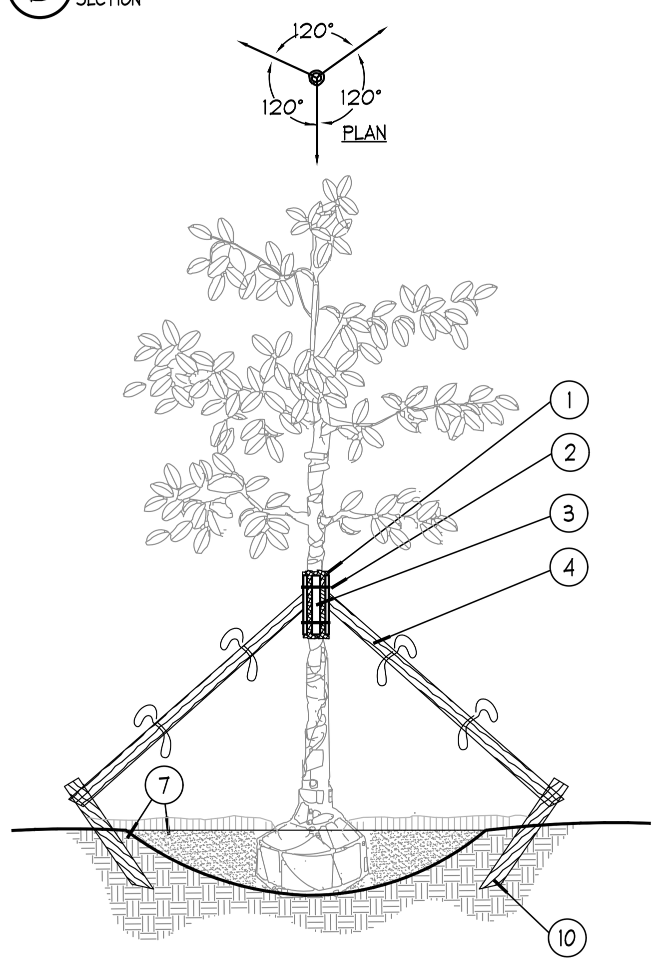
1. FINISH GRADE
2. HORIZONTAL 2X2 SCREWED TO 2X2 STAKE. ALL WOOD SHALL BE #2 UNTREATED.
3. 3-1/2" DRYWALL SCREW, THREAD SIZE 12, SHARP POINT, FULL THREAD, BLACK PHOSPHATE FINISH
4. VERTICAL STAKES SHALL ABUT SIDE OF ROOTBALL
5. STAKES TO EXTEND INTO NATIVE SOIL BY 1-1/2 X THE ROOTBALL DEPTH MIN.

NOTE:

IF SPATIAL REQUIREMENTS PRECLUDE STAKING WITH THIS METHOD, SUBMIT ALTERNATE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLING PLANT.

* Refer to details B and D for planting

E Staking - up to 65 gal. or B&B to 3-1/2" Cal.
PLAN/SECTION NTS



1. FIVE (5) LAYERS OF BURLAP TO PROTECT TRUNK
2. TWO STEEL BANDS TO SECURE BATTENS
3. FIVE 2 X 4 X 18"L WOOD BATTENS
4. THREE (3) 2" X 8' LODGE POLES. DRILL, USING GALVANIZED SCREWS, TO BATTENS AND 2" X 4" STAKES. NO SCREWS SHALL PENETRATE TREE. FLAG AT MIDPOINT AND AT BASE.
10. 2" x 4" x 3' (MIN), P.T. WOOD STAKES BURIED 3" BELOW FINISHED GRADE.
7. FINISHED GRADE (SEE GRADING PLAN)

NOTES:

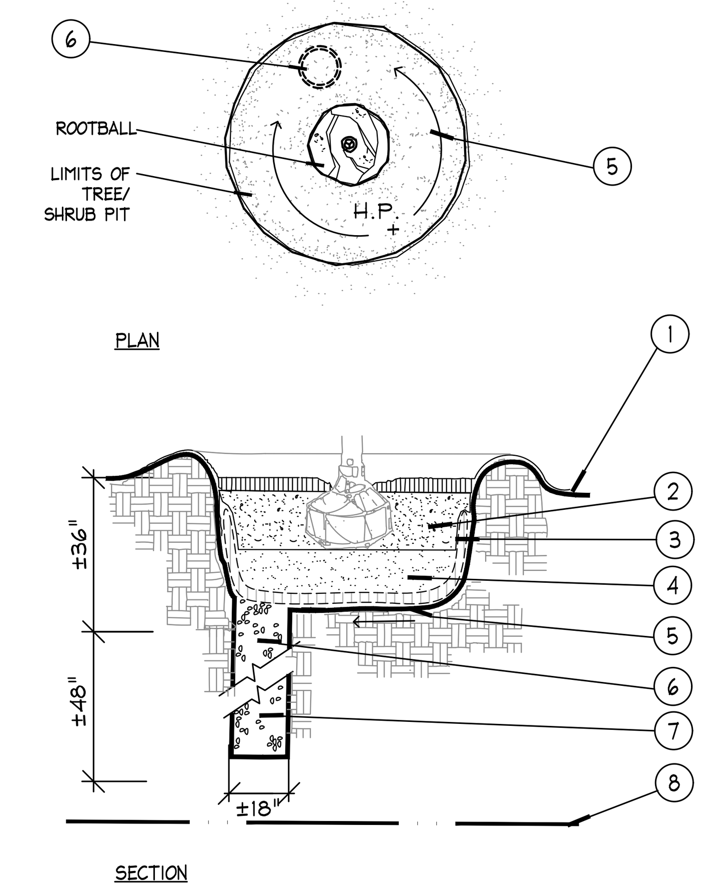
A. ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. ALTERNATE TREE ANCHORING SYSTEMS MAY BE SUBSTITUTED FOR WOOD STAKING SYSTEM UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE

PRE-APPROVED SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

D. RUBBER HOSE/WIRE SYSTEMS ARE NOT ALLOWED.

* Refer to details B and D for planting

F Large Tree Staking - 100 Gal + or B&B 4" +
SECTION NTS



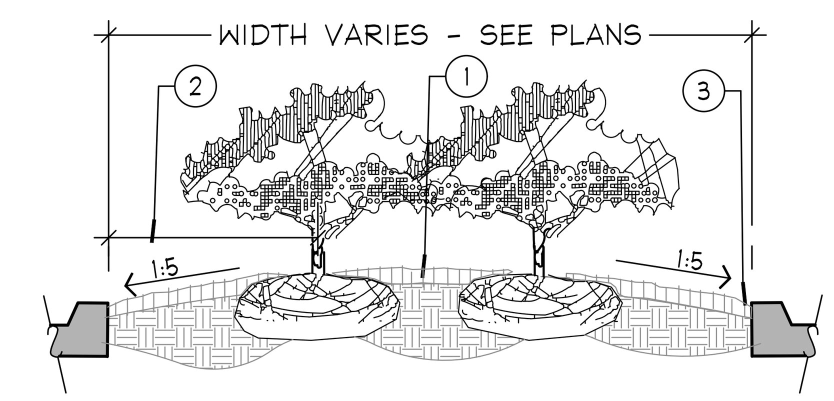
1. FINISH GRADE
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER
4. 12" CLEAN SAND, COMPACTED. ADJUST LAYER THICKNESS SO TOP OF ROOTBALL IS AT LEAST 1" ABOVE FINISHED GRADE.
5. SLOPE BOTTOM TO DRAIN
6. ±18"ø AUGURED HOLE PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
7. BACKFILL WITH 1/2" - 3/4" GRAVEL.
8. WATER TABLE. (DEPTH VARIES)

NOTE:

FOR A PARKING ISLAND PLANTING SITUATION, CONTRACTOR TO BACKFILL ENTIRE LENGTH OF PLANTING AREA TO WITHIN 6" OF BACK OF CURB OR EDGE OF PAVEMENT.

REFER TO NOTE 0.3 OF WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.

G Poor Drainage Condition
PLAN/SECTION NTS

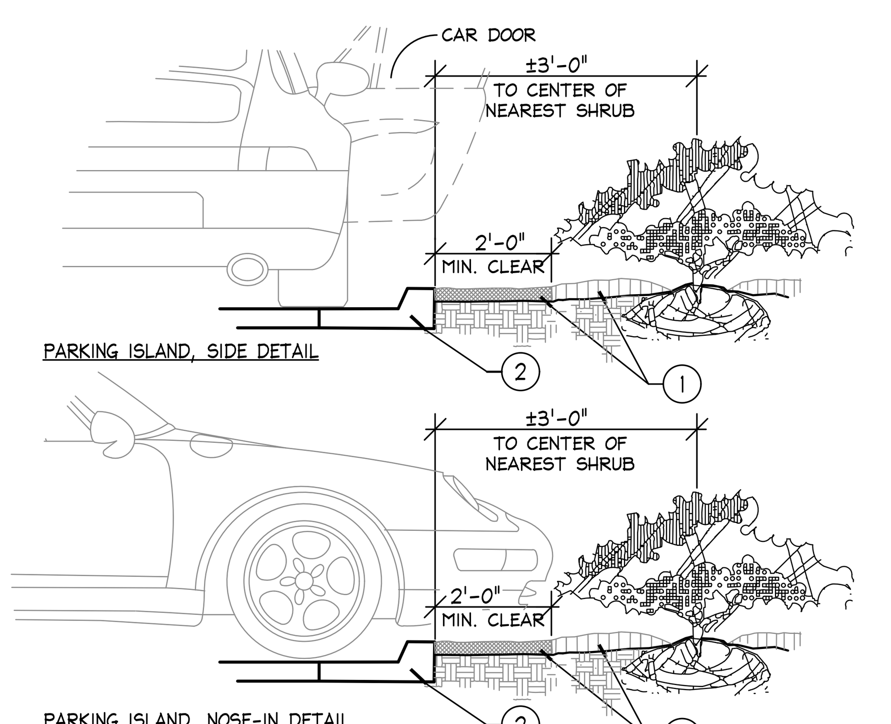


PLANTER ISLAND NOTES

1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS. SEE DETAIL 'I' FOR PLANTER MEDIANS ADJACENT TO PARKING SPACES.
3. 1" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

- EXCAVATE CONTINUOUS 36" DEEP (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND & BACKFILL WITH APPROVED PLANTING MIX.
- PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).
- ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

H Planted Parking Lot Islands / Medians
SECTION NTS

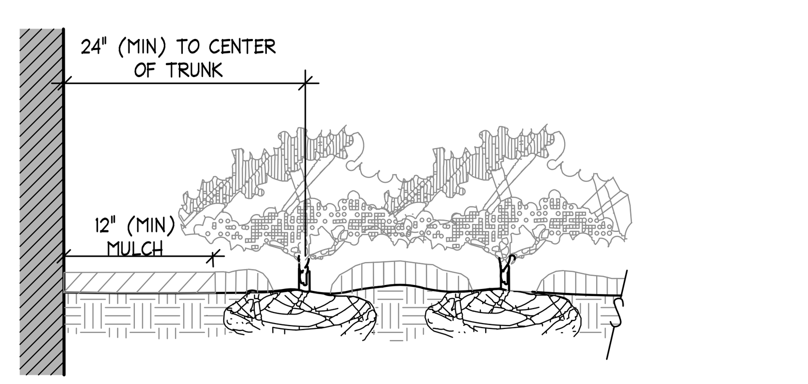


1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP.

NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE

2. CURB OR PARKING LOT EDGE, BY OTHERS

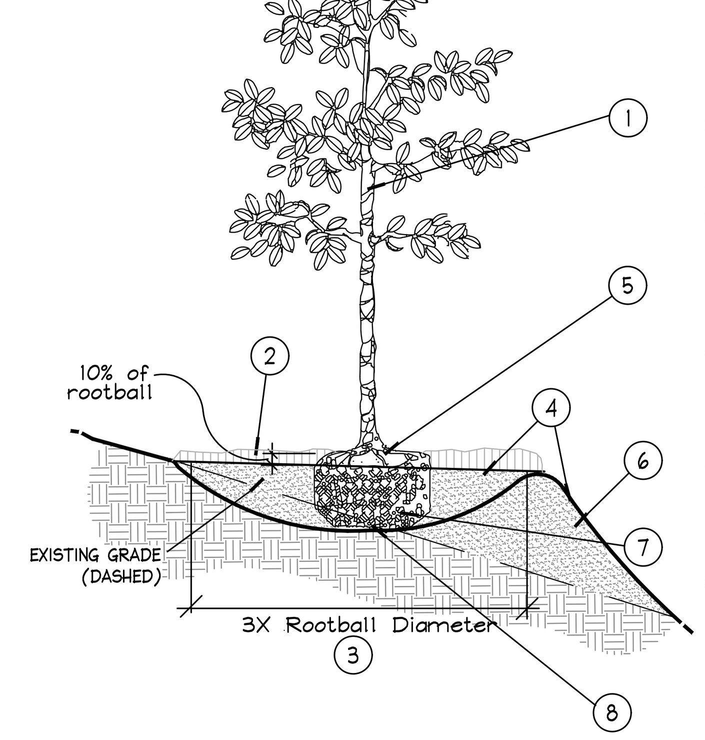
I Parking Space/Curb Planting
SECTION NTS



NOTES

* CLEAR ZONE: 24" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.

J Plantings Adjacent to Buildings
SECTION NTS



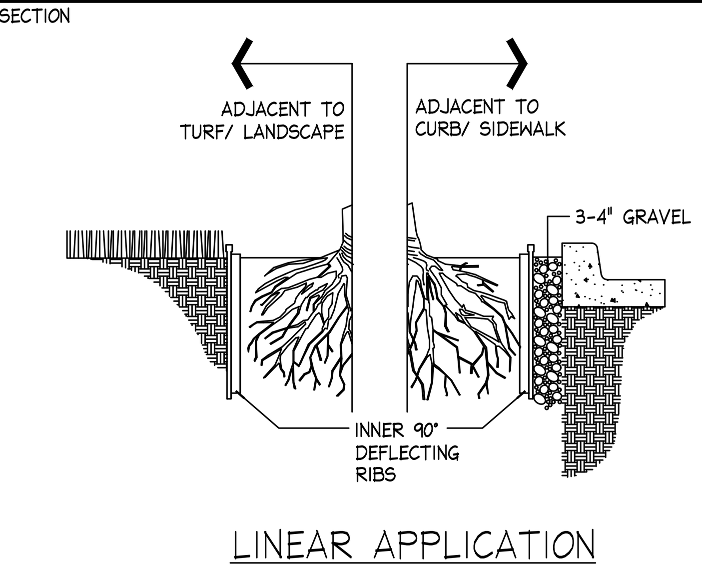
1. TREES, PALMS, AND LARGE SHRUBS (15 GAL OR GREATER) SHALL BE PLANTED IN SIMILAR MANNER
2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
3. SHALLOW/ WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
4. FINISHED GRADE - LANDSCAPE SOIL
5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
6. BERM SOIL SO THAT TOP OF BERM IS JUST BELOW THE TOP 10% OF THE TOP OF THE ROOTBALL. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE.
7. B & B OR CONTAINER REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL. (SEE SPECIFICATIONS FOR OTHER ROOT BALL REQUIREMENTS)
8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET

* ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.

K Planting on a Slope
SECTION NTS



LINEAR APPLICATION

ROOT BARRIER BY: Century Root Barrier (714)632-7083
(or) DeepRoot (800)458-7668
(or approved equal)

SIZE: 36" D
MATERIAL: POLYETHYLENE WITH ULTRAVIOLET INHIBITORS
THICKNESS: .085 IN. (min.)

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. INSTALL AS REQUIRED, PER PLAN NOTES.
3. SUBMIT PRODUCT DATA FOR APPROVAL.

L Root Barrier
Barrier Detail NTS

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-03

GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/ OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

D. MATERIALS

1. GENERAL

MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS' APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SUBMITTAL
MULCH	PRODUCT DATA
TOPSOIL MIX	AMENDMENT MIX/ PRODUCT DATA/ TEST RESULTS
PLANTS	PHOTOGRAPHS OF ONE (1) OF EACH SPECIES (OR TAGGED IN NURSERY) CLIENT-REQUESTED TAGGING MAY SUBSTITUTE PHOTOS. INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC.
FERTILIZER	PRODUCT DATA
INNOCULANT	PRODUCT DATA
HERBICIDE	PRODUCT DATA
STAKING/GUYING	FOR ALTERNATE TO DETAILS: SEND PRODUCT DATA, DETAIL

2. PLANT MATERIALS

A. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE

B. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 20% CLEAN FLORIDA MUCK AND 80% PARTS CLEAN SAND. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
2. MUCK (OR MUCKY PEAT) FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, AND OF A VERY HIGH ORGANIC CONTENT DERIVED FROM FLORIDA SOURCES; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.
3. SAND FOR USE IN PREPARING SOIL MIXTURE SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY THE OWNER.
4. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.
5. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

F. WATER

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). TYPE OF MATERIAL: "FLORIMULCH" OR SHREDDED, STERILE EUCALYPTUS MULCH

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.
3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.
4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.
5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB- BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, FLORIDA #1 OR BETTER.
2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.
4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO LOCATE UTILITIES.
3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.
4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
5. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE , PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.
6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.
8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
13. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A-300.
14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" TO ACHEIVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
16. MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.
17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
4. SODDING

A. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

B. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

C. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED - REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
6. LAWN MAINTENANCE:

A. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

B. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

S. MAINTENANCE (ALTERNATE BID ITEM)

CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

U. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL 7 GALLON AND LARGER PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
2. THE LIFE AND SATISFACTORY CONDITION OF ALL OTHER PLANT MATERIAL (INCLUDING SOD) INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
3. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.
4. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

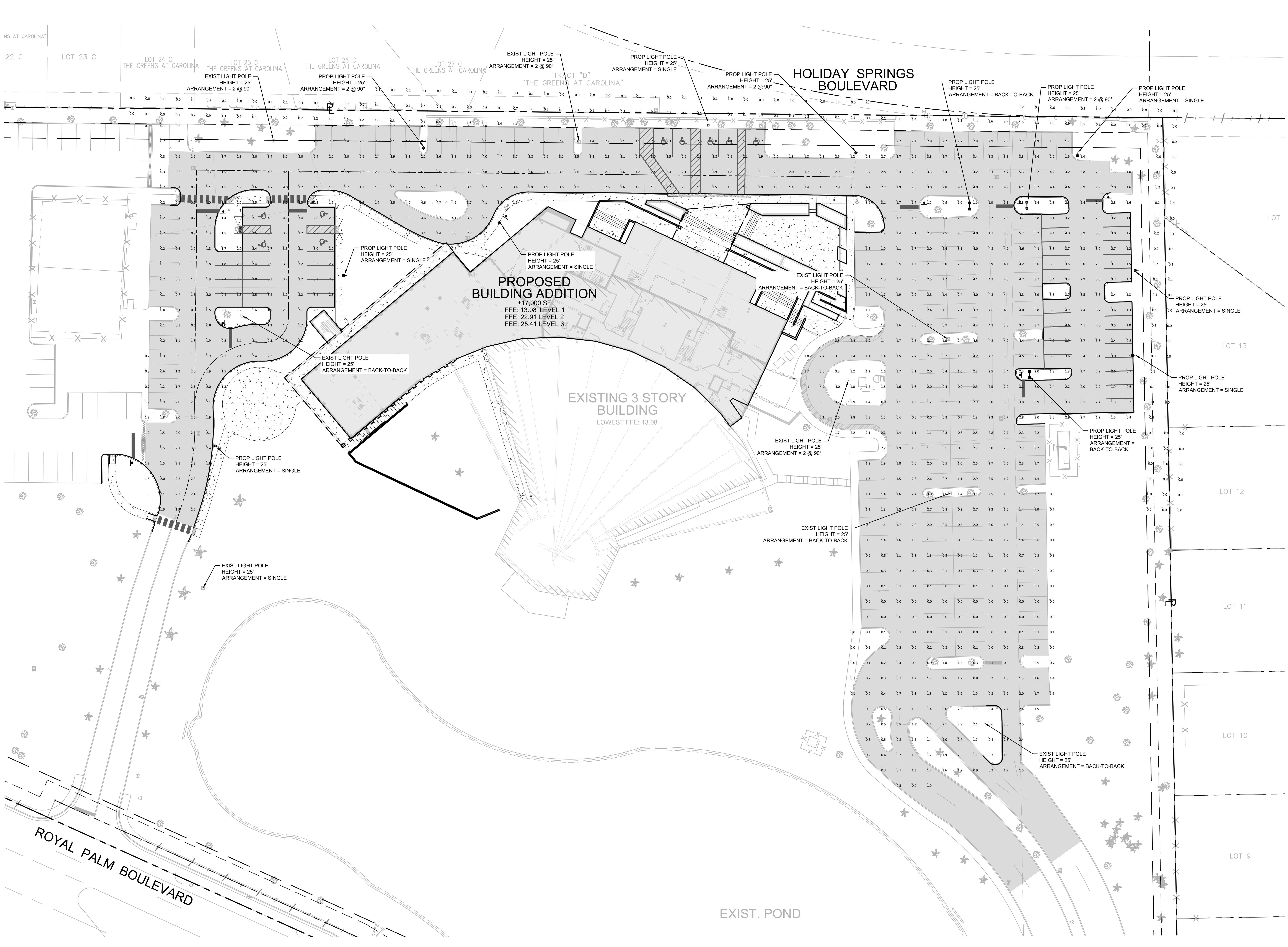
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

LANDSCAPE NOTES

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
LP-04



LEGEND

R/W — PL	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. SIGN
	EXIST. SIGN
	ASPHALT PAVEMENT SEE SHEET SP-05 FOR DETAIL
	PROP. CONCRETE SIDEWALK
	PROP. BUILDING ADDITION
	EXIST. SITE LIGHTING
	PROP. SITE LIGHTING

NOTES:

1. EXISTING LUMINAIRES ARE ASSUMED TO BE THE ETA2 (ENTABULATURE) 54L-750 T4 BY KIM LIGHTING.
2. LOCATIONS AND ARRANGEMENTS OF EXISTING SITE LIGHTING IS BASED ON SURVEY AND FIELD OBSERVATIONS. MOUNTING HEIGHT IS ASSUMED TO BE 25-FT PER THE MAXIMUM ALLOWABLE BY CITY OF MARGATE CODE
3. PROPOSED SITE LIGHTING IS DESIGNED TO COMPLY WITH CITY OF MARGATE CODE SEC. 40.705(G) (LEVEL 1) FOR PARKING AREAS IMPACTED BY THE PROPOSED SITE IMPROVEMENTS. NON-COMPLIANT EXISTING SITE AREAS ARE NOT ADDRESSED BY THE PROPOSED SITE LIGHTING LAYOUT.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
	5	90 Degree Angle	2 @ 90 degrees	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1262.7	25
	8	Single Head	Single	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1010.16	25
	7	Back-to-Back	Back-Back	ET2-54L-750-3K7-4-BC	0.900	9420	126.27	1767.78	25

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Lot Area	Illuminance	Fc	2.03	6.1	0.0	N.A.	N.A.
Property Limits	Illuminance	Fc	0.27	1.9	0.0	N.A.	N.A.

REVISIONS | No. | DATE | BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

PHOTOMETRICS PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

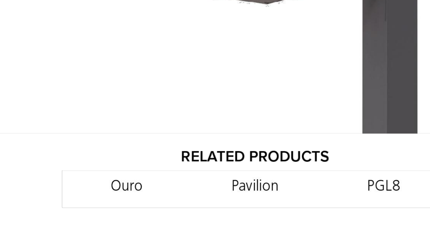
SHEET NUMBER
SL-01

KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

Entablature®



FEATURES

- TIR Strike Optics
- Patented low profile luminaire
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Type 1, 2, 3, 4, 4W, 5W, 5QM, L, and R distributions
- 0 - 10V dimming drivers standard
- IP65 optical assembly

c UL us LISTED · BUY AMERICAN SOLUTIONS See Certification Specifications · ida DARK SKY APPROVED 2016 3000K and warmer CCTs only

CONTROL TECHNOLOGY

NX LIGHTING CONTROLS · wiSCAPE™

RELATED PRODUCTS

Ouro	Pavilion	PGL8

SPECIFICATIONS

CONSTRUCTION
- One piece die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- Solid barrier wall separates optical and electrical compartments
- Double-thick wall with gussets on the support-arm mounting end
- Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- One-piece die-cast, low copper (<0 6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange
- Optional clear 1/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimete
- Optional, fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens. CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance
- One-piece extruded aluminum arm with internal bolt guides and fully radiussed top and bottom
- Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief

CONSTRUCTION (CONTINUED)
- Arm is circular cut for specified round pole
- Optional cast, low copper aluminum horizontal slip-fitter with adaptor plate to secure the luminaire to 2" IPS pipe size arms
- Optional cast aluminum wall mount plate assembly. Attaches to the wall over the junction box. Luminaire attaches to the wall plate

OPTICS
- Optical cartridge system consisting of a die cast heat sink, LED Total Internal Reflection (TIR) optics, gasket and bezel plate
- Molded silicone gasket ensures a weather-proof seal around each individual LED
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Optional BackLight Control for complete control of unwanted backlight
- IP65 Optical assembly
- Type 1, 2, 3, 4, 4W, 5W, 5QM, R, and L standard distributions
- Available in Monochromatic Amber, 2700K, 3000K, 3500K, 4000K and 5000K
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level
- Anodized aluminum heat sink modules

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

ELECTRICAL
- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts
  DF for 208, 240, 480 Line volts

CONTROLS
- 7-pin Receptacle and Button Photocell

CERTIFICATIONS AND LISTINGS
- Listed to UL1598 and CSA C22.2#250.0-24 for wet location and 40°C ambient temperatures
- IDA approved, 3000K and warmer CCTs only
- RoHS compliant
- This product qualifies as a “designated country construction material” per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	4,363–20,433
Wattage Range	88.7–178.2
Efficacy Range (LPW)	46.2–128.3
Reported Life (Hours)	L70/60,000
Weight	45 lbs 20.4 kg
EPS Side View	1.8

KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: ETA2-1A-750-35K8-3-CLR-SQ-UNV-BLT-7PR-SF-A4

CATALOG #

ETA2		54L-750	3K7	4		BC
Model	**Mounting**	**LED Engine**	**CCT/CRI [6]**	**Distribution**	**Lens Options**	**House Side Shield**
ETA2 Entablature 2.0 Large Fixture	1A Single Arm Mount	54L-560 54 LEDs - 11,000 Lumens	AM [1] Monochromatic Amber [1]	1 Type I	(Blank) No Lens	BC [7] Backlight Control
	1W Wall Mount	54L-750 54 LEDs - 14,000 Lumens	27K8 [2] 2700K, 80CRI	2 Type II	CLR [9] Clear Glass Lens	
	HSF Horizontal Slipfitter	81L-700 81 LEDs - 19,000 Lumens	27K9 [2] 2700K, 90CRI	3 Type III	CP [9] Clear Polycarbonate Lens	
			3K7 3000K, 70CRI	4 Type IV Forward		
			3K8 [2] 3000K, 80CRI	4W Type IV Wide		
			3K9 [2] 3000K, 90CRI	5W Type V Wide		
			35K8 [2] 3500K, 80CRI	5QM Type V Square Medium		
			35K9 [2] 3500K, 90CRI	R Corner Right		
			4K7 4000K, 70CRI	L Corner Left		
			4K8 [2] 4000K, 80CRI			
			4K9 [2] 4000K, 90CRI			
			5K7 5000K, 70CRI			
			5K8 [2] 5000K, 80CRI			
			5K9 [2] 5000K, 90CRI			

VSF 2B	UNV	BLS			
Mounting Options	**Voltage**	**Fixture Finish**	**Photocell Options**	**Fuse Options**	**Optional Entablatures**
VSF [8] Vertical Slipfitter Mount for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	UNV 120-277V	BLS Black Gloss Smooth	7PR 7-Pin Photocell Receptacle	SF Single Fuse 120, 277, 347 Line Volts	A1 Arch
SVSF [8] Vertical Slipfitter Mount square for 2" pipe tenon (2-3/8"O.D. x 4" LONG)	347 347V	BLT Black Matte Textured	PC [10] Button Photocell	DF Double Fuse 208, 240, 480 Line Volts	A2 Broken Arch
3 Side Arm Mount 3" O.D. Pole	480 480V	DBS Dark Bronze Gloss Smooth			A3 Stepped Arch
3.5 Side Arm Mount 3.5" O.D. Pole		DBT Dark Bronze Matte Textured			A4 Stepped Brock Arch
4 Side Arm Mount 4" O.D. Pole		GTT Graphite Matte Textured			A5 Standard Entablature
5 Side Arm Mount 5" O.D. Pole		LGS Light Grey Gloss Smooth			P6 Peak
6 Side Arm Mount 6" O.D. Pole		LGT Light Grey Matte Textured			P7 Broken Peak
SQ Side Arm Mount Square Pole		PSS Platinum Silver Smooth			P8 Stepped Peak
		VGT Verde Green Matte Textured			P9 Stepped Broken Peak
		WHS White Gloss Smooth			P10 Stepped
		WHT White Matte Textured			See Page 5 for details
		Color Option			
		CC Custom Color			

Control Options	Control Accessories [3]
SCH-R Round Pole Mounted (Occupancy Sensor up to 16' to 30')	WIR-RME-L wiSCAPE 7-pin Module
SCH-S Square Pole Mounted (Occupancy Sensor up to 16' to 30')	NXOFM-1R1D-UNV NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming

Notes:
1 Turtle Friendly.
2 See Lumen Multiplier chart on Page 13 for lumen scaling factor. Consult factory for additional details.
3 Not available with other sensor or wireless control options
6 5-step MacAdam Ellipse Binning is standard. Consult factory for 3-step MacAdam Ellipse Binning
7 Not available with 5QM and 5W distributions
8 For all arm configurations, please refer to page 4. VSF/SVSF options ordered seperately.
9 Not Available with 81L-700
10 Not Available in 480V

KIM LIGHTING

ETA2

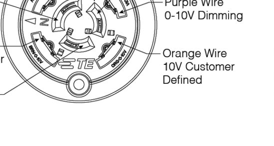
ARCHITECTURAL AREA/SITE

SPECIFICATIONS (CONTINUED)

CONTROLS

BUTTON PHOTOCELL
- Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others

7PR
- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others
- Standard customer operation modes:
  1. Traditional on/off photoelectric control
  2. 5-pin wireless photoelectric control for added dimming feature
  3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use

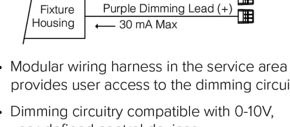


wiSCAPE™
- wiSCAPE™ wireless control modules allow an individual fixture to managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The wiSCAPE modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L
- wiSCAPE External Module,120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

NX LIGHTING CONTROLS
- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity.

DIMMING:
- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver



- Modular wiring harness in the service area provides user access to the dimming circuitry
- Dimming circuitry compatible with 0-10V, user-defined control devices
- Optional factory programmed dimming profile

POLE MOUNTED

ROUND POLE-MOUNTED OCCUPANCY SENSOR UP TO 30’

SCH-R
- Round Pole Mounted Occupancy Sensor up to 30’ - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for round pole mounting. Pole diameter needed. Pole to be drilled in the field with provided installation instructions
- Ordering Example: SCH-R4[1]/277[2]/BL[3]

SQUARE POLE-MOUNTED OCCUPANCY SENSOR UP TO 30’

SCH-S
- Square Pole Mounted Occupancy Sensor up to 30’ - Outdoor occupancy sensor with 0-10V interface dimming control mounts directly to the pole. Wide 360° pattern. Module colors available Black, Gray, and White. Module is cut for square pole mounting
- Ordering Example: SCH-S/277[2]/BL[3]

ASTRODIM
- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times

OPTIONAL FUSING:
- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- High temperature fuse holders factory installed inside the fixture housing
- Fuse is included

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

KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

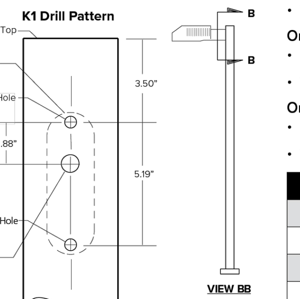
Configuration			EPA
	1A	1 Arm Side Mount	1.8
	1W	Single Wall Mount	n/a
	HSF	Horizontal Slipfitter	n/a

VSF/SVSF Configuration			
	1A		3T
	2B		3Y
	2L		4C

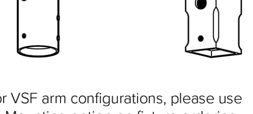
MOUNTING OPTIONS

SUPPORT ARM:
- Die-cast, low copper aluminum alloy, with splice access cover
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief
- The arm adapter is square or circular cut for specified pole size and shape
- For field wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment

Fixture Drilling Instructions:
For AR, CC, CCS, and ET Fixtures



OPTIONAL VERTICAL SLIP-FITTER (VSF/SVSF):
- Internally accessible slip-fitter attaches to a 2-3/8" x 4" long tenon and allows hands-free wiring and maintenance
- Available for round and square poles



- For VSF arm configurations, please use 4". Mounting option on fixture ordering configuration. The optional VSF/SVSF will need to be ordered separately.
- SVSF use square configuration.

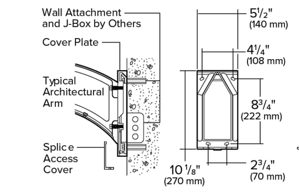
Ordering example for round:
- 2 A/ETA2/54L-500/35K8/3/CLR/**4.00**/UNV/BLT
- 1 VSF-2B

Ordering example for square:
- 2 1A/ETA2/54L-500/35K8/3/CLR/**SQ**/UNV/BLT
- 1 SVSF-2SB

VSF	SVSF
VSF-1A	SVF-1A
VSF-2B	SVF-2B
VSF-2L	SVSF-2L
VSF-3T	SVSF-3T
VSF-3Y	SVSF-3Y
VSF-4C	SVSF-4C

WALL MOUNT

1W
- A cast mounting plate of 356 alloy, low-copper (<0.6% Cu) aluminum, is mounted to the wall with bolts (by others). Fixture and arm are mounted to a cast 356 alloy aluminum cover plate before attaching to the wall mounting plate. The fixture-arm-cover plate assembly is hooked to the wall mounting plate, and secured with stainless steel screws provided. After mounting to the wall, field splices are made at the opening in the cover plate, then covered by a cast 356 alloy aluminum plate that blends with the cover plate design. Complete fixture-arm-cover plate assembly can therefore be mounted before field splices are made. Cover plate is finished to match arm and fixture powder coat color
- Optional Wall Mount: (CC is illustration the same for all site area?)
- Optional, cast aluminum mounting plate attaches to a wall over a junction box and the speed mount is bolted to the cover plate. To complete the wiring, the luminaire assembly slides over the mounting plate.



Mounting Plate

KIM LIGHTING

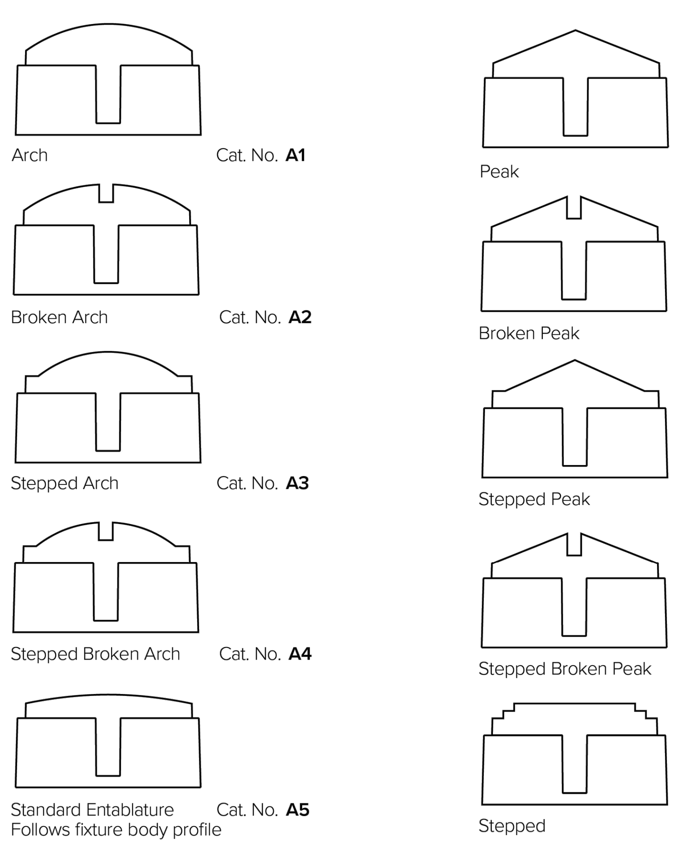
ETA2

ARCHITECTURAL AREA/SITE

PRODUCT EXCEPTIONS & DETAILS

OPTIONAL ENTABLATURES

ARCHED ENTABLATURES · PEAKED ENTABLATURES



Arch — Cat. No. **A1**
Broken Arch — Cat. No. **A2**
Stepped Arch — Cat. No. **A3**
Stepped Broken Arch — Cat. No. **A4**
Standard Entablature Follows fixture body profile — Cat. No. **A5**
Peak — Cat. No. **P6**
Broken Peak — Cat. No. **P7**
Stepped Peak — Cat. No. **P8**
Stepped Broken Peak — Cat. No. **P9**
Stepped — Cat. No. **P10**

KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

DELIVERED LUMENS

NO LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating B	U	G	lm/w	Lumen	BUG Rating B	U	G	lm/w	Lumen	BUG Rating B	U	G	lm/w
54	11,000	560	1	10664	1	0	1	120.2	10802	1	0	1	121.7	11380	1	0	1	128.3
			1-BC	6020	0	0	0	67.8	6098	0	0	0	68.7	6424	0	0	1	72.4
			2	9651	2	0	2	108.8	9776	2	0	2	110.2	10299	2	0	2	116.1
			2-BC	5304	0	0	1	59.8	5373	0	0	1	60.6	5660	0	0	1	63.8
			3	9901	1	0	2	111.6	10029	1	0	2	113.0	10566	1	0	2	119.1
			3-BC	5426	0	0	2	61.2	5496	0	0	2	61.9	5791	0	0	2	65.3
			4	10301	1	0	2	116.1	10435	1	0	2	117.6	10994	1	0	2	123.9
			4-BC	7046	0	0	2	79.4	7138	0	0	2	80.4	7520	0	0	2	84.8
			4W	9545	1	0	2	107.6	9669	1	0	2	109.0	10186	1	0	2	114.8
			4W-BC	5724	0	0	2	64.5	5798	0	0	2	65.3	6108	0	0	2	68.8
			5W	9561	3	0	2	107.7	9685	3	0	2	109.1	10203	3	0	2	115.0
			5QM	10254	3	0	1	115.6	10387	3	0	1	117.1	10943	3	0	1	123.3
			R	10021	2	0	2	112.9	10151	2	0	2	114.4	10695	2	0	2	120.5
			L	10021	1	0	2	112.9	10151	1	0	2	114.4	10695	1	0	2	120.5
	14,000	750	1	14256	1	0	1	112.9	14441	1	0	1	114.4	15213	1	0	1	120.5
			1-BC	8048	0	0	1	63.7	8152	0	0	1	64.6	8588	0	0	1	68.0
			2	12901	2	0	2	102.2	13069	2	0	2	103.5	13768	2	0	2	109.0
			2-BC	7090	0	0	1	56.2	7183	0	0	1	56.9	7567	0	0	2	59.9
			3	13236	2	0	2	104.8	13407	2	0	2	106.2	14125	2	0	2	111.9
			3-BC	7254	0	0	2	57.4	7348	0	0	2	58.2	7741	0	0	2	61.3
			4	13771	1	0	3	109.1	13950	1	0	3	110.5	14696	1	0	3	116.4
			4-BC	9420	0	0	2	74.6	9542	0	0	2	75.6	10052	0	0	2	79.6
			4W	12760	2	0	3	101.1	12926	4	0	2	102.4	13618	2	0	3	107.8
			4W-BC	7652	0	0	2	60.6	7751	0	0	2	61.4	8166	0	0	2	64.7
			5W	12781	4	0	2	101.2	12947	2	0	3	102.5	13640	4	0	2	108.0
			5QM	13708	3	0	1	108.6	13886	3	0	1	110.0	14629	4	0	1	115.9
			R	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
			L	13397	2	0	2	106.1	13571	2	0	2	107.5	14297	2	0	3	113.2
81	19,500	700	1	19820	2	0	1	111.2	20077	2	0	1	112.6	21151	2	0	1	118.7
			1-BC	11188	0	0	1	62.8	11334	0	0	1	63.6	11940	0	0	1	67.0
			2	17937	2	0	2	100.6	18169	2	0	2	101.9	19142	3	0	3	107.4
			2-BC	9858	0	0	2	55.3	9986	0	0	2	56.0	10520	0	0	2	59.0
			3	18402	2	0	3	103.2	18640	2	0	3	104.6	19638	2	0	3	110.2
			3-BC	10085	0	0	2	56.6	10216	0	0	2	57.3	10762	0	0	2	60.4
			4	19146	2	0	4	107.4	19395	2	0	4	108.8	20433	2	0	4	114.6
			4-BC	13096	0	0	3	73.5	13266	0	0	3	74.4	13976	0	0	3	78.4
			4W	17741	2	0	4	99.5	17971	2	0	4	100.8	18933	2	0	4	106.2
			4W-BC	10638	1	0	2	59.7	10776	1	0	3	60.5	11353	1	0	3	63.7
			5W	17769	4	0	2	99.7	18000	4	0	2	101.0	18963	4	0	2	106.4
			5QM	19058	4	0	2	106.9	19305	4	0	2	108.3	20338	4	0	2	114.1
			R	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	3	0	3	111.5
			L	18625	2	0	3	104.5	18867	2	0	3	105.9	19877	2	0	3	111.5

KIM LIGHTING

ETA2

ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

CLR LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating B	U	G	lm/w	Lumen	BUG Rating B	U	G	lm/w	Lumen	BUG Rating B	U	G	lm/w
54	11,000	560	1	8907	1	0	1	100.4	9023	1	0	1	101.7	9506	1	0	1	107.1
			1-BC	5028	0	0	0	56.7	5094	0	0	0	57.4	5366	0	0	0	60.5
			2	8061	1	0	2	90.8	8166	1	0	2	92.0	8603	1	0	2	97.0
			2-BC	4430	0	0	1	49.9	4488	0	0	1	50.6	4728	0	0	1	53.3
			3	8270	1	0	2	93.2	8377	1	0	2	94.4	8826	1	0	2	99.5
			3-BC	4532	0	0	1	51.1	4591	0	0	1	51.7	4837	0	0	2	54.5
			4	8605	1	0	2	97.0	8716	1	0	2	98.2	9183	1	0	2	103.5
			4-BC	5885	0	0	2	66.3	5962	0	0	2	67.2	6281	0	0	2	70.8
			4W	7973	1	0	2	89.9	8076	1	0	2	91.0	8509	1	0	2	95.9
			4W-BC	4781	0	0	2	53.9	4843	0	0	2	54.6	5102	0	0	2	57.5
			5W	7986	3	0	1	90.0	8089	3	0	1	91.2	8522	3	0	2	96.0
			5QM	8565	3	0	1	96.5	8676	3	0	1	97.8	9140	3	0	1	103.0
			R	8371	3	0	1	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
			L	8371	1	0	2	94.3	8479	1	0	2	95.6	8933	1	0	2	100.7
	14,000	750	1	11907	1	0	1	94.3	12062	1	0	1	95.5	12708	1	0	1	100.6
			1-BC	6722	0	0	1	53.2	6809	0	0	1	53.9	7174	0	0	1	56.8
			2	10776	2	0	2	85.3	10916	2	0	2	86.4	11500	2	0	2	91.1
			2-BC	5923	0	0	1	46.9	5999	0	0	1	47.5	6321	0	0	1	50.1
			3	11056	1	0	2	87.6	11199	1	0	2	88.7	11798	1	0	2	93.4
			3-BC	6059	0	0	2	48.0	6137	0	0	2	48.6	6466	0	0	2	51.2
			4	11503	1	0	2	91.1	11652	1	0	2	92.3	12276	1	0	2	97.2
			4-BC	7868	0	0	2	62.3	7970	0	0	2	63.1	8397	0	0	2	66.5
			4W	10658	1	0	2	84.4	10797	1	0	2	85.5	11375	1	0	3	90.1
			4W-BC	6391	0	0	2	50.6	6474	0	0	2	51.3	6821	0	0	2	54.0
			5W	10676	3	0	2	84.5	10814	3	0	2	85.6	11393	3	0	2	90.2
			5QM	11450	3	0	1	90.7	11598	3	0	1	91.9	12219	3	0	1	96.8
			R	11190	2	0	2	88.6	11335	2	0	2	89.8	11942	2	0	2	94.6
			L	11190	1	0	2	88.6	11335	1	0	2	89.8	11942	1	0	2	94.6

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000	DATE 7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-02

KIM LIGHTING®

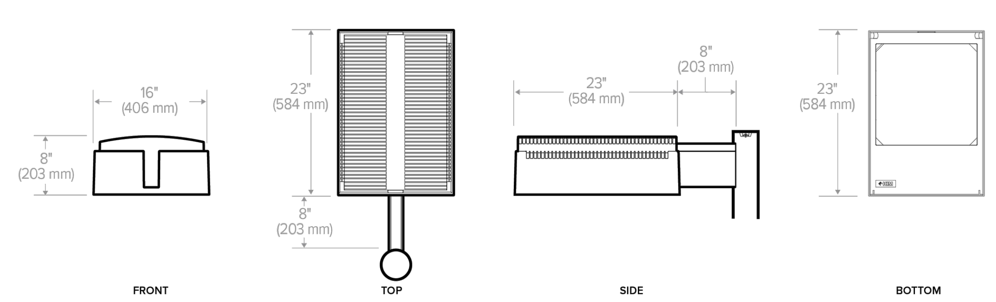
ETA2
ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

PL LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI Lumen	3000K B	3000K U	3000K G	3000K lm/w	4000K 70CRI Lumen	4000K B	4000K U	4000K G	4000K lm/w	5000K 70CRI Lumen	5000K B	5000K U	5000K G	5000K lm/w
54	11,000	560	1	8772	1	0	1	98.9	8886	1	0	1	100.2	9362	1	0	1	105.5
			1-BC	4952	0	0	0	55.8	5016	0	0	0	56.5	5285	0	0	0	59.6
			2	7939	1	0	1	89.5	8042	1	0	2	90.6	8472	1	0	2	95.5
			2-BC	4363	0	0	1	49.2	4420	0	0	1	49.8	4656	0	0	1	52.5
			3	8145	1	0	2	91.8	8251	1	0	2	93.0	8692	1	0	2	98.0
			3-BC	4464	0	0	1	50.3	4522	0	0	1	51.0	4764	0	0	1	53.7
			4	8475	1	0	2	95.5	8584	1	0	2	96.7	9044	1	0	2	101.9
			4-BC	5797	0	0	2	65.3	5872	0	0	2	66.2	6186	0	0	2	69.7
			4W	7852	1	0	2	88.5	7954	1	0	2	89.6	8380	1	0	2	94.4
			4W-BC	4709	0	0	2	53.1	4770	0	0	2	53.8	5025	0	0	2	56.6
			5W	7865	3	0	1	88.6	7967	3	0	1	89.8	8393	3	0	2	94.6
			5QM	8435	3	0	1	95.1	8545	3	0	1	96.3	9002	3	0	1	101.5
			R	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
			L	8244	1	0	2	92.9	8351	1	0	2	94.1	8798	1	0	2	99.2
	14,000	750	1	11727	1	0	1	92.9	11880	1	0	1	94.1	12515	1	0	1	99.1
			1-BC	6620	0	0	1	52.4	6706	0	0	1	53.1	7065	0	0	1	56.0
			2	10613	2	0	2	84.1	10751	2	0	2	85.1	11326	2	0	2	89.7
			2-BC	5833	0	0	1	46.2	5909	0	0	1	46.8	6225	0	0	1	49.3
			3	10888	1	0	2	86.2	11030	1	0	2	87.3	11620	1	0	2	92.0
			3-BC	5967	0	0	2	47.3	6045	0	0	2	47.9	6368	0	0	2	50.4
			4	11329	1	0	2	89.7	11476	1	0	2	90.9	12090	1	0	2	95.7
			4-BC	7749	0	0	2	61.4	7849	0	0	2	62.2	8270	0	0	2	65.5
			4W	10497	1	0	2	83.1	10633	1	0	2	84.2	11203	1	0	3	88.7
			4W-BC	6295	0	0	2	49.8	6376	0	0	2	50.5	6718	0	0	2	53.2
			5W	10514	3	0	2	83.3	10651	3	0	2	84.3	11221	3	0	2	88.9
			5QM	11277	3	0	1	89.3	11423	3	0	1	90.5	12034	3	0	1	95.3
			R	11021	2	0	2	87.3	11164	2	0	2	88.4	11761	2	0	2	93.1
			L	11021	1	0	2	87.3	11164	1	0	2	88.4	11761	1	0	2	93.1

DIMENSIONS



KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-1

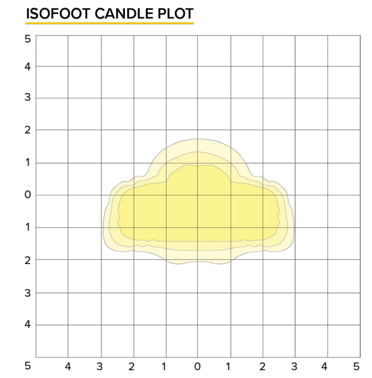
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	14440
Watts	126.27
Efficacy	114.4
IES Type	1
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12851	89.0%
Downward House Side	1589	11.0%
Downward Total	14440	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	14440	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-1-BC

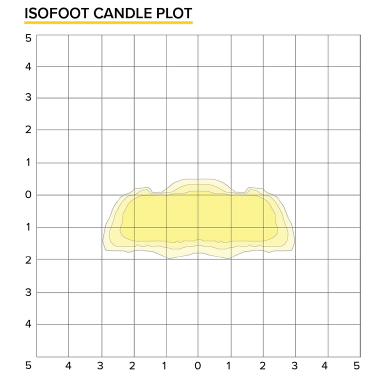
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	8151
Watts	126.27
Efficacy	64.6
IES Type	1
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	8033	98.5%
Downward House Side	118	1.5%
Downward Total	8151	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	8151	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-2

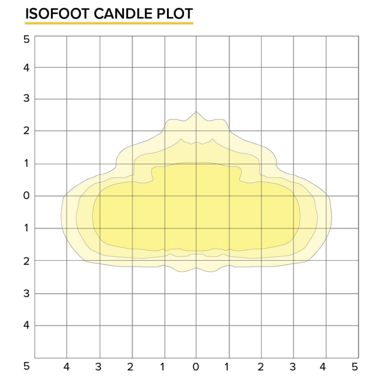
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13069
Watts	126.27
Efficacy	103.5
IES Type	2
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10825	82.8%
Downward House Side	2245	17.2%
Downward Total	13069	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13069	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-2-BC

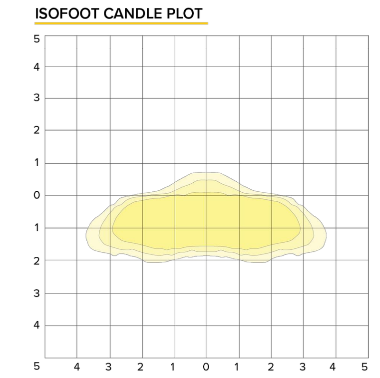
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7182
Watts	126.27
Efficacy	56.9
IES Type	2
BUG Rating	B0-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7019	97.7%
Downward House Side	163	2.3%
Downward Total	7182	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7182	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3

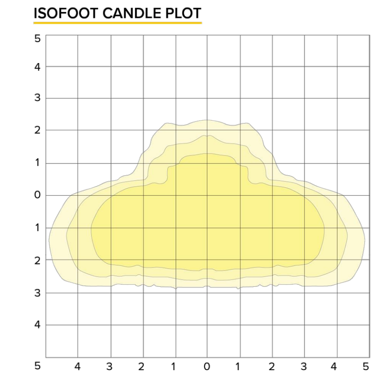
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13406
Watts	126.27
Efficacy	106.2
IES Type	3
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11502	85.8%
Downward House Side	1904	14.2%
Downward Total	13406	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13406	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-3-BC

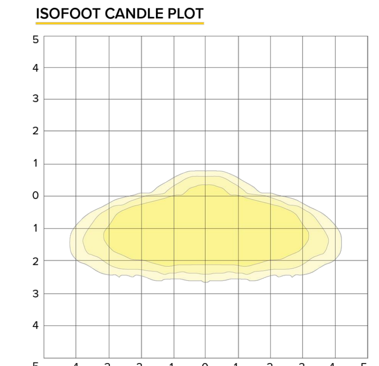
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7347
Watts	126.27
Efficacy	58.2
IES Type	3
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7108	96.7%
Downward House Side	239	3.3%
Downward Total	7347	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7347	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4

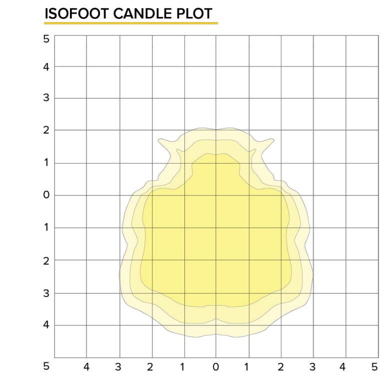
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13950
Watts	126.27
Efficacy	110.5
IES Type	4
BUG Rating	B1-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	12630	87.6%
Downward House Side	1321	12.4%
Downward Total	13951	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13951	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4-BC

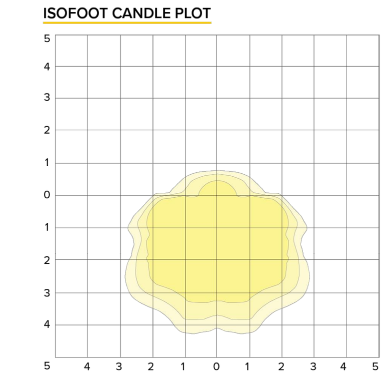
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	9542
Watts	126.27
Efficacy	75.6
IES Type	4
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	9312	87.6%
Downward House Side	231	12.4%
Downward Total	9543	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	9543	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-4W

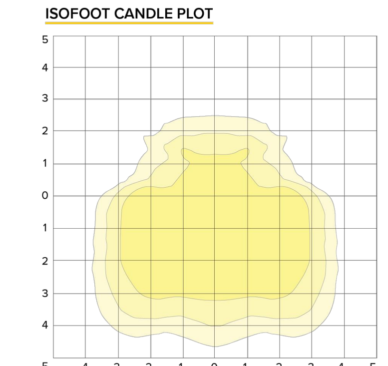
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12926
Watts	126.27
Efficacy	102.4
IES Type	4W
BUG Rating	B2-U0-G3
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11324	87.6%
Downward House Side	1602	12.4%
Downward Total	12926	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12926	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-4W-BC

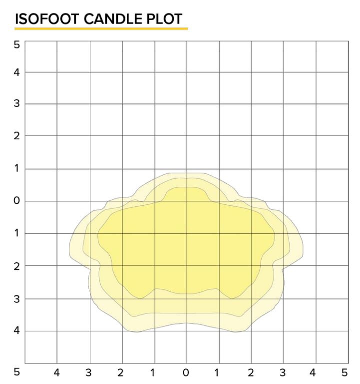
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7750
Watts	126.27
Efficacy	61.4
IES Type	4W
BUG Rating	B0-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	7449	96.0%
Downward House Side	301	4.0%
Downward Total	7750	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	7750	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5QM

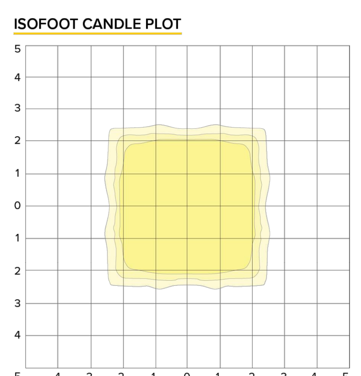
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13885
Watts	126.27
Efficacy	110.0
IES Type	5
BUG Rating	B3-U0-G1
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6943	50.0%
Downward House Side	6942	50.0%
Downward Total	13885	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13885	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-5W

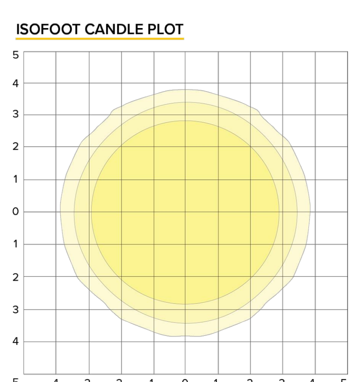
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	12946
Watts	126.27
Efficacy	102.5
IES Type	5
BUG Rating	B4-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6473	50.0%
Downward House Side	6473	50.0%
Downward Total	12946	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	12946	100%

ISOFOOT CANDLE PLOT



KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

PHOTOMETRY

ET2-54L-750-4K7-R

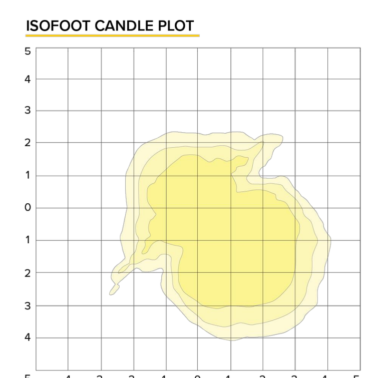
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13570
Watts	126.27
Efficacy	107.5
IES Type	R
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11231	82.8%
Downward House Side	2339	17.2%
Downward Total	13570	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13570	100%

ISOFOOT CANDLE PLOT



ET2-54L-750-4K7-L

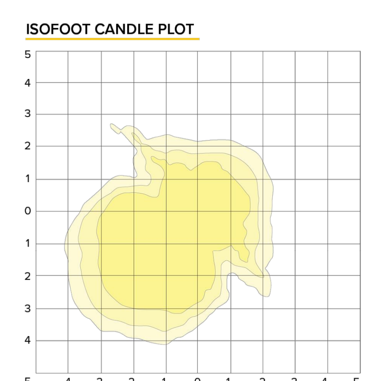
LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	13571
Watts	126.27
Efficacy	107.5
IES Type	L
BUG Rating	B2-U0-G2
Mounting Height	15 ft
Grid Scale	10 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	11523	84.9%
Downward House Side	2048	15.1%
Downward Total	13571	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	13571	100%

ISOFOOT CANDLE PLOT

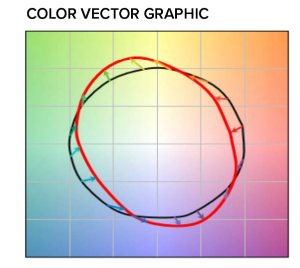


KIM LIGHTING®

ETA2
ARCHITECTURAL AREA/SITE

TM-30 DATA

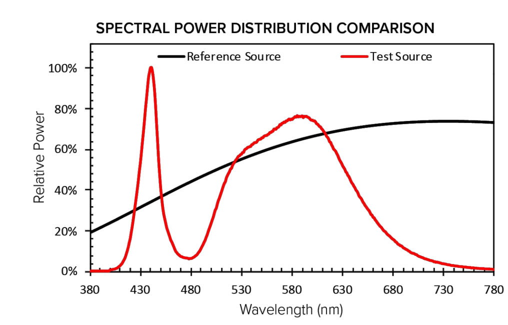
COLOR VECTOR GRAPHIC



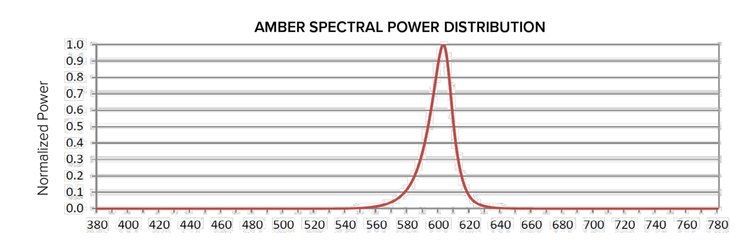
TEST SOURCE

R_f	68
R_g	99
CCT(K)	3947
D_{uv}	0.0004
x	0.3831
y	0.3793
CIE R_a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



AMBER SPECTRAL POWER DISTRIBUTION



ELECTRICAL DATA

LED Count	System Watts	Current	Line Voltage VAC	Line Voltage Hz	Amps AC 120	Amps AC 208	Amps AC 240	Amps AC 277	Amps AC 347	Amps AC 480	Min Power Factor	Max. THD (%)	Dimming Range	Source Current Out Min	Source Current Out Max	Absolute Voltage Min	Absolute Voltage Max
54 LEDs	88.7	560 mA	120-480	50/60	0.74	0.43	0.37	0.32	0.26	0.18	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	126.3	750 mA			1.05	0.61	0.53	0.46	0.36	0.26							
81 LEDs	178.2	700 mA			1.49	0.86	0.74	0.64	0.51	0.37							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
Ambient Temp.	0	25,000	36,000	50,000	100,000	Reported L70
25°C / 77°F	100%	94.22%	92.26%	89.84%	81.68%	>60khrs

CRI Lumen Multiplier for 80 and 90 CRI		
CCT	80 CRI	90 CRI
2700K	0.859	0.655
3000K	0.9119	.7033
3500K	0.906	0.732
4000K	0.8941	.734
5000K	0.879	.7712
Scaling factor of 5000K 70CRI lumen packages		

No.	REVISIONS	DATE	BY

Kimley-Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

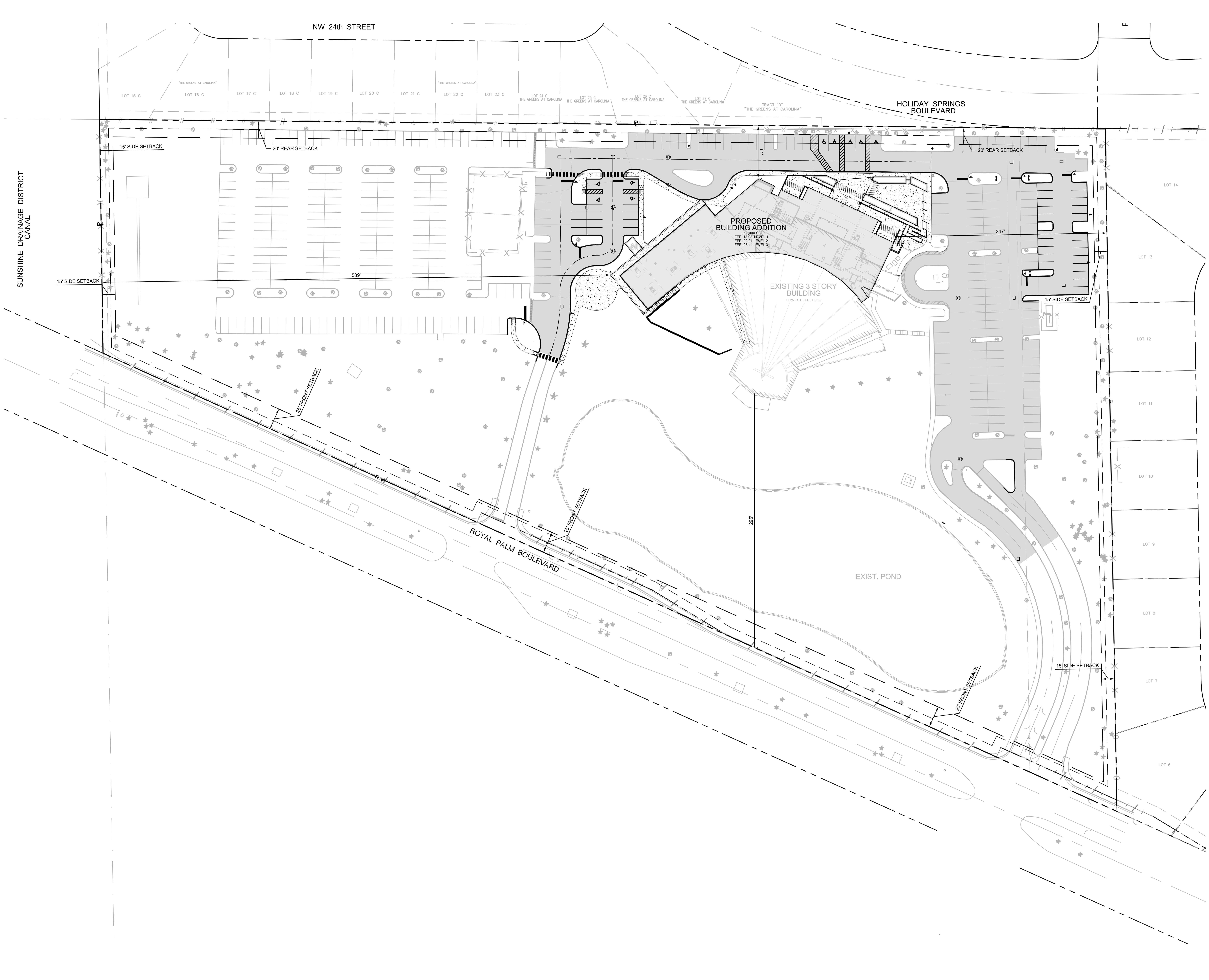
RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 7/23/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

PHOTOMETRICS DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SL-03



NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND

R/W — ℄ —	PROPERTY LINE
— — —	EXIST. RIGHT OF WAY
— · — · —	PROP. ROAD CENTERLINE
▭	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

ZONING

SETBACK	REQUIRED	PROVIDED
FRONT	25 Ft	295 Ft
SIDE	15 Ft	247 Ft
REAR	20 Ft	60 Ft
FAR	0.30	0.07

Sunshine811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES
LICENSE
No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

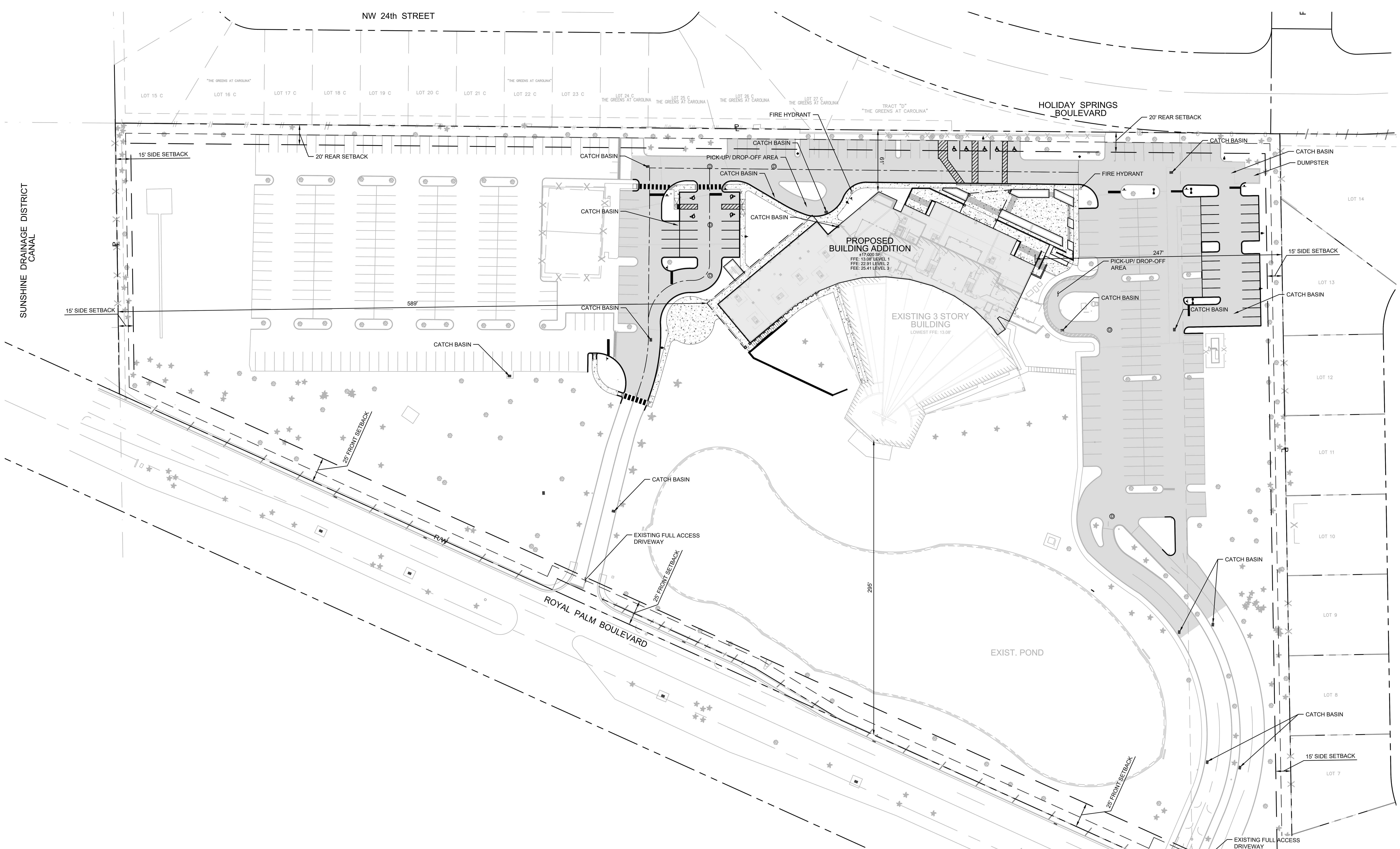
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

OVERALL SITE PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-01



GRAPHIC SCALE IN FEET

0 25 50 100

LEGEND

R/W ℄	PROPERTY LINE
	EXIST. RIGHT OF WAY
	PROP. ROAD CENTERLINE
	PROP. BUILDING ADDITION

NOTES:

1. A REGISTERED LAND SURVEYOR SHALL REPLACE SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, UPON COMPLETION OF WORK.
2. HANDICAP PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL HANDICAP SYMBOL AND EACH SPACE SHALL BE PROVIDED WITH A SIGN STATING "PARKING BY DISABLED PERMIT ONLY". ALL HANDICAP ACCESS POINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE HANDICAP CODES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF BROWARD COUNTY.
4. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. ALL BUILDING DIMENSIONS ARE TO THE FACE OF THE BUILDING.
7. PARKING STALLS TO BE MARKED WITH WHITE PAINT.
8. WHERE APPLICABLE DOUBLE YELLOW STRIPING, HANDICAP, STOP BARS, AND FIRE LANE STRIPING TO BE THERMOPLASTIC
9. THIS PROJECT IS LOCATED IN FLOOD ZONE 12011C0165H, WITH AN EFFECTIVE DATE OF 08/18/2014

PARKING COUNT TABLE:

EXISTING SANCTUARY TOTAL SEATS	PROPOSED SANCTUARY TOTAL SEATS
1,570	1,570
EXISTING PARKING SPACES	PROPOSED PARKING SPACES
394	395
EXISTING ADA PARKING SPACES	PROPOSED ADA PARKING SPACES
9	9
TOTAL EXISTING PARKING SPACES	TOTAL PROPOSED PARKING SPACES
403	404

Sunshine 811

Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.

Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

MASTER PARKING PLAN

CHURCH SITE IMPROVEMENTS

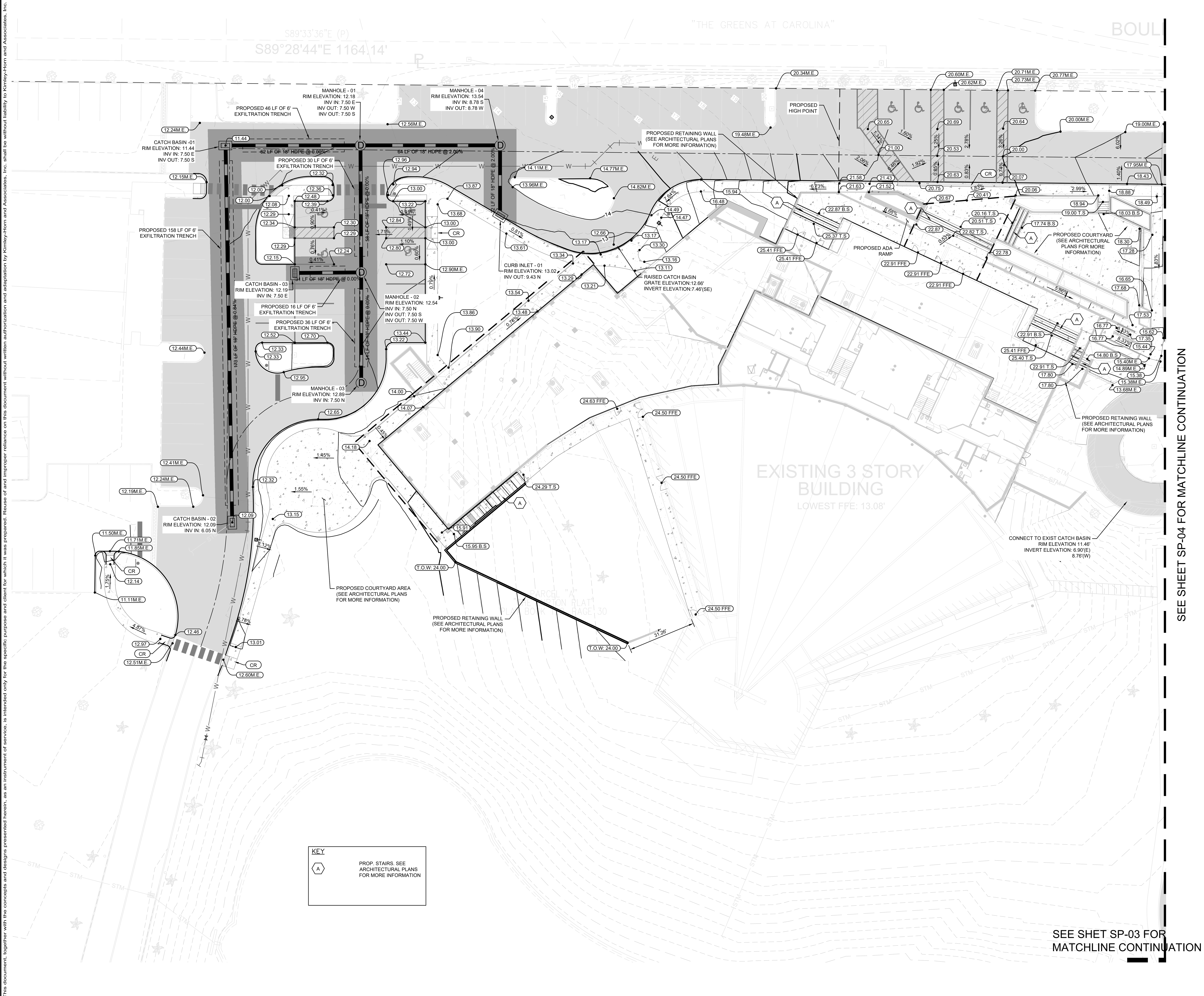
PREPARED FOR

ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

SP-02



LEGEND

R/W — P	PROPERTY LINE
	EXIST. RIGHT OF WAY
15.48M.E.	MATCH EXIST. ELEVATION
15.48 FFE	PROP. FINISHED FLOOR ELEVATION
15.48	PROP. SPOT ELEVATION
15.48 T.S	PROP. TOP OF STAIR ELEVATION
15.48 B.S	PROP. BOTTOM OF STAIR ELEVATION
15	PROP. CONTOURS
12.36	EXIST. ELEVATION
15	EXIST. CONTOURS
	PROP. GRADE BREAK
	PROP. FULL DEPTH PAVEMENT RESTORATION
	PROP. CONCRETE SIDEWALK
	PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
	PROP. BUILDING ADDITION
	PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.
16. REFER TO SP-03 FOR GRADING OF DRIVEWAY CONNECTION AREA

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

CHURCH SITE IMPROVEMENTS

PREPARED FOR

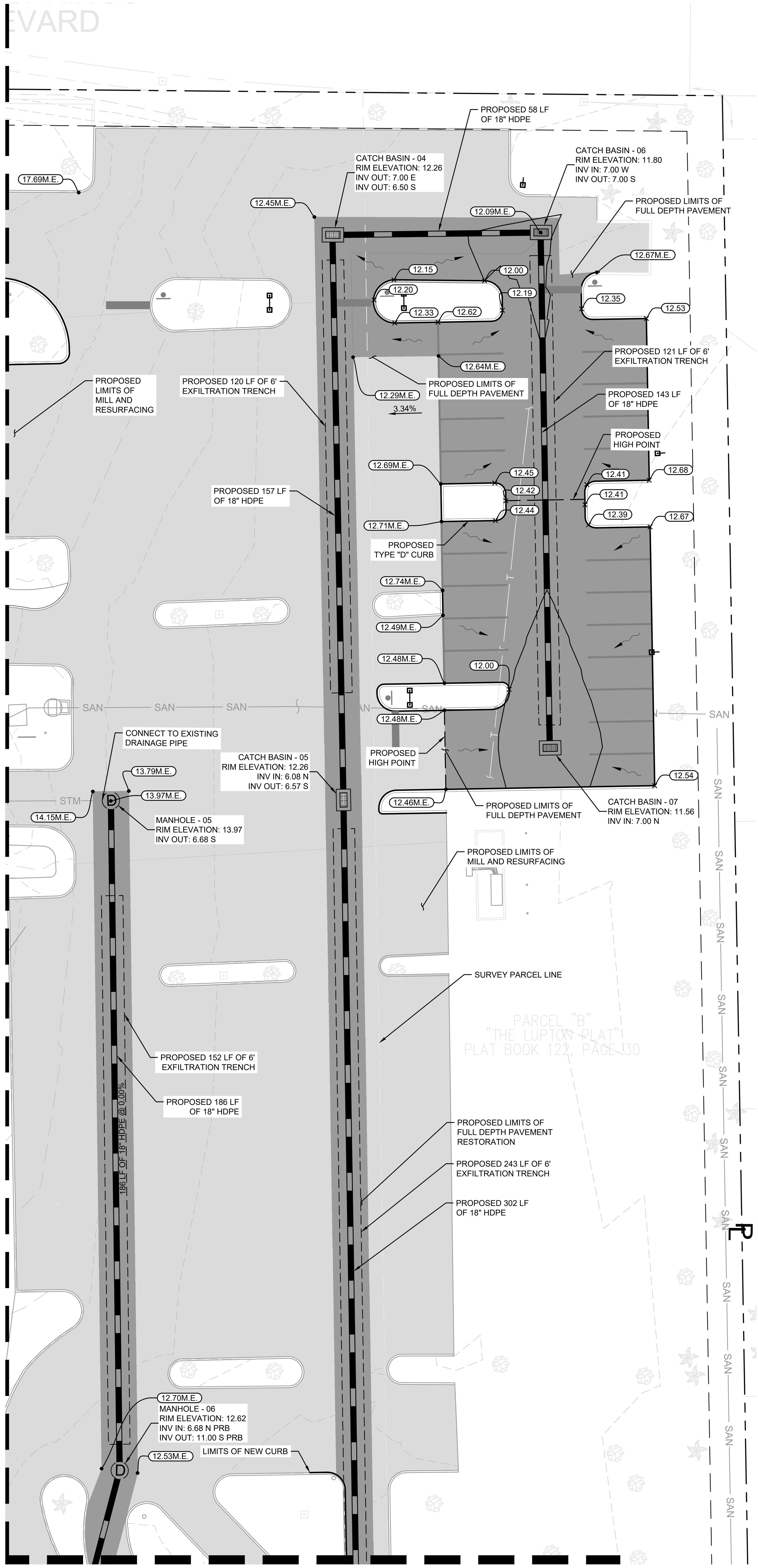
ABUNDANT LIFE CHURCH

CITY OF MARGATE FL

SHEET NUMBER

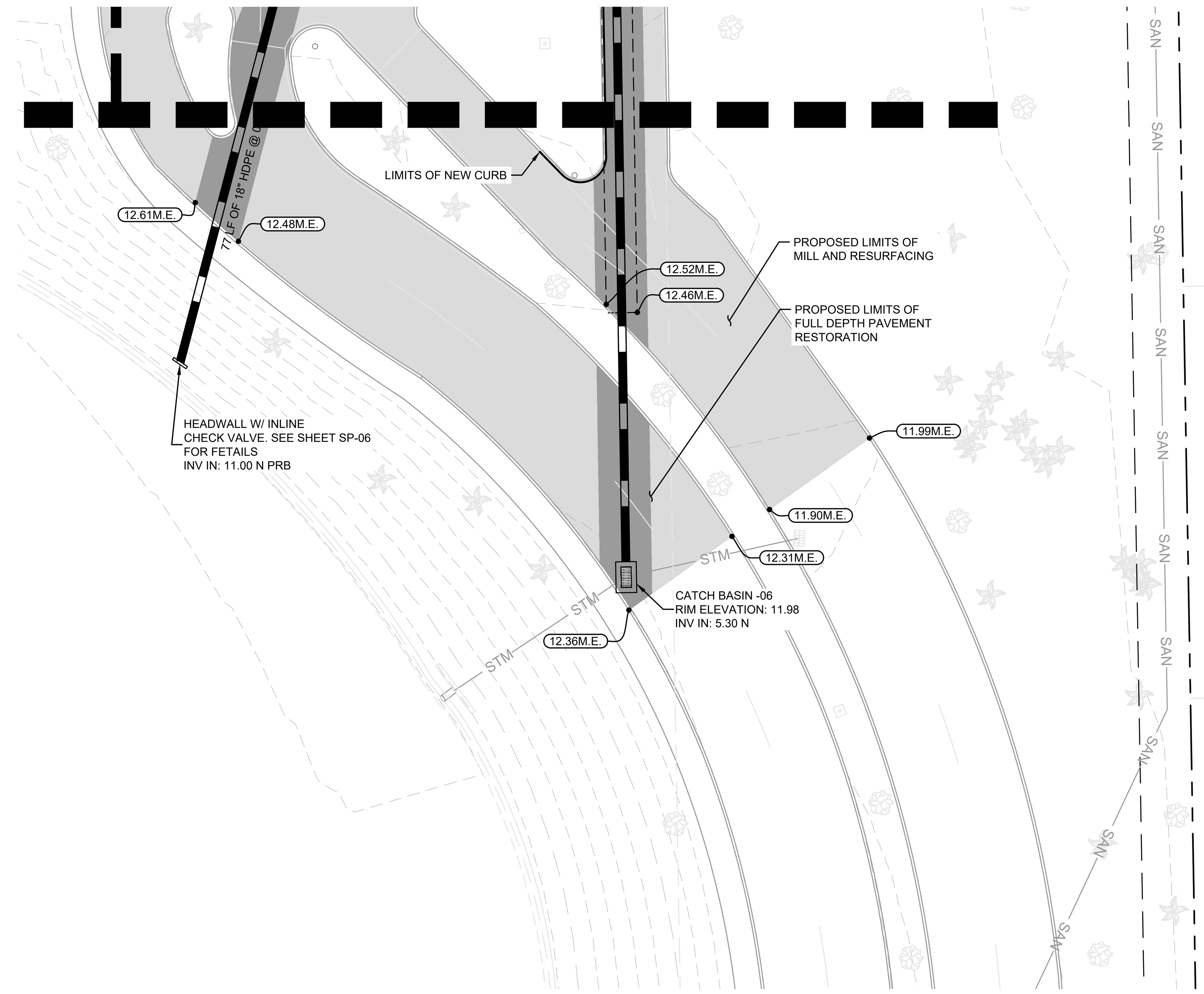
SP-03

SEE SHEET SP-03 FOR MATCHLINE CONTINUATION



SEE RIGHT FOR MATCHLINE CONTINUATION

SEE LEFT FOR MATCHLINE CONTINUATION



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

R/W — P —	PROPERTY LINE
	EXIST. RIGHT OF WAY
15.48M.E.	MATCH EXIST. ELEVATION
15.48 FFE	PROP. FINISHED FLOOR ELEVATION
15.48	PROP. SPOT ELEVATION
15.48 T.S	PROP. TOP OF STAIR ELEVATION
15.48 B.S	PROP. BOTTOM OF STAIR ELEVATION
15	PROP. CONTOURS
12.38	EXIST. ELEVATION
15	EXIST. CONTOURS
	PROP. GRADE BREAK
	PROP. FULL DEPTH PAVEMENT RESTORATION
	PROP. CONCRETE SIDEWALK
	PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
	PROP. BUILDING ADDITION
	PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

Sunshine811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

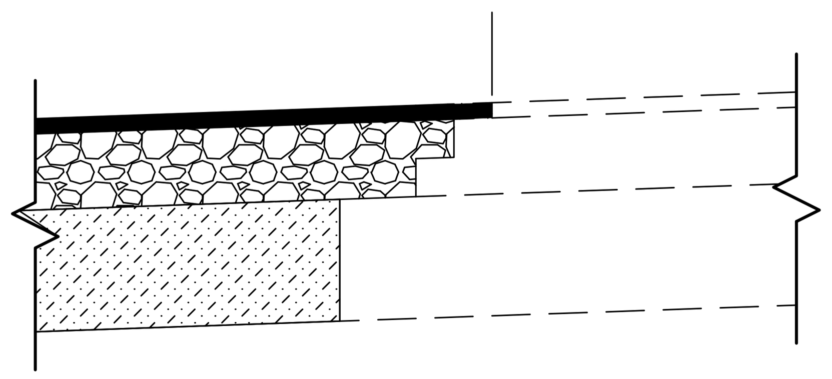
RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

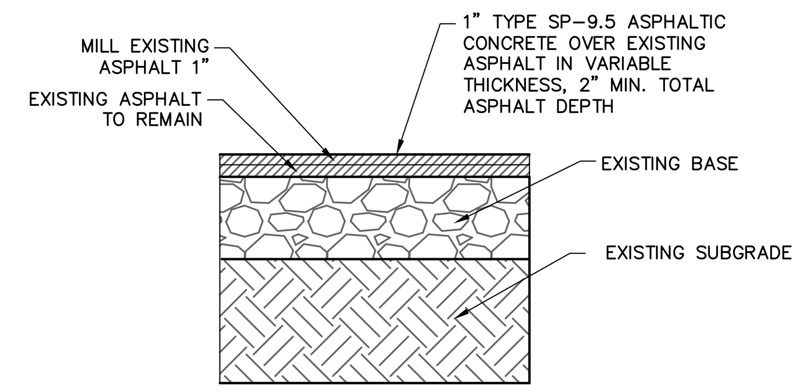
PAVING GRADING & DRAINAGE PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-04



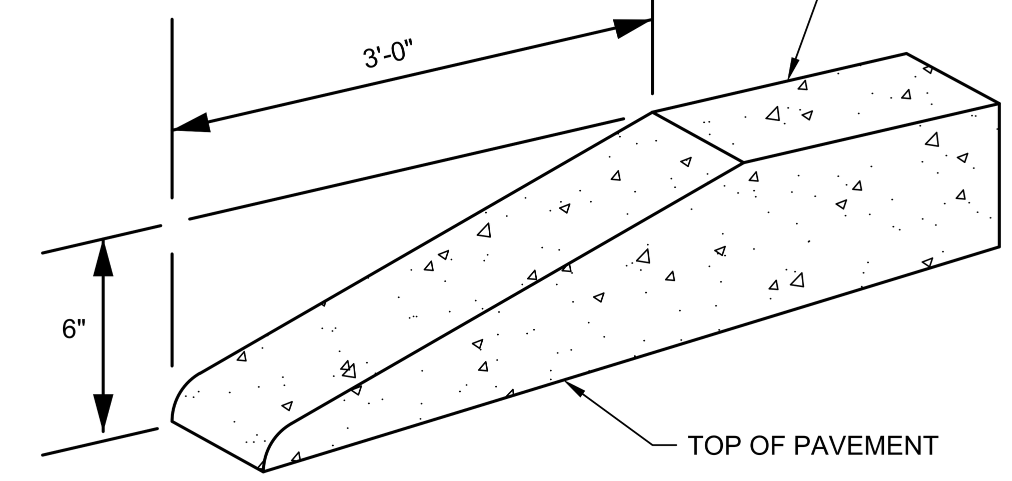
CONNECTION TO EXISTING PAVEMENT DETAIL
NOT TO SCALE



EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED

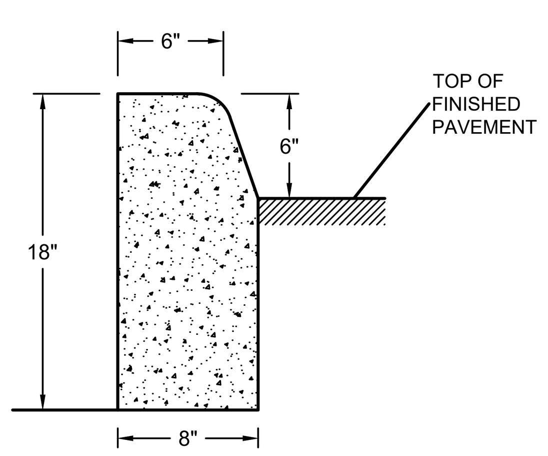
K-H

NOT TO SCALE

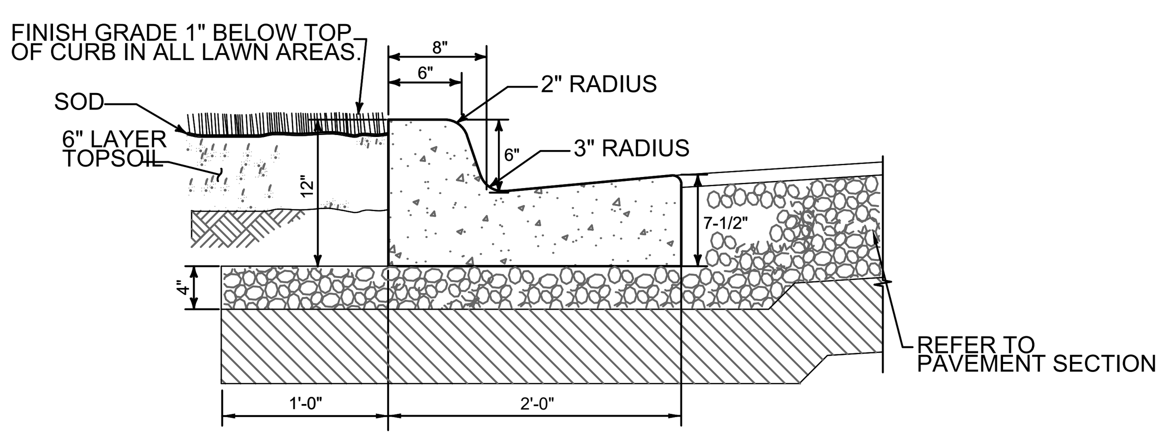


ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

STANDARD CURB TRANSITIONS
NOT TO SCALE

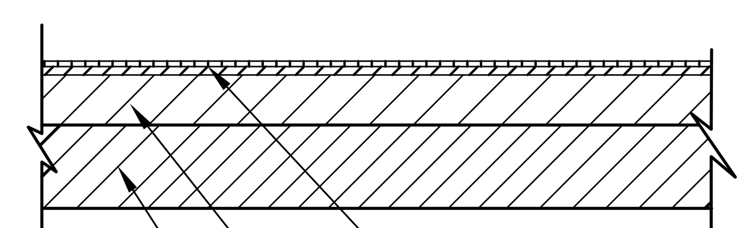


TYPE 'D' CURB
AS PER FDOT INDEX 300
NOT TO SCALE



NOTES:
1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

TYPE "F" CURB
NOT TO SCALE

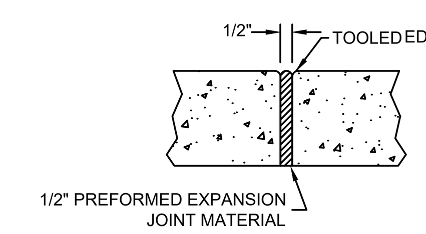


2" TYPE SP-12.5 OR S-1 ASPHALTIC CONCRETE SURFACE COURSE (1500 MARSHALL STABILITY) ABOVE BASE

8" CRUSHED CONCRETE BASE (LDR 100) COMPACTED TO A MIN. OF 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-135)

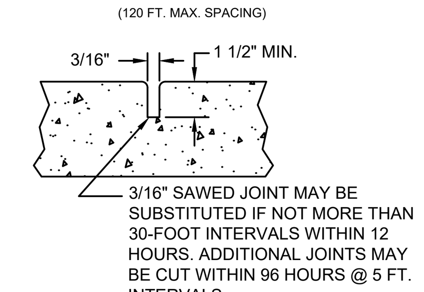
12" STABILIZED SUB BASE (LBR 40) SHALL BE COMPACTED TO A MINIMUM OF 98% OF MAX. DENSITY PER AASHTO T-180 MODIFIED PROCTOR

HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



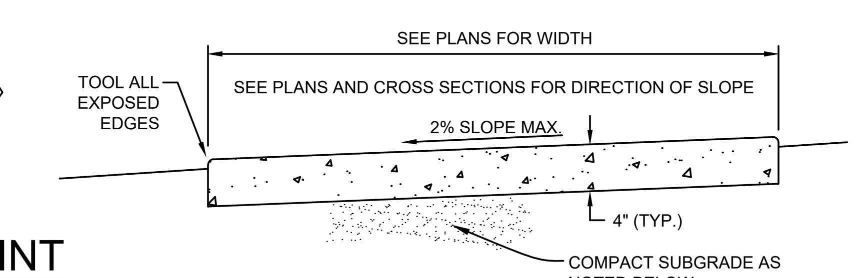
EXPANSION JOINT
NOT TO SCALE

(120 FT. MAX. SPACING)



(5 FT. MAX. SPACING)

CONTRACTION JOINT
NOT TO SCALE



TYPICAL SECTION

NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

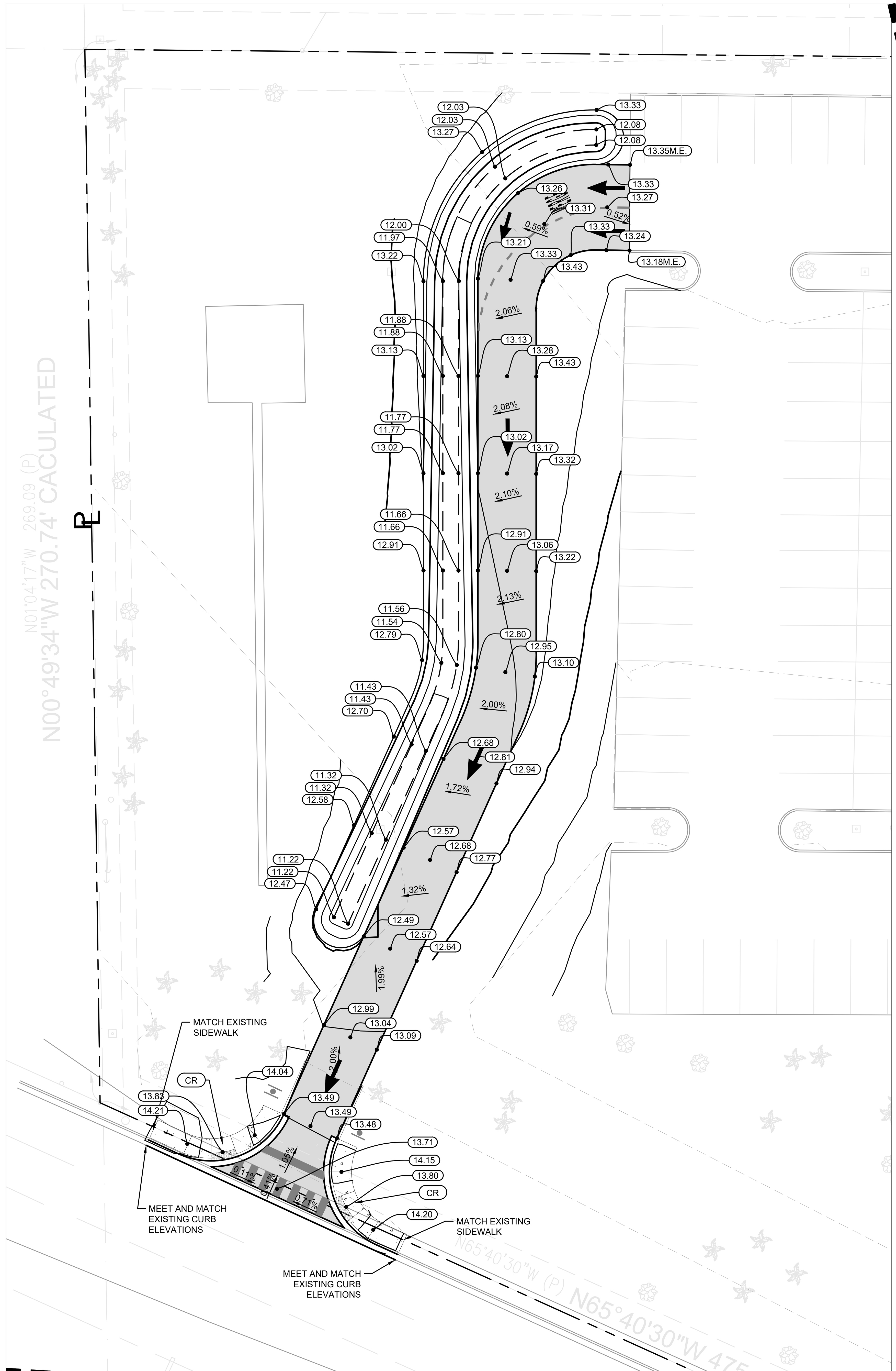
RODRIGO A. TORRES
LICENSE No. 97343
STATE OF FLORIDA
PROFESSIONAL ENGINEER

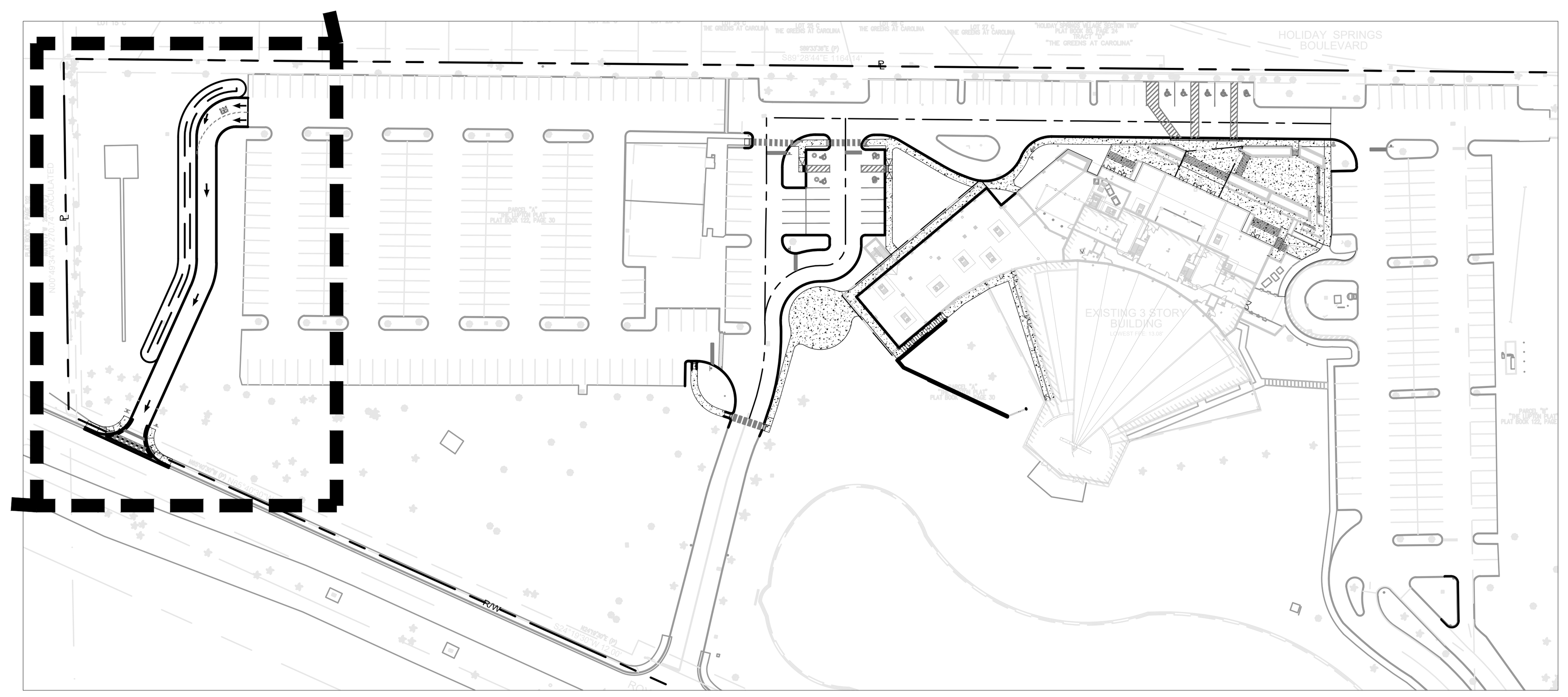
KHA PROJECT	143788000
DATE	7/23/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING & GRADING DETAILS

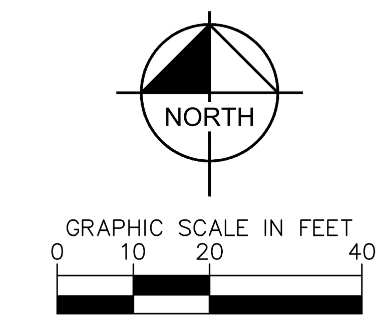
CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-05





KEY MAP:



LEGEND

- PROPERTY LINE
- EXIST. RIGHT OF WAY
- MATCH EXIST. ELEVATION
- PROP. FINISHED FLOOR ELEVATION
- PROP. SPOT ELEVATION
- PROP. TOP OF STAIR ELEVATION
- PROP. BOTTOM OF STAIR ELEVATION
- PROP. CONTOURS
- EXIST. ELEVATION
- EXIST. CONTOURS
- PROP. GRADE BREAK
- PROP. FULL DEPTH PAVEMENT RESTORATION
- PROP. CONCRETE SIDEWALK
- PROP. ASPHALT PAVEMENT MILLING AND RESURFACING
- PROP. BUILDING ADDITION
- PROP. CATCH BASIN

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

Sunshine811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

No.	REVISIONS	DATE	BY

Kimley»Horn

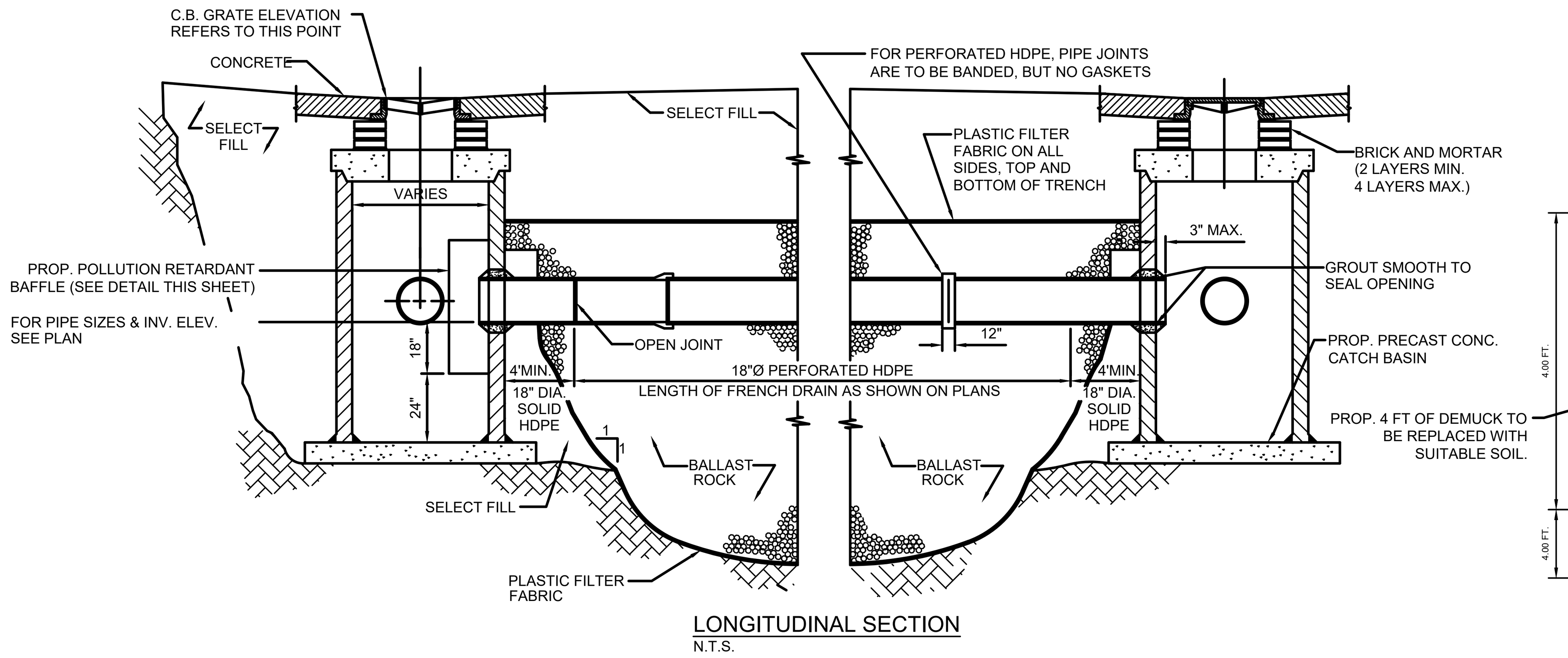
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

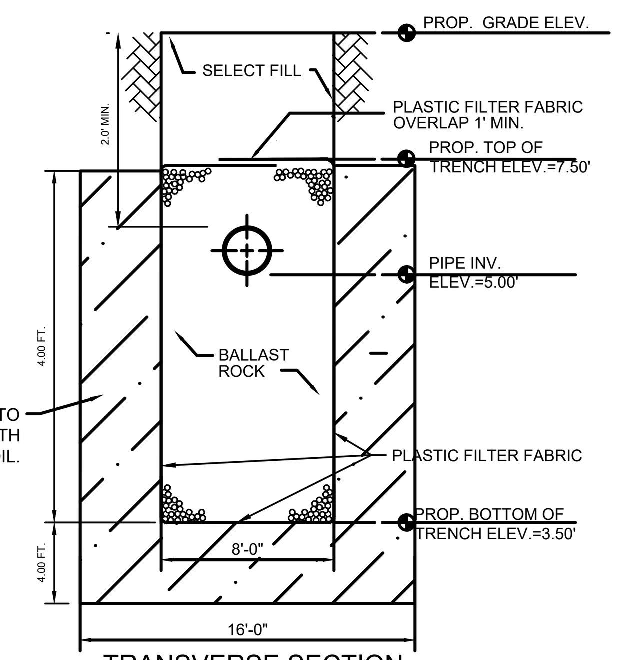
KHA PROJECT	143788000
DATE	2/6/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING GRADING & DRAINAGE PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-05

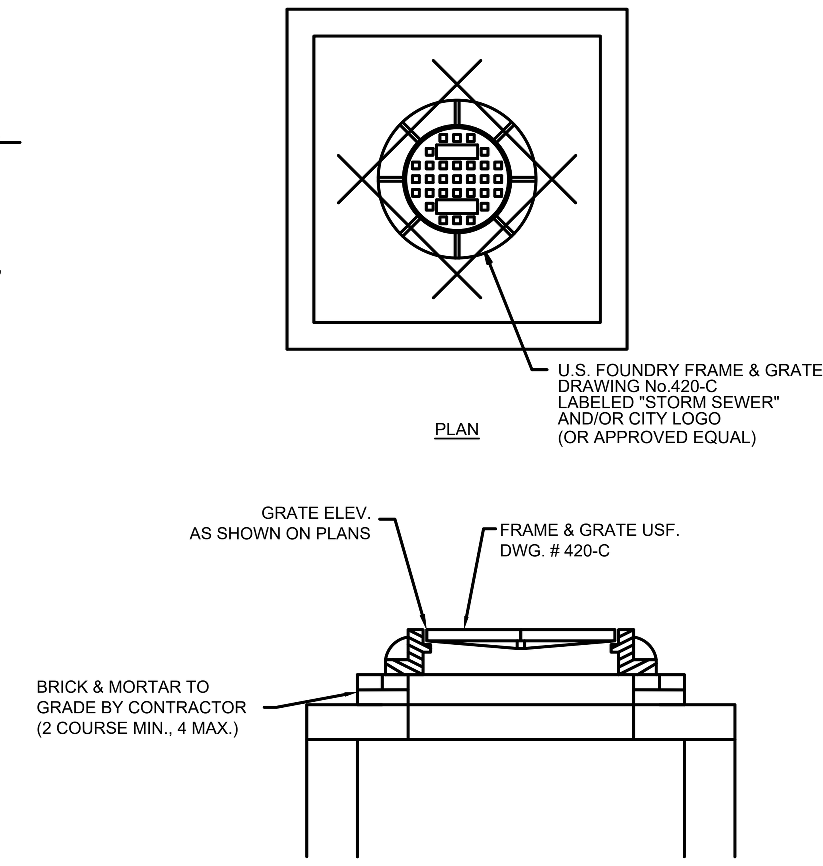




NOTES
1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

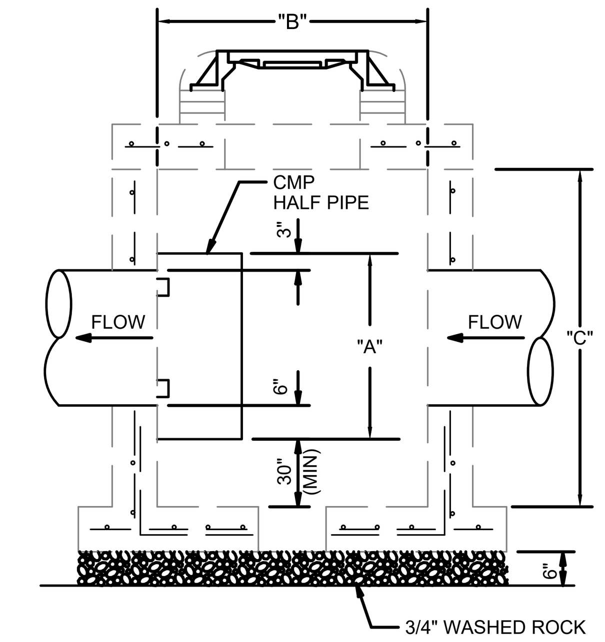
CATCH BASIN AND EXFILTRATION TRENCH DETAIL

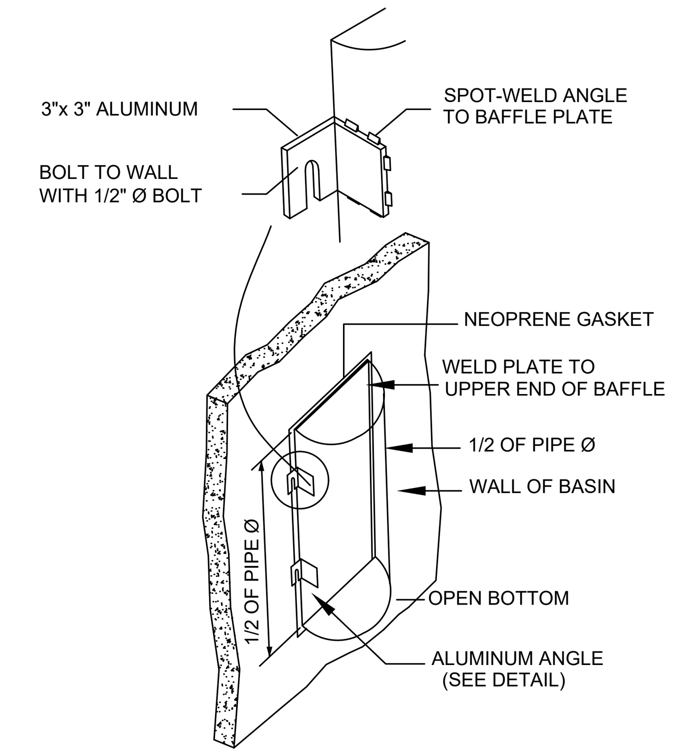
NOT TO SCALE



STORM MANHOLE TOP

NOT TO SCALE



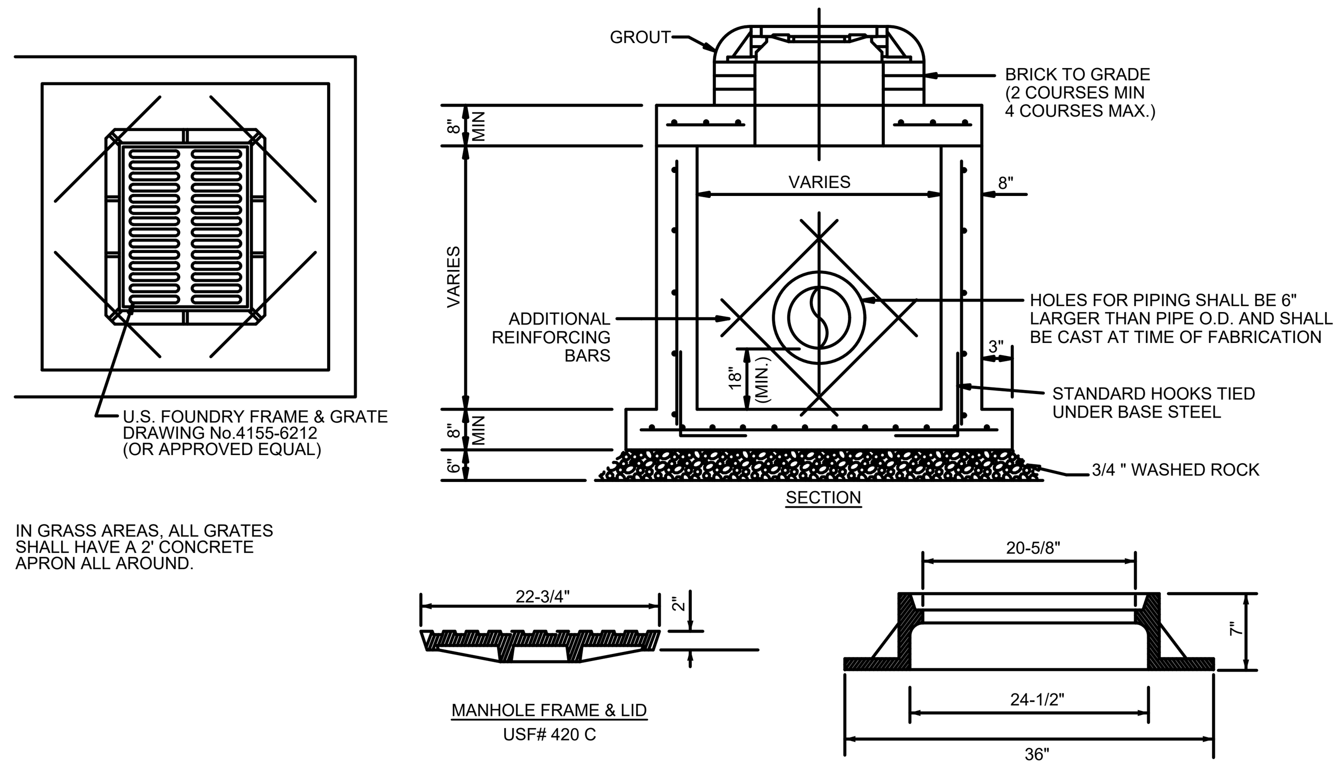


NOTES:
1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

PIPE DIAMETER	BAFFLE SCHEDULE "A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

POLLUTION RETARDANT BAFFLE (PRB)

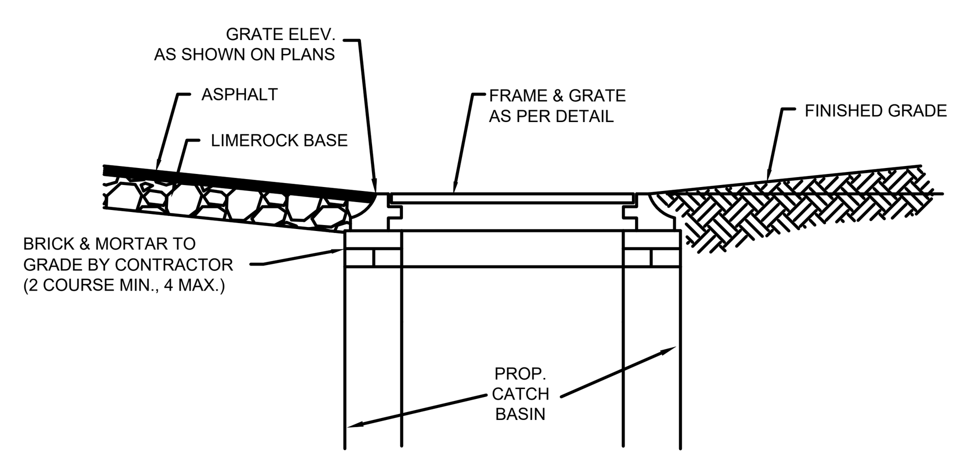
NOT TO SCALE



IN GRASS AREAS, ALL GRATES SHALL HAVE A 2' CONCRETE APRON ALL AROUND.

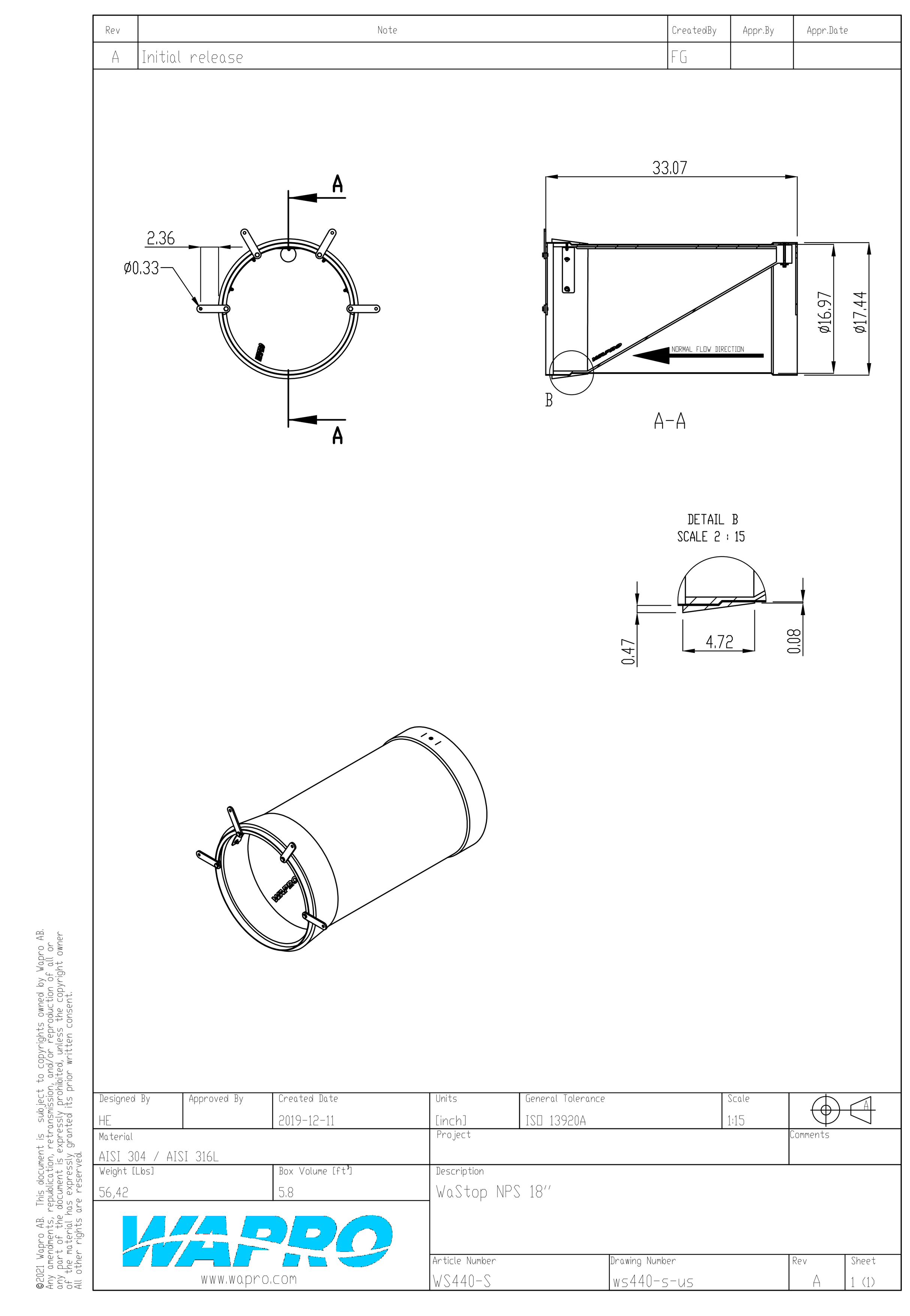
PRECAST DRAINAGE MANHOLE

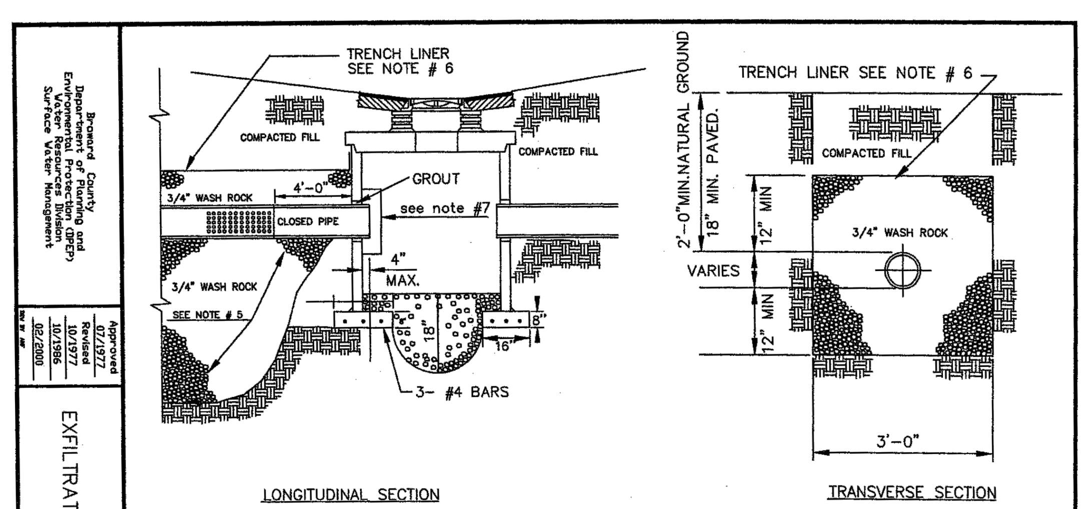
NOT TO SCALE



CATCH BASIN TOP DETAIL

NOT TO SCALE





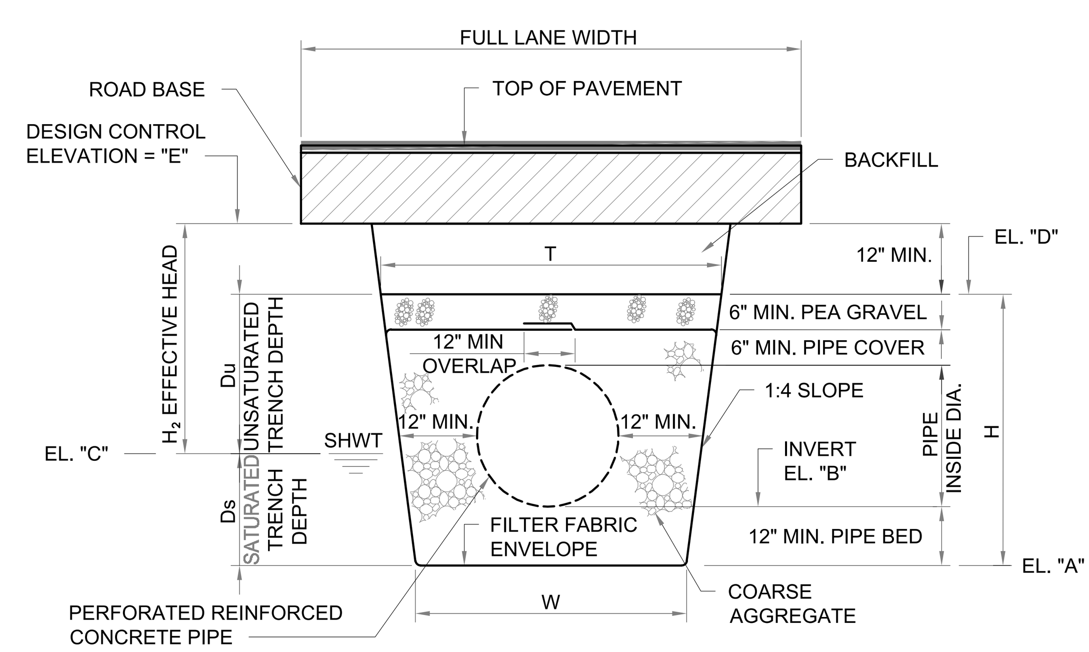
EXFILTRATION TRENCH DETAILS

NOTES:
1.- FOR CATCH BASIN SEE G.D. 7.2 AND W.M. 4.3 THRU 4.5.
2.- DRAIN FIELD MAY BE OF SLOTTED CONCRETE PIPE OR PERFORATED METAL PIPE MEETING BROWARD COUNTY SPECIFICATIONS. OTHER TYPES OF DRAIN PIPE REQUIRE WATER RESOURCES DIVISION APPROVAL.
3.- PIPE SHALL TERMINATE 2 FT FROM END OF TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
4.- COVER PIPE ENDS WITH No. 10 GALVANIZED OR ALUMINUM SCREEN, OPENING NO LARGER THAN 1/2" X 1/2".
5.- BALLAST ROCK SHALL BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
6.- SLIDES AND TOP OF TRENCH TO BE LINED WITH ONE LAYER OF PLASTIC TYPE FILTER CLOTH OR APPROVED EQUAL. OVERLAP TRENCH LINING MATERIAL A MINIMUM OF TWO FEET AT TOP OF TRENCH
7.- INSTALL BAFFLE AS REQUIRED. (SEE W.M. PLATE 4.3)

TRENCH SCHEDULE

PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE



No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

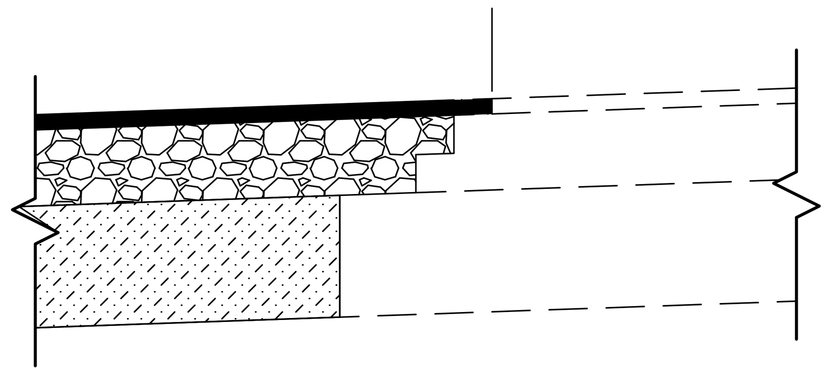
RODRIGO A. TORRES LICENSE No. 97343 STATE OF FLORIDA PROFESSIONAL ENGINEER

KHA PROJECT 143788000
DATE 3/29/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

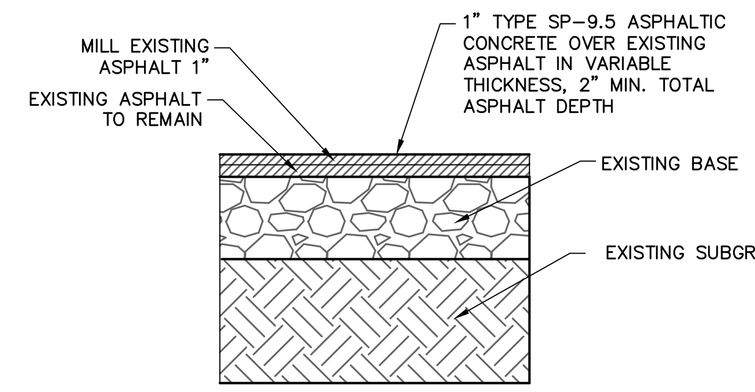
DRAINAGE DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-06



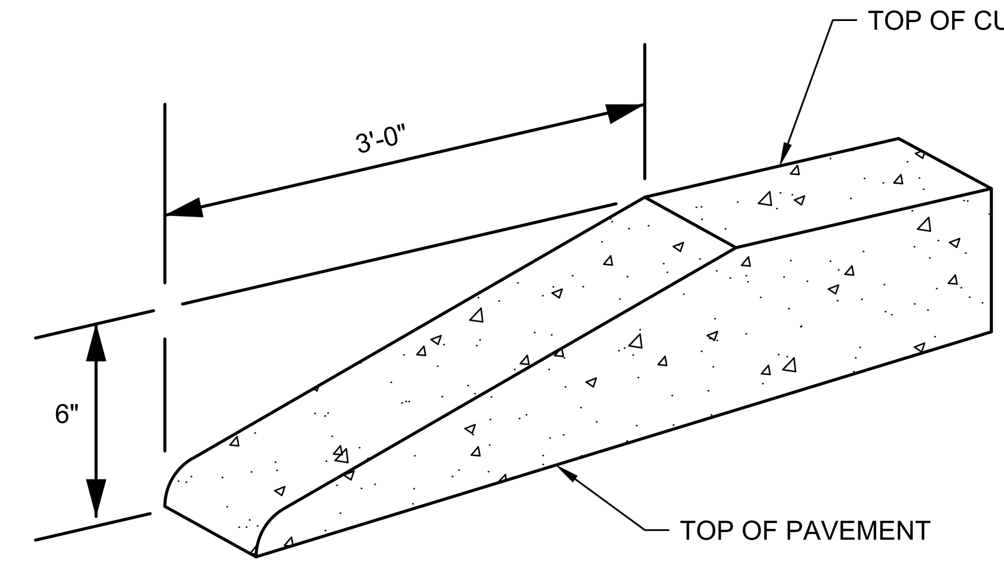
CONNECTION TO EXISTING PAVEMENT DETAIL
NOT TO SCALE



EXISTING STANDARD DUTY ASPHALT TO BE MILLED AND RESURFACED

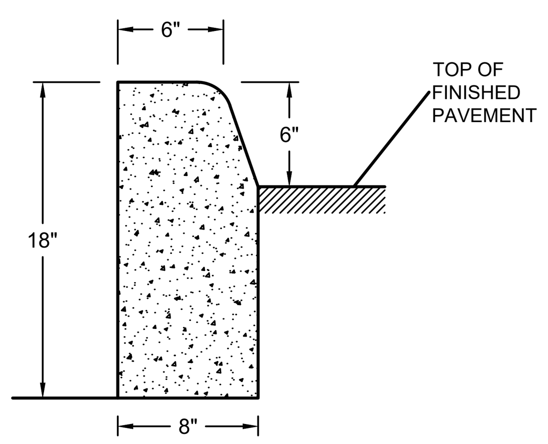
K-H

NOT TO SCALE

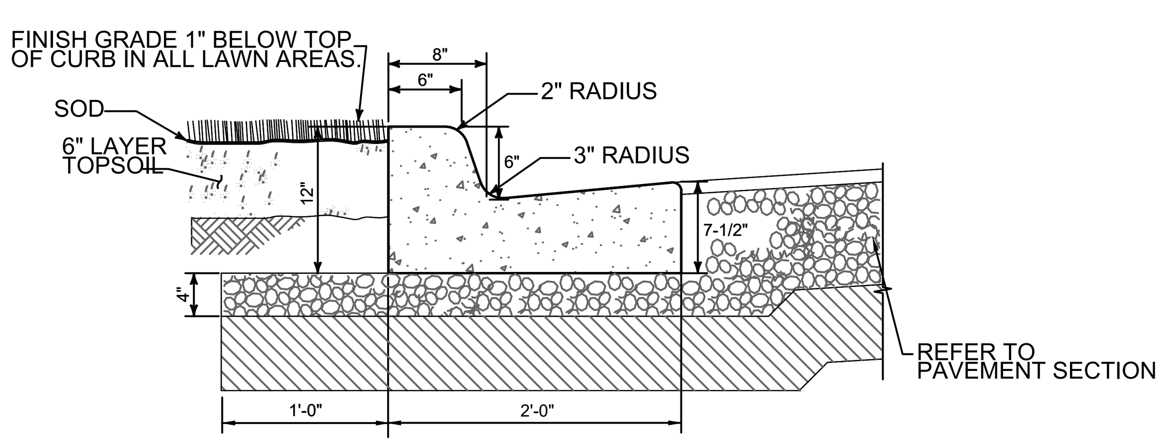


ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITIONS THROUGHOUT THE PROJECT.

STANDARD CURB TRANSITIONS
NOT TO SCALE

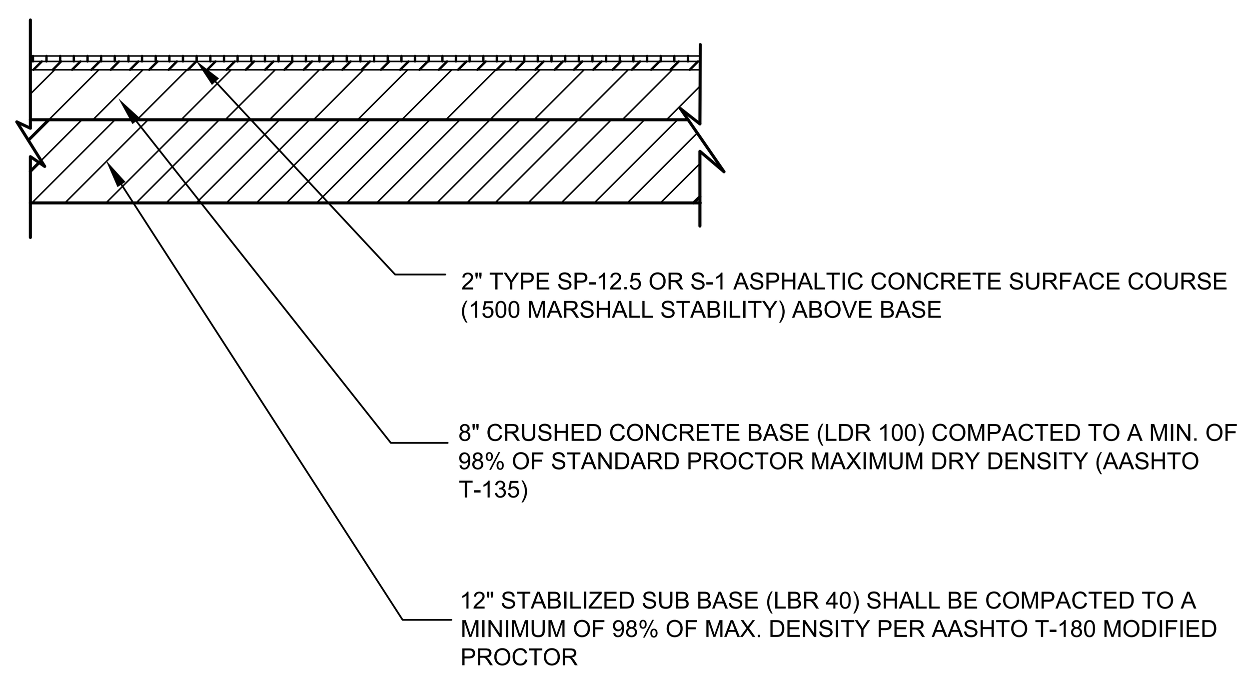


TYPE 'D' CURB
AS PER FDOT INDEX 300
NOT TO SCALE

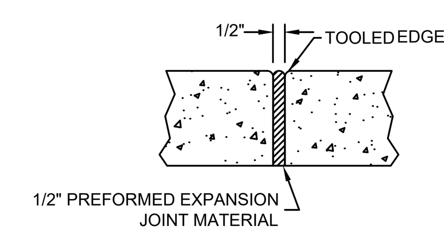


NOTES:
1. GUTTER SLOPE IS TO MATCH THE PAVEMENT SLOPE WHEN USED ON THE HIGH SIDE OF THE PAVEMENT.

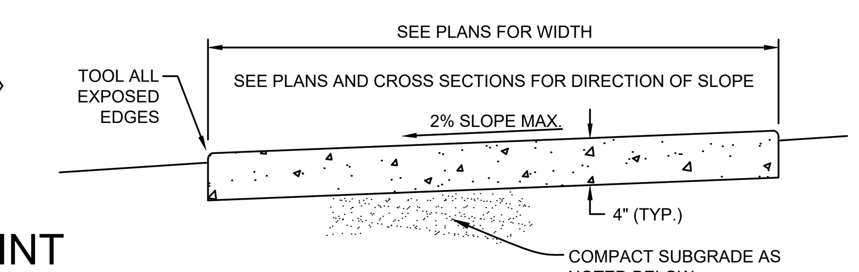
TYPE "F" CURB
NOT TO SCALE



HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE

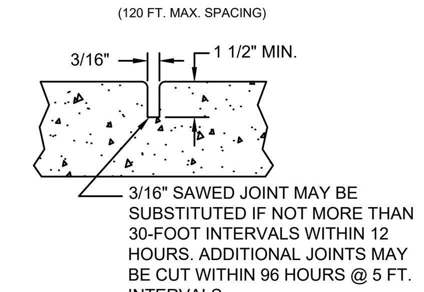


EXPANSION JOINT
NOT TO SCALE



TYPICAL SECTION

(120 FT. MAX. SPACING)



(5 FT. MAX. SPACING)

CONTRACTION JOINT
NOT TO SCALE

NOTES:

1. PROVIDE EXPANSION JOINTS BETWEEN SIDEWALK AND CURB, SIDEWALK, OR AT ANY OTHER RIGID STRUCTURE.
2. EXPANSION JOINTS SHALL BE PROVIDED AT 120 FT. MAXIMUM SPACING.
3. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. (MIN.) @ 28 DAYS FOR SIDEWALKS.
4. MINIMUM THICKNESS OF SIDEWALK SHALL BE AS NOTED ABOVE.
5. FOR SIDEWALKS OR DRIVEWAYS WITHIN R.O.W., COMPACT SUBGRADE TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM1557. COMPACTION OUTSIDE R.O.W. MAY BE 95% OF MAXIMUM DENSITY.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

No.	REVISIONS	DATE	BY

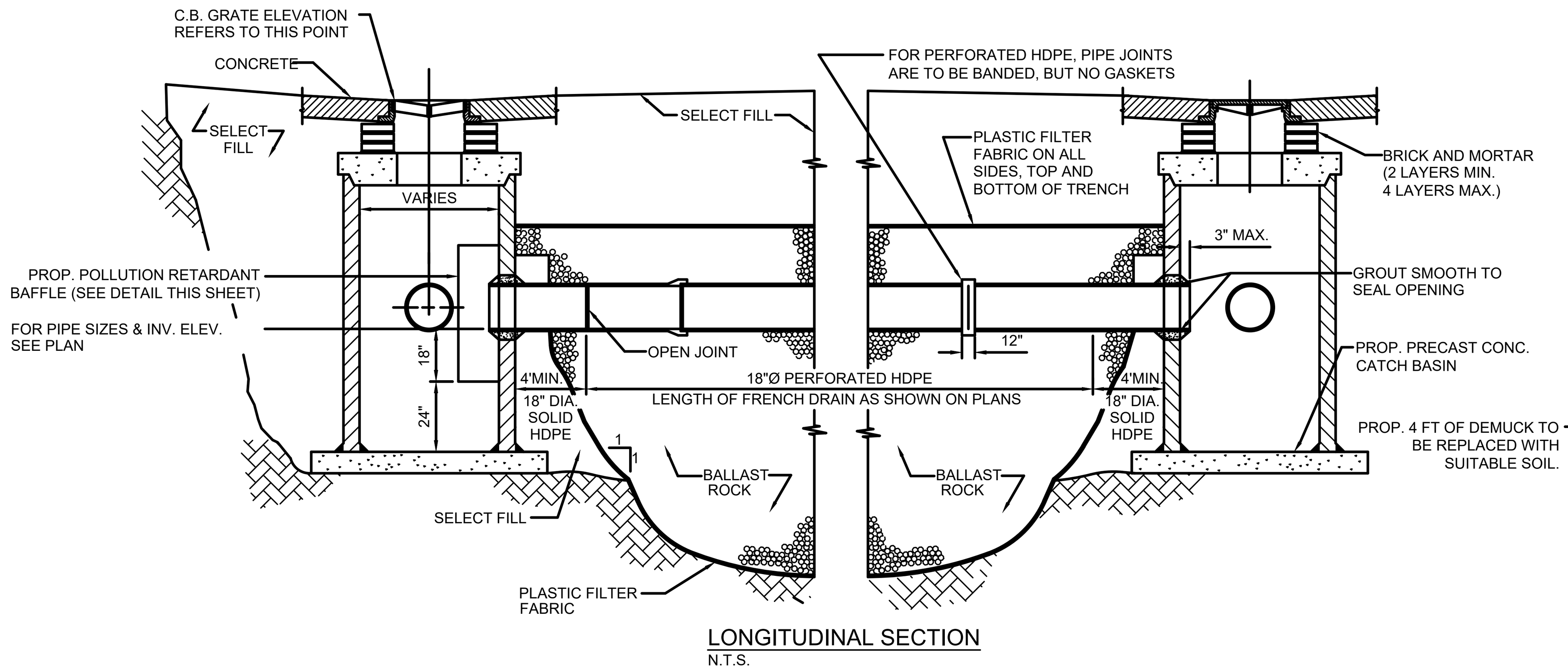
Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

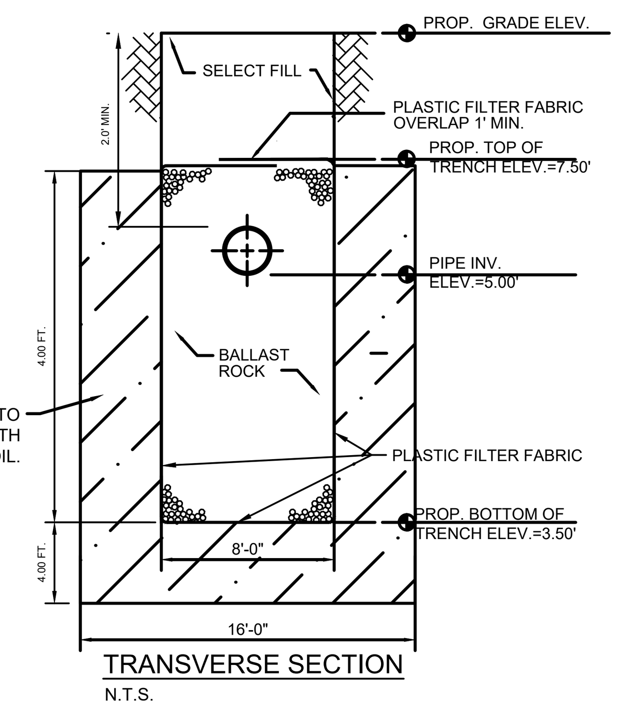
KHA PROJECT	143788000
DATE	2/6/2025
SCALE	AS SHOWN
DESIGNED BY	RT
DRAWN BY	KH
CHECKED BY	ARM

PAVING & GRADING DETAILS

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-06

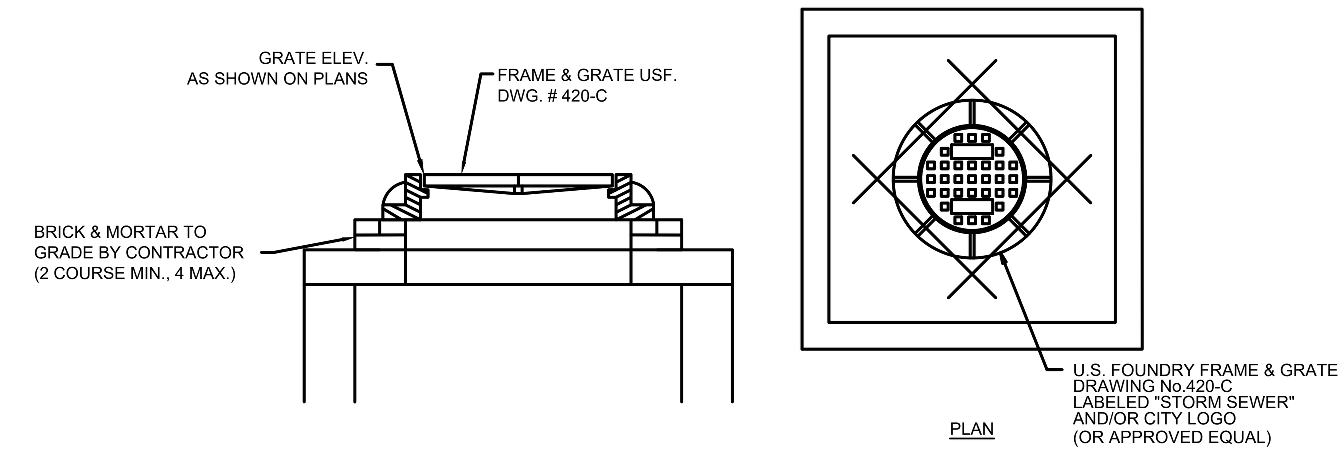




NOTES
1. AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE DRAINAGE STRUCTURES. DRAINAGE STRUCTURES SHALL BE SIZED AS REQUIRED TO ACCOMMODATE THE SIZE, ANGLE AND NUMBER OF PIPES AND BAFFLES REQUIRED FOR EACH STRUCTURE.

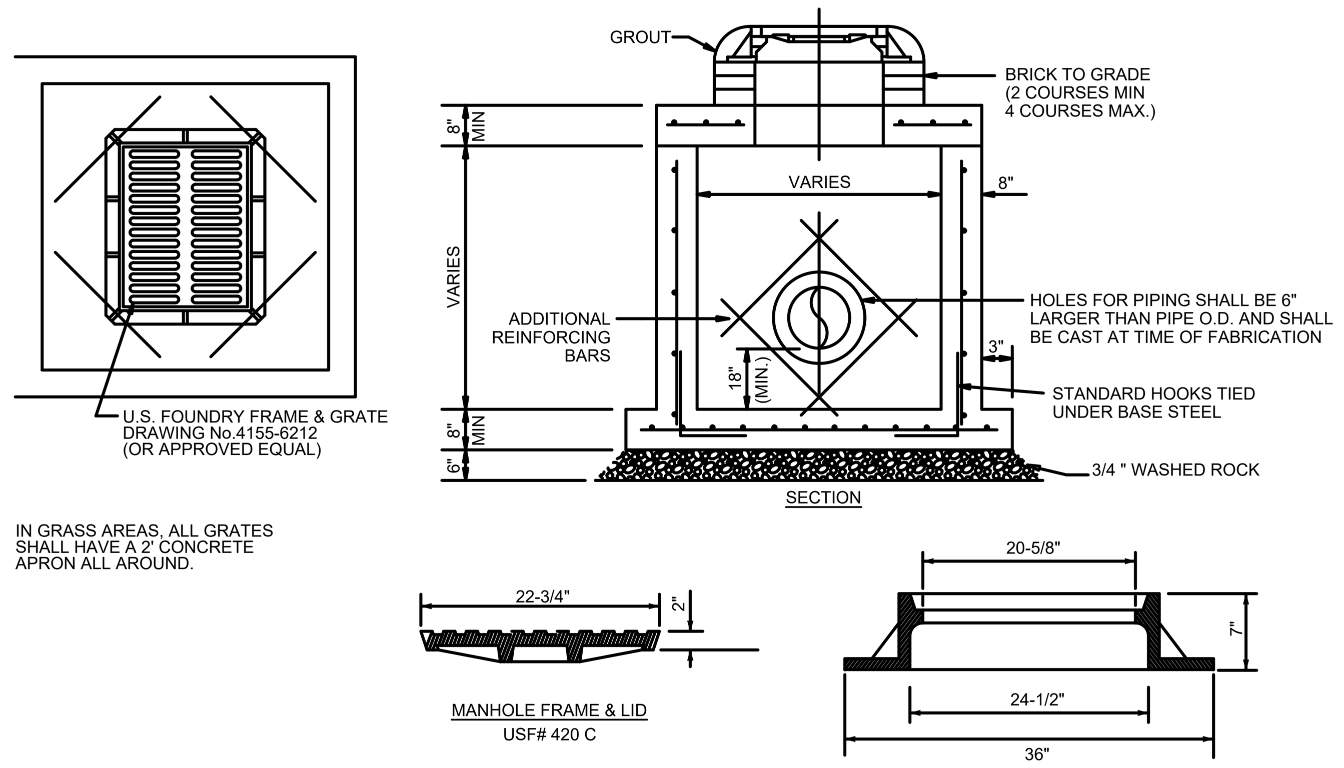
CATCH BASIN AND EXFILTRATION TRENCH DETAIL

NOT TO SCALE



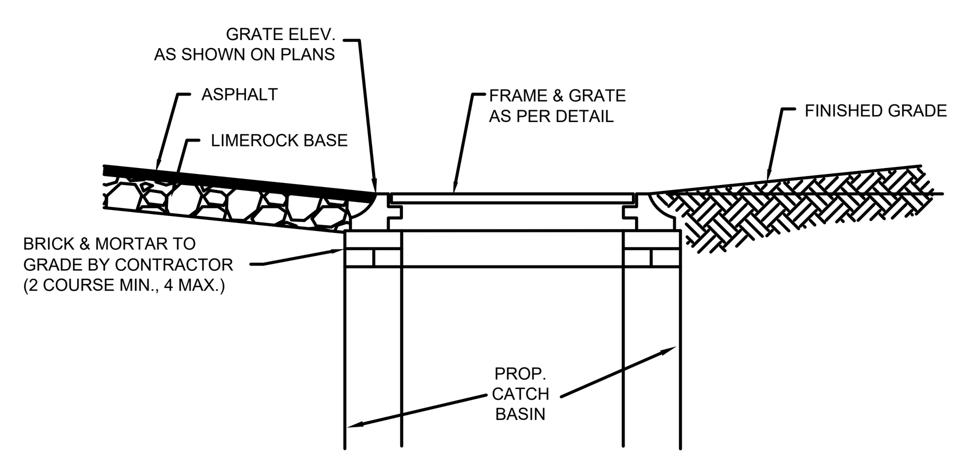
STORM MANHOLE TOP

NO TO SCALE



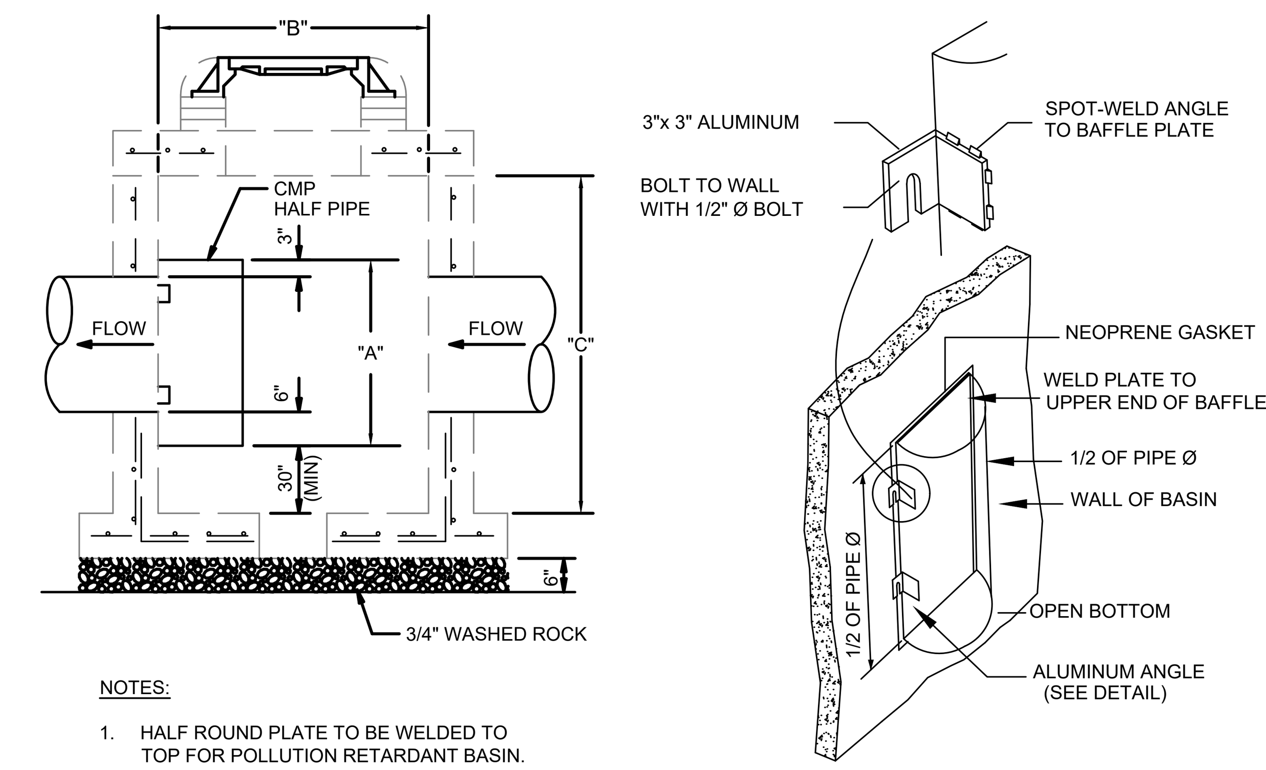
PRECAST DRAINAGE MANHOLE

NOT TO SCALE



CATCH BASIN TOP DETAIL

NOT TO SCALE



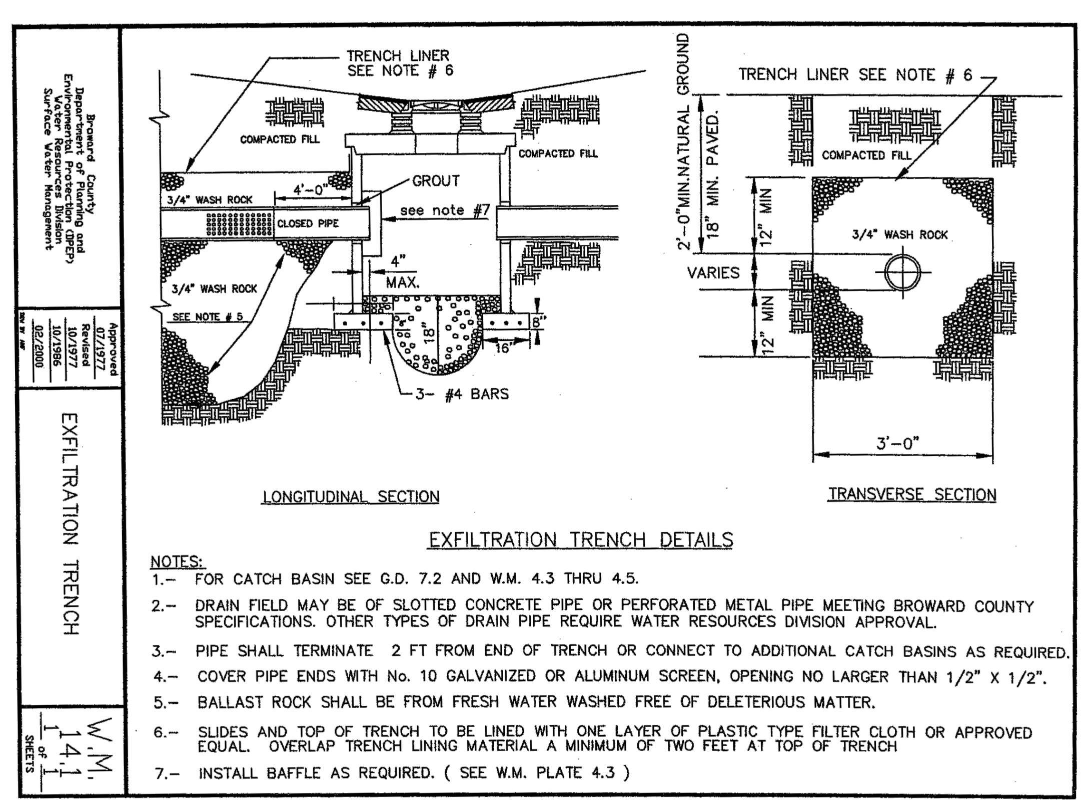
NOTES:

1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.
3. FOR STRUCTURE'S CONSTRUCTION DIMENSIONS AND SPEC'S., SEE PRECAST CATCH BASIN DETAIL.
4. WEEP HOLES ARE NOT PERMITTED IN WELL FIELD AREAS.

PIPE	BAFFLE SCHEDULE		
DIAMETER	"A"	"B"	"C"
15"	27"	24"	37"
18"	30"	24"	37"
24"	36"	36"	36"
30"	42"	36"	42"
36"	48"	42"	54"
42"	56"	56"	56"
48"	60"	48"	60"
60"	72"	72"	72"

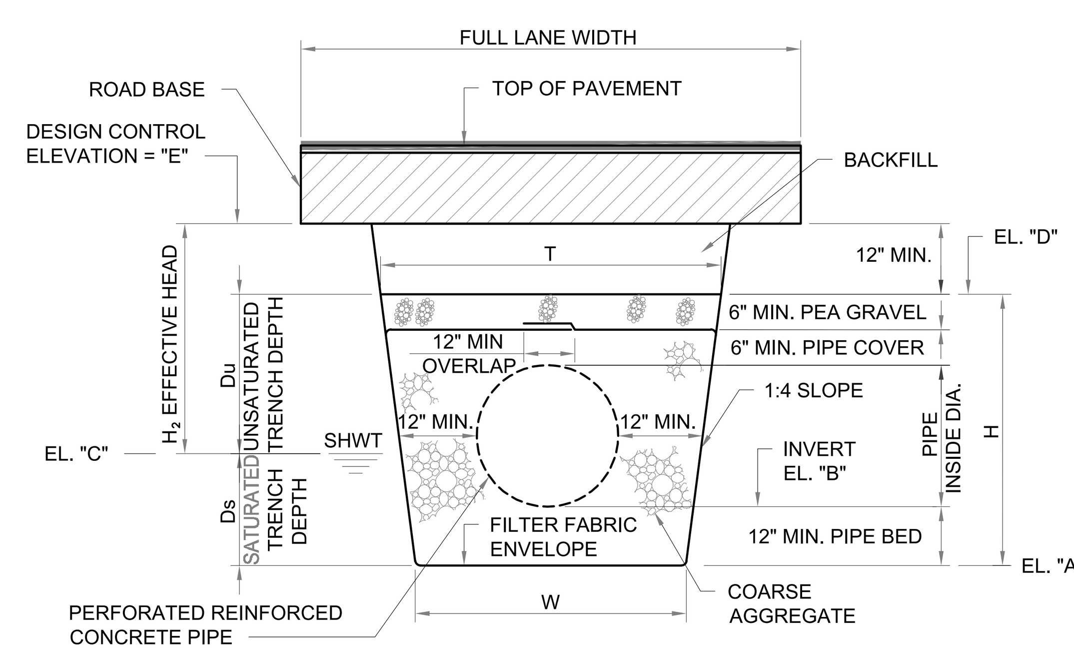
POLLUTION RETARDANT BAFFLE (PRB)

NOT TO SCALE



TRENCH SCHEDULE	
PARAMETER	TYPE 1 TRENCH
PIPE DIAMETER	18-IN
W	6.00-FT
T	6.00-FT
H	12.00-FT
Ds	9.50-FT
Du	2.50-FT
H_2	2.50-FT
EL. "A"	-4.00-FT
EL. "B"	5.50-FT
EL. "C" (SHWT)	5.50-FT
EL. "D"	8.00-FT
EL. "E" (DCE)	8.00-FT

NOTES:
DCE: DESIGN CONTROL ELEVATION
SHWT: SEASONAL HIGH WATER TABLE



No.	REVISIONS	DATE	BY

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

KHA PROJECT 143788000
DATE 5/20/2025
SCALE AS SHOWN
DESIGNED BY RT
DRAWN BY KH
CHECKED BY ARM

DRAINAGE DETAILS

CHURCH SITE IMPROVEMENTS

PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
SP-07

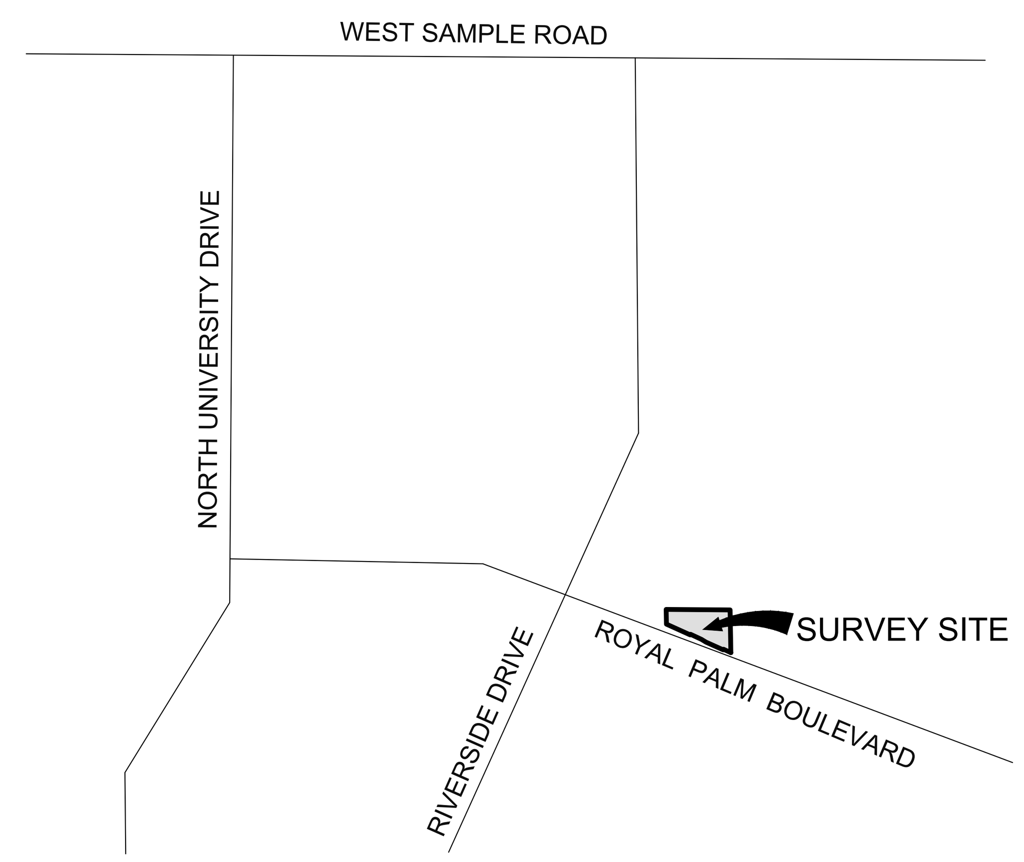
LEGAL DESCRIPTION:

PARCEL "A" AND "B" "THE LUPTON PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 122, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

SAID LANDS LYING AND BEING IN THE CITY OF MARGATE, BROWARD COUNTY, FLORIDA AND CONTAINING A TOTAL OF 610,532 SQUARE FEET (14.016 ACRES), MORE OR LESS.

NOTES:

1. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OR AN ELECTRONIC SIGNATURE AND ELECTRONIC SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. BROWARD COUNTY BENCHMARK #2279; ELEVATION: 8.408 FEET.
3. FLOOD ZONE: AE/X(0.2%)/X; BASE FLOOD ELEVATION: 12 FEET/NONE/NONE; PANEL #12011C0165H; COMMUNITY #120047; MAP DATE: 8/18/14.
4. THIS SITE LIES IN SECTION 26, TOWNSHIP 48 SOUTH, RANGE 41 EAST, BROWARD COUNTY, FLORIDA.
5. BEARINGS ARE BASED ON STATE PLANE COORDINATES AND ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1983 WITH 1990 ADJUSTMENT, FL-E ZONE, WITH THE NORTH LINE OF PARCEL "A" BEING S89°28'44"E.
6. REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND THE LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION OR CONSTRUCTION CONTACT BLOOD HOUND UNDERGROUND UTILITY LOCATIONS FOR FIELD VERIFICATION.
7. THIS SURVEY IS CERTIFIED EXCLUSIVELY TO: ABUNDANT LIFE CHURCH.
8. THE HORIZONTAL POSITIONAL ACCURACY OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.2'. THE VERTICAL ACCURACY OF ELEVATIONS OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.1'.
9. THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A COMMITMENT FOR TITLE INSURANCE. ONLY PLATTED OR KNOWN EASEMENTS ARE DEPICTED HEREON.
10. ALL RECORDED DOCUMENTS ARE PER BROWARD COUNTY PUBLIC RECORDS.
11. THE FLOOD ZONE DESIGNATION LINES DEPICTED HEREON ARE PLACED IN APPROXIMATE LOCATIONS, AS SCALED FROM THE IMAGE FROM THE FEMA.ORG WEBSITE.
12. THIS SITE CONTAINS 403 TOTAL CLEARLY IDENTIFIABLE PARKING SPACES (394 REGULAR & 9 DISABLED).
13. BOUNDARY CALCULATIONS PER COORDINATES ON THE LUPTON PLAT BOOK 122, PAGE 30.



CERTIFICATION:

I HEREBY CERTIFY: THAT THIS MAP OF SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA STATE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

☐ JOHN F. PULICE, PROFESSIONAL SURVEYOR AND MAPPER LS2691
☐ VICTOR R. GILBERT, PROFESSIONAL SURVEYOR AND MAPPER LS6274
☐ MICHAEL M. MOSSEY, PROFESSIONAL SURVEYOR AND MAPPER PSM5660
STATE OF FLORIDA

NO.	REVISIONS	BY
5		
4		
3		
2	#72824 -UPDATE SURVEY-6/19/24	J.S.
1	#71148 -ORIGINAL SURVEY-3/21/23	R.V.

ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: R.V.	SCALE: 1" = 40'	CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P.	SURVEY DATE: 6/1924	ORDER NO.: 72824

LEGEND & ABBREVIATIONS

	CONCRETE
	ASPHALT PAVEMENT
	BRICK PAVEMENT
10.00'	ELEVATION
	OVERHEAD WIRES
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND IRRIGATION LINE
	UNDERGROUND GAS LINE
	UNDERGROUND STORM SEWER LINE
	UNDERGROUND WATER LINE
—/—/—	NON-VEHICULAR ACCESS LINE
FPL	FLORIDA POWER & LIGHT COMPANY
LB	LICENSED BUSINESS
O.R.B.	OFFICIAL RECORDS BOOK
TP	TRAVERSE POINT (FOR FIELD INFORMATION ONLY)
(P)	PLATTED BEARINGS
	PALM
	TREE

SHEET 2 OF 2

THIS DOCUMENT IS NEITHER FULL NOR COMPLETE WITHOUT SHEETS 1 AND 2

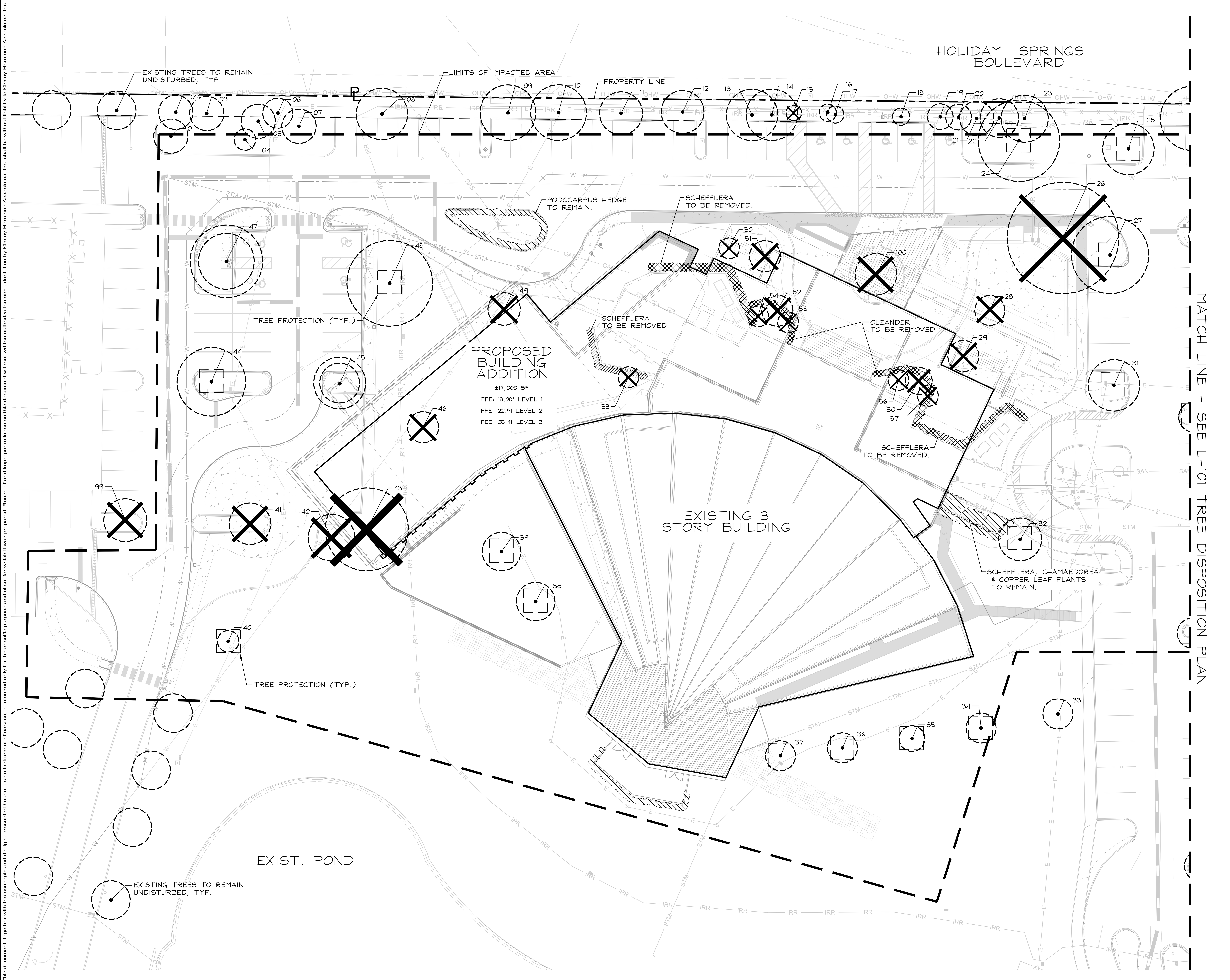
ABUNDANT LIFE CHURCH
7955 ROYAL PALM BOULEVARD
MARGATE, FLORIDA 33063
(CITY OF MARGATE, BROWARD COUNTY)

BOUNDARY AND TOPOGRAPHIC SURVEY

PLS

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: R.V.	SCALE: 1" = 40'	CLIENT: ABUNDANT LIFE CHURCH
CHECKED BY: J.F.P.	SURVEY DATE: 6/19/24	ORDER NO.: 72824



GRAPHIC SCALE IN FEET
0 10 20 40

KEY:

	TREE TO REMAIN
	TREE TO BE REMOVED
	TREE TO BE RELOCATED
	TREE TO BE PROTECTED PER DETAIL ON SHEET L-101
	SHRUB TO REMAIN
	SHRUB TO BE REMOVED

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

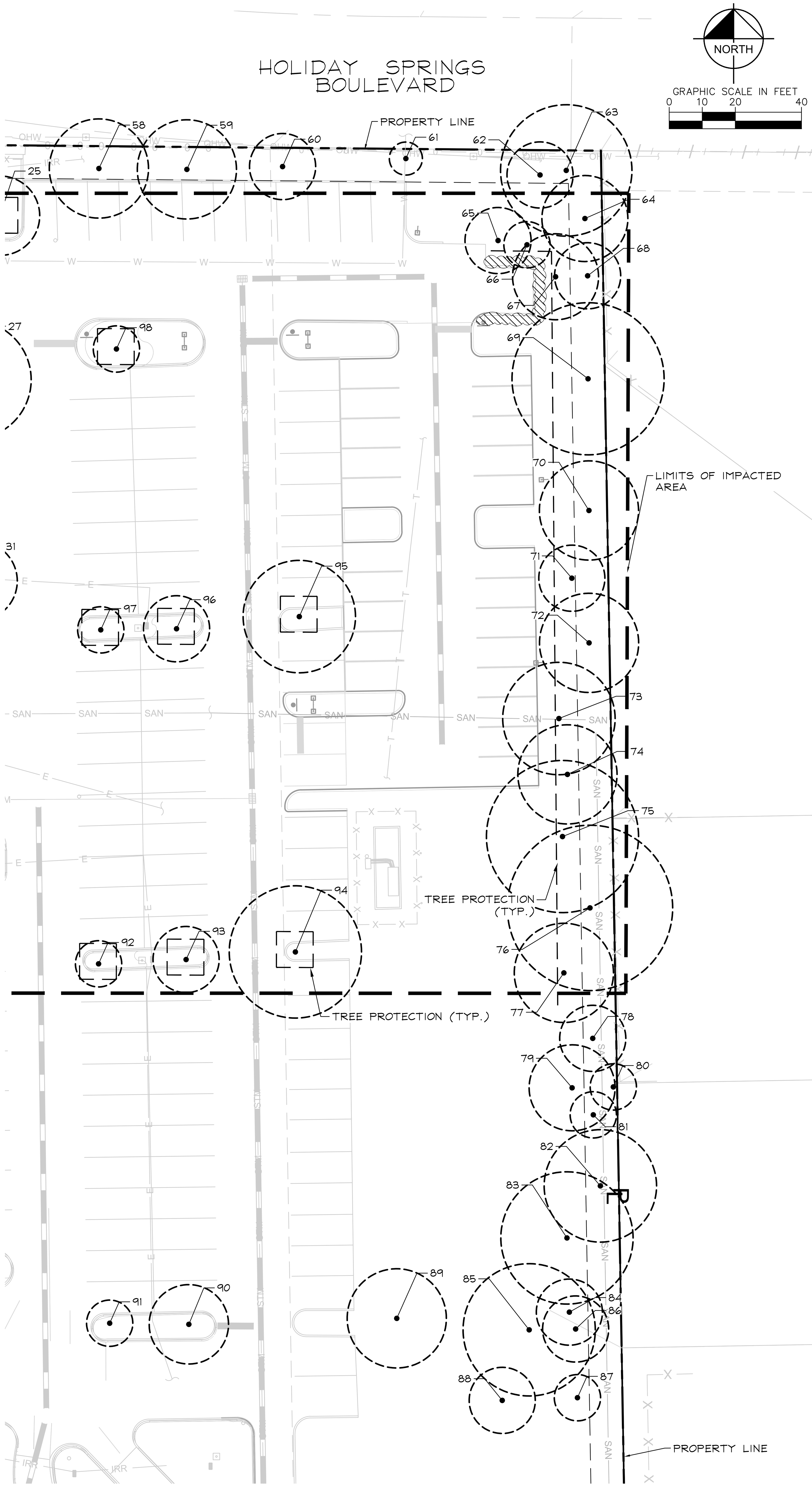
LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

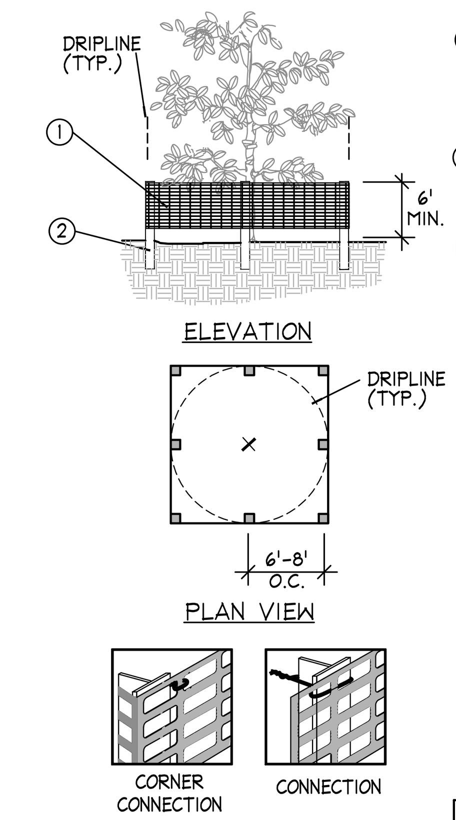
TREE DISPOSITION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
TD-01



TREE DISPOSITION LIST							
NO.	COMMON NAME	BOTANICAL NAME	DBH (in.)	SPREAD (ft.)	AREA (sf.)	HEIGHT (ft.)	DISPOSITION
1	Sabal Palm	Sabal palmetto		30	707		REMAIN
2	Live Oak	Quercus virginiana		30	707		REMAIN
3	Sabal Palm	Sabal palmetto		30	707		REMAIN
4	Sabal Palm	Sabal palmetto		10	79		REMAIN
5	Sabal Palm	Sabal palmetto		15	177		REMAIN
6	Mahogany	Swietenia mahagoni		15	177		REMAIN
7	Mahogany	Swietenia mahagoni		15	177		REMAIN
8	Mahogany	Swietenia mahagoni		25	491		REMAIN
9	Mahogany	Swietenia mahagoni		25	491		REMAIN
10	Mahogany	Swietenia mahagoni		25	491		REMAIN
11	Mahogany	Swietenia mahagoni		20	314		REMAIN
12	Mahogany	Swietenia mahagoni		20	314		REMAIN
13	Mahogany	Swietenia mahagoni		25	491		REMAIN
14	Japanese Privet	Ligustrum japonicum		25	491		REMAIN
15	**Stump**				0		**REMOVE**
16	Gumbo Limbo	Bursera simaruba		10	79		REMAIN
17	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
18	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
19	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
20	Japanese Privet	Ligustrum japonicum		10	79		REMAIN
21	Japanese Privet	Ligustrum japonicum		15	177		REMAIN
22	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
23	Japanese Privet	Ligustrum japonicum		20	314		REMAIN
24	Mahogany	Swietenia mahagoni		40	1257		REMAIN
25	Mahogany	Swietenia mahagoni		25	491		REMAIN
26	**Live Oak**	**Quercus virginiana**		50	1963		**REMOVE**
27	Live Oak	Quercus virginiana		35	962		REMAIN
28	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
29	**Royal Palm**	**Roystonia regia**		15	177		**REMOVE**
30	**Royal Palm**	**Roystonia regia**		10	79		**REMOVE**
31	Live Oak	Quercus virginiana		25	491		REMAIN
32	Royal Palm	Roystonia regia		20	314		REMAIN
33	Royal Palm	Roystonia regia		15	177		REMAIN
34	Royal Palm	Roystonia regia		15	177		REMAIN
35	Royal Palm	Roystonia regia		10	79		REMAIN
36	Royal Palm	Roystonia regia		15	177		REMAIN
37	Royal Palm	Roystonia regia		15	177		REMAIN
38	Royal Palm	Roystonia regia		20	314		REMAIN
39	Royal Palm	Roystonia regia		20	314		REMAIN
40	Dahoon Holly	Ilex cassine		10	79		REMAIN
41	**Live Oak**	**Quercus virginiana**		20	314		**REMOVE**
42	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
43	**Live Oak**	**Quercus virginiana**		**40**	1257		**REMOVE**
44	Live Oak	Quercus virginiana		30	707		REMAIN
45	**Live Oak**	**Quercus virginiana**		25	491		**RELOCATE**
46	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
47	**Live Oak**	**Quercus virginiana**		30	707		**RELOCATE**
48	Live Oak	Quercus virginiana		40	1257		REMAIN
49	**Dahoon Holly**	**Ilex cassine**	**15**	**15**	177		**REMOVE**
50	**Live Oak**	**Quercus virginiana**		**10**	79		**REMOVE**
51	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
52	**Royal Palm**	**Roystonia regia**		**15**	177		**REMOVE**
53	**Dahoon Holly**	**Ilex cassine**		**10**	79		**REMOVE**
54	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
55	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
56	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
57	**Southern Magnolia**	**Magnolia grandiflora**		**10**	79		**REMOVE**
58	Mahogany	Swietenia mahagoni		30	707		REMAIN
59	Mahogany	Swietenia mahagoni		30	707		REMAIN
60	Mahogany	Swietenia mahagoni		20	314		REMAIN
61	Sabal Palm	Sabal palmetto		10	79		REMAIN
62	Sabal Palm	Sabal palmetto		20	314		REMAIN
63	Live Oak	Quercus virginiana		40	1257		REMAIN
64	Live Oak	Quercus virginiana		25	491		REMAIN
65	Sabal Palm	Sabal palmetto		20	314		REMAIN
66	Sabal Palm	Sabal palmetto		15	177		REMAIN
67	Sabal Palm	Sabal palmetto		25	491		REMAIN
68	Live Oak	Quercus virginiana		20	314		REMAIN
69	Live Oak	Quercus virginiana		45	1590		REMAIN
70	Live Oak	Quercus virginiana		30	707		REMAIN
71	Live Oak	Quercus virginiana		20	314		REMAIN
72	Live Oak	Quercus virginiana		30	707		REMAIN
73	Live Oak	Quercus virginiana		35	962		REMAIN
74	Live Oak	Quercus virginiana		30	707		REMAIN
75	Live Oak	Quercus virginiana		45	1590		REMAIN
76	Live Oak	Quercus virginiana		50	1963		REMAIN
77	Live Oak	Quercus virginiana		30	707		REMAIN
78	Live Oak	Quercus virginiana		20	314		REMAIN
79	Southern Mangonlia	Magnolia grandiflora		25	491		REMAIN
80	Unknown	Unknown		15	177		REMAIN
81	Unknown	Unknown		15	177		REMAIN
82	Sabal Palm	Sabal palmetto		35	962		REMAIN
83	Live Oak	Quercus virginiana		40	1257		REMAIN
84	Unknown	Unknown		20	314		REMAIN
85	Mahogany	Swietenia mahagoni		40	1257		REMAIN
86	Unknown	Unknown		20	314		REMAIN
87	Unknown	Unknown		15	177		REMAIN
88	Unknown	Unknown		20	314		REMAIN
89	Live Oak	Quercus virginiana		30	707		REMAIN
90	Live Oak	Quercus virginiana		25	491		REMAIN
91	Live Oak	Quercus virginiana		15	177		REMAIN
92	Live Oak	Quercus virginiana		15	177		REMAIN
93	Live Oak	Quercus virginiana		20	314		REMAIN
94	Live Oak	Quercus virginiana		40	1257		REMAIN
95	Live Oak	Quercus virginiana		35	962		REMAIN
96	Live Oak	Quercus virginiana		20	314		REMAIN
97	Live Oak	Quercus virginiana		15	177		REMAIN
98	Live Oak	Quercus virginiana		15	177		REMAIN
99	**Live Oak**	**Quercus virginiana**		**20**	314		**REMOVE**
100	**Pigmy Date Palm**	**Phoenix roebelenii**		**20**	314		**REMOVE**



1. 6'H "PERIMETER PLUS" CONSTRUCTION FENCE BY CONWED PLASTICS OR OWNER'S REPRESENTATIVE APPROVED EQUAL. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.

2. 8' TALL METAL "T" POSTS OR 2" x 2" X 8' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.

INSTALLATION NOTES:

A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.

B. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/4 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 8' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.

C. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).

D. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

A Tree/Shrub Protector
Barrier Detail
NTS

KEY:

- TREE TO REMAIN
- TREE TO BE REMOVED
- TREE TO BE RELOCATED
- TREE TO BE PROTECTED PER DETAIL ON SHEET L-101
- SHRUB TO REMAIN
- SHRUB TO BE REMOVED

ROOT PRUNING

1. THE LANDSCAPE ARCHITECT HAS OBSERVED TREES THAT COULD BE IMPACTED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
2. IF CONSTRUCTION ACTIVITIES OCCUR WITHIN THE DRIPLINE (OR THE HORIZONTAL EXTENT OF THE CANOPY) OF A TREE, THEN THAT TREE IS A CANDIDATE FOR ROOT PRUNING.
3. ROOT PRUNING MUST OCCUR PRIOR TO TRENCHING OPERATIONS TO INSURE THAT THE ROOTS ARE CUT CLEAN AND AT PROPER ANGLES AND NOT MECHANICALLY RIPPED FROM THE EARTH DURING CONSTRUCTION.
4. FOR TREES REQUIRING ROOT PRUNING, A TREE ASSESSMENT SHALL BE CONDUCTED AND A ROOT-PRUNING PLAN SHALL BE DEVELOPED BY A CERTIFIED ARBORIST OR CONSULTING ARBORIST. THIS PLAN SHOULD IDENTIFY:
   - MAXIMUM ALLOWABLE SIZE OF ROOTS TO BE CUT
   - ALLOWABLE PROXIMITY TO THE TRUNK FOR CUTS
   - TIME OF YEAR WHEN ROOT CUTTING IS ALLOWABLE (NOTE: IN FLORIDA, IT IS BEST TO AVOID ROOT PRUNING DURING TIMES OF THE MAY THROUGH SEPTEMBER, WHEN THE POTENTIAL FOR DAMAGING WIND LOADS ON TREES ARE GREATEST.)
   - METHOD FOR MAKING CUTS
   - MITIGATING CANOPY PRUNING
   - TYPE AND EXTENT OF NECESSARY STRUCTURAL SUPPORT
   - SCHEDULE FOR WATERING/FERTILIZATION AFTER PRUNING
5. IMPLEMENT THE ROOT PRUNING PLAN PER THE ARBORIST'S RECOMMENDATION.

NOTES:

1. CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD AS-BUILT DRAWINGS, SIGNED, SEALED AND DATED BY A REGISTERED LAND SURVEYOR ONCE THE PROJECT IS COMPLETE.
2. AS-BUILT DRAWINGS SHALL INDICATE ANY DEPARTURES FROM THE APPROVED PLANS DURING CONSTRUCTION.
3. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROX. ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF "OTHER" UTILITIES (NOT SHOWN IN THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE RESPECTIVE UTILITY OWNERS TO RESOLVE UTILITY CONFLICTS AND ADJUSTMENTS, AS REQUIRED.
4. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
5. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS TO OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
7. THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL OF FLORIDA (800/432-4770) FOR FIELD LOCATIONS 48 HOURS BEFORE DIGGING NEAR UNDERGROUND UTILITIES.
8. PRIOR TO COMMENCEMENT OF ANY EXCAVATION,THE CONTRACTOR SHALL COMPLY W/ FLA. STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
9. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR.
10. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AND F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE SITE-GRADING PLAN.
11. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.
12. EXCAVATION OF UNSUITABLE FILL AND COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE SOIL ENGINEER'S RECOMMENDATIONS.
13. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH HIS EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED BY OWNER AND CONTRACTOR.
14. ALL FILLS ON THE PROPERTY SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE AND PAVING. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER IMMEDIATELY. THE APPLICATION OF PAVING MATERIALS SHALL BE HELD TO BE IN ACCEPTANCE TO THE SURFACES AND WORKING CONDITIONS OF THE PAVING CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE RESULTS REASONABLE TO BE EXPECTED.
15. ANY ELEVATION SHOWN AS MATCHING EXISTING GRADE IS SHOWN FOR REFERENCE ONLY AND IS PULLED FROM A SURVEY PREPARED BY PULICE LAND SURVEYORS, DATED 03/21/2023 AND THE CONTRACTOR IS TO CONFIRM ALL EXISTING GRADES PRIOR TO PERFORMING WORK AND TO NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO COMMENCING WORK.

TREE DISPOSITION SUMMARY	
TREES TO BE REMOVED	12
TREES TO BE RELOCATED	2
PALMS TO BE REMOVED	7

TREE MITIGATION SUMMARY	
TREE REMOVAL SUMMARY 6 LIVE OAKS (#26,41,42,43,50,99)= 4,241 SF 1 STUMP (#15) 4 SOUTHERN MAGNOLIAS (#54,55,56,57)= 314 SF 2 DAHOON HOLLIES (#49,53)= 255 SF	4,811 SF
PALM REMOVAL SUMMARY 6 ROYAL PALMS (#28,29,30,46,51,52)= 962 SF 1 PIGMY DATE PALM (#100)= 314 SF	1,276 SF
CANOPY PROVIDED PER SHEET L-201 1 GUMBO LIMBO @ 300 SF = 300 SF 3 LIVE OAKS @ 300 SF = 900 SF 2 SILVER BUTTON WOOD @200 SF = 400 SF 2 ROYAL PALMS @ 100 SF = 200 SF	1,800 SF

TREE MITIGATION COST	
SEC. 34-448.2.D. - PROCEDURES FOR DETERMINING TREE REPLACEMENT REQUIREMENTS. CONTRIBUTION OF $2.00 PER SF OF LOST CANOPY (6,087 SF - 1,800 SF = 4,287 SF OF LOST CANOPY) 4,287 X 2 = $ 8,574 CONTRIBUTION	$8,574

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

BUILDING DEPARTMENT REVISION SET

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!

REVISIONS | DATE | BY | No.

Kimley»Horn

WWW.KIMLEY-HORN.COM REGISTRY No. 35106
PHONE: 954-535-5100 FAX: 954-739-2247
8200 PETERS ROAD, SUITE 2200, PLANTATION, FL 33324

LICENSED PROFESSIONAL
THOMAS C. HARGRETT, PLA
FL LICENSE NUMBER 6667512
DATE: 07/17/2025

KHA PROJECT 143788000
DATE 07/17/2025
SCALE AS SHOWN
DESIGNED BY NS
DRAWN BY NS
CHECKED BY TCH

TREE DISPOSITION PLAN

CHURCH SITE IMPROVEMENTS
PREPARED FOR
ABUNDANT LIFE CHURCH
CITY OF MARGATE FL

SHEET NUMBER
TD-02