

OAK TRAILS PARK IMPROVEMENTS

NW 74TH ST.

30% SCHEMATIC DESIGN SET

GEOTECHNICAL ENGINEER:



Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
www.pacificaes.com
(561) 419-8460

SUSTAINABILITY CONSULTANT:



SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
www.spinnakergroup.com
(561) 801-7576

ARCHITECT:



Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
www.justinarc.com
(954) 771-2724

CLIENT:



4900 W. Copans Road
Coconut Creek, Florida 33063

LANDSCAPE ARCHITECT, CIVIL ENGINEER:



Miller Legg
South Florida Office: 13680 NW 5th Street
Suite 200, Sunrise, Florida 33325
www.millerlegg.com
(954) 436-7000

STRUCTURAL ENGINEER:



Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
www.mceengineers.com
(954) 210-7671

MEP ENGINEER:



SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
www.sgmengineering.com
(954) 421-1944

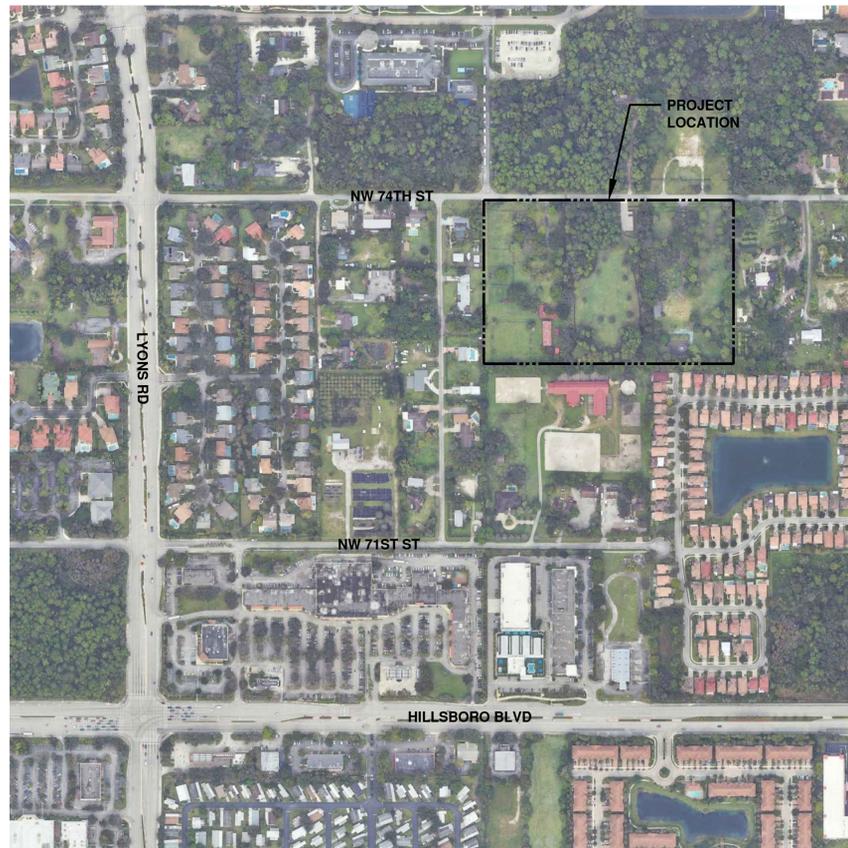
PROJECT SCOPE:

Consultant shall provide survey, civil engineering, landscape architecture and architecture design and permitting assistance for the proposed improvements to Oak Trails Park, located at 4230 NW 74 Street, Coconut Creek, FL 33073. The purpose of this scope is to renovate the two (2) five-acre parcels to a natural passive park while renovating an existing building for classroom and restroom facilities. The project includes the Florida Communities Trust (FCT) grant.

PROJECT INTRODUCTION:

- Oak Trails Park is a five-acre park located in Coconut Creek, FL. The existing park amenities consist of a parking lot and a ¼ mile recycled rubber pathway with exercise equipment. The city purchased two adjacent five-acre parcels to the east and west of the park for expansion purposes. Project minimum includes:
 - Two multipurpose fields (simple open-space passive use)
 - Picnic area (picnic table)
 - Exercise equipment
 - ½ mile sidewalk (pathway extension +/- ¼ each parcel)
 - Water fountain(s) (one chilled at building and one site)
 - Interpretive kiosk(s) (one educational and one FCT grant sign)
 - Public classroom space (interior and exterior space)
 - Minimum 1,000 S.F. of interior classroom space required.
 - Public bathrooms (2 exterior access within existing building)
 - LEED certification for the house renovation, minimum credits
 - One (1) acre of native vegetation (pine flatwood community)
- Funding will be focused on constructing the bare minimum improvements to meet the grant requirements, but items outside of the scope will be considered additional scope if they fit within the proposed budget.

PROJECT LOCATION MAP:



V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_CIV.DWG by JROMER 5/1/2024 5:14:32 PM

LANDSCAPE & CIVIL SHEET INDEX:

| Sheet List Table | |
|------------------|---|
| Sheet Number | Sheet Title |
| C-0.0 | COVER SHEET |
| C-0.1 | SHEET INDEX |
| V-01 | SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY |
| V-02 | SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY |
| V-03 | SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY |
| V-04 | SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY |
| V-05 | SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY |
| V-06 | SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY |
| V-07 | SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY |
| S-1.0 | SITE PLAN |
| S-1.1 | SECTION RENDERING A |
| S-1.2 | SECTION RENDERING B |
| S-1.3 | SECTION RENDERING C |
| C-2.0 | DEMOLITION PLAN |
| L-0.0 | TREE DISPOSITION KEY SHEET |
| L-1.0 | TREE DISPOSITION PLAN |
| L-1.1 | TREE DISPOSITION PLAN |
| L-1.2 | TREE DISPOSITION PLAN |
| L-1.3 | TREE DISPOSITION PLAN |
| L-1.4 | TREE DISPOSITION CHART |
| L-1.5 | TREE DISPOSITION CHART & DETAILS |
| L-1.6 | TREE MITIGATION CHART |
| L-2.0 | PLANTING KEY SHEET |
| L-2.1 | PLANTING PLAN |
| L-2.2 | PLANTING PLAN |
| L-2.3 | PLANTING PLAN |
| L-2.4 | PLANTING PLAN |
| L-2.5 | PLANTING SCHEDULE & DETAILS |
| L-3.0 | SITE AMENITIES PLAN |
| L-3.1 | SITE AMENITIES NOTES & DETAILS |
| L-3.2 | SITE AMENITIES NOTES & DETAILS |
| C-3.0 | ENGINEERING SITE PLAN |
| C-1.0 | GENERAL NOTES & SPECIFICATIONS |
| C-1.1 | CIVIL LEGEND, ABBREVIATIONS, & SYMBOLS |

ARCHITECTURE SHEET INDEX:

| Sheet List Table | |
|------------------|-----------------------------------|
| Sheet Number | Sheet Title |
| A-1.0 | FLOOR PLAN |
| A-2.0 | EXTERIOR ELEVATIONS |
| A-3.0 | WINDOW & DOOR SCHEDULES & DETAILS |
| RCP-1.0 | REFLECTED CEILING PLAN |
| R-1.0 | RENDERING |

STRUCTURAL SHEET INDEX:

| Sheet List Table | |
|------------------|----------------------------------|
| Sheet Number | Sheet Title |
| S-1.1 | GENERAL STRUCTURAL NOTES |
| S-1.2 | WIND DESIGN DATA & LOAD SCHEDULE |
| S-2.1 | SLAB ON GRADE PLAN |
| S-3.1 | TYPICAL DETAILS |
| S-3.2 | TYPICAL DETAILS |
| S-5.1 | ELEVATIONS |

MECHANICAL, ELECTRIC, PLUMBING SHEET INDEX:

| Sheet List Table | |
|------------------|-----------------------------------|
| Sheet Number | Sheet Title |
| M001 | SYMBOLS, SPECS, FIXTURE SCHEDULES |
| M002 | MECHANICAL GENERAL NOTES |
| M201 | MECHANICAL FLOOR PLAN |
| M601 | MECHANICAL CONTROL DRAWINGS |
| M701 | MECHANICAL SCHEDULES |
| M801 | MECHANICAL DETAILS |
| E001 | SYMBOLS, SPECS, FIXTURE SCHEDULES |
| E002 | ELECTRICAL SPECIFICATIONS |
| E301 | POWER PLAN |
| E701 | PANEL SCHEDULES |
| E801 | ELECTRICAL DETAILS |
| E802 | ELECTRICAL DETAILS |
| P001 | SYMBOLS, SPECS, FIXTURE SCHEDULES |
| P201 | PLUMBING PRESSURE FLOOR PLAN |
| P301 | PLUMBING GRAVITY FLOOR PLAN |
| P701 | PLUMBING SCHEDULE |
| P801 | PLUMBING DETAILS |



CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 410-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| REVISIONS | |
|-----------|-------------|
| NO. | DESCRIPTION |
| | |
| | |
| | |
| | |
| | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:

SHEET INDEX

SHEET NUMBER:

C-0.1

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7871
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL: I HEREBY CERTIFY THAT THE INFORMATION HEREON MEETS STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 6J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.01, FLORIDA STATUTES.



NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
MARTIN P. ROSSI, P.S.M.

APPROVED: _____ DATE 02/12/24
PLA. REGISTRATION NO. 5857

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

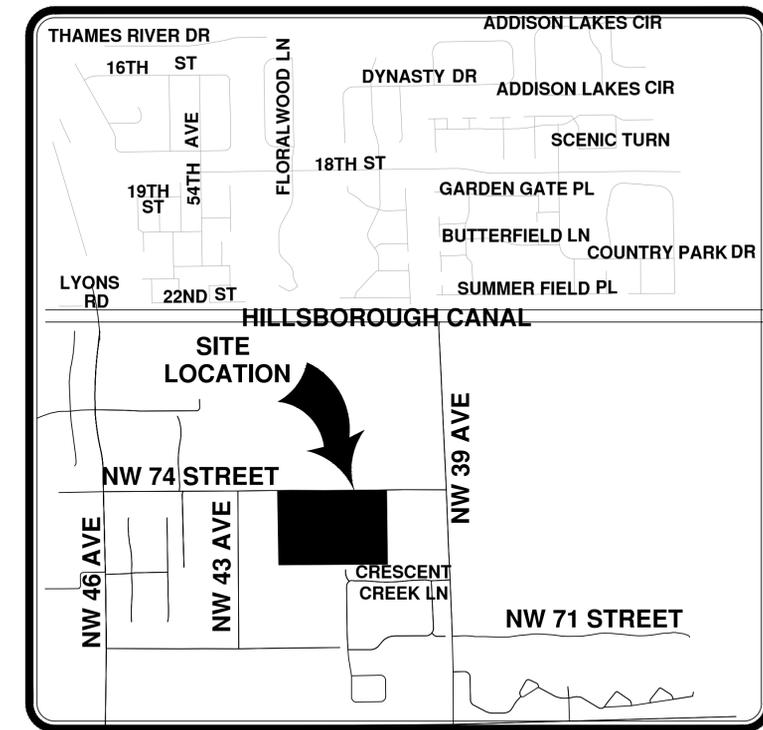
30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

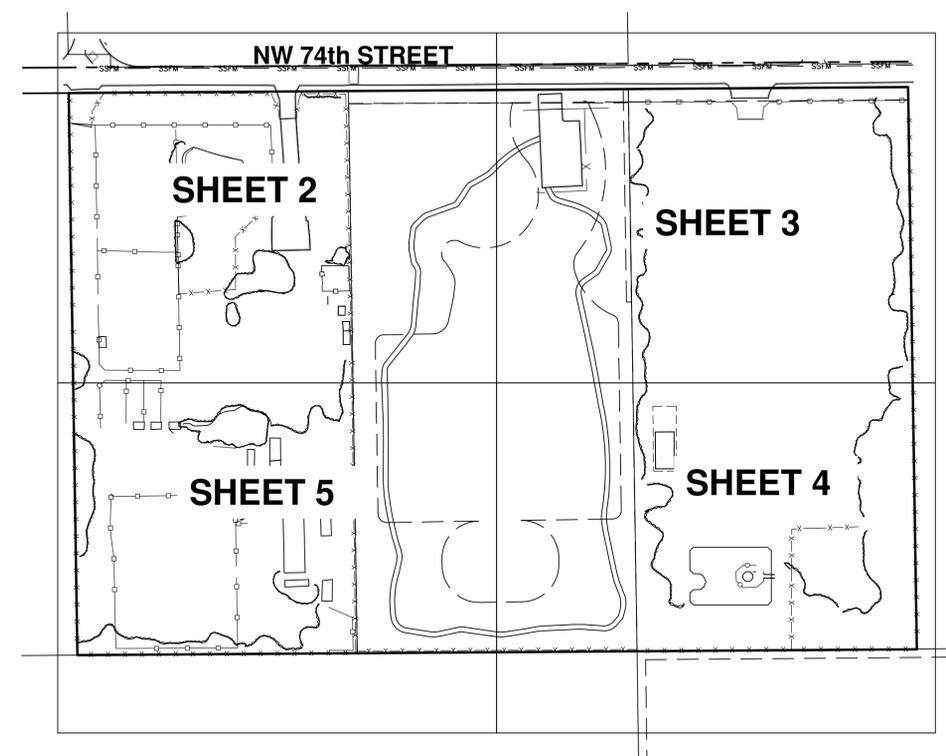
SHEET TITLE:
SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY

SHEET NUMBER:

V-01



TOWNSHIP 47S - RANGE 42E - SECTION 32
LOCATION MAP
N.T.S.



KEY MAP
NOT TO SCALE

DESCRIPTION:

TRACTS 42, 43 AND 44 OF PALM BEACH FARMS PLAT NO.3, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, AT PAGES 45 THROUGH 54, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA;

SAID LANDS SITUATE, LYING AND BEING IN THE CITY OF COCONUT CREEK, BROWARD COUNTY, FLORIDA AND CONTAINING 653,424 SQUARE FEET (15.000 ACRES) MORE OR LESS.

| OWNERSHIP CHICAGO TITLE INSURANCE AGENCY, INC. & ENCUMBRANCE SEARCH, CERTIFICATE NO. 48172 DATE: DECEMBER 11, 2023 @ 6:00 AM | | | | | |
|--|--------------------------------|---|--|---------|----------------|
| ITEM NO. | INSTRUMENT | DESCRIPTION | RECORDING DATA | AFFECTS | PLOTTED |
| 1 | PLAT | RESERVATIONS AS CONTAINED IN THE PLAT OF PALM BEACH FARMS COMPANY PLAT NO.3 | P.B. 2, PG. 45-54, P.B.C.R. | YES | YES |
| 2 | DEED #2972 | TIFF RESERVATIONS | D.B. 549, PG. 211, B.C.R. | YES | YES (TRACT 43) |
| 3 | DEED #5513 | DRAINAGE RESERVATIONS | D.B. 553, PG. 284, B.C.R. | YES | YES (TRACT 43) |
| 4 | EASEMENT | FLORIDA POWER & LIGHT COMPANY EASEMENT | O.R.B. 8343, PG. 170, B.C.R. | YES | YES |
| 5 | WARRANTY DEED | RESTRICTIVE COVENANTS | O.R.B. 14704, PG. 526, B.C.R. | YES | YES (TRACT 42) |
| 6 | EASEMENTS | OFFICIAL RECORD | O.R.B. 15519, PG. 987, B.C.R. | YES | YES |
| 7 | WARRANTY DEED | RESTRICTIVE COVENANTS | O.R.B. 33054, PG. 1571, B.C.R. O.R.B. 33948, PG. 1254, B.C.R. | YES | YES (TRACT 42) |
| 8 | ORDINANCE NO. 2002-015 | OFFICIAL RECORD | O.R.B. 34541, PG. 289, B.C.R. | YES | YES (TRACT 43) |
| 9 | DEED | CONSERVATION EASEMENT | O.R.B. 35123, PG. 1097, B.C.R. | YES | YES (TRACT 43) |
| 10 | FLORIDA RESOLUTION 2007-696 | OFFICIAL RECORD | O.R.B. 44714, PG. 566, B.C.R. | YES | YES (TRACT 43) |
| 11 | INTERLOCAL AGREEMENT | OFFICIAL RECORD | O.R.B. 44714, PG. 572, B.C.R. | YES | YES (TRACT 43) |
| 12 | FLORIDA ORDINANCE NO. 2015-027 | OFFICIAL RECORD | INSTRUMENT #113260344 | YES | YES (TRACT 42) |
| 13 | FLORIDA ORDINANCE NO. 2018-014 | OFFICIAL RECORD | INSTRUMENT #115233139 | YES | YES (TRACT 44) |
| 14 | NOT SURVEY PERTINENT | TAXES FOR YEAR 2023 | --- | --- | --- |

- SYMBOL LEGEND:**
- ▲ STREET SIGN
 - WIRE PULL BOX
 - WATER VALVE
 - SEWER VALVE
 - CONCRETE POWER POLE
 - WOOD POWER POLE
 - ALUMINUM LIGHT POLE
 - IRRIGATION CONTROL BOX
 - FIRE HYDRANT
 - BOLLARD
 - WATER METER
 - ← BACKFLOW PREVENTER
 - CONCRETE LIGHT POLE
 - GUY ANCHOR
 - ELECTRIC METER
 - STAND PIPE
 - PUMP
 - ELECTRIC SERVICE BOX
 - OHW — OVERHEAD WIRE
- ABBREVIATIONS:**
- P.B. - PLAT BOOK
 - PG. - PAGE
 - B.C.R. - BROWARD COUNTY RECORDS
 - P.B.C.R. - PALM BEACH COUNTY RECORDS
 - U.E. - UTILITY EASEMENT
 - B.O.S. - BOTTOM OF STRUCTURE
 - Q.L.F. - CHAIN LINK FENCE
 - B.F.P. - BACKFLOW PREVENTER
 - R/W - RIGHT OF WAY
 - F.P.L. - FLORIDA POWER & LIGHT COMPANY
- TREE LEGEND:**
- NUMBER FROM TREE CHART
 - TREE
 - ★ PALM TREE
- UNDERGROUND UTILITIES LEGEND:**
- SSFM — UNDERGROUND FORCE MAIN
 - E — UNDERGROUND ELECTRIC LINE
 - W — UNDERGROUND WATER LINE

FLOOD INSURANCE NOTES:

MOST OF THE SUBJECT PROPERTY LIES IN FLOOD ZONE X, WITH THE EXCEPTION OF A SMALL PORTION OF THE NORTHEAST CORNER OF TRACT 42 (P.B. 2, PG. 45-54, P.B.C.R.) LIES IN FLOOD ZONE AH WITH A BASE FLOOD ELEVATION OF 16 FEET.

COMMUNITY PANEL NO. 125093 0158 H (UNINCORPORATED BROWARD COUNTY)
PER FIRM DATED AUGUST 18, 2014
MAP NO. 12011C 0158 H

SURVEYORS NOTES:

- ELEVATIONS SHOWN HEREON ARE RELATIVE TO NORTH AMERICAN DATUM OF 1988 AND ARE BASED ON NATIONAL GEODETIC SURVEY BENCHMARK AD8517 WITH DESIGNATION: "PILING" AND LOCATED AT WEST EDGE OF CONCRETE SIDEWALK ON THE WEST SIDE OF LYONS ROAD JUST SOUTH OF THE HILLSBOROUGH CANAL BRIDGE. ELEVATION = 15.11'
- BEARINGS SHOWN HEREON ARE BASED ON A BEARING OF N89°35'56"E ALONG THE SOUTH RIGHT-OF-WAY OF NW 74th STREET.
- THIS SURVEY WAS PREPARED WITH THE BENEFIT OF AN OWNERSHIP ENCUMBRANCE REPORT PREPARED BY CHICAGO TITLE INSURANCE AGENCY.
- SEE SHEETS 2-5 FOR SURVEY AND SHEETS 6-7 FOR TREE DISPOSITION CHART.
- UTILITIES ARE DEPICTED PER A SUBSURFACE UTILITY INVESTIGATION CONDUCTED ON FEBRUARY 3RD 2024. INDUSTRY STANDARD GEOPHYSICAL PROSPECTING TECHNIQUES WERE USED IN CONJUNCTION WITH GROUND PENETRATING RADAR TO DETECT UNDERGROUND UTILITY LINES IN AREAS SPECIFIED BY THE CLIENT. DUE TO SITE CONDITIONS AND INHERENT LIMITATIONS WITH CURRENT TECHNOLOGY, NO GUARANTEE IS EXPRESSED THAT ALL UTILITIES WERE SUCCESSFULLY DETECTED AND LOCATED. CLIENT / CONTRACTOR IS HEREBY ADVISED TO CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 811 PRIOR TO ANY EXCAVATION. MILLER LEGG SHALL NOT BE HELD LIABLE FOR DAMAGE CAUSED TO UTILITIES DURING CONSTRUCTION.

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7871
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL: I HEREBY CERTIFY THAT THE INFORMATION HEREON MEETS STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER SJ-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.001(1), FLORIDA STATUTES.



NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

APPROVED: MARTIN P. ROSSI, PSM
FLA. REGISTRATION NO. 5857 DATE: 02/12/24

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

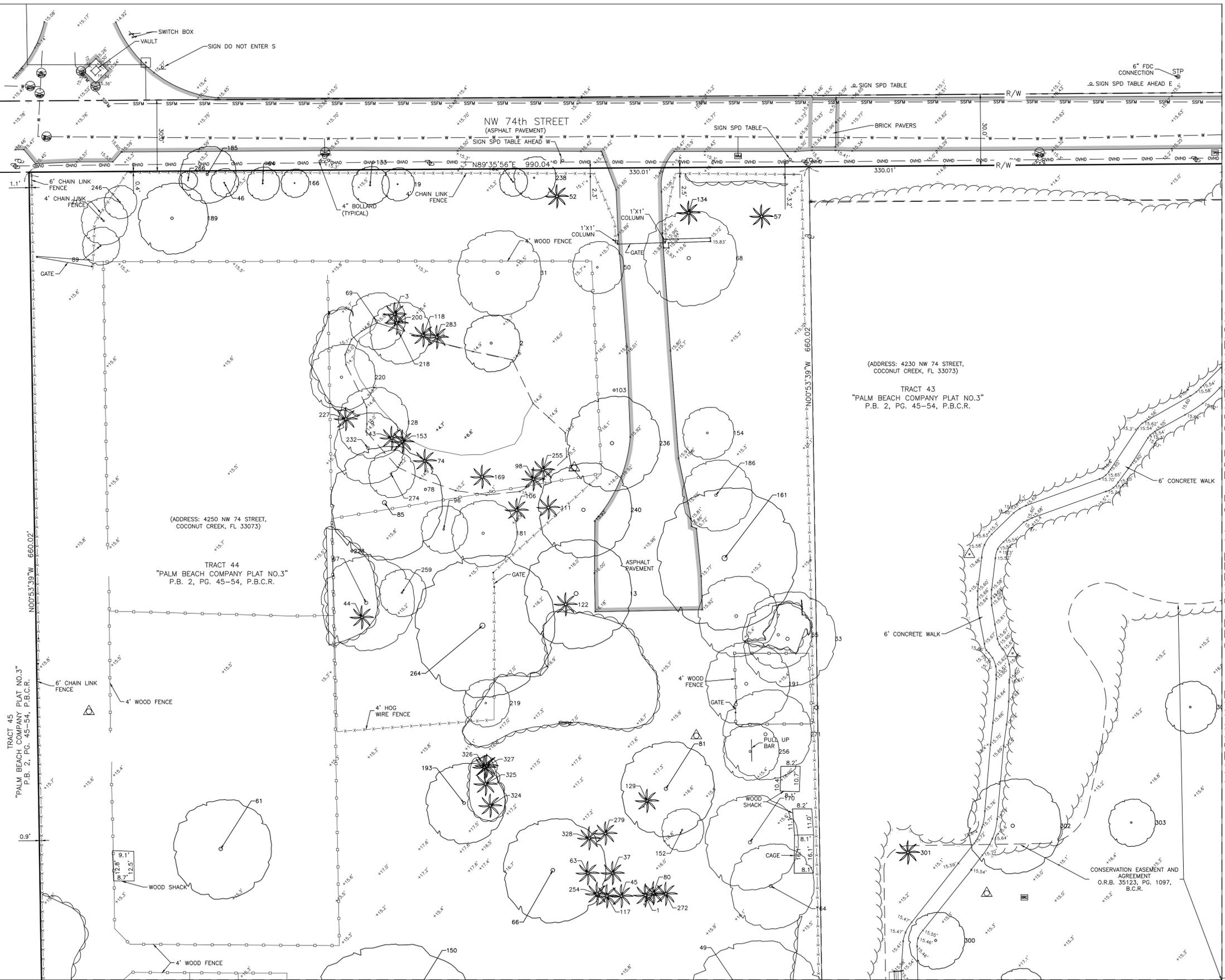
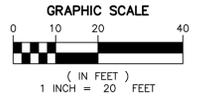
30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:
SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY

SHEET NUMBER:

V-02



MATCHLINE - SEE SHEET V-03 FOR CONTINUATION

MATCHLINE - SEE SHEET V-05 FOR CONTINUATION

- SYMBOL LEGEND:**
- STREET SIGN
 - WIRE PULL BOX
 - ⊕ WATER VALVE
 - ⊖ SEWER VALVE
 - ⊕ CONCRETE POWER POLE
 - ⊕ WOOD POWER POLE
 - ⊕ ALUMINUM LIGHT POLE
 - ⊕ IRRIGATION CONTROL BOX
 - ⊕ FIRE HYDRANT
 - BOLLARD
 - ⊕ WATER METER
 - ⊕ BACKFLOW PREVENTER
 - ⊕ CONCRETE LIGHT POLE
 - ⊕ GUY ANCHOR
 - ⊕ ELECTRIC METER
 - ⊕ STAND PIPE
 - ⊕ PUMP
 - ⊕ ELECTRIC SERVICE BOX
 - O.V.H.D. OVERHEAD WIRE
- ABBREVIATIONS:**
- P.B. - PLAT BOOK
 - P.G. - PAGE
 - B.C.R. - BROWARD COUNTY RECORDS
 - P.B.C.R. - PALM BEACH COUNTY RECORDS
 - U.E. - UTILITY EASEMENT
 - B.O.S. - BOTTOM OF STRUCTURE
 - CLF - CHAIN LINK FENCE
 - SFP - BACKFLOW PREVENTER
 - R/W - RIGHT OF WAY
 - F.P.L. - FLORIDA POWER & LIGHT COMPANY
- TREE LEGEND:**
- NUMBER FROM TREE CHART
 - TREE
 - ★ PALM TREE
- UNDERGROUND UTILITIES LEGEND:**
- SSFM UNDERGROUND FORCE MAIN
 - E UNDERGROUND ELECTRIC LINE
 - W UNDERGROUND WATER LINE

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK SURVEY\DRAWINGS\23-00155_LBS.DWG by JROMER 4/30/2024 2:30:04 PM

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7871
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinnakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:



4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL: I HEREBY CERTIFY THAT THE INFORMATION HEREON MEETS STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER SJ-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.001, FLORIDA STATUTES.



NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

APPROVED: MARTIN P. ROSSI, PSM
 DATE: 02/12/24
 FLA. REGISTRATION NO. 5857

| NO. | REVISIONS |
|-----|-----------|
| | |
| | |
| | |
| | |

SUBMITTAL:

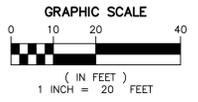
30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:
SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY

SHEET NUMBER:

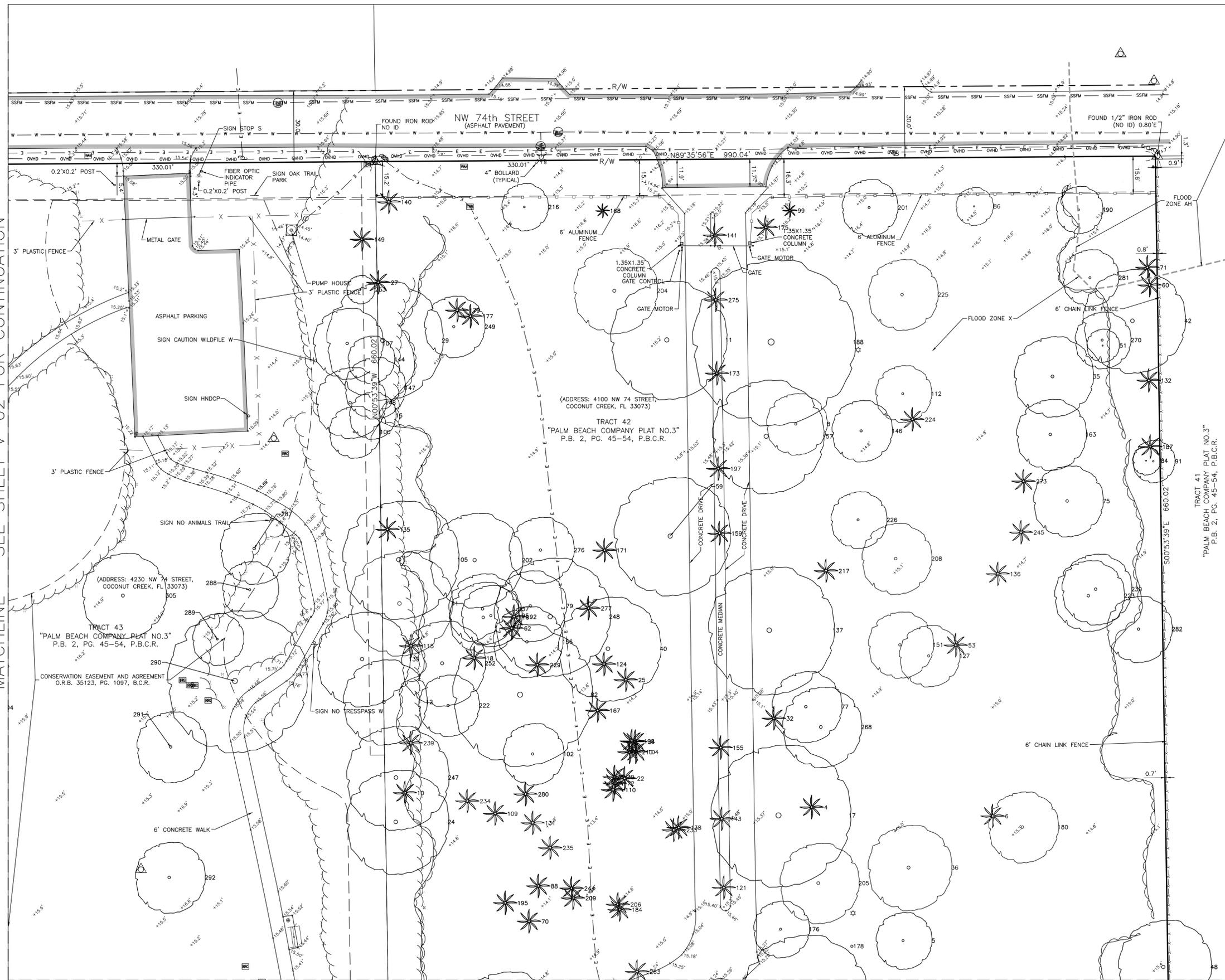
V-03



MATCHLINE - SEE SHEET V-02 FOR CONTINUATION

MATCHLINE - SEE SHEET V-04 FOR CONTINUATION

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\SURVEY\DRAWINGS\23-00155_LBS.DWG by JROMER 4/30/2024 2:30:04 PM



- SYMBOL LEGEND:**
- STREET SIGN
 - WIRE PULL BOX
 - WATER VALVE
 - SEWER VALVE
 - CONCRETE POWER POLE
 - WOOD POWER POLE
 - ALUMINUM LIGHT POLE
 - IRRIGATION CONTROL BOX
 - FIRE HYDRANT
 - BOLLARD
 - WATER METER
 - BACKFLOW PREVENTER
 - CONCRETE LIGHT POLE
 - GUY ANCHOR
 - ELECTRIC METER
 - STAND PIPE
 - PUMP
 - ELECTRIC SERVICE BOX
 - OVERHEAD WIRE
- ABBREVIATIONS:**
- P.B. - PLAT BOOK
 - P.G. - PAGE
 - B.C.R. - BROWARD COUNTY RECORDS
 - P.B.C.R. - PALM BEACH COUNTY RECORDS
 - U.E. - UTILITY EASEMENT
 - B.O.S. - BOTTOM OF STRUCTURE
 - CLF - CHAIN LINK FENCE
 - BFP - BACKFLOW PREVENTER
 - R/W - RIGHT OF WAY
 - F.P.L. - FLORIDA POWER & LIGHT COMPANY
- TREE LEGEND:**
- NUMBER FROM TREE CHART
 - TREE
 - ★ PALM TREE
- UNDERGROUND UTILITIES LEGEND:**
- UNDERGROUND FORCE MAIN
 - E UNDERGROUND ELECTRIC LINE
 - W UNDERGROUND WATER LINE

MATCHLINE - SEE SHEET V-03 FOR CONTINUATION

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mcengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW, 74th Street
Coconut Creek, FL 33073

SEAL: I HEREBY CERTIFY THAT THE INFORMATION HEREON MEETS STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.01, FLORIDA STATUTES.

Martin P. Rossi
Martin P. Rossi
Professional Surveyor & Mapper
No. 5857
FLORIDA
Professional Surveyors & Mappers

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

APPROVED: MARTIN P. ROSSI, PSM
FLA. REGISTRATION NO. 5857 DATE: 02/12/24

DATE: 02/12/24

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

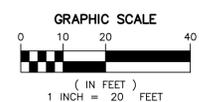
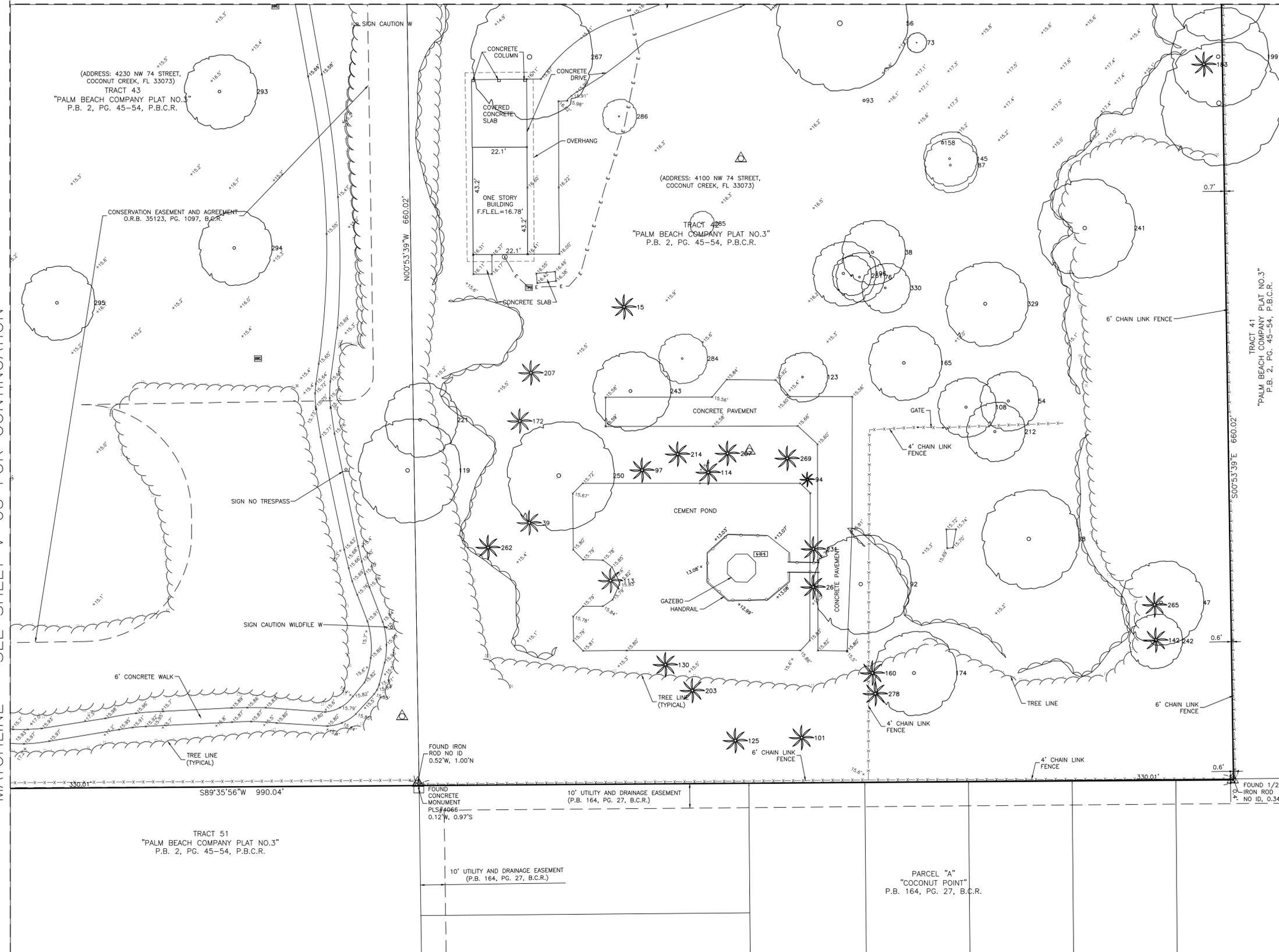
SHEET TITLE:
SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY

SHEET NUMBER:

V-04

MATCHLINE - SEE SHEET V-05 FOR CONTINUATION

V:\PROJECTS\2023\23-00155 - COCONUT CREEK PARK\SURVEY\DRAWINGS\23-00155_BTS.DWG by JROMER 4/30/2024 2:50:04 PM



- SYMBOL LEGEND:**
- ⊙ STREET SIGN
 - ⊠ WIRE PULL BOX
 - ⊕ WATER VALVE
 - ⊕ SEWER VALVE
 - ⊕ CONCRETE POWER POLE
 - ⊕ WOOD POWER POLE
 - ⊕ ALUMINUM LIGHT POLE
 - ⊕ IRRIGATION CONTROL BOX
 - ⊕ FIRE HYDRANT
 - ⊕ BOLLARD
 - ⊕ WATER METER
 - ⊕ BACKFLOW PREVENTER
 - ⊕ CONCRETE LIGHT POLE
 - ⊕ GUY ANCHOR
 - ⊕ ELECTRIC METER
 - ⊕ STAND PIPE
 - ⊕ PUMP
 - ⊕ ELECTRIC SERVICE BOX
 - OVERHEAD WIRE

- ABBREVIATIONS:**
- P.B. - PLAT BOOK
 - P.C. - PAGE
 - B.C.R. - BROWARD COUNTY RECORDS
 - P.B.C.R. - PALM BEACH COUNTY RECORDS
 - U.E. - UTILITY EASEMENT
 - B.O.S. - BOTTOM OF STRUCTURE
 - CLF - CHAIN LINK FENCE
 - BFP - BACKFLOW PREVENTER
 - R/W - RIGHT OF WAY
 - F.P.L. - FLORIDA POWER & LIGHT COMPANY

- TREE LEGEND:**
- NUMBER FROM TREE CHART
 - TREE
 - ⊙ PALM TREE

- UNDERGROUND UTILITIES LEGEND:**
- SSFM — UNDERGROUND FORCE MAIN
 - E — UNDERGROUND ELECTRIC LINE
 - W — UNDERGROUND WATER LINE

(ADDRESS: 4230 NW 74 STREET,
COCONUT CREEK, FL 33073)
TRACT 43
"PALM BEACH COMPANY PLAT NO.3"
P.B. 2, PG. 45-54, P.B.C.R.

(ADDRESS: 4100 NW 74 STREET,
COCONUT CREEK, FL 33073)

TRACT 4285
"PALM BEACH COMPANY PLAT NO.3"
P.B. 2, PG. 45-54, P.B.C.R.

TRACT 51
"PALM BEACH COMPANY PLAT NO.3"
P.B. 2, PG. 45-54, P.B.C.R.

10' UTILITY AND DRAINAGE EASEMENT
(P.B. 164, PG. 27, B.C.R.)

FOUND IRON ROD NO ID
0.52' W, 1.00' N

10' UTILITY AND DRAINAGE EASEMENT
(P.B. 164, PG. 27, B.C.R.)

PARCEL "A"
"COCONUT POINT"
P.B. 164, PG. 27, B.C.R.

FOUND 1/2" IRON ROD
NO ID, 0.34' W

MATCHLINE - SEE SHEET V-01 FOR CONTINUATION

CONSULTANTS:
ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com
MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com
STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7871
 www.mceengineers.com
SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinakergroup.com
GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:
OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL: I HEREBY CERTIFY THAT THE INFORMATION HEREON MEETS STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 65-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.04(1), FLORIDA STATUTES.

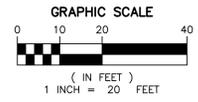
 Martin P. Rossi
 No. 5857
 Registered Professional Surveyor & Mapper
 FLORIDA
 NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
 APPROVED: MARTIN P. ROSSI, PSM
 P.L.A. REGISTRATION NO. 5857 DATE 02/12/24

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:
SKETCH OF BOUNDARY AND TOPOGRAPHIC SURVEY

SHEET NUMBER:
V-05

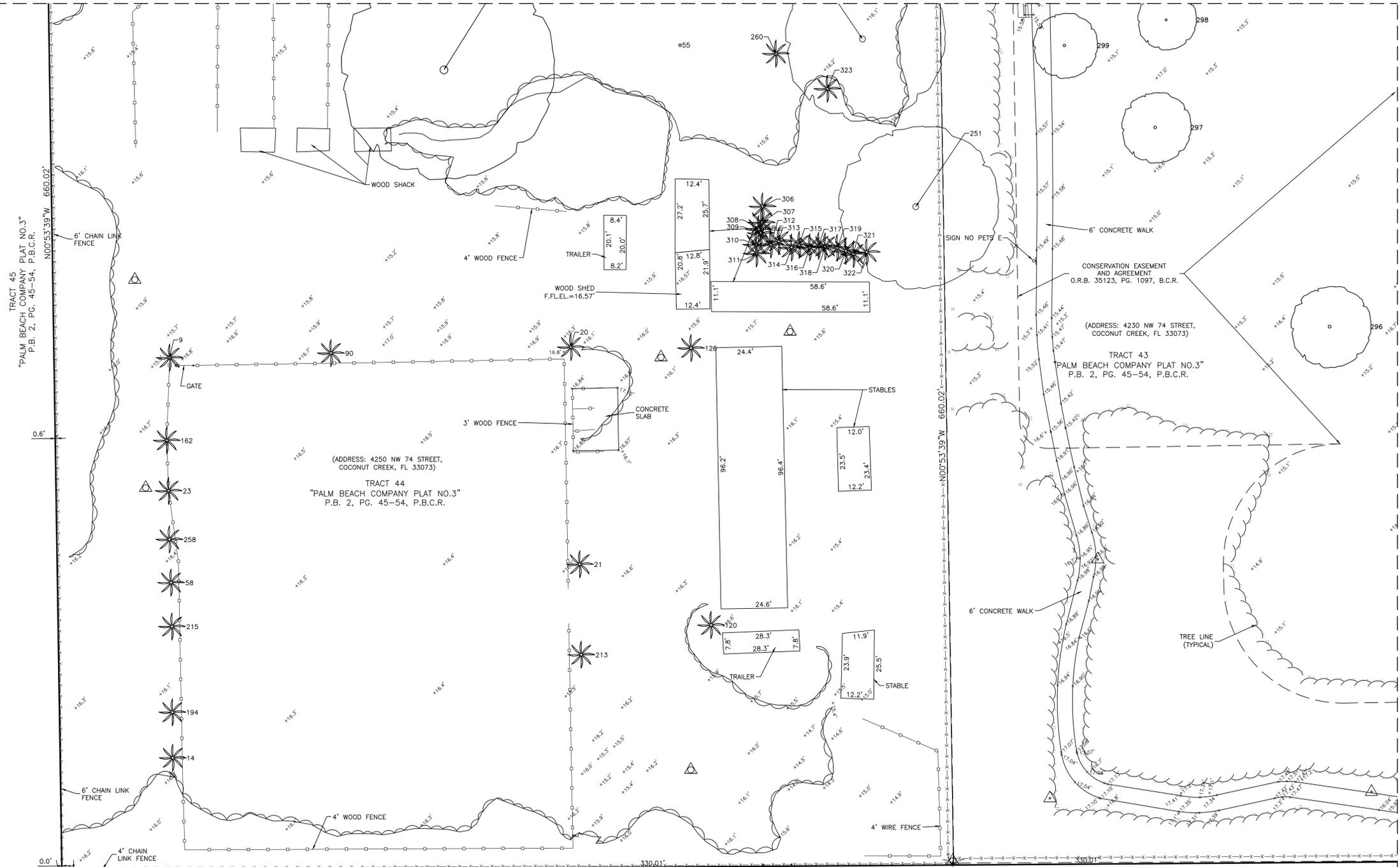


- SYMBOL LEGEND:**
- ▲ STREET SIGN
 - WIRE PULL BOX
 - WATER VALVE
 - SEWER VALVE
 - CONCRETE POWER POLE
 - WOOD POWER POLE
 - ALUMINUM LIGHT POLE
 - IRRIGATION CONTROL BOX
 - FIRE HYDRANT
 - BOLLARD
 - WATER METER
 - BACKFLOW PREVENTER
 - CONCRETE LIGHT POLE
 - GUY ANCHOR
 - ELECTRIC METER
 - STAND PIPE
 - PUMP
 - ELECTRIC SERVICE BOX
 - O.V.H.D. — OVERHEAD WIRE

- ABBREVIATIONS:**
- P.B. - PLAT BOOK
 - P.G. - PAGE
 - B.C.R. - BROWARD COUNTY RECORDS
 - P.B.C.R. - PALM BEACH COUNTY RECORDS
 - U.E. - UTILITY EASEMENT
 - B.O.S. - BOTTOM OF STRUCTURE
 - CLF - CHAIN LINK FENCE
 - BFP - BACKFLOW PREVENTER
 - R/W - RIGHT OF WAY
 - F.P.L. - FLORIDA POWER & LIGHT COMPANY

- TREE LEGEND:**
- NUMBER FROM TREE CHART
 - TREE
 - ★ PALM TREE

- UNDERGROUND UTILITIES LEGEND:**
- SSW — UNDERGROUND FORCE MAIN
 - E — UNDERGROUND ELECTRIC LINE
 - W — UNDERGROUND WATER LINE



MATCHLINE - SEE SHEET V-04 FOR CONTINUATION

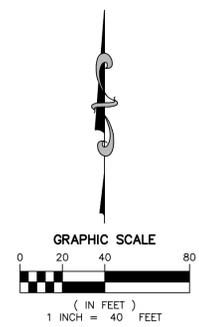
V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\SURVEY\DRAWINGS\23-00155_LBS.DWG by JROMER 4/30/2024 2:30:04 PM

V:\PROJECTS\2023\23-00155 - COCONUT CREEK PARK SURVEY\DRMINGS\23-00155_LBS.DWG by JROMER 4/30/2024 2:30:04 PM

| TREE INVENTORY CHART | | | | | | | |
|----------------------|-------------------|-------------------------------|--------------|---------------|---------------|-----------|--|
| ID # | Common Name | Botanical Name | DBH (inches) | Height (feet) | Spread (feet) | Condition | Notes |
| 1 | Solitaire Palm | <i>Ptychosperma elegans</i> | 3 | 20 | 6 | Good | |
| 2 | Live Oak | <i>Quercus virginiana</i> | 8 | 24 | 24 | Good | |
| 3 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 3 | 12 | Good | |
| 4 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 8 | 12 | Good | |
| 5 | Slash Pine | <i>Pinus elliotii</i> | 13 | 42 | 24 | Good | |
| 6 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 8 | 10 | Good | |
| 7 | Black Olive | <i>Bucida buceras</i> | 17 | 32 | 34 | Fair | Bent Leader Co-Dominant Leaders Included Bark |
| 8 | Slash Pine | <i>Pinus elliotii</i> | 20 | 42 | 26 | Good | |
| 9 | Christmas Palm | <i>Adonidia merrillii</i> | 6 | 6 | 8 | Good | |
| 10 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 24 | 14 | Good | |
| 11 | Slash Pine | <i>Pinus elliotii</i> | 31 | 42 | 50 | Fair | Co-Dominant Leaders Limb Damage - Minor |
| 12 | Laurel Oak | <i>Quercus laurifolia</i> | 12 | 38 | 36 | Good | |
| 13 | Black Olive | <i>Bucida buceras</i> | 23 | 42 | 46 | Good | |
| 14 | Christmas Palm | <i>Adonidia merrillii</i> | 5 | 8 | 6 | Good | |
| 15 | Montgomery Palm | <i>Veitchia arecina</i> | 4 | 14 | 6 | Good | |
| 16 | Slash Pine | <i>Pinus elliotii</i> | 8 | 32 | 20 | Fair | Limb Damage - Minor Lopsided Poor Structure |
| 17 | Black Olive | <i>Bucida buceras</i> | 23 | 38 | 60 | Good | Limb Damage - Minor Sprouting |
| 18 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 14 | 14 | Good | |
| 19 | Weeping Fig | <i>Ficus benjamina</i> | 8 | 22 | 14 | Good | |
| 20 | Christmas Palm | <i>Adonidia merrillii</i> | 6 | 8 | 6 | Good | |
| 21 | Christmas Palm | <i>Adonidia merrillii</i> | 6 | 6 | 6 | Good | |
| 22 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 16 | 14 | Good | |
| 23 | Christmas Palm | <i>Adonidia merrillii</i> | 5 | 8 | 6 | Good | |
| 24 | Live Oak | <i>Quercus virginiana</i> | 18 | 46 | 44 | Good | Leaning - Minor |
| 25 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 14 | 12 | Fair | Bent Trunk |
| 26 | Christmas Palm | <i>Adonidia merrillii</i> | 6 | 14 | 6 | Good | |
| 27 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 16 | 12 | Good | |
| 28 | Weeping Fig | <i>Ficus benjamina</i> | 16 | 34 | 40 | Fair | Apical Dieback Co-Dominant Leaders Limb Damage - Minor |
| 29 | Laurel Oak | <i>Quercus laurifolia</i> | 24 | 44 | 50 | Fair | Co-Dominant Leaders Limb Damage - Minor |
| 30 | Cabbage Palm | <i>Sabal palmetto</i> | 8 | 14 | 12 | Good | |
| 31 | Black Olive | <i>Bucida buceras</i> | 16 | 38 | 36 | Good | Bent Leader Limb Damage - Minor |
| 32 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 16 | 12 | Fair | Bent Trunk |
| 33 | Slash Pine | <i>Pinus elliotii</i> | 20 | 46 | 40 | Good | |
| 34 | Cabbage Palm | <i>Sabal palmetto</i> | 11 | 16 | 14 | Good | |
| 35 | Slash Pine | <i>Pinus elliotii</i> | 20 | 42 | 34 | Good | |
| 36 | Slash Pine | <i>Pinus elliotii</i> | 20 | 48 | 36 | Good | Limb Damage - Minor |
| 37 | Solitaire Palm | <i>Ptychosperma elegans</i> | | | | Dead | |
| 38 | Weeping Fig | <i>Ficus benjamina</i> | 10 | 28 | 26 | Fair | Bent Leader Co-Dominant Leaders Limb Damage - Minor |
| 39 | Areca Palm | <i>Dypsis lutescens</i> | | 28 | 30 | Good | |
| 40 | Live Oak | <i>Quercus virginiana</i> | 26 | 48 | 44 | Fair | Apical Dieback Bent Leader Lopsided |
| 41 | Pongam | <i>Milletia pinnata</i> | 16 | 40 | 44 | Good | Bent Leader Co-Dominant Leaders |
| 42 | Live Oak | <i>Quercus virginiana</i> | 17 | 46 | 44 | Fair | Co-Dominant Leaders Limb Damage - Minor |
| 43 | Royal Palm | <i>Roystonea regia</i> | 16 | 36 | 18 | Good | |
| 44 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 6 | 14 | Good | |
| 45 | Solitaire Palm | <i>Ptychosperma elegans</i> | 6 | 24 | 8 | Good | |
| 46 | Weeping Fig | <i>Ficus benjamina</i> | 6 | 16 | 12 | Good | |
| 47 | Slash Pine | <i>Pinus elliotii</i> | 16 | 48 | 34 | Good | |
| 48 | Weeping Fig | <i>Ficus benjamina</i> | 24 | 46 | 40 | Fair | Co-Dominant Leaders Limb Damage - Minor On CLF |
| 49 | Live Oak | <i>Quercus virginiana</i> | 25 | 40 | 60 | Good | |
| 50 | Black Olive | <i>Bucida buceras</i> | 10 | 28 | 22 | Fair | Bent Leader Leaning - Minor |
| 51 | Slash Pine | <i>Pinus elliotii</i> | 5 | 24 | 14 | Fair | Bent Leader Limb Damage - Minor |
| 52 | Queen Palm | <i>Syagrus romanzoffiana</i> | 9 | 16 | 14 | Fair | Leaning |
| 53 | Cabbage Palm | <i>Sabal palmetto</i> | 9 | 14 | 12 | Good | |
| 54 | Avocado | <i>Persea americana</i> | 8 | 30 | 24 | Good | Co-Dominant Leaders |
| 55 | Strangler Fig | <i>Ficus aurea</i> | | 26 | 24 | Poor | Co-Dominant Leaders Limb Damage - Minor Poor Structure |
| 56 | Black Olive | <i>Bucida buceras</i> | 31 | 60 | 54 | Good | Partially Uprooted Slight Lean |
| 57 | Montgomery Palm | <i>Veitchia arecina</i> | 8 | 16 | 12 | Good | |
| 58 | Christmas Palm | <i>Adonidia merrillii</i> | 5 | 8 | 6 | Good | |
| 59 | Black Olive | <i>Bucida buceras</i> | 30 | 48 | 50 | Good | |
| 60 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 28 | 14 | Good | |
| 61 | Weeping Fig | <i>Ficus benjamina</i> | 26 | 44 | 42 | Fair | Co-Dominant Leaders Limb Damage - Minor |
| 62 | Cabbage Palm | <i>Sabal palmetto</i> | 11 | 30 | 12 | Good | |
| 63 | Solitaire Palm | <i>Ptychosperma elegans</i> | 2 | 22 | 6 | Good | |
| 64 | Weeping Fig | <i>Ficus benjamina</i> | 8 | 18 | 14 | Good | |
| 65 | Laurel Oak | <i>Quercus laurifolia</i> | 10 | 32 | 28 | Fair | Limb Damage - Minor Poor Structure |
| 66 | Black Olive | <i>Bucida buceras</i> | 20 | 40 | 44 | Fair | Co-Dominant Leaders Limb Damage - Minor Invasive vines |
| 67 | Slash Pine | <i>Pinus elliotii</i> | 26 | 46 | 40 | Good | |
| 68 | Black Olive | <i>Bucida buceras</i> | 21 | 40 | 40 | Fair | Co-Dominant Leaders Limb Damage - Minor |
| 69 | Black Olive | <i>Bucida buceras</i> | 6 | 20 | 24 | Poor | Co-Dominant Leaders Limb Damage - Minor Growing on rock edge |
| 70 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 16 | 14 | Good | |
| 71 | Cabbage Palm | <i>Sabal palmetto</i> | 13 | 24 | 14 | Good | |
| 72 | Cabbage Palm | <i>Sabal palmetto</i> | 15 | 18 | 14 | Good | |
| 73 | Strangler Fig | <i>Ficus aurea</i> | 3 | 8 | 8 | Fair | On dead stump |
| 74 | Cabbage Palm | <i>Sabal palmetto</i> | 14 | 20 | 14 | Good | |
| 75 | Slash Pine | <i>Pinus elliotii</i> | 18 | 44 | 30 | Good | |
| 76 | Weeping Fig | <i>Ficus benjamina</i> | 8 | 26 | 20 | Fair | Bent Leader Co-Dominant Leaders Limb Damage - Minor |
| 77 | Slash Pine | <i>Pinus elliotii</i> | 21 | 52 | 30 | Good | Limb Damage - Minor |
| 78 | Bird of paradise | <i>Strelitzia reginae</i> | | | | Good | |
| 79 | Live Oak | <i>Quercus virginiana</i> | 12 | 38 | 30 | Fair | Limb Damage - Minor |
| 80 | Washingtonia Palm | <i>Washingtonia robusta</i> | 12 | 16 | 4 | Poor | Most Fronds Missing |
| 81 | Black Olive | <i>Bucida buceras</i> | 20 | 42 | 40 | Fair | Limb Damage - Minor |
| 82 | Live Oak | <i>Quercus virginiana</i> | 26 | 48 | 60 | Good | Co-Dominant Leaders Limb Damage - Minor |
| 83 | Weeping Fig | <i>Ficus benjamina</i> | 30 | 44 | 50 | Fair | Co-Dominant Leaders Limb Damage - Minor On CLF |
| 84 | Strangler Fig | <i>Ficus aurea</i> | 5 | 14 | 12 | Fair | |
| 85 | Weeping Fig | <i>Ficus benjamina</i> | 15 | 38 | 48 | Good | |
| 86 | Pink tabebuia | <i>Tabebuia rosea</i> | 6 | 32 | 16 | Fair | Bent Leader Limb Damage - Minor |
| 87 | Slash Pine | <i>Pinus elliotii</i> | 13 | 34 | 22 | Good | Lopsided |
| 88 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 12 | 16 | Good | |
| 89 | Weeping Fig | <i>Ficus benjamina</i> | 6 | 20 | 16 | Fair | Co-Dominant Leaders Limb Damage - Minor |
| 90 | Christmas Palm | <i>Adonidia merrillii</i> | 4 | 8 | 6 | Good | |
| 91 | Florida Trema | | 6 | 24 | 18 | Good | Bent Leader Limb Damage - Minor |
| 92 | Slash Pine | <i>Pinus elliotii</i> | 20 | 50 | 40 | Good | Limb Damage - Minor |
| 93 | Slash Pine | <i>Pinus elliotii</i> | | | | Dead | |
| 94 | Bottle Palm | <i>Hyophorbe lagenicaulis</i> | 8 | 10 | 6 | Fair | Tapered and yellow fronds |
| 95 | Live Oak | <i>Quercus virginiana</i> | 12 | 34 | 26 | Fair | Limb Damage - Minor Lopsided Trunk Damage - Minor |
| 96 | Pink tabebuia | <i>Tabebuia rosea</i> | 10 | 26 | 20 | Fair | Apical Dieback Bent Leader Mostly Defoliated |
| 97 | Montgomery Palm | <i>Veitchia arecina</i> | 6 | 18 | 6 | Good | |
| 98 | Cabbage Palm | <i>Sabal palmetto</i> | 14 | 20 | 14 | Good | |
| 99 | Bottle Palm | <i>Hyophorbe lagenicaulis</i> | 8 | 10 | 6 | Good | Tapered |
| 100 | Laurel Oak | <i>Quercus laurifolia</i> | 63 | 30 | 22 | Fair | Limb Damage - Minor |
| 101 | Triangle Palm | <i>Dypsis decaryi</i> | 12 | 16 | 18 | Good | |
| 102 | Slash Pine | <i>Pinus elliotii</i> | 18 | 44 | 26 | Fair | Limb Damage - Minor Lopsided |
| 103 | Black Olive | <i>Bucida buceras</i> | | | | Dead | |
| 104 | Cabbage Palm | <i>Sabal palmetto</i> | 14 | 14 | 12 | Good | |
| 105 | Live Oak | <i>Quercus virginiana</i> | 20 | 44 | 50 | Good | |

| | | | | | | | |
|-----|-------------------|-------------------------------|-----|----|----|------|--|
| 106 | Queen Palm | <i>Syagrus romanzoffiana</i> | 10 | 24 | 14 | Fair | Tapered Trunk |
| 107 | Live Oak | <i>Quercus virginiana</i> | 16 | 32 | 30 | Fair | Bent Leader Limb Damage - Minor Lopsided |
| 108 | Avocado | <i>Persea americana</i> | 8 | 26 | 24 | Good | |
| 109 | Cabbage Palm | <i>Sabal palmetto</i> | 11 | 14 | 14 | Good | |
| 110 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 18 | 12 | Good | |
| 111 | Queen Palm | <i>Syagrus romanzoffiana</i> | 11 | 28 | 16 | Fair | Bent Trunk Tapered Trunk |
| 112 | Slash Pine | <i>Pinus elliotii</i> | 15 | 48 | 24 | Good | |
| 113 | Montgomery Palm | <i>Veitchia arecina</i> | 5 | 14 | 6 | Good | |
| 114 | Montgomery Palm | <i>Veitchia arecina</i> | 6 | 16 | 12 | Good | |
| 115 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 24 | 16 | Good | |
| 116 | Live Oak | <i>Quercus virginiana</i> | 12 | 32 | 30 | Fair | Bent Leader Limb Damage - Minor Lopsided |
| 117 | Solitaire Palm | <i>Ptychosperma elegans</i> | 2 | 20 | 6 | Good | |
| 118 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 6 | 14 | Fair | Growing on rock edge |
| 119 | Laurel Oak | <i>Quercus laurifolia</i> | 20 | 44 | 42 | Good | |
| 120 | Montgomery Palm | <i>Veitchia arecina</i> | 5 | 12 | 8 | Good | |
| 121 | Royal Palm | <i>Roystonea regia</i> | 19 | 36 | 16 | Fair | Yellow Fronds |
| 122 | Areca Palm | <i>Dypsis lutescens</i> | | 16 | 20 | Good | |
| 123 | Crepe Myrtle | <i>Lagerstroemia indica</i> | 14 | 30 | 20 | Fair | Limb Damage - Minor |
| 124 | Cabbage Palm | <i>Sabal palmetto</i> | 11 | 20 | 14 | Good | |
| 125 | Triangle Palm | <i>Dypsis decaryi</i> | 12 | 18 | 18 | Good | |
| 126 | Christmas Palm | <i>Adonidia merrillii</i> | 4 | 8 | 6 | Good | |
| 127 | Slash Pine | <i>Pinus elliotii</i> | 16 | 44 | 26 | Fair | Bent Leader Lopsided |
| 128 | Laurel Oak | <i>Quercus laurifolia</i> | 12 | 32 | 30 | Fair | Roots growing on rock edge |
| 129 | Birds of paradise | <i>Strelitzia reginae</i> | | 28 | 20 | Good | |
| 130 | Queen Palm | <i>Syagrus romanzoffiana</i> | 12 | 24 | 20 | Good | |
| 131 | Cabbage Palm | <i>Sabal palmetto</i> | 11 | 18 | 14 | Good | |
| 132 | Cabbage Palm | <i>Sabal palmetto</i> | 17 | 18 | 14 | Good | |
| 133 | Weeping Fig | <i>Ficus benjamina</i> | 8 | 24 | 16 | Fair | |
| 134 | Queen Palm | <i>Syagrus romanzoffiana</i> | 9 | 26 | 14 | Good | |
| 135 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 20 | 14 | Good | |
| 136 | Cabbage Palm | <i>Sabal palmetto</i> | 8 | 24 | 10 | Good | |
| 137 | Black Olive | <i>Bucida buceras</i> | 22 | 36 | 54 | Good | Limb Damage - Minor |
| 138 | Cabbage Palm | <i>Sabal palmetto</i> | 11 | 16 | 14 | Good | |
| 139 | Live Oak | <i>Quercus virginiana</i> | 22 | 46 | 40 | Good | |
| 140 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 20 | 14 | Good | |
| 141 | Royal Palm | <i>Roystonea regia</i> | 15 | 28 | 16 | Good | |
| 142 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 16 | 14 | Fair | Invasive vines |
| 143 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 4 | 12 | Good | |
| 144 | Live Oak | <i>Quercus virginiana</i> | 8 | 32 | 20 | Fair | Bent Leader Limb Damage - Minor Lopsided |
| 145 | Slash Pine | <i>Pinus elliotii</i> | 9 | 38 | 22 | Good | |
| 146 | Slash Pine | <i>Pinus elliotii</i> | 19 | 42 | 26 | Good | |
| 147 | Live Oak | <i>Quercus virginiana</i> | 12 | 30 | 26 | Fair | Apical Dieback Co-Dominant Leaders Limb Damage - Minor |
| 148 | Live Oak | <i>Quercus virginiana</i> | 13 | 38 | 30 | Fair | Bent Leader Limb Damage - Minor |
| 149 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 22 | 12 | Good | Leaning |
| 150 | Banyan | <i>Ficus benghalensis</i> | 71 | 40 | 80 | Good | Co-Dominant Leaders Limb Damage - Minor |
| 151 | Slash Pine | <i>Pinus elliotii</i> | 16 | 42 | 28 | Good | |
| 152 | Black Olive | <i>Bucida buceras</i> | 18 | 30 | 18 | Poor | Apical Dieback Limb Damage - Major Trunk Damage - Major |
| 153 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 6 | 14 | Good | |
| 154 | Black Olive | <i>Bucida buceras</i> | 13 | 32 | 22 | Poor | Co-Dominant Leaders Limb Damage - Major Trunk Damage - Major |
| 155 | Royal Palm | <i>Roystonea regia</i> | 16 | 34 | 18 | Good | |
| 156 | Live Oak | <i>Quercus virginiana</i> | 15 | 34 | 30 | Fair | Bent Leader Lopsided |
| 157 | Live Oak | <i>Quercus virginiana</i> | 24 | 40 | 48 | Fair | Bent Leader Co-Dominant Leaders Included Bark Lopsided |
| 158 | Slash Pine | <i>Pinus elliotii</i> | | | | Dead | |
| 159 | Royal Palm | <i>Roystonea regia</i> | 20 | 32 | 18 | Fair | Bent Trunk Yellow Fronds |
| 160 | Cabbage Palm | <i>Sabal palmetto</i> | 16 | 6 | 16 | Good | |
| 161 | Black Olive | <i>Bucida buceras</i> | 28 | 52 | 60 | Good | Co-Dominant Leaders |
| 162 | Christmas Palm | <i>Adonidia merrillii</i> | 4 | 6 | 6 | Good | |
| 163 | Slash Pine | <i>Pinus elliotii</i> | 19 | 48 | 30 | Good | |
| 164 | Live Oak | <i>Quercus virginiana</i> | 16 | 38 | 36 | Fair | Co-Dominant Leaders Limb Damage - Minor Lopsided |
| 165 | Mango | <i>Mangifera indica</i> | 12 | 34 | 30 | Good | |
| 166 | Weeping Fig | <i>Ficus benjamina</i> | 5 | 18 | 12 | Good | |
| 167 | Cabbage Palm | <i>Sabal palmetto</i> | 11 | 12 | 14 | Good | |
| 168 | Bottle palm | <i>Hyophorbe lagenicaulis</i> | 10 | 10 | 6 | Good | Tapered trunk |
| 169 | Cabbage Palm | <i>Sabal palmetto</i> | 12 | 10 | 14 | Good | |
| 170 | Black Olive | <i>Bucida buceras</i> | 18 | 36 | 40 | Fair | Apical Dieback Limb Damage - Minor |
| 171 | Cabbage Palm | <i>Sabal palmetto</i> | 10 | 8 | 14 | Good | |
| 172 | Areca Palm | <i>Dypsis lutescens</i> | | 20 | 20 | Good | |
| 173 | Royal Palm | <i>Roystonea regia</i> | 18 | 36 | 14 | Fair | Yellow Fronds |
| 174 | Slash Pine | <i>Pinus elliotii</i> | 16 | 48 | 34 | Good | |
| 175 | Montgomery Palm | <i>Veitchia arecina</i> | 4 | 14 | 6 | Good | |
| 176 | Bottlebrush | <i>Callistemon citrinus</i> | 10 | 26 | 24 | Fair | Co-Dominant Leaders Leaning - Minor Limb Damage - Minor |
| 177 | Cabbage Palm | <i>Sabal palmetto</i> | 142 | 6 | 14 | Good | |
| 178 | Slash Pine | <i>Pinus elliotii</i> | | | | Dead | |
| 179 | Cabbage Palm | <i>Sabal palmetto</i> | 14 | 20 | 16 | Good | |

V:\PROJECTS\2023\23-00155 - COCONUT CREEK PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_SITEDWG by JROMER 5/1/2024 2:27:57 PM



MILLER LEGG
 South Florida Office: 13680 NW 5th Street
 Suite 200, Sunrise, Florida 33325
 954-436-7000
 www.millerlegg.com

CONSULTANTS:
ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com
MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com
STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mcengineers.com
SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinnaekergroup.com
GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:
OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

 APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN
 DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: MD
 REVIEWED BY: JM
 DESIGNED BY: MG

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
S-1.0

V:\PROJECTS\2023\23-00155 - COCONUT CREEK PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_SITELING by JROMER 5/1/2024 2:27:57 PM



CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: MD
 REVIEWED BY: JM
 DESIGNED BY: MG

SHEET TITLE:

SECTION RENDERING A

SHEET NUMBER:

S-1.1



NATIVE VEGETATION

MULTI-USE TRAIL

NATIVE VEGETATION

V:\PROJECTS\2023\23-00155 - COCONUT CREEK - OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_SITEDWG by JROMER 5/1/2024 2:27:57 PM



CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mcengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:

SECTION RENDERING B

SHEET NUMBER:

S-1.2



LANDSCAPE ISLAND

PARKING LOT

MULTI-USE TRAIL

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_SITEDWG by JROMER 5/1/2024 2:27:57 PM



CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:
SECTION RENDERING C

SHEET NUMBER:
S-1.3



RECREATIONAL SHADED SPACE

MULTI-USE TRAIL

PICNIC AREA

MULTI-USE TRAIL

ROAD

NATIVE VEGETATION

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinmakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:



4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

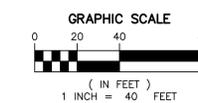
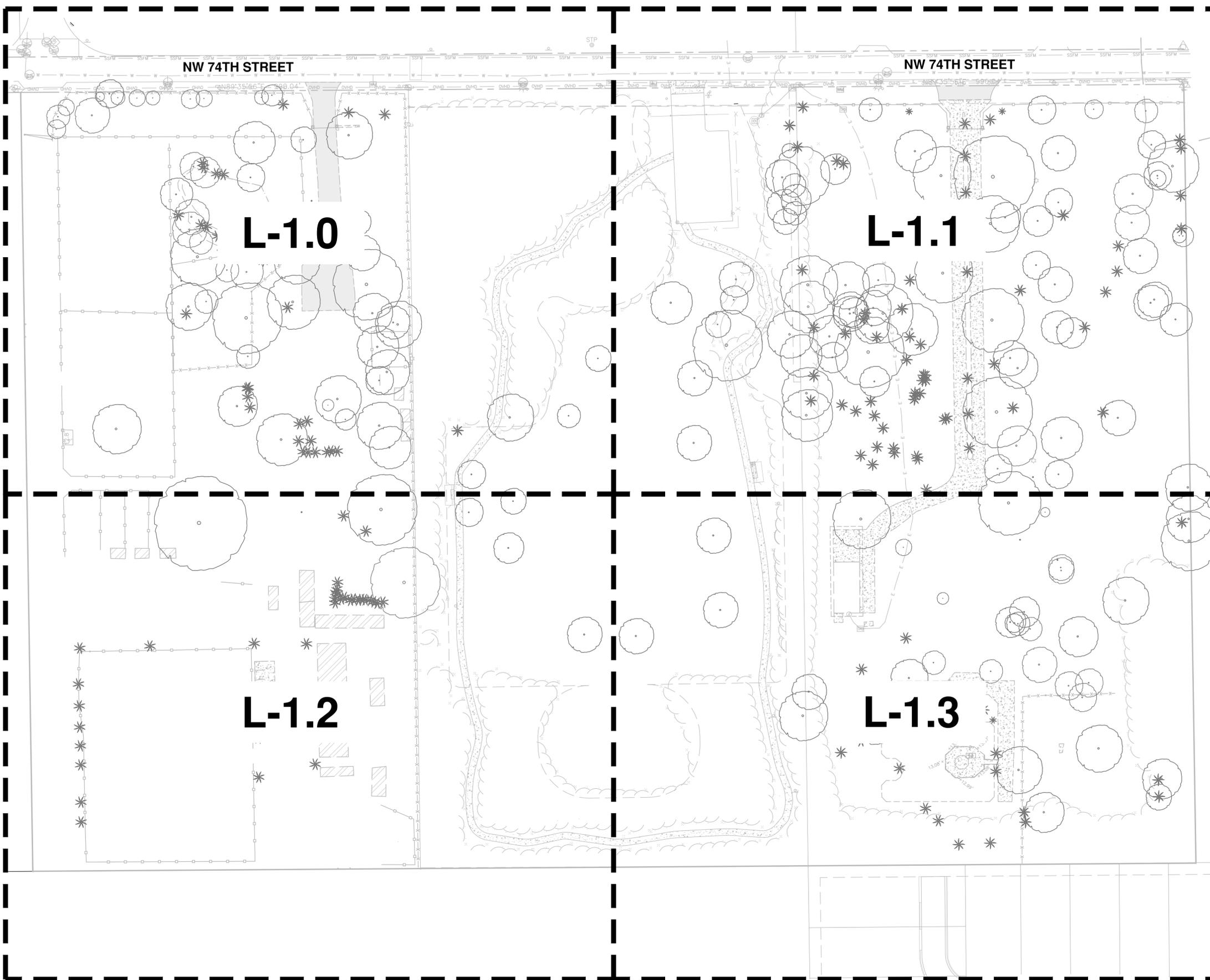
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: JR
REVIEWED BY: AP
DESIGNED BY: BS

SHEET TITLE:

TREE DISPOSITION KEY SHEET

SHEET NUMBER:

L-0.0



V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_IDP.DWG by JROMER 5/1/2024 2:58:29 PM

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

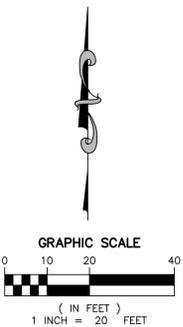
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: JR
REVIEWED BY: AP
DESIGNED BY: BS

SHEET TITLE:

TREE DISPOSITION PLAN

SHEET NUMBER:

L-1.0



NW 74TH STREET

MATCHLINE - SEE SHEET L-1.1 FOR CONTINUATION

MATCHLINE - SEE SHEET L-1.2 FOR CONTINUATION

LEGEND:



V:\PROJECTS\2023\23-00155 - COCONUT CREEK PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_IDP.DWG by JR/ROMER 5/1/2024 2:58:29 PM

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

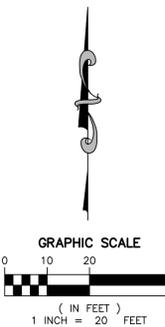
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: JR
REVIEWED BY: AP
DESIGNED BY: BS

SHEET TITLE:

TREE DISPOSITION PLAN

SHEET NUMBER:

L-1.1



NW 74TH STREET

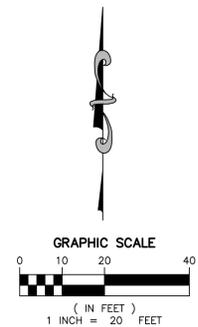
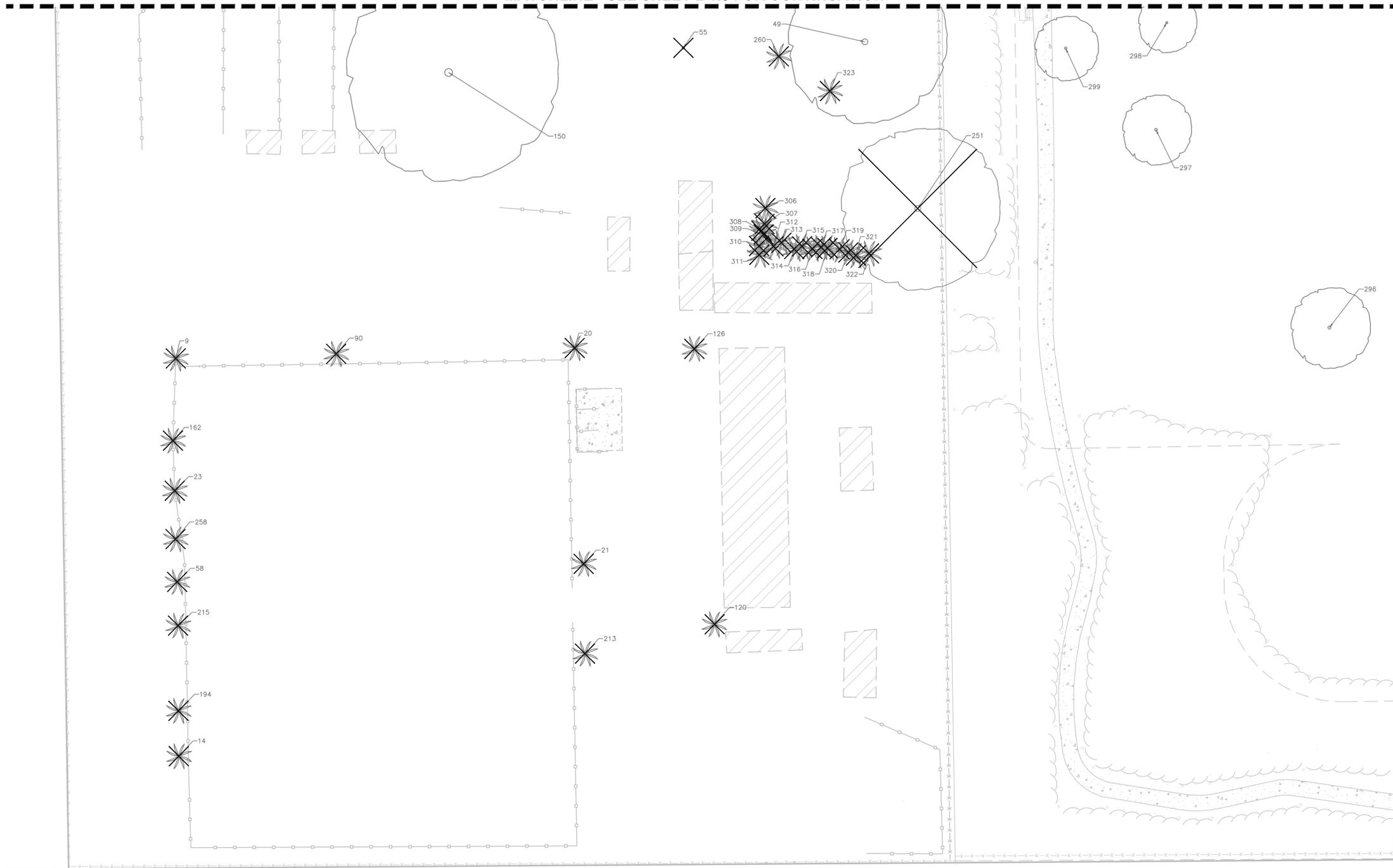
MATCHLINE - SEE SHEET L-1.0 FOR CONTINUATION

MATCHLINE - SEE SHEET L-1.3 FOR CONTINUATION

LEGEND:

- XXXX TREES/PALMS TO BE RELOCATED
- XXXX TREES/PALMS TO BE REMOVED
- XXXX TREES/PALMS TO REMAIN

MATCHLINE - SEE SHEET L-1.0 FOR CONTINUATION



MILLER LEGG
 South Florida Office: 13680 NW 5th Street
 Suite 200, Sunrise, Florida - 33325
 954-436-7000
 www.millerlegg.com

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

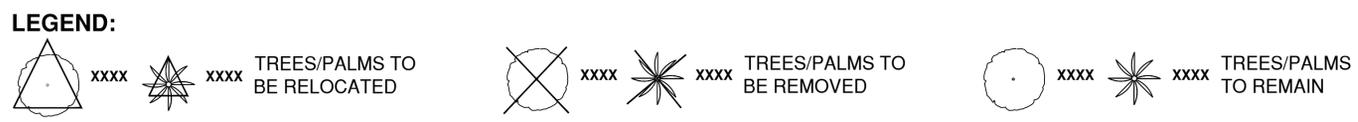
DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: JR
 REVIEWED BY: AP
 DESIGNED BY: BS

SHEET TITLE:

TREE DISPOSITION PLAN

SHEET NUMBER:

L-1.2



V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_IDP.DWG by JROMER 5/1/2024 2:58:29 PM

MATCHLINE - SEE SHEET L-1.1 FOR CONTINUATION

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinnakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

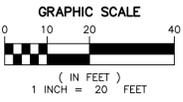
DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: JR
 REVIEWED BY: AP
 DESIGNED BY: BS

SHEET TITLE:

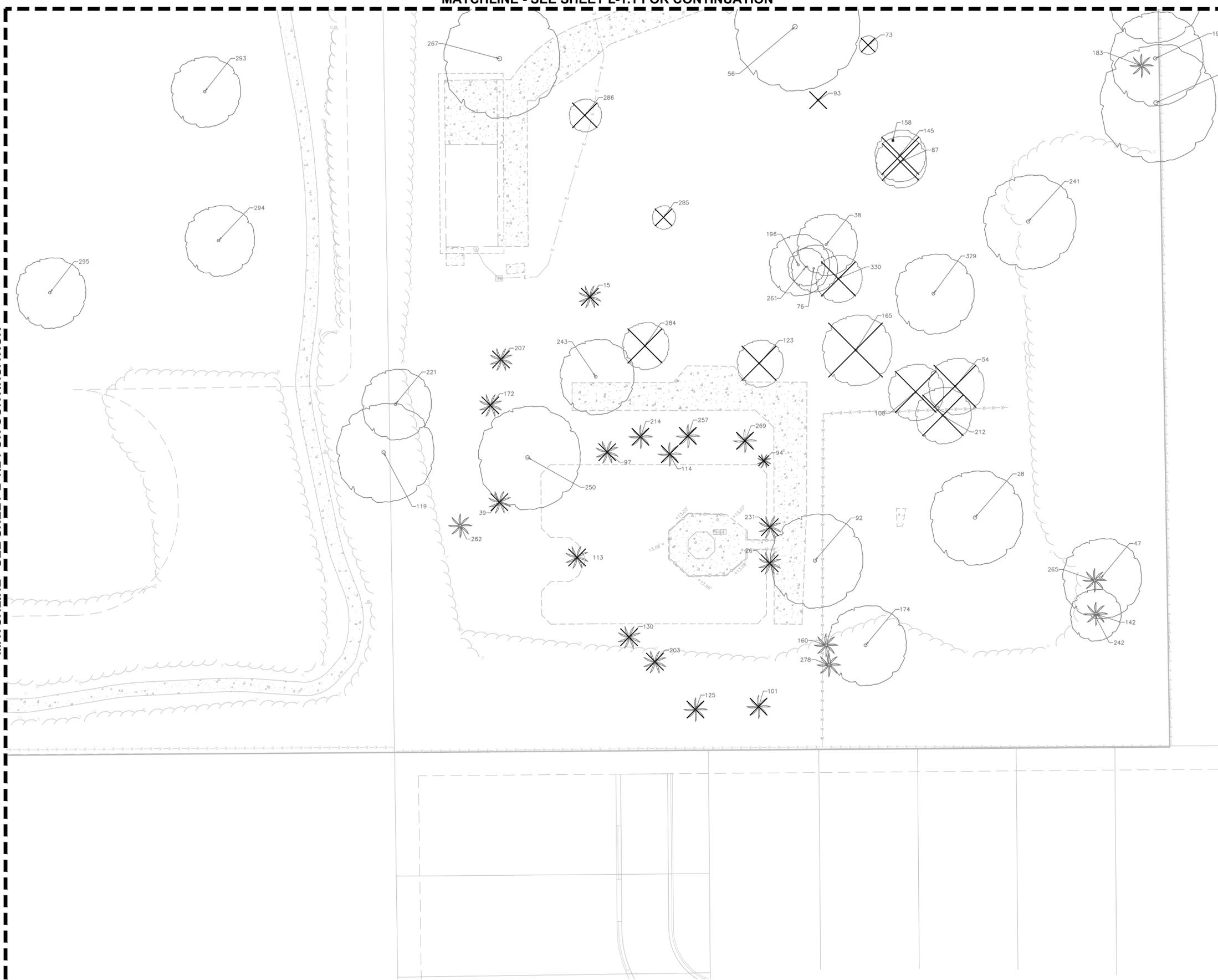
TREE DISPOSITON PLAN

SHEET NUMBER:

L-1.3



MATCHLINE - SEE SHEET L-1.2 FOR CONTINUATION



LEGEND:

- XXXX
 XXXX
 TREES/PALMS TO BE RELOCATED
- XXXX
 XXXX
 TREES/PALMS TO BE REMOVED
- XXXX
 XXXX
 TREES/PALMS TO REMAIN

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\00% DESIGN SUBMITTAL\23-00155_IDP.DWG by JROMER 5/1/2024 2:58:29 PM

TREE DISPOSITION CHART table with columns: ID #, Common Name, Botanical Name, FL Native, DBH (inches), Height (feet), Spread (feet), Condition, Disposition, Notes. Contains 100 rows of tree data.

TREE DISPOSITION CHART table with columns: ID #, Common Name, Botanical Name, FL Native, DBH (inches), Height (feet), Spread (feet), Condition, Disposition, Notes. Contains 100 rows of tree data.



South Florida Office: 13680 NW 5th Street Suite 200, Sunrise, Florida 33325 954-436-7000 www.millerlegg.com

CONSULTANTS:

ARCHITECT: Justin Architects 2400 E. Commercial Boulevard, Suite 201 Fort Lauderdale, FL 33308 (954) 771-2724 www.justinarc.com

MEP: SGM Engineering 5805 Blue Lagoon Drive, Suite 285 Miami, Florida 33026 (954) 421-1944 www.sgmengineering.com

STRUCTURAL ENGINEER: Master Consulting Engineers 4101 Ravenswood Road, Suite 320 Fort Lauderdale, Florida 33312 (954) 210-7671 www.mceengineers.com

SUSTAINABILITY CONSULTANT: SOCOTEC Consulting, Inc. 1177 Clare Avenue, Suite 7 West Palm Beach, Florida 33401 (561) 801-7576 www.spinakergroup.com

GEOTECHNICAL: Pacifica Engineering Services 601 N. Congress Avenue, Suite 303 Delray Beach, Florida 33445 (561) 419-8460 www.pacificaes.com

CLIENT:



4900 W. Copans Road Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA F.L.A. REGISTRATION NO. LA6666770 DATE: 5/1/2024

REVISIONS table with columns for revision number, description, and date.

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024 PROJECT NUMBER: 23-00155 DRAWN BY: JR REVIEWED BY: AP DESIGNED BY: BS

SHEET TITLE:

TREE DISPOSITION CHART

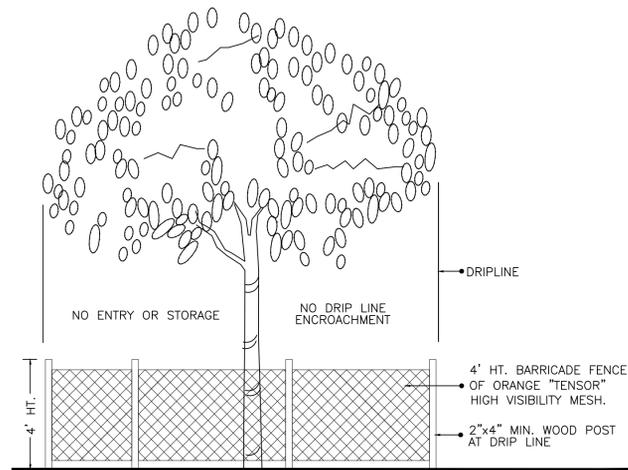
SHEET NUMBER:

L-1.4

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\00% DESIGN SUBMITTAL\23-00155_IDP.DWG by JROMER 5/1/2024 2:58:29 PM

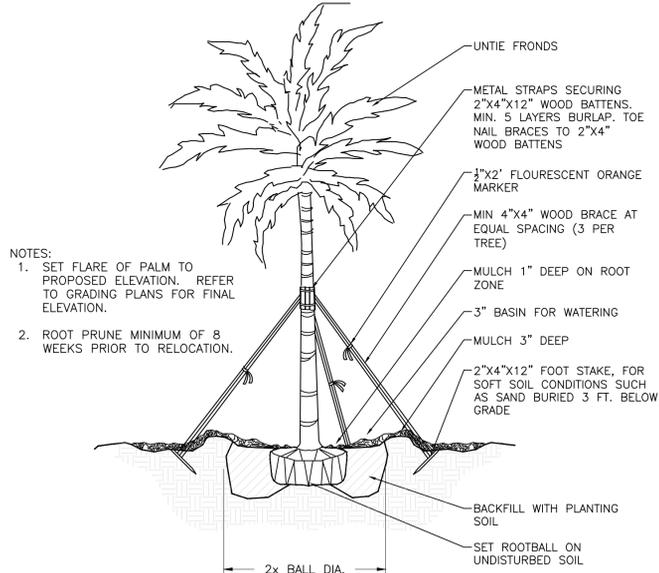
| TREE DISPOSITION CHART | | | | | | | | | | |
|------------------------|--------------------|---------------------------------|-----------|--------------|---------------|---------------|-----------|-------------|---|--|
| ID # | Common Name | Botanical Name | FL Native | DBH (inches) | Height (feet) | Spread (feet) | Condition | Disposition | Notes | |
| 201 | Paradise Tree | <i>Simarouba glauca</i> | Yes | 8 | 26 | 24 | Good | REMAIN | | |
| 202 | Slash Pine | <i>Pinus elliottii</i> | Yes | 20 | 46 | 40 | Good | REMAIN | | |
| 203 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 4 | 12 | Fair | REMOVE | | |
| 204 | Slash Pine | <i>Pinus elliottii</i> | Yes | 15 | 40 | 36 | Good | REMAIN | | |
| 205 | Slash Pine | <i>Pinus elliottii</i> | Yes | 17 | 48 | 34 | Good | REMOVE | | |
| 206 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | | | Dead | REMOVE | | |
| 207 | Areca Palm | <i>Dypsis lutescens</i> | No | | 30 | 24 | Good | REMOVE | | |
| 208 | Slash Pine | <i>Pinus elliottii</i> | Yes | 24 | 50 | 30 | Good | REMAIN | | |
| 209 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 10 | 10 | 12 | Good | REMAIN | | |
| 210 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 11 | 14 | 14 | Good | REMAIN | | |
| 211 | Weeping Fig | <i>Ficus benjamina</i> | No | 8 | 22 | 20 | Fair | REMOVE | Bent Leader Co-Dominant Leaders Limb Damage - Minor | |
| 212 | Unidentified fruit | | | 7 | 26 | 24 | Fair | REMOVE | Co-Dominant Leaders Leaning - Minor | |
| 213 | Christmas Palm | <i>Adonidia merrillii</i> | No | 3 | 6 | 5 | Good | REMOVE | | |
| 214 | Washingtonia Palm | <i>Washingtonia robusta</i> | No | 12 | 6 | 8 | Good | REMOVE | | |
| 215 | Christmas Palm | <i>Adonidia merrillii</i> | No | 4 | 6 | 6 | Good | REMOVE | | |
| 216 | Paradise Tree | <i>Simarouba glauca</i> | Yes | 8 | 24 | 20 | Good | REMAIN | | |
| 217 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 9 | 10 | 14 | Good | REMAIN | | |
| 218 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 24 | 46 | 26 | Good | REMOVE | | |
| 219 | Laurel Oak | <i>Quercus laurifolia</i> | Yes | 6 | 26 | 20 | Good | REMAIN | | |
| 220 | Slash Pine | <i>Pinus elliottii</i> | Yes | 18 | 38 | 28 | Good | REMAIN | Limb Damage - Minor | |
| 221 | Live Oak | <i>Quercus virginiana</i> | Yes | 11 | 38 | 30 | Good | REMAIN | | |
| 222 | Slash Pine | <i>Pinus elliottii</i> | Yes | 20 | 42 | 26 | Fair | REMAIN | Apical Dieback Limb Damage - Minor Lopsided | |
| 223 | Slash Pine | <i>Pinus elliottii</i> | Yes | 17 | 46 | 30 | Good | REMAIN | | |
| 224 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 16 | 14 | Good | REMAIN | | |
| 225 | Slash Pine | <i>Pinus elliottii</i> | Yes | 13 | 40 | 30 | Good | REMAIN | | |
| 226 | Slash Pine | <i>Pinus elliottii</i> | Yes | 19 | 46 | 24 | Good | REMAIN | | |
| 227 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 26 | 16 | Good | RELOCATE | | |
| 228 | Slash Pine | <i>Pinus elliottii</i> | Yes | | | | Dead | REMOVE | | |
| 229 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 8 | 12 | 14 | Good | REMAIN | | |
| 230 | Slash Pine | <i>Pinus elliottii</i> | Yes | 14 | 42 | 30 | Good | REMAIN | Lopsided | |
| 231 | Christmas Palm | <i>Adonidia merrillii</i> | No | 8 | 16 | 10 | Good | REMOVE | | |
| 232 | Strangler Fig | <i>Ficus aurea</i> | Yes | 14 | 30 | 30 | Fair | REMOVE | Growing on a rock | |
| 233 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 11 | 14 | 14 | Good | REMAIN | | |
| 234 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 10 | 14 | 14 | Good | REMAIN | | |
| 235 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 11 | 16 | 14 | Good | REMAIN | | |
| 236 | Black Olive | <i>Bucida buceras</i> | No | 23 | 38 | 40 | Fair | REMAIN | Apical Dieback Co-Dominant Leaders Limb Damage - Major | |
| 237 | Live Oak | <i>Quercus virginiana</i> | Yes | 14 | 36 | 30 | Fair | REMAIN | Leaning - Major Limb Damage - Minor Lopsided Trunk Damage - Minor | |
| 238 | Live Oak | <i>Quercus virginiana</i> | Yes | 5 | 18 | 18 | Good | REMAIN | | |
| 239 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 8 | 16 | Good | REMAIN | | |
| 240 | Black Olive | <i>Bucida buceras</i> | No | 18 | 40 | 40 | Good | REMAIN | | |
| 241 | Slash Pine | <i>Pinus elliottii</i> | Yes | 22 | 54 | 40 | Good | REMAIN | Limb Damage - Minor | |
| 242 | Slash Pine | <i>Pinus elliottii</i> | Yes | 15 | 44 | 22 | Fair | REMAIN | Apical Dieback Limb Damage - Minor Invasive vines | |
| 243 | Slash Pine | <i>Pinus elliottii</i> | Yes | 14 | 42 | 32 | Good | REMAIN | | |
| 244 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 10 | 18 | 14 | Good | REMAIN | | |
| 245 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 8 | 14 | Good | REMOVE | | |
| 246 | Weeping Fig | <i>Ficus benjamina</i> | No | 4 | 18 | 14 | Fair | REMOVE | | |
| 247 | Live Oak | <i>Quercus virginiana</i> | Yes | 20 | 46 | 44 | Fair | REMAIN | Bent Leader | |
| 248 | Laurel Oak | <i>Quercus laurifolia</i> | Yes | 26 | 48 | 50 | Fair | REMAIN | Co-Dominant Leaders | |
| 249 | Slash Pine | <i>Pinus elliottii</i> | Yes | 15 | 44 | 26 | Fair | REMAIN | Apical Dieback Limb Damage - Minor | |
| 250 | Japanese Fern tree | <i>Filicium decipiens</i> | No | 14 | 36 | 44 | Fair | REMAIN | Co-Dominant Leaders Limb Damage - Minor | |
| 251 | Java Bishopwood | <i>Bischofia javanica</i> | No | 32 | 60 | 60 | Poor | REMOVE | Co-Dominant Leaders Limb Damage - Major | |
| 252 | Live Oak | <i>Quercus virginiana</i> | Yes | 16 | 34 | 36 | Fair | REMAIN | Apical Dieback Co-Dominant Leaders Lopsided | |
| 253 | Slash Pine | <i>Pinus elliottii</i> | Yes | 6 | 30 | 12 | Fair | REMAIN | Limb Damage - Minor Lopsided Mostly Defoliated | |
| 254 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 3 | 20 | 6 | Good | REMOVE | | |
| 255 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 14 | 18 | 14 | Good | RELOCATE | | |
| 256 | Live Oak | <i>Quercus virginiana</i> | Yes | 8 | 26 | 24 | Fair | REMAIN | Co-Dominant Leaders Leaning - Minor Limb Damage - Minor | |
| 257 | Macarthur Palm | <i>Ptychosperma macarthurii</i> | No | 4 | 12 | 8 | Good | REMOVE | | |
| 258 | Christmas Palm | <i>Adonidia merrillii</i> | No | 5 | 8 | 6 | Good | REMOVE | | |
| 259 | Yucca | <i>Yucca</i> | Yes | 8 | 12 | 20 | Good | REMOVE | | |
| 260 | Areca Palm | <i>Dypsis lutescens</i> | No | | 10 | 20 | Good | REMOVE | | |
| 261 | Weeping Fig | <i>Ficus benjamina</i> | No | 6 | 18 | 16 | Fair | REMAIN | Bent Leader Co-Dominant Leaders Limb Damage - Minor | |
| 262 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 16 | 14 | Good | REMAIN | | |
| 263 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 14 | 14 | Good | RELOCATE | | |
| 264 | Strangler Fig | <i>Ficus aurea</i> | Yes | 36 | 42 | 60 | Good | REMAIN | Limb Damage - Minor | |
| 265 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 14 | 24 | 14 | Fair | REMAIN | Invasive vines | |
| 266 | Weeping Fig | <i>Ficus benjamina</i> | No | 4 | 16 | 8 | Fair | REMOVE | | |
| 267 | Black Olive | <i>Bucida buceras</i> | No | 22 | 46 | 50 | Good | REMAIN | Co-Dominant Leaders Leaning - Minor | |
| 268 | Slash Pine | <i>Pinus elliottii</i> | Yes | 20 | 54 | 34 | Good | REMAIN | | |
| 269 | Washingtonia Palm | <i>Washingtonia robusta</i> | No | 14 | 16 | 14 | Good | REMOVE | | |
| 270 | Slash Pine | <i>Pinus elliottii</i> | Yes | 11 | 42 | 24 | Good | REMAIN | | |
| 271 | Slash Pine | <i>Pinus elliottii</i> | Yes | 19 | 46 | 38 | Good | REMAIN | Limb Damage - Minor | |
| 272 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 2 | 18 | 6 | Good | REMOVE | | |
| 273 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 11 | 8 | 14 | Good | REMOVE | | |
| 274 | Umbrella Tree | <i>Schefflera actinophylla</i> | No | 12 | 26 | 20 | Fair | REMOVE | Co-Dominant Leaders | |
| 275 | Royal Palm | <i>Roystonia regia</i> | Yes | 16 | 34 | 14 | Fair | RELOCATE | Yellow Fronds | |
| 276 | Slash Pine | <i>Pinus elliottii</i> | Yes | 14 | 44 | 28 | Good | REMAIN | | |
| 277 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 11 | 16 | 14 | Good | REMAIN | | |
| 278 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 15 | 14 | 16 | Good | REMAIN | | |
| 279 | Areca Palm | <i>Dypsis lutescens</i> | No | | 16 | 20 | Good | REMOVE | | |
| 280 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 13 | 14 | 14 | Good | REMAIN | | |
| 281 | Laurel Oak | <i>Quercus laurifolia</i> | Yes | 6 | 26 | 24 | Good | REMAIN | Limb Damage - Minor | |
| 282 | Slash Pine | <i>Pinus elliottii</i> | Yes | 18 | 48 | 28 | Good | REMAIN | Lopsided | |
| 283 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 26 | 12 | Good | RELOCATE | | |
| 284 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 5 | 22 | 20 | Good | REMOVE | | |
| 285 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 3 | 20 | 10 | Good | REMOVE | | |
| 286 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 3 | 18 | 14 | Good | REMOVE | | |
| 287 | Slash Pine | <i>Pinus elliottii</i> | Yes | 20 | 48 | 30 | Good | REMAIN | | |
| 288 | Laurel Oak | <i>Quercus laurifolia</i> | Yes | 7 | 28 | 24 | Fair | REMAIN | Bent Leader Limb Damage - Minor Lopsided | |
| 289 | Slash Pine | <i>Pinus elliottii</i> | Yes | 16 | 40 | 22 | Good | REMAIN | Bent Leader | |
| 290 | Ficus Spp. | | | 26 | 44 | 60 | Good | REMAIN | Co-Dominant Leaders Limb Damage - Minor | |
| 291 | Live Oak | <i>Quercus virginiana</i> | Yes | 11 | 32 | 30 | Good | REMAIN | | |
| 292 | Live Oak | <i>Quercus virginiana</i> | Yes | 10 | 32 | 30 | Good | REMAIN | | |
| 293 | Live Oak | <i>Quercus virginiana</i> | Yes | 10 | 34 | 30 | Good | REMAIN | Limb Damage - Minor | |
| 294 | Live Oak | <i>Quercus virginiana</i> | Yes | 10 | 28 | 30 | Good | REMAIN | | |
| 295 | Live Oak | <i>Quercus virginiana</i> | Yes | 10 | 28 | 30 | Good | REMAIN | | |
| 296 | Live Oak | <i>Quercus virginiana</i> | Yes | 11 | 34 | 30 | Good | REMAIN | Co-Dominant Leaders Sprouting | |
| 297 | Live Oak | <i>Quercus virginiana</i> | Yes | 11 | 32 | 26 | Good | REMAIN | | |
| 298 | Live Oak | <i>Quercus virginiana</i> | Yes | 9 | 30 | 22 | Good | REMAIN | Limb Damage - Minor | |
| 299 | Slash Pine | <i>Pinus elliottii</i> | Yes | 15 | 42 | 24 | Good | REMAIN | Co-Dominant Leaders | |
| 300 | Slash Pine | <i>Pinus elliottii</i> | Yes | 15 | 42 | 24 | Good | REMAIN | Limb Damage - Minor | |

| TREE DISPOSITION CHART | | | | | | | | | | |
|------------------------|-----------------|---------------------------|-----------|--------------|---------------|---------------|-----------|-------------|---|--|
| ID # | Common Name | Botanical Name | FL Native | DBH (inches) | Height (feet) | Spread (feet) | Condition | Disposition | Notes | |
| 301 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 10 | 16 | 12 | Good | REMAIN | | |
| 302 | Laurel Oak | <i>Quercus laurifolia</i> | Yes | 16 | 36 | 40 | Fair | REMAIN | Co-Dominant Leaders Limb Damage - Minor | |
| 303 | Live Oak | <i>Quercus virginiana</i> | Yes | 8 | 26 | 20 | Good | REMAIN | Bent Leader | |
| 304 | Live Oak | <i>Quercus virginiana</i> | Yes | 11 | 28 | 22 | Good | REMAIN | | |
| 305 | Royal Poinciana | <i>Delonix regia</i> | Yes | 14 | 30 | 36 | Fair | REMAIN | Apical Dieback Co-Dominant Leaders Lopsided | |
| 306 | Areca Palm | <i>Dypsis lutescens</i> | No | | 14 | 12 | Good | REMOVE | | |
| 307 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 308 | Areca Palm | <i>Dypsis lutescens</i> | No | | 14 | 12 | Good | REMOVE | | |
| 309 | Areca Palm | <i>Dypsis lutescens</i> | No | | 14 | 12 | Good | REMOVE | | |
| 310 | Areca Palm | <i>Dypsis lutescens</i> | No | | 13 | 12 | Good | REMOVE | | |
| 311 | Areca Palm | <i>Dypsis lutescens</i> | No | | 14 | 12 | Good | REMOVE | | |
| 312 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 313 | Areca Palm | <i>Dypsis lutescens</i> | No | | 14 | 12 | Good | REMOVE | | |
| 314 | Areca Palm | <i>Dypsis lutescens</i> | No | | 13 | 12 | Good | REMOVE | | |
| 315 | Areca Palm | <i>Dypsis lutescens</i> | No | | 14 | 12 | Good | REMOVE | | |
| 316 | Areca Palm | <i>Dypsis lutescens</i> | No | | 14 | 12 | Good | REMOVE | | |
| 317 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 318 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 319 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 320 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 321 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 322 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 323 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 324 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 325 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 326 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 327 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 328 | Areca Palm | <i>Dypsis lutescens</i> | No | | 15 | 12 | Good | REMOVE | | |
| 329 | Slash Pine | <i>Pinus elliottii</i> | Yes | 22 | 44 | 34 | Good | REMAIN | Limb Damage - Minor | |
| 330 | Spanish Dagger | <i>Yucca gloriosa</i> | Yes | 10 | 16 | 20 | Good | REMOVE | Cluster | |



TREE PRESERVATION BARRICADE FENCING DETAIL

NT8.



RELOCATED PALM PLANTING DETAIL

NT8.

NOTE:

TREE PROTECTION BARRICADES SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AROUND EXISTING TREES THAT ARE TO REMAIN. PRIOR TO ANY CONSTRUCTION A TREE PROTECTION BARRICADE INSPECTION SHALL BE CONDUCTED BY OWNER OR OWNERS REPRESENTATIVE. REFER TO LANDSCAPE DETAIL FOR TREE PRESERVATION BARRICADE FENCING.

ROOT PRUNING NOTES:

- ROOT PRUNING SHALL BE DONE WHENEVER THERE WILL BE GRADING, CUTTING OR COMPACTION DISTURBANCE UNDERNEATH THE DRIP LINE OF A TREE. PRIOR TO ANY WORK WITHIN DRIP LINE, CONTRACTORS SHOULD CONTACT LANDSCAPE ARCHITECT TO COORDINATE WORK. ROOT PRUNING SHALL BE DONE PRIOR TO DISTURBANCE OF THE SITE. NO DISTURBANCE SHALL BE DONE WITHIN A DISTANCE OF 3X THE DIAMETER OF THE TREE, DUE TO STABILITY CONCERNS.
- BEFORE DISTURBANCE, MEET WITH LANDSCAPE ARCHITECT ON SITE TO CONFIRM LOCATION OF ROOT PRUNING. ROOT PRUNING SHALL BE CONDUCTED AT AN AGREED UPON LOCATION. THIS LOCATION WILL BE MARKED ON THE GROUND BETWEEN THE DISTURBANCE AND THE TREE, TYPICALLY 6" CLOSER TO THE TREE THAN EDGE THE DISTURBANCE.
- ALL ROOTS 3/4"-1.5" DIAMETERS MUST BE PRUNED. IF 2.5" OR LARGER ROOTS ARE ENCOUNTERED, STOP PRUNING IN THAT AREA AND CONTACT LANDSCAPE ARCHITECT. ROOT PRUNING SHALL ONLY BE AS DEEP AS NECESSARY TO ENSURE THE CUTTING OF ALL ROOTS WHICH WOULD BE IMPACTED BY THE DISTURBANCE.
- ROOT PRUNING SHALL BE DONE WITH A SHARP TOOL, IN SUCH A WAY THAT DOES NOT PULL ON THE ROOTS, BUT LEAVES SMOOTH CUTS. IT IS PREFERABLE TO EXPOSE THE ROOTS PRIOR TO ROOT PRUNING. AFTER PRUNING, FILL THE AREA WITH QUALITY TOPSOIL AND WATER UNTIL THOROUGHLY SOAKED.
- ONCE EXPOSED, ROOT

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 711-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

**OAK TRAILS PARK
IMPROVEMENTS**
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: JR
REVIEWED BY: AP
DESIGNED BY: BS

SHEET TITLE:

**TREE DISPOSITION
CHART & DETAILS**

SHEET NUMBER:

L-1.5

| TREE MITIGATION CHART | | | | | | | | |
|--|-------------------|--------------------------------|-----------|--------------|---------------|---------------|-----------|---|
| Table 1 - Invasive Trees to be Removed | | | | | | | | |
| ID # | Common Name | Botanical Name | FL Native | DBH (inches) | Height (feet) | Spread (feet) | Condition | Notes |
| 52 | Queen Palm | <i>Syagrus romanzoffiana</i> | No | 9 | 16 | 14 | Fair | Leaning |
| 80 | Washingtonia Palm | <i>Washingtonia robusta</i> | No | 12 | 16 | 4 | Poor | Most Fronds Missing |
| 85 | Pink tabebuia | <i>Tabebuia rosea</i> | No | 6 | 32 | 16 | Fair | Bent Leader Limb Damage - Minor |
| 96 | Pink tabebuia | <i>Tabebuia rosea</i> | No | 10 | 26 | 20 | Fair | Apical Dieback Bent Leader Mostly Defoliated |
| 106 | Queen Palm | <i>Syagrus romanzoffiana</i> | No | 10 | 24 | 14 | Fair | Tapered Trunk |
| 111 | Queen Palm | <i>Syagrus romanzoffiana</i> | No | 11 | 28 | 16 | Fair | Bent Trunk Tapered Trunk |
| 130 | Queen Palm | <i>Syagrus romanzoffiana</i> | No | 12 | 24 | 20 | Good | |
| 134 | Queen Palm | <i>Syagrus romanzoffiana</i> | No | 9 | 26 | 14 | Good | |
| 176 | Bottlebrush | <i>Callistemon citrinus</i> | No | 10 | 26 | 24 | Fair | Co-Dominant Leaders Leaning - Minor Limb Damage - Minor |
| 190 | Pink tabebuia | <i>Tabebuia rosea</i> | No | 6 | 26 | 20 | Fair | Bent Leader Limb Damage - Minor Lopsided |
| 214 | Washingtonia Palm | <i>Washingtonia robusta</i> | No | 12 | 6 | 8 | Good | |
| 218 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 24 | 46 | 26 | Good | |
| 251 | Java Bishopwood | <i>Bischofia javanica</i> | No | 32 | 60 | 60 | Poor | Co-Dominant Leaders Limb Damage - Major |
| 269 | Washingtonia Palm | <i>Washingtonia robusta</i> | No | 14 | 16 | 14 | Good | |
| 274 | Umbrella Tree | <i>Schefflera actinophylla</i> | No | 12 | 26 | 20 | Fair | Co-Dominant Leaders |
| 284 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 5 | 22 | 20 | Good | |
| 285 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 3 | 20 | 10 | Good | |
| 286 | Australian Pine | <i>Casuarina equisetifolia</i> | No | 3 | 18 | 14 | Good | |

| Table 3 - Palms to be Removed | | | | | | | | |
|-------------------------------|-----------------|---------------------------------|-----------|--------------|---------------|---------------|-----------|---------------------------------|
| ID # | Common Name | Botanical Name | FL Native | DBH (inches) | Height (feet) | Spread (feet) | Condition | Notes |
| 39 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 28 | 30 | Good | |
| 122 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 16 | 20 | Good | |
| 172 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 20 | 20 | Good | |
| 207 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 30 | 24 | Good | |
| 260 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 10 | 20 | Good | |
| 279 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 16 | 20 | Good | |
| 306 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 14 | 12 | Good | |
| 307 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 308 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 14 | 12 | Good | |
| 309 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 14 | 12 | Good | |
| 310 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 13 | 12 | Good | |
| 311 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 14 | 12 | Good | |
| 312 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 313 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 14 | 12 | Good | |
| 314 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 13 | 12 | Good | |
| 315 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 14 | 12 | Good | |
| 316 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 14 | 12 | Good | |
| 317 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 318 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 319 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 320 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 321 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 322 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 323 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 324 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 325 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 326 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 327 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 328 | Areca Palm | <i>Dyopsis lutescens</i> | No | 0 | 15 | 12 | Good | |
| 94 | Bottle Palm | <i>Hyophorbe lagenicaulis</i> | No | 8 | 10 | 6 | Fair | Tapered and yellow fronds |
| 99 | Bottle Palm | <i>Hyophorbe lagenicaulis</i> | No | 8 | 10 | 6 | Good | Tapered |
| 168 | Bottle Palm | <i>Hyophorbe lagenicaulis</i> | No | 10 | 10 | 6 | Good | Tapered trunk |
| 3 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 3 | 12 | Good | |
| 118 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 6 | 14 | Fair | Growing on rock edge |
| 143 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 4 | 12 | Good | |
| 153 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 6 | 14 | Good | |
| 203 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 4 | 12 | Fair | |
| 206 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 0 | 0 | Dead | |
| 245 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 12 | 8 | 14 | Good | |
| 273 | Cabbage Palm | <i>Sabal palmetto</i> | Yes | 11 | 8 | 14 | Good | |
| 9 | Christmas Palm | <i>Adonidia merrillii</i> | No | 6 | 6 | 8 | Good | |
| 14 | Christmas Palm | <i>Adonidia merrillii</i> | No | 5 | 8 | 6 | Good | |
| 20 | Christmas Palm | <i>Adonidia merrillii</i> | No | 6 | 8 | 6 | Good | |
| 21 | Christmas Palm | <i>Adonidia merrillii</i> | No | 6 | 6 | 6 | Good | |
| 23 | Christmas Palm | <i>Adonidia merrillii</i> | No | 5 | 8 | 6 | Good | |
| 26 | Christmas Palm | <i>Adonidia merrillii</i> | No | 6 | 14 | 6 | Good | |
| 58 | Christmas Palm | <i>Adonidia merrillii</i> | No | 5 | 8 | 6 | Good | |
| 90 | Christmas Palm | <i>Adonidia merrillii</i> | No | 4 | 8 | 6 | Good | |
| 126 | Christmas Palm | <i>Adonidia merrillii</i> | No | 4 | 8 | 6 | Good | |
| 162 | Christmas Palm | <i>Adonidia merrillii</i> | No | 4 | 6 | 6 | Good | |
| 194 | Christmas Palm | <i>Adonidia merrillii</i> | No | 4 | 8 | 6 | Good | |
| 213 | Christmas Palm | <i>Adonidia merrillii</i> | No | 3 | 6 | 5 | Good | |
| 215 | Christmas Palm | <i>Adonidia merrillii</i> | No | 4 | 6 | 6 | Good | |
| 231 | Christmas Palm | <i>Adonidia merrillii</i> | No | 8 | 16 | 10 | Good | |
| 258 | Christmas Palm | <i>Adonidia merrillii</i> | No | 5 | 8 | 6 | Good | |
| 257 | Macarthur Palm | <i>Ptychosperma macarthurii</i> | No | 4 | 12 | 8 | Good | |
| 15 | Montgomery Palm | <i>Veitchia arecina</i> | No | 4 | 14 | 6 | Good | |
| 57 | Montgomery Palm | <i>Veitchia arecina</i> | No | 8 | 16 | 12 | Good | |
| 97 | Montgomery Palm | <i>Veitchia arecina</i> | No | 6 | 18 | 6 | Good | |
| 113 | Montgomery Palm | <i>Veitchia arecina</i> | No | 5 | 14 | 6 | Good | |
| 114 | Montgomery Palm | <i>Veitchia arecina</i> | No | 6 | 16 | 12 | Good | |
| 120 | Montgomery Palm | <i>Veitchia arecina</i> | No | 5 | 12 | 8 | Good | |
| 175 | Montgomery Palm | <i>Veitchia arecina</i> | No | 4 | 14 | 6 | Good | |
| 197 | Royal Palm | <i>Roystonea regia</i> | Yes | 17 | 36 | 16 | Poor | Yellow Fronds Woodpecker damage |
| 1 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 3 | 20 | 6 | Good | |
| 37 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 0 | 0 | 0 | Dead | |
| 45 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 6 | 24 | 8 | Good | |
| 63 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 2 | 22 | 6 | Good | |
| 117 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 2 | 20 | 6 | Good | |
| 254 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 3 | 20 | 6 | Good | |
| 272 | Solitaire Palm | <i>Ptychosperma elegans</i> | No | 2 | 18 | 6 | Good | |
| 101 | Triangle Palm | <i>Dyopsis decaryi</i> | No | 12 | 16 | 18 | Good | |
| 125 | Triangle Palm | <i>Dyopsis decaryi</i> | No | 12 | 18 | 18 | Good | |

Total # of Palms to be Removed: 73

| Table 2 - Trees to be Removed | | | | | | | | | |
|-------------------------------|--------------------|-----------------------------|-----------|--------------|---------------|---------------|-----------|--|--|
| ID # | Common Name | Botanical Name | FL Native | DBH (inches) | Height (feet) | Spread (feet) | Condition | Notes | |
| 54 | Avocado | <i>Persea americana</i> | No | 8 | 30 | 24 | Good | Co-Dominant Leaders | |
| 108 | Avocado | <i>Persea americana</i> | No | 8 | 26 | 24 | Good | | |
| 78 | Bird of paradise | <i>Strelitzia reginae</i> | | | | | Good | | |
| 129 | Birds of paradise | <i>Strelitzia reginae</i> | | | 28 | 20 | Good | | |
| 69 | Black Olive | <i>Bucida buceras</i> | No | 6 | 20 | 24 | Poor | Co-Dominant Leaders Limb Damage - Minor Growing on rock edge of pond | |
| 103 | Black Olive | <i>Bucida buceras</i> | No | | | | Dead | | |
| 123 | Crepe Myrtle | <i>Lagerstroemia indica</i> | No | 14 | 30 | 20 | Fair | Limb Damage - Minor | |
| 91 | Florida Trema | | | 6 | 24 | 18 | Good | Bent Leader Limb Damage - Minor | |
| 128 | Laurel Oak | <i>Quercus laurifolia</i> | Yes | 12 | 32 | 30 | Fair | Roots growing on rock edge | |
| 165 | Mango | <i>Mangifera indica</i> | No | 12 | 34 | 30 | Good | | |
| 189 | Mango | <i>Mangifera indica</i> | No | 12 | 34 | 30 | Good | | |
| 41 | Pongam | <i>Milletia pinnata</i> | No | 16 | 40 | 44 | Good | Bent Leader Co-Dominant Leaders | |
| 35 | Slash Pine | <i>Pinus elliottii</i> | Yes | 20 | 42 | 34 | Good | | |
| 87 | Slash Pine | <i>Pinus elliottii</i> | Yes | 13 | 34 | 22 | Good | Lopsided | |
| 93 | Slash Pine | <i>Pinus elliottii</i> | Yes | | | | Dead | | |
| 145 | Slash Pine | <i>Pinus elliottii</i> | Yes | 9 | 38 | 22 | Good | | |
| 158 | Slash Pine | <i>Pinus elliottii</i> | Yes | | | | Dead | | |
| 163 | Slash Pine | <i>Pinus elliottii</i> | Yes | 19 | 48 | 30 | Good | | |
| 178 | Slash Pine | <i>Pinus elliottii</i> | Yes | | | | Dead | | |
| 205 | Slash Pine | <i>Pinus elliottii</i> | Yes | 17 | 48 | 34 | Good | | |
| 228 | Slash Pine | <i>Pinus elliottii</i> | Yes | | | | Dead | | |
| 330 | Spanish Dagger | <i>Yucca gloriosa</i> | Yes | 10 | 16 | 20 | Good | Cluster | |
| 55 | Strangler Fig | <i>Ficus aurea</i> | Yes | 0 | 26 | 24 | Poor | Co-Dominant Leaders Limb Damage - Minor Poor Structure | |
| 73 | Strangler Fig | <i>Ficus aurea</i> | Yes | 3 | 8 | 8 | Fair | On dead stump | |
| 232 | Strangler Fig | <i>Ficus aurea</i> | Yes | 14 | 30 | 30 | Fair | Growing on a rock | |
| 212 | Unidentified fruit | | | 7 | 26 | 24 | Fair | Co-Dominant Leaders Leaning - Minor | |
| 19 | Weeping Fig | <i>Ficus benjamina</i> | No | 8 | 22 | 14 | Good | | |
| 46 | Weeping Fig | <i>Ficus benjamina</i> | No | 6 | 16 | 12 | Good | | |
| 64 | Weeping Fig | <i>Ficus benjamina</i> | No | 8 | 18 | 14 | Good | | |
| 89 | Weeping Fig | <i>Ficus benjamina</i> | No | 6 | 20 | 16 | Fair | Co-Dominant Leaders Limb Damage - Minor | |
| 133 | Weeping Fig | <i>Ficus benjamina</i> | No | 8 | 24 | 16 | Fair | | |
| 166 | Weeping Fig | <i>Ficus benjamina</i> | No | 5 | 18 | 12 | Good | | |
| 182 | Weeping Fig | <i>Ficus benjamina</i> | No | 6 | 20 | 12 | Fair | | |
| 211 | Weeping Fig | <i>Ficus benjamina</i> | No | 8 | 22 | 20 | Fair | Bent Leader Co-Dominant Leaders Limb Damage - Minor | |
| 246 | Weeping Fig | <i>Ficus benjamina</i> | No | 4 | 18 | 14 | Fair | | |
| 266 | Weeping Fig | <i>Ficus benjamina</i> | No | 4 | 16 | 8 | Fair | | |
| 181 | Yucca | <i>Yucca</i> | Yes | 14 | 24 | 28 | Good | | |
| 259 | Yucca | <i>Yucca</i> | Yes | 8 | 12 | 20 | Good | | |

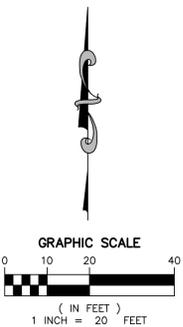
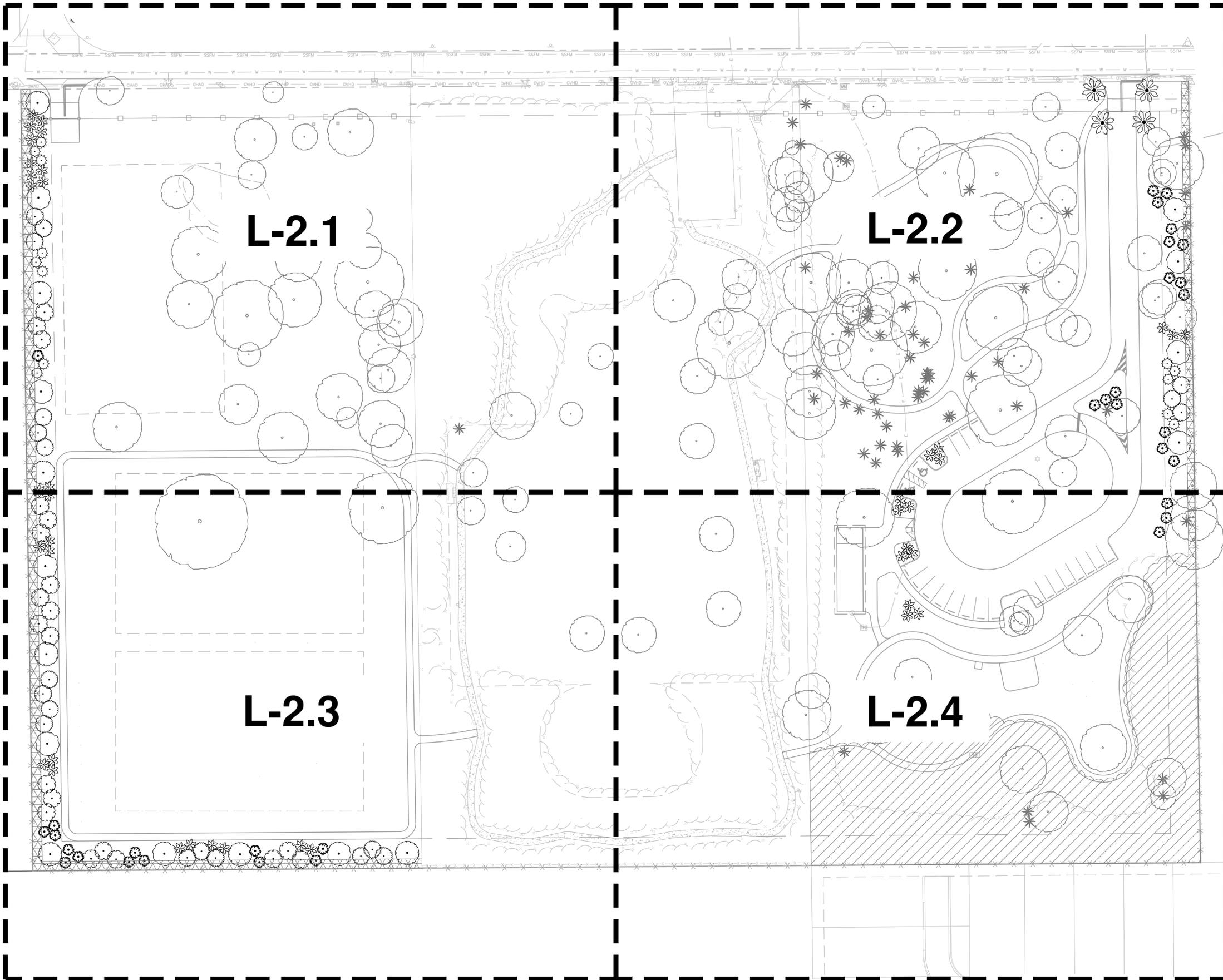
Total Canopy to be Removed (SF): 16964

| Table 4 - Replacement/Mitigation Tree List | | | | | | | | | |
|--|---------------------|------------------------------|-----------|--------------|---------------------|--------------|----------------------|--|-------|
| Symbol | Common Name | Botanical Name | FL Native | DBH (inches) | Height or CT (feet) | Quantity | Replacement Category | | Notes |
| SP | Cabbage Palm | <i>Sabal palmetto</i> | Yes | | | 33 | 3 | | |
| TR | FL Thatch Palm | <i>Thrinax radiata</i> | Yes | | | 40 | 4 | | |
| PE | South FL Slash Pine | <i>Pinus elliottii densa</i> | Yes | | | 20 | 1 | | |
| CE | Green Buttonwood | <i>Conocarpus erectus</i> | Yes | | | 20 | 1 | | |
| BS | Gumbo Limbo | <i>Bursera simaruba</i> | Yes | | | 10 | 1 | | |
| QV | Southern Live Oak | <i>Quercus virginiana</i> | Yes | | | 7 | 1 | | |
| Total Replacement Canopy (SF): | | | | | | 17100 | | | |
| Total Replacement Palms: | | | | | | 73 | | | |

NOTES:

1. THERE ARE TEN (10) TREES AND EIGHT (8) PALMS LISTED IN TABLE

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\00% DESIGN SUBMITTAL\23-00155_LNP.DWG by JROMER 5/1/2024 5:26:55 PM



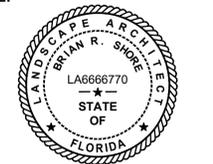
MILLER LEGG
South Florida Office: 13680 NW 5th Street
Suite 200, Sunrise, Florida - 33325
954-436-7000
www.millerlegg.com

CONSULTANTS:
ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com
MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com
STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com
SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com
GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:

4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:
OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

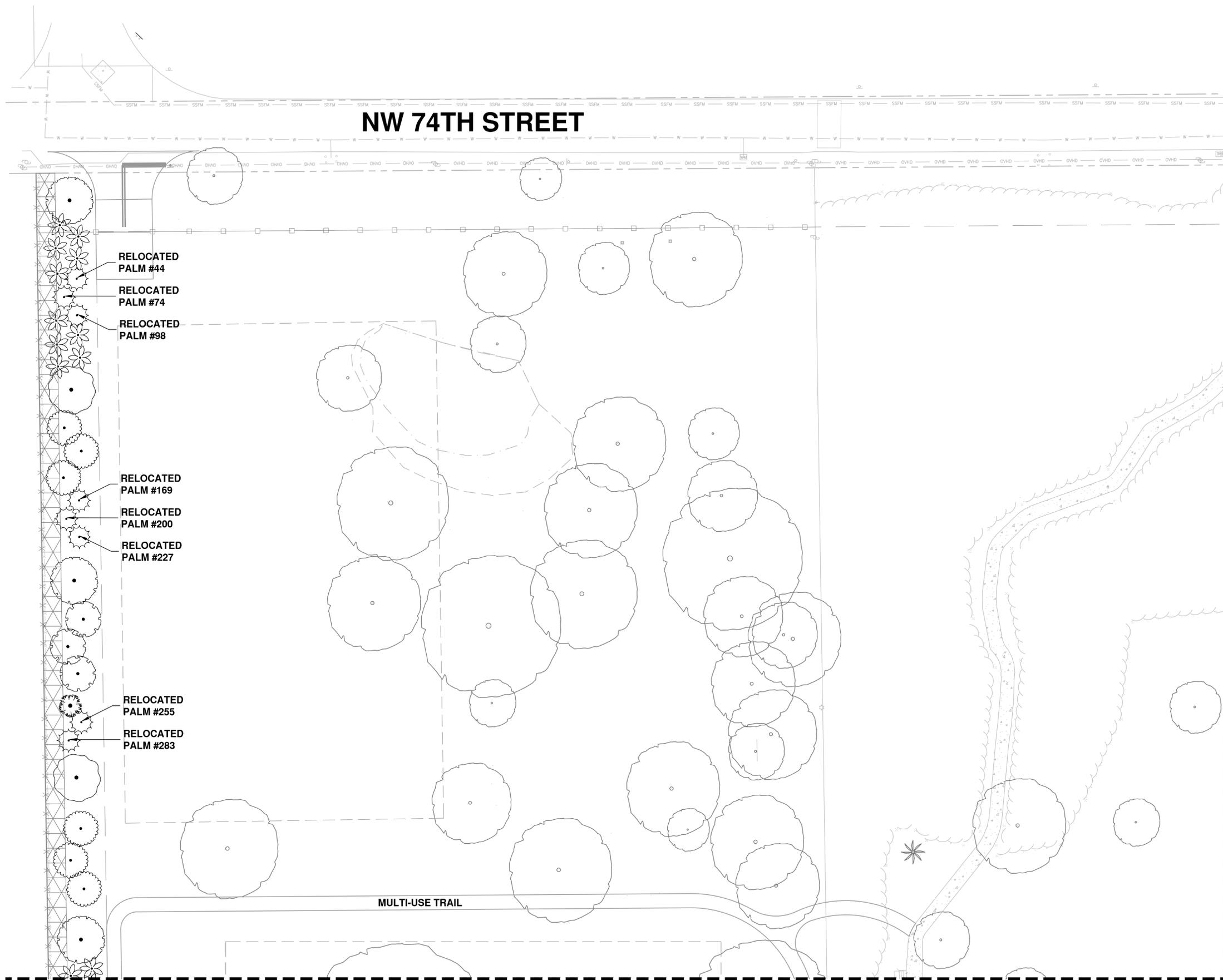
| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: JR
REVIEWED BY: AP
DESIGNED BY: BS

SHEET TITLE:
PLANTING KEY SHEET

SHEET NUMBER:
L-2.0

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\00% DESIGN SUBMITTAL\23-00155_LNP.DWG by JROMER 5/1/2024 5:26:55 PM



CONSULTANTS:

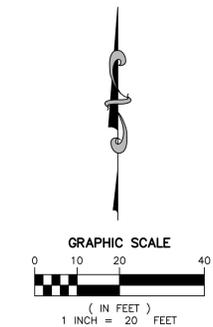
ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinnakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com



- MITIGATION PLANTING:**
- GUMBO LIMBO
 - GREEN BUTTONWOOD
 - SLASH PINE
 - SOUTHERN LIVE OAK
 - CABBAGE PALMETTO
 - FLORIDA THATCH PALM
- RELOCATED PLANTING:**
- ROYAL PALM
 - CABBAGE PALMETTO
- EXISTING PLANTING:**
- EXISTING TREE
 - EXISTING PALM

CLIENT:

Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: JR
REVIEWED BY: AP
DESIGNED BY: BS

SHEET TITLE:

PLANTING PLAN

SHEET NUMBER:

L-2.1

CONSULTANTS:
 ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:
OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

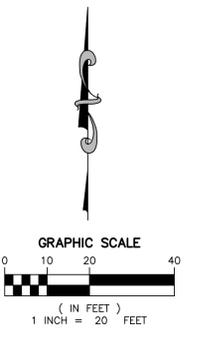
 APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

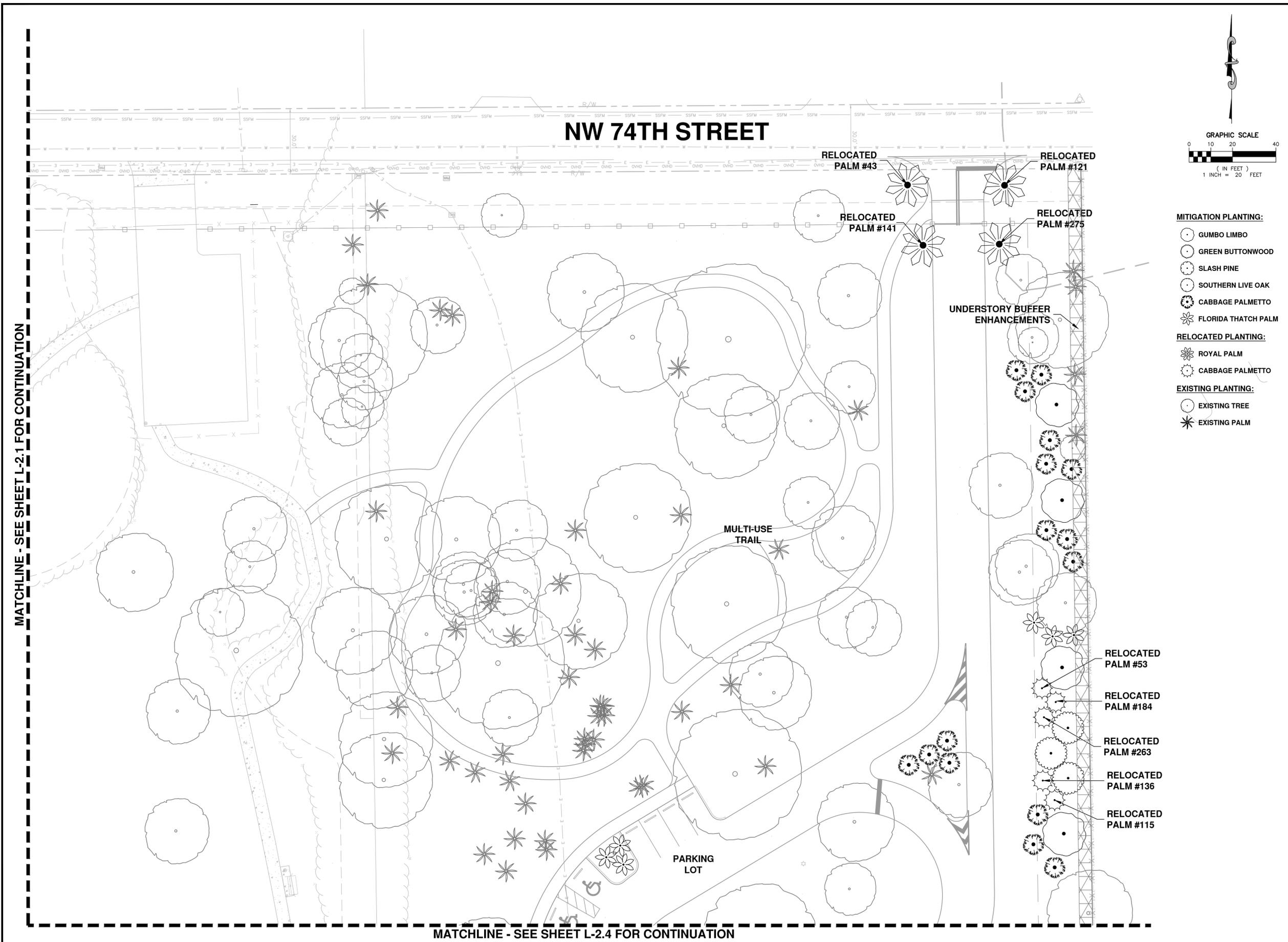
SUBMITTAL:
30% SCHEMATIC DESIGN
 DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: JR
 REVIEWED BY: AP
 DESIGNED BY: BS

SHEET TITLE:
PLANTING PLAN

SHEET NUMBER:
L-2.2

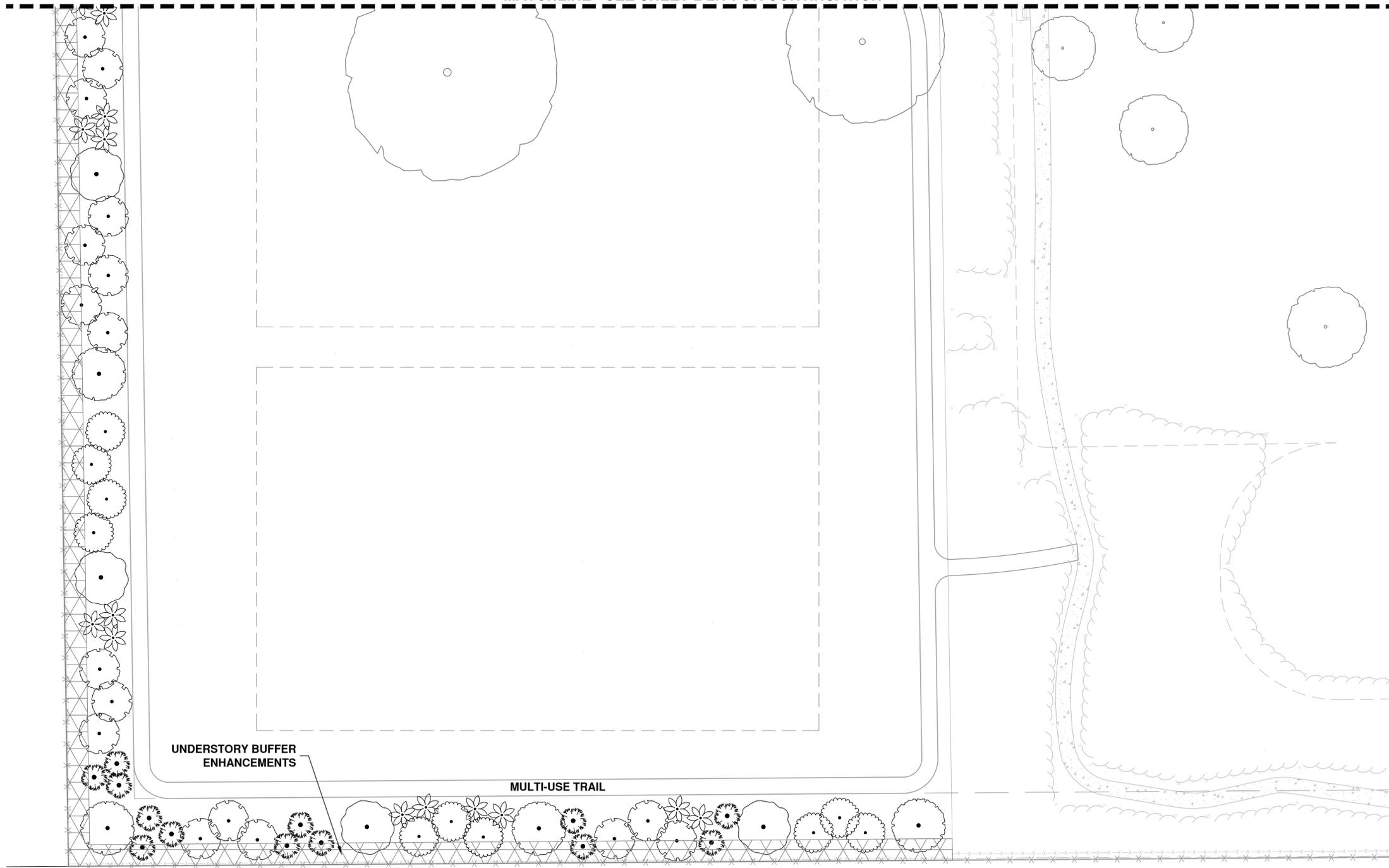


- MITIGATION PLANTING:**
-  GUMBO LIMBO
 -  GREEN BUTTONWOOD
 -  SLASH PINE
 -  SOUTHERN LIVE OAK
 -  CABBAGE PALMETTO
 -  FLORIDA THATCH PALM
- RELOCATED PLANTING:**
-  ROYAL PALM
 -  CABBAGE PALMETTO
- EXISTING PLANTING:**
-  EXISTING TREE
 -  EXISTING PALM



V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_LNP.DWG by JROMER 5/1/2024 5:26:55 PM

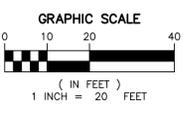
MATCHLINE - SEE SHEET L-2.1 FOR CONTINUATION



UNDERSTORY BUFFER ENHANCEMENTS

MULTI-USE TRAIL

MATCHLINE - SEE SHEET L-2.4 FOR CONTINUATION



MITIGATION PLANTING:

- GUMBO LIMBO
- GREEN BUTTONWOOD
- SLASH PINE
- SOUTHERN LIVE OAK
- CABBAGE PALMETTO
- FLORIDA THATCH PALM

RELOCATED PLANTING:

- ROYAL PALM
- CABBAGE PALMETTO

EXISTING PLANTING:

- EXISTING TREE
- EXISTING PALM

MILLER LEGG
 South Florida Office: 13680 NW 5th Street
 Suite 200, Sunrise, Florida 33325
 954-436-7000
 www.millerlegg.com

CONSULTANTS:
 ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinmakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:
OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

 APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN
 DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: JR
 REVIEWED BY: AP
 DESIGNED BY: BS

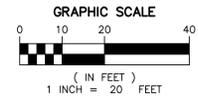
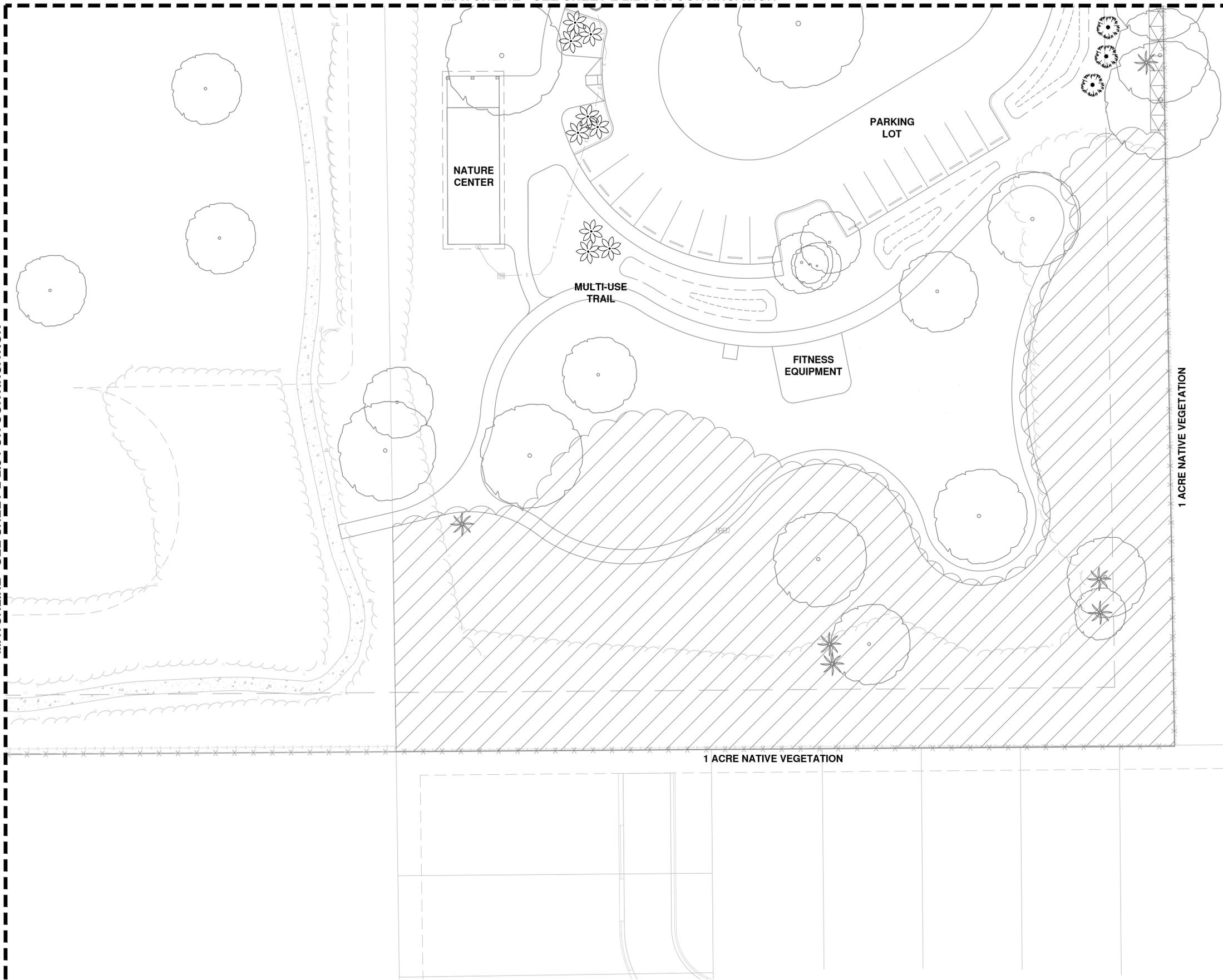
SHEET TITLE:
PLANTING PLAN

SHEET NUMBER:
L-2.3

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\00% DESIGN SUBMITTAL\23-00155_LNP.DWG by JROMER 5/1/2024 5:26:55 PM

MATCHLINE - SEE SHEET L-2.2 FOR CONTINUATION

MATCHLINE - SEE SHEET L-2.3 FOR CONTINUATION



MITIGATION PLANTING:

- GUMBO LIMBO
- GREEN BUTTONWOOD
- SLASH PINE
- SOUTHERN LIVE OAK
- CABBAGE PALMETTO
- FLORIDA THATCH PALM

RELOCATED PLANTING:

- ROYAL PALM
- CABBAGE PALMETTO

EXISTING PLANTING:

- EXISTING TREE
- EXISTING PALM

NATIVE VEGETATION:

- TREES:**
- GUMBO LIMBO
 - GREEN BUTTONWOOD
 - SLASH PINE
 - SOUTHERN LIVE OAK
 - CABBAGE PALMETTO
 - FLORIDA THATCH PALM
 - DAHOON HOLLY

- SHRUBS:**
- MARLBERRY
 - SPANISH STOPPER
 - FIREBUSH
 - BAHAMA COFFEE
 - WHITE INDIGO BERRY
 - WILD SAGE
 - SAW PALMETTO
 - FAKAHATCHEE GRASS

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinmakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

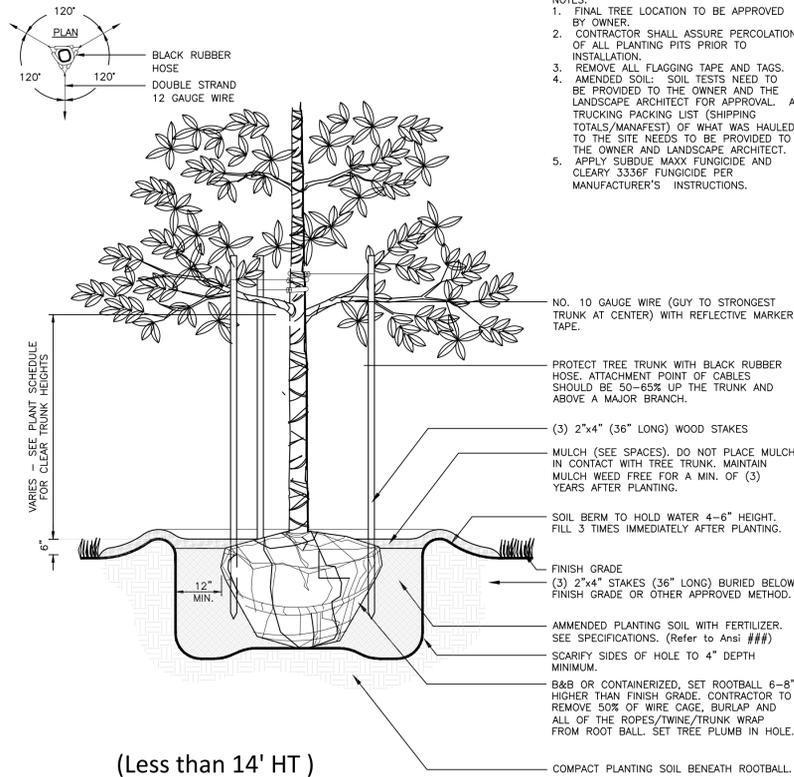
DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: JR
 REVIEWED BY: AP
 DESIGNED BY: BS

SHEET TITLE:

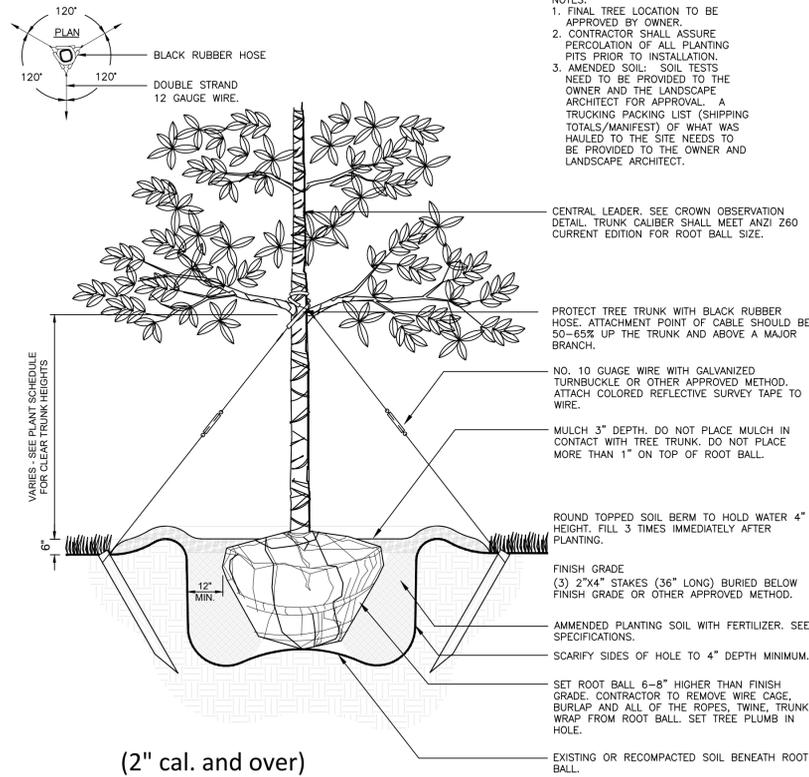
PLANTING PLAN

SHEET NUMBER:

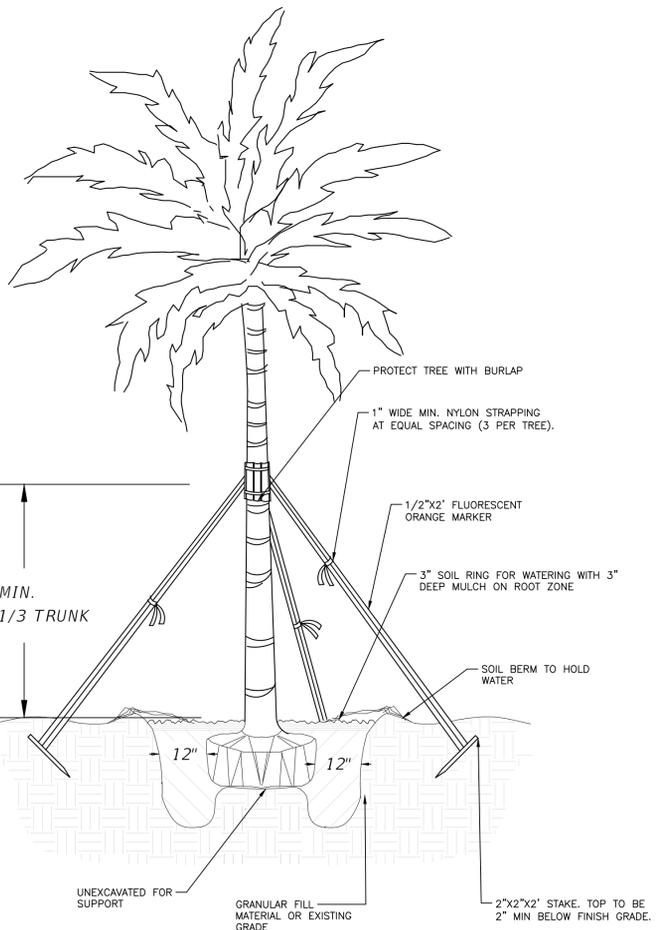
L-2.4



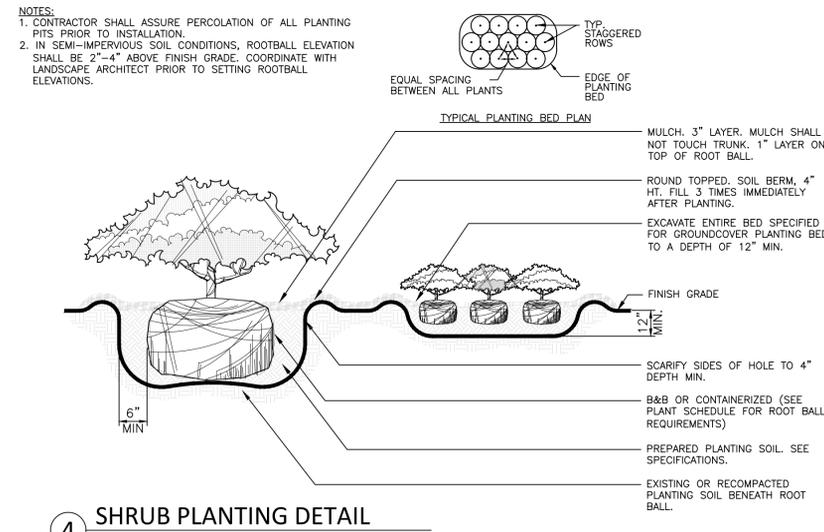
1 (Less than 14' HT)
SMALL TREE PLANTING DETAIL



2 (2" cal. and over)
LARGE TREE PLANTING DETAIL



3 PALM PLANTING DETAIL



4 SHRUB PLANTING DETAIL

| PLANT SCHEDULE | | | | |
|----------------|------|--|-------------|-----|
| SYMBOL | CODE | BOTANICAL / COMMON NAME | CONT. | QTY |
| TREES | | | | |
| | BS | Bursera simaruba / Gumbo Limbo | Field Grown | 10 |
| | CE | Conocarpus erectus / Buttonwood | Field Grown | 20 |
| | PD | Pinus elliottii densa / Slash Pine | Field Grown | 20 |
| | QV | Quercus virginiana / Southern Live Oak | Field Grown | 7 |

| PALM TREES | | | | |
|-------------------------|------|---------------------------------------|-------------|----|
| | SP | Sabal palmetto / Cabbage Palmetto | Field Grown | 33 |
| | TR | Thrinax radiata / Florida Thatch Palm | Field Grown | 40 |
| RELOCATED TREES & PALMS | | | | |
| | R-RR | Roystonea regia / Royal Palm | Field Grown | 4 |
| | R-SP | Sabal palmetto / Cabbage Palmetto | Field Grown | 13 |

GENERAL NOTES:

- PLANT MATERIAL: ALL PLANT MATERIAL SHALL BE FLORIDA #1 OR BETTER AS ESTABLISHED BY "GRADES AND STANDARDS FOR NURSERY PLANTS" OF THE STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.
- ALL TREES, SHRUBS AND GROUNDCOVERS SHALL BE OF THE SIZES AS SPECIFIED IN THE PLANT LIST.
- QUANTITIES LISTED ON THE THE PLANT LIST ARE FOR ESTIMATING PURPOSES. CONTRACTOR SHALL VERIFY ALL QUANTITIES. MULCH, TOPSOIL, FERTILIZER, ETC. SHALL BE INCLUDED IN THE UNIT COST OF THE PLANTS.
- WHERE THERE IS A DISCREPANCY EITHER IN QUANTITIES, PLANT NAMES, SIZES OR SPECIFICATIONS BETWEEN THE PLAN OR PLANT LIST, THE PLAN TAKES PRECEDENCE.
- ALL PLANTING BEDS AND WATER BASINS FOR TREES SHALL BE COVERED WITH A 3" MINIMUM DEPTH OF SHREDDED EUCALYPTUS OR FLORIMULCH GRADE "B" OR BETTER.
- THE PLANTING PLAN SHALL BE INSTALLED IN COMPLIANCE WITH ALL EXISTING CODES AND APPLICABLE DEED RESTRICTIONS.
- SOD: ALL AREAS NOT USED FOR BUILDINGS, VEHICULAR USE AREAS, WALKS OR PLANTING BEDS SHALL BE GRASSED. GRASSING SHALL EXTEND TO ANY ABUTTING STREET PAVEMENT EDGE AND TO THE MEAN WATERLINE OF ANY ABUTTING CANAL, LAKE OR WATERWAY.
- PLANTING SOIL: ALL TREES AND SHRUBS SHALL BE PLANTED WITH A MINIMUM OF 12" TOPSOIL AROUND AND BENEATH THE ROOTBALL. MINIMUM TOPSOIL SHALL BE 6" FOR GROUNDCOVER AREAS AND 2" FOR SODDED GRASS AREAS.
- PLANTING SOIL TO BE A WEED-FREE MIXTURE OF 50% SAND, 40% MUCK, AND 10% CANADIAN PEAT. ALL PLANT MATERIAL TO RECEIVE PLANTING SOIL AS PER DETAILS.
- CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL UTILITY LOCATIONS AND INSTALLING FACILITIES SO AS TO NOT CONFLICT. ALL DAMAGE TO EXISTING UTILITIES OR IMPROVEMENTS CAUSED BY CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR TO NOTIFY "SUNSHINE STATE ONE CALL OF FLORIDA, INC." AT 1-800-432-4770 TWO FULL BUSINESS DAYS PRIOR TO DIGGING FOR UNDERGROUND UTILITY LOCATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FINAL GRADING OF ALL ASSOCIATED PLANTING AREAS.
- AFTER FINAL GRADE, AREA TO BE RAKED TO 6" DEPTH AND ALL ROCK AND FOREIGN INORGANIC MATERIALS REMOVED AND DISPOSED OF PROPERLY OFF-SITE.
- ALL PLANTING HOLES TO BE HAND DUG EXCEPT WHERE MACHINE DUG HOLES WILL NOT ADVERSELY AFFECT OR DAMAGE UTILITIES OR IMPROVEMENTS (SEE NOTE 8).
- NO PLUNGING OF ANY TREE OR PALM WILL BE ACCEPTED. ALL PLANTS TO BE PLANTED AT THE NURSERY GRADE OR SLIGHTLY HIGHER.
- CONTRACTOR SHALL STAKE & GUY ALL TREES AND PALMS AT TIME OF PLANTING AS PER THE APPROPRIATE DETAIL. CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND/OR REPAIR OF ALL STAKING AND GUYING DURING WARRANTY PERIOD AND REMOVAL & DISPOSAL OF STAKING AFTER ESTABLISHMENT PERIOD.
- FERTILIZER FOR GRASS AREAS SHALL BE NPK 16-4-8 @ 12.5 LBS/1000 S.F. OR 545 LBS/ACRE. NITROGEN 50% SLOW RELEASE FORM & FERTILIZER TO INCLUDE SECONDARY MICRONUTRIENTS.
- SUBSTITUTIONS AND CHANGES: ALL SUBSTITUTIONS AND CHANGES SHALL BE APPROVED IN WRITING PRIOR TO INSTALLATION. ANY DISCREPANCIES BETWEEN PLANS, SITE AND SPECIFICATIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT, THE OWNER AND GOVERNING MUNICIPALITY.
- WATERING: ALL PLANT MATERIAL SHALL BE WATERED IN AT TIME OF PLANTING IN ACCORDANCE WITH STANDARD NURSERY PRACTICES. IN ADDITION, CONTRACTOR WILL CONTINUE WATERING OF PLANT MATERIAL UNTIL SUBSTANTIAL COMPLETION AND AS NEEDED THEREAFTER FOR A PERIOD OF 2 MONTHS.
- ALL NEW PLANT MATERIAL SHALL BE GUARANTEED FOR 1 YEAR FROM TIME OF FINAL ACCEPTANCE OF PROJECT. ANY PLANT MATERIAL NOT IN A HEALTHY GROWING CONDITION WILL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER WITHIN 10 DAYS OF NOTIFICATION. FOR ALL REPLACEMENT PLANT MATERIAL, THE WARRANTY PERIOD SHALL BE EXTENDED AN ADDITIONAL 45 DAYS BEYOND THE ORIGINAL WARRANTY PERIOD. ALL TREES THAT LEAN OR ARE BLOWN OVER, CAUSED BY WINDS LESS THAN 75 MPH, WILL BE RE-SET AND BRACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE SUCCESSFUL BIDDER SHALL FURNISH TO THE OWNER A UNIT PRICE BREAKDOWN FOR ALL MATERIALS. THE OWNER MAY, AT ITS DISCRETION, ADD OR DELETE FROM THE MATERIALS SHOWING THE UNIT PRICE BREAKDOWN SUBMITTED.
- NO PLANT MATERIAL WILL BE ACCEPTED SHOWING EVIDENCE OF CABLE, CHAIN MARKS, EQUIPMENT SCARS, OR OTHERWISE DAMAGED.
- PLANT MATERIAL WILL NOT BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN CRACKED, BROKEN OR OTHERWISE DAMAGED.
- ROOT-PRUNE ALL TREES A MINIMUM OF (12) WEEKS PRIOR TO PLANTING.
- ALL PLANT MATERIAL PLANTED WITHIN THE SIGHT DISTANCE TRIANGLE AREAS (SEE PLAN) SHALL PROVIDE UNOBSTRUCTED CROSS-VISIBILITY AT A HORIZONTAL LEVEL BETWEEN 30 INCHES AND 8 FEET ABOVE ADJACENT STREET GRADE.
- NO CANOPY TREES SHALL BE PLANTED WITHIN 12 FEET OF A LIGHT POLE. NO PALM SPECIES SHALL BE PLANTED WITHIN 6 FEET OF A LIGHT POLE.
- TREE PROTECTION BARRICADES SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AROUND EXISTING TREES THAT MAY BE IMPACTED BY THE PROPOSED CONSTRUCTION. PRIOR TO ANY CONSTRUCTION A TREE PROTECTION BARRICADE INSPECTION SHALL BE CONDUCTED BY THE LANDSCAPE ARCHITECT, OWNER OR GOVERNING MUNICIPALITY. REFER TO LANDSCAPE DETAIL FOR TREE PRESERVATION BARRICADE FENCING.
- IN ALL PEDESTRIAN AREAS, ALL TREES AND PALMS SHALL BE MAINTAINED TO ALLOW FOR CLEAR PASSAGE AT AN 8 FOOT CLEAR TRUNK.
- ALL LANDSCAPE MATERIAL SHALL BE SETBACK A MINIMUM OF 10' FROM ANY FIRE HYDRANT.
- WATERING REQUIREMENTS. PROVIDED A MINIMUM 12 WEEKS OF WATERING AFTER RELOCATION, SUBMIT A WATERING SCHEDULE PRIOR TO ROOT PRUNING INCLUDING ANTICIPATED FREQUENCY AND VOLUME BASED UPON THE RECOMMENDED SCHEDULE BELOW.

| RECOMMENDED WATER REQUIREMENTS | | | | |
|--------------------------------|------------------|------------------|------------------|------------------|
| WEEK 1-3 | WEEK 3-6 | WEEK 6-8 | WEEK 8-11 | WEEK 12 |
| 4 TIMES PER WEEK | 3 TIMES PER WEEK | 3 TIMES PER WEEK | 2 TIMES PER WEEK | 2 TIMES PER WEEK |

- ROOT PRUNE NOTES:
 - ROOT PRUNING SHALL BE DONE WHENEVER THERE WILL BE GRADING, CUTTING OR COMPACTION DISTURBANCE UNDERNEATH THE DRIP LINE OF A TREE. PRIOR TO ANY WORK WITHIN DRIP LINE, CONTRACTORS SHOULD CONTACT LANDSCAPE ARCHITECT TO COORDINATE WORK. ROOT PRUNING SHALL BE DONE PRIOR TO DISTURBANCE OF THE SITE. NO DISTURBANCE SHALL BE DONE WITHIN A DISTANCE OF 3X THE DIAMETER OF THE TREE, DUE TO STABILITY CONCERNS.
 - BEFORE DISTURBANCE, MEET WITH LANDSCAPE ARCHITECT ON SITE TO CONFIRM LOCATION OF ROOT PRUNING. ROOT PRUNING SHALL BE CONDUCTED AT AN AGREED UPON LOCATION. THIS LOCATION WILL BE MARKED ON THE GROUND BETWEEN THE DISTURBANCE AND THE TREE, TYPICALLY 6' CLOSER TO THE TREE THAN EDGE THE DISTURBANCE.
 - ALL ROOTS 3/4"-1.5" DIAMETERS MUST BE PRUNED. IF 2.5" OR LARGER ROOTS ARE ENCOUNTERED, STOP PRUNING IN THAT AREA AND CONTACT LANDSCAPE ARCHITECT. ROOT PRUNING SHALL ONLY BE AS DEEP AS NECESSARY TO ENSURE THE CUTTING OF ALL ROOTS WHICH WOULD BE IMPACTED BY THE DISTURBANCE.
 - ROOT PRUNING SHALL BE DONE WITH A SHARP TOOL, IN SUCH A WAY THAT DOES NOT PULL ON THE ROOTS, BUT LEAVES SMOOTH CUTS. IT IS PREFERABLE TO EXPOSE THE ROOTS PRIOR TO ROOT PRUNING. AFTER PRUNING, FILL THE AREA WITH QUALITY TOPSOIL AND WATER UNTIL THOROUGHLY SOAKED.
 - ONCE EXPOSED, ROOTS MUST BE COVERED WITHIN 8 HOURS. IF ROOTS WILL BE LEFT EXPOSED FOR LONGER THAN 8 HOURS, THEY MUST BE KEPT MOIST. ONE OPTION IS TO PUT MOIST BURLAP OVER THE EXPOSED ROOTS. HYDRATE ROOT PRUNE TRENCH TO MAINTAIN MOISTURE AS NECESSARY UNTIL RELOCATION OF PLANT MATERIAL.
 - ROOT PRUNING SHALL BE DONE BY OR UNDER THE SUPERVISION OF AN ISA CERTIFIED ARBORIST, AND MEET OR EXCEED ANSI A300 OR APPROVED TREE CARE INDUSTRY STANDARDS. A CERTIFIED ARBORIST MUST BE ONSITE DURING THE ENTIRETY OF ROOT PRUNING.
 - ALL ROOT PRUNING SHALL BE DONE PER ANSI A300.
 - ROOT-PRUNE MINIMUM OF (12) WEEKS PRIOR TO RELOCATE TREES.

MILLER LEGG
 South Florida Office: 13680 NW 5th Street
 Suite 200, Sunrise, Florida - 33325
 954-436-7000
 www.millerlegg.com

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Mastin Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 419-8460
 www.pacificaes.com

CLIENT:

Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

APPROVED: BRIAN R. SHORE, RLA
 FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| REVISIONS | |
|-----------|--|
| | |
| | |
| | |
| | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: JR
 REVIEWED BY: AP
 DESIGNED BY: BS

SHEET TITLE:

PLANTING SCHEDULE & DETAILS

SHEET NUMBER:

L-2.5

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_LNP.DWG by JROMER 5/1/2024 5:26:55 PM

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7871
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

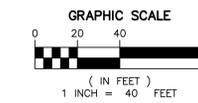
| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN

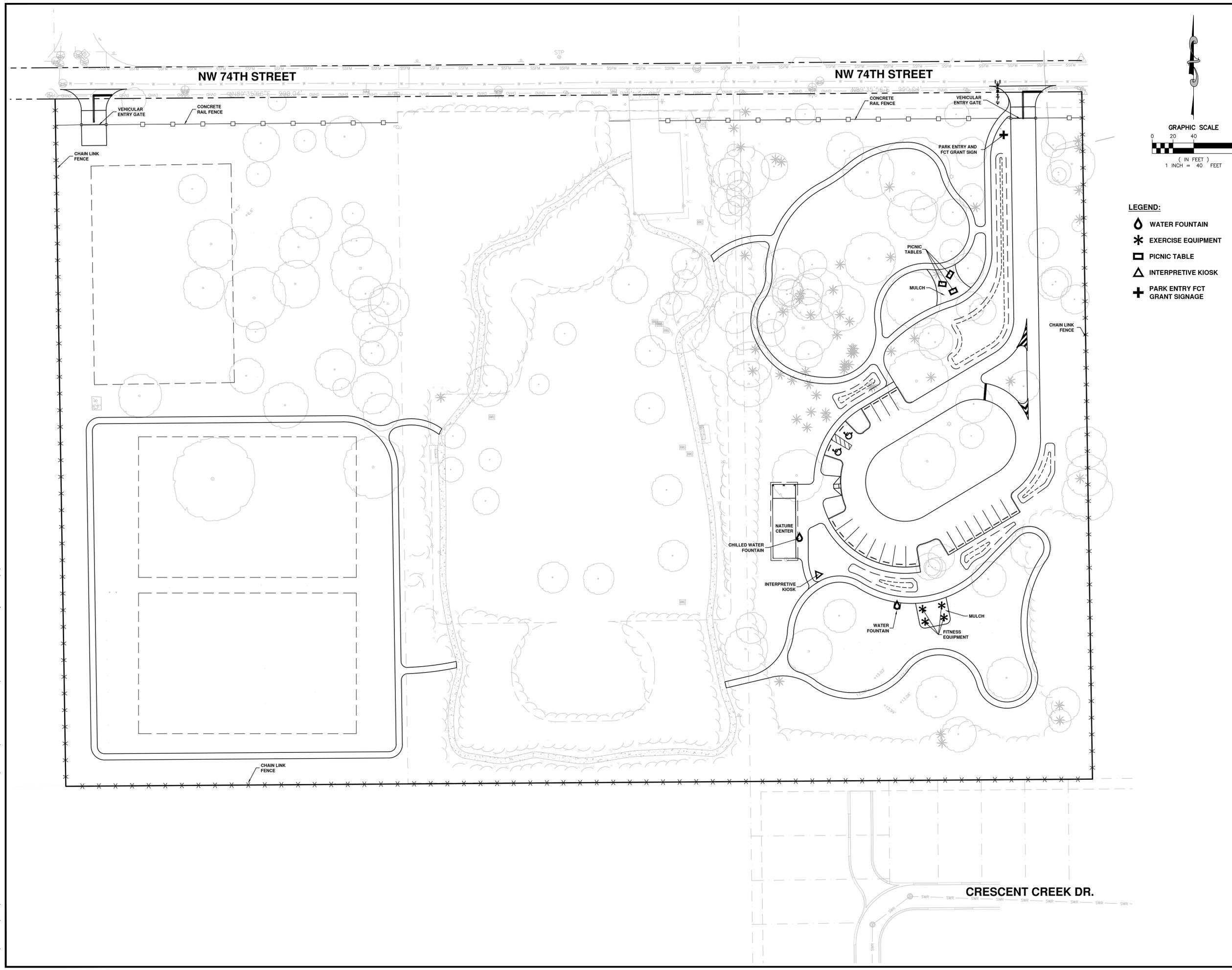
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:
SITE AMENITIES PLAN

SHEET NUMBER:
L-3.0

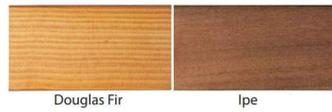


- LEGEND:**
- WATER FOUNTAIN
 - EXERCISE EQUIPMENT
 - PICNIC TABLE
 - INTERPRETIVE KIOSK
 - PARK ENTRY FCT GRANT SIGNAGE



V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_AMENITIES.DWG by JROMER 5/1/2024 3:01:45 PM

Wood Species



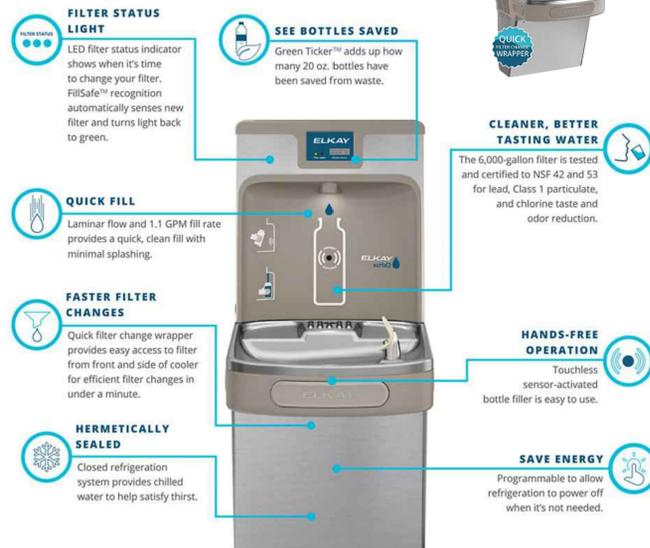
Recycled Plastic Colors



1 PICNIC TABLE
N.T.S.

NOTE:
REFER TO ARCHITECTURE PLANS FOR LOCATION OF
ELKAY WATER FOUNTAIN ATTACHED TO BUILDING

ELKAY



Shown: LZSBWSP

2 ELKAY WATER FOUNTAIN WITH BOTTLE FILLER
N.T.S.



3 MDF WATER FOUNTAIN WITH PET BOWL
N.T.S.

CONSULTANTS:
ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com
MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com
STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7871
www.mcengineers.com
SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com
GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:
Coconut Creek
4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:
OAK TRAILS PARK IMPROVEMENTS
4230 NW, 74th Street
Coconut Creek, FL 33073

SEAL:

APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/17/2024

| NO. | REVISIONS |
|-----|-----------|
| | |
| | |
| | |
| | |

SUBMITTAL:
30% SCHEMATIC DESIGN
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:
SITE AMENITIES NOTES & DETAILS

SHEET NUMBER:
L-3.1

Low Profile Bases:
CANTILEVERED



The preferred style for NPS interpretive exhibits, this classic base fits unobtrusively into the landscape while angling the panel for easy viewing.



4 INTERPRETIVE KIOSK CANTILEVERED SIGN
N.T.S.

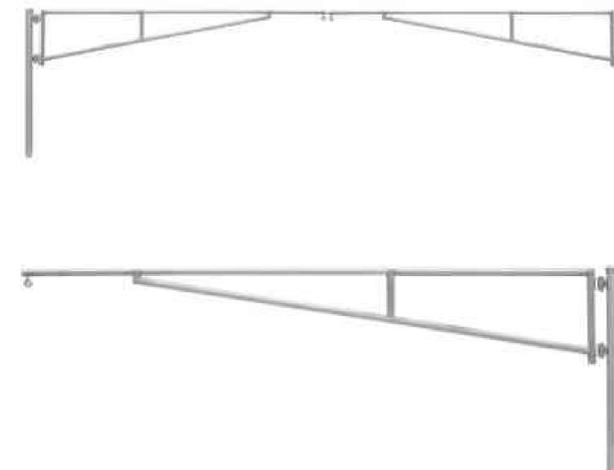
Upright Bases & Kiosks:
ARCH FRAME



Arch Frames are a custom solution made to match the uniqueness of each exhibit. The upright design features two sturdy posts, fitted with an arch top (or bottom) frame. Also available as a Low Profile base.



5 PARK ENTRY & FCT GRANT SIGNAGE
N.T.S.



NOTE:
VEHICULAR ENTRY GATE WILL BE BUILT BY LOCAL MANUFACTURER TO MATCH GATE IN EXISTING PARK

6 VEHICULAR ENTRY GATE
N.T.S.



7 EXERCISE EQUIPMENT - SHOULDER PRESS
N.T.S.



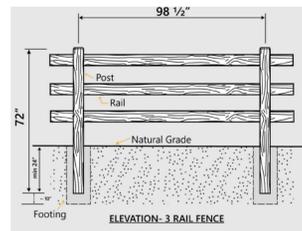
8 EXERCISE EQUIPMENT - 2 PERSON LEG PRESS
N.T.S.



9 EXERCISE EQUIPMENT - HIP TWIST
N.T.S.



10 EXERCISE EQUIPMENT - STEPPER
N.T.S.



11 CONCRETE RAIL FENCE
N.T.S.



NOTE:
CHAIN LINK FENCE WILL BE BUILT BY LOCAL MANUFACTURER, IMAGE IS USED AS A REFERENCE

12 CHAIN LINK FENCE
N.T.S.



South Florida Office: 13680 NW 5th Street
Suite 200, Sunrise, Florida - 33325
954-436-7000
www.millerlegg.com

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificae.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: BRIAN R. SHORE, RLA
FLA. REGISTRATION NO. LA6666770 DATE: 5/1/2024

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:
SITE AMENITIES NOTES & DETAILS

SHEET NUMBER:
L-3.2

V:\PROJECTS\2023\23-00155 - COCONUT CREEK PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_AMENITIES.DWG by JROMER 5/1/2024 3:01:45 PM

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:



APPROVED: JOAQUIN A. MOJICA, P.E.
FLA. REGISTRATION NO. 60488 DATE: 5/1/2024

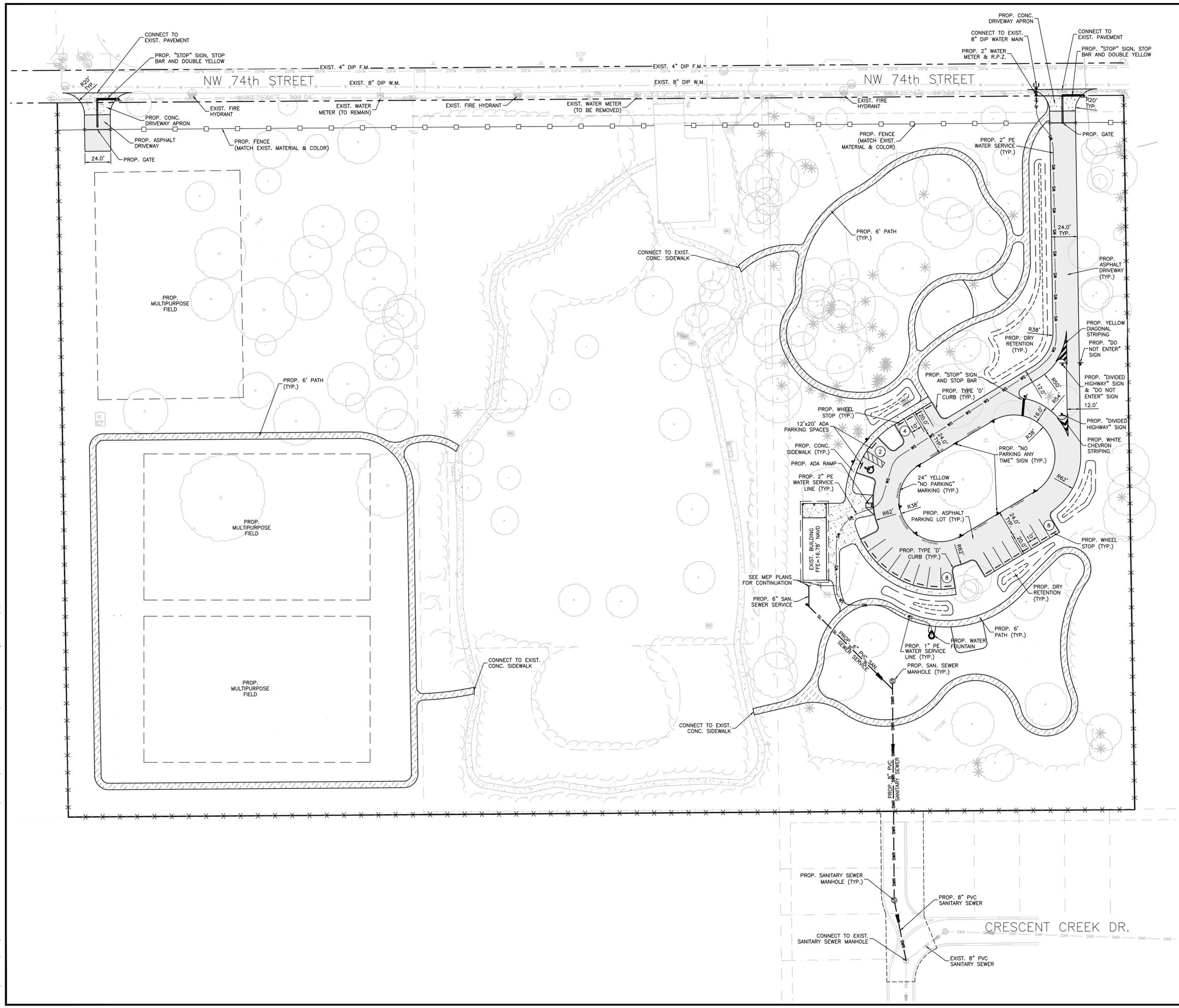
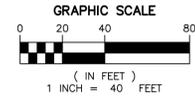
| NO. | REVISIONS |
|-----|-----------|
| | |
| | |
| | |
| | |

SUBMITTAL:
30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:
ENGINEERING SITE PLAN

SHEET NUMBER:
C-3.0



V:\PROJECTS\2023\23-00155 - COCONUT CREEK PARK\DRAWINGS\30% DESIGN SUBMITTAL\23-00155_SECDWG by JROMER 5/1/2024 2:04:56 PM

GENERAL NOTES ON THE PROJECT PLANS AND DRAWINGS ARE SOLELY TO AID AND ASSIST THE CONTRACTOR WITH THE FIELD OPERATIONS FOR THE PROJECT. SAID GENERAL NOTES MAY NOT FULLY DESCRIBE ALL OF THE REQUIREMENTS FOR AN ITEM. THEREFORE, THE CONTRACTOR SHALL READ AND VERIFY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE PLANS, SPECIFICATIONS, GENERAL TERMS AND CONDITIONS, AND THE SUPPLEMENTAL TERMS AND CONDITIONS, TO FULLY UNDERSTAND AND COMPLY WITH ALL THE REQUIREMENTS THEREIN. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY HAVE BEEN PREPARED FROM INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL UTILITIES, BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

1. APPLICABLE CODES
1.1. GENERAL
ALL CONSTRUCTION, MATERIALS AND TESTING SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF **####**, **####**, **####**, AND ALL OTHER LOCAL AND NATIONAL CODES WHERE APPLICABLE, WHEN ANY OF THE GOVERNING REGULATORY AGENCY'S STANDARDS ARE IN CONFLICT, THE MORE STRINGENT OF THE TWO SHALL APPLY.

1.2. CONSTRUCTION SAFETY
ALL CONSTRUCTION SHALL BE DONE IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

1.3. TRENCH SAFETY ACT
CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF FLORIDA TRENCH SAFETY ACT.

1.4. SURVEY DATA
ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS UNLESS OTHERWISE NOTED, ARE BASED ON **####** (#####).

2. PRECONSTRUCTION RESPONSIBILITIES AND NOTICES
2.1. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE ONE CALL AT 811 CERTIFICATION NUMBER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
2.2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SITE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
2.3. EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
2.4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH HE FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. HE IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.
2.5. CONTRACTOR SHALL OBTAIN AND KEEP COPIES OF ALL REQUIRED PERMITS ONSITE PRIOR TO COMMENCEMENT OF CONSTRUCTION. CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR WORK PERFORMED WITHOUT PERMITS.
2.6. ADDITIONAL COORDINATION FOR UTILITY CONFLICTS, R.F.I.'S AND CONTRACT EXTENDED TIME BEYOND THE ORIGINAL SCOPE OF CONSTRUCTION DURATION (AFTER THE CONTRACTOR CONSTRUCTION NOTICE TO PROCEED) AND EXCLUDING DOCUMENTED WORKSTOP ORDERS ISSUED BY CLIENT TO CONTRACTOR AND CONSULTANT WILL BE BILLED TO THE CONTRACTOR VIA THE OWNER AT \$135 PER HOUR.

3. INSPECTIONS
3.1. THE CONTRACTOR SHALL NOTIFY **####**, THE ENGINEER OF RECORD AND **####**, IF APPLICABLE, AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO THE INSPECTION OF THE FOLLOWING ITEMS:
3.1.1. STORM DRAINAGE
3.1.1.1. SANITARY SEWER
3.1.1.2. ALUMINUM
3.1.1.3. WATER SYSTEM
3.1.1.4. SUBGRADE - SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK
3.1.1.5. LIME/ROCK BASE - SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT.
3.1.6. ASPHALTIC CONCRETE
3.1.7. FINAL INSPECTION
3.2. ALL INSPECTIONS SHALL BE MADE BY **####**, THE ENGINEER OF RECORD WILL PROVIDE GENERAL CONSTRUCTION OBSERVATION SERVICES.

4. SHOP DRAWINGS
4.1. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY **####** AND ENGINEER OF RECORD FOR SANITARY MANHOLES, CATCH BASINS, FIRE HYDRANTS, VALVES AND OTHER MECHANICAL/ELECTRICAL EQUIPMENT WITH ASSOCIATED STRUCTURES, INCLUDING ALL DATA, CATALOGUE LITERATURE SHALL BE SUBMITTED FOR WATER AND SEWER PIPES, FITTINGS, AND APPURTENANCES.
4.2. PRIOR TO SUBMITTING DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS AND SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S PLANS OR SPECIFICATIONS.
4.3. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

5. TEMPORARY FACILITIES
5.1. TEMPORARY UTILITIES
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY TO HIS EMPLOYEES AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.
5.2. TRAFFIC REGULATION
5.2.1. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MUTCD.
5.2.2. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
5.2.3. NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION OF THE ENGINEER, **####** AND LOCAL OR **####** AUTHORITY.
5.2.4. ALL CONSTRUCTION WITHIN FDOT RIGHT-OF-WAYS MUST CONFORM WITH FDOT SPECIFICATIONS, STANDARDS AND PERMIT REQUIREMENTS. NO WORK SHALL COMMENCE WITHIN FDOT RIGHT-OF-WAYS WITHOUT AN FDOT PERMIT. FULL LANE WIDTH RESTORATION TO MATCH EXISTING PAVED SECTION IS REQUIRED IN ACCORDANCE WITH STANDARDS FOR PROPOSED WORK WITHIN FDOT RIGHT-OF-WAYS.
5.2.5. CONTRACTOR SHALL PREPARE AND SUBMIT MAINTENANCE OF TRAFFIC PLAN (MOT) WHERE REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL AGENCIES HAVING JURISDICTION. CONTRACTOR SHALL OBTAIN ALL REQUIRED APPROVALS AND PERMITS ASSOCIATED WITH THE MOT'S. ALL MOT'S ARE TO BE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION CERTIFIED.

6. PROJECT CLOSURE
6.1. CLEANING OUT
6.1.1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEP BROOM CLEAN AS DIRECTED BY THE ENGINEER.
6.1.2. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER OR **####**, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THIS END, THE CONTRACTOR SHALL PERFORM AS REQUIRED ALL NECESSARY HIGHWAY OR DRIVEWAY, WALK, IRRIGATION AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
6.1.3. WHERE MATERIAL OR DEBRIS WAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED, SATISFACTORILY DISPOSED OF DURING PROGRESS OF WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION AS DIRECTED BY THE ENGINEER.
6.1.4. CONTRACTOR SHALL DISPOSE OF ALL SITE DEMOLITION IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
6.2. PROJECT RECORD DOCUMENTS
6.2.1. THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF WORK ITEMS COMPLETED.
6.2.2. PRIOR TO THE PLACEMENT OF ANY ASPHALT OR CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER "AS-BUILT" PLANS SHOWING LIME/ROCK BASE GRADES, AND ALL DRAINAGE, WATER AND SEWER IMPROVEMENTS. PAVING OPERATIONS SHALL NOT COMMENCE UNTIL THE ENGINEER AND THE APPROVING AGENCY HAS REVIEWED THE "AS-BUILTS".
6.2.3. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR SUBGRADE SHALL BE PROVIDED TO THE ENGINEER AND **####** PRIOR TO PLACING LIME/ROCK BASE MATERIAL.
6.2.4. ALL REQUIRED DENSITY AND LBR TEST RESULTS FOR LIME/ROCK SHALL BE PROVIDED TO THE ENGINEER AND **####** PRIOR TO PLACING ASPHALT.
6.2.5. ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO THE SATISFACTION OF THE ENGINEER THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE CONSTRUCTION. UNLESS STRUCTURED, LAKE AS-BUILTS WILL BE CROSS SECTIONED SHOWING THE DESIGNED SECTION AS DASHED, AS-BUILT SECTION AS SOLID, AND HAVE THE TOP OF BANK REFERENCE TO THE LAKE MAINTENANCE EASEMENT. SPACING BETWEEN EACH CROSS-SECTION SHALL BE SUCH AS TO PROVIDE ENOUGH DATA TO DETERMINE IF THE LAKE WAS CONSTRUCTED AS DESIGNED.
6.2.7. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD TWO COMPLETE SETS OF "AS-BUILT" CONSTRUCTION DRAWINGS. "AS-BUILT" DRAWINGS SHALL BE MARKED TO SHOW "RECORDED" AND "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR OR ENGINEER. FINAL AS-BUILT INFORMATION SHALL BE SUBMITTED ON AN AUTOCAD & PDF FORMAT AS DIRECTED BY THE ENGINEER.

7. Dewatering Permit
7.1. Dewatering permit is not available for the site development. It is the CONTRACTOR'S RESPONSIBILITY TO OBTAIN A Dewatering PERMIT.

8. UNSUITABLE MATERIAL REMOVAL AND DISPOSAL
8.1. CONTRACTOR IS RESPONSIBLE FOR DETERMINATION/INVESTIGATION OF SUBSURFACE CONDITIONS. ALL UNSUITABLE MATERIAL AND SUBSURFACE WITHIN AREAS OF CONSTRUCTION IS TO BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE REGULATIONS. UNSUITABLE MATERIAL INCLUDES BUT IS NOT LIMITED TO: DEBRIS, ORGANICS/MUCK, AND PLASTIC MATERIAL. ALL UNSUITABLE MATERIAL REMOVED SHALL BE REPLACED WITH SUITABLE MATERIAL.

9. GEOTECHNICAL REQUIREMENTS
9.1. CONTRACTOR IS RESPONSIBLE FOR DETERMINATION/INVESTIGATION OF SUBSURFACE

CONDITIONS.

10. DEMOLITION NOTES
10.1. PROPER SAFETY PRECAUTIONS SHALL BE TAKEN TO SEPARATE AREA OF DEMOLITION FROM SURROUNDING PROPERTY.
10.2. ASPHALT AND CURB SHALL BE SAWCUT AT THE LIMITS OF DEMOLITION PRIOR TO REMOVAL.
10.3. ALL DEMOLITION TO BE PERFORMED IN A MANNER TO ELIMINATE HAZARDS TO PERSONS AND PROPERTY. MINIMIZE INTERFERENCE WITH USE OF ADJACENT AREAS, PROVIDE NON-DISRUPTION OF SERVICES PROVIDED BY EXISTING UTILITIES TO ADJACENT AREAS, AND TO PROVIDE FREE PASSAGE TO AND FROM ADJACENT AREAS OR STRUCTURES.
10.4. PRIOR TO AND DURING DEMOLITION, CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING ITEMS TO REMAIN.
10.5. DEBRIS RESULTING FROM DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF ON A DAILY BASIS. DISPOSAL OF DEBRIS SHALL BE IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL PERMITS, RULES AND/OR REGULATIONS.
10.6. HAZARDOUS MATERIALS, IF PRESENT, SHALL BE DEALT WITH IN A MANNER CONSISTENT WITH FEDERAL, STATE AND LOCAL REGULATIONS.
10.7. UPON COMPLETION OF DEMOLITION, SITE IS TO BE LEFT IN CLEAN CONDITION FREE OF DEBRIS.
10.8. CONTRACTOR TO PROVIDE PROPER SEDIMENT CONTROL AND PROTECTION OF STORM WATER STRUCTURES, BOTH WITHIN AND OUTSIDE THE LIMITS OF DEMOLITION AND P/L, TO PREVENT DEPOSIT OF SEDIMENTS CONVEYED THROUGH RUNOFF. CONTRACTOR TO CLEAN AND REMOVE SEDIMENTS FROM ALL STRUCTURES AS NEEDED.
10.9. EXISTING UTILITIES INFORMATION IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL UTILITIES SHOWN OR NOT SHOWN PRIOR TO DEMOLITION. CONTRACTOR SHALL HAVE ALL UTILITIES PROPERLY LOCATED PRIOR TO COMMENCEMENT OF DEMOLITION.
10.10. BRICK AND GROUT ANY REMAINING HOLE OPENINGS IN EXISTING STRUCTURES AFTER REMOVAL OF ANY PIPE DESIGNATED FOR REMOVAL.

11. EARTHWORK
11.3. GENERAL
11.3.1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST A COPY OF THE GEOTECHNICAL ENGINEERING SOILS REPORT AND ADHERE TO THE CONDITIONS AND RECOMMENDATIONS STATED THEREIN.
11.3.2. NONE OF THE EXISTING MATERIAL IS TO BE INCORPORATED IN THE LIME/ROCK BASE.
11.3.3. ALL SUB-GRADE UNDER PAVED AREAS SHALL HAVE A MINIMUM LBR VALUE OF 40 AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
11.3.4. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
11.3.5. A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODED.
11.4. ON-SITE
11.4.1. ALL ORGANIC AND OTHER UNSUITABLE MATERIAL UNDER THOSE AREAS TO BE PAVED SHALL BE REMOVED TO A DEPTH OF THREE (3) FEET BELOW FINISHED GRADE AND FOR THREE (3) FEET BEYOND THE PERIMETER OF THE PAVING AND DISPOSED OF BY CONTRACTOR AS PART OF WORK.
11.4.2. SUITABLE MINIMUM LBR 40 MATERIAL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 THREE (3) FEET BEYOND PERIMETER OF THE PAVING.
11.4.3. ALL UNSUITABLE MATERIAL UNDER EXFILTRATION TRENCH LOCATIONS SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR AS PART OF THIS WORK.

12. STORM DRAINAGE
12.1. CONTRACTOR MAY UTILIZE ONE OF THE FOLLOWING MATERIALS (AS DIRECTED AND APPROVED BY APPROVING AUTHORITY) ON A SIZE FOR SIZE BASIS:
12.1.1. ALUMINUM
12.1.1.1. PIPE SHALL BE ALUMINUM, MANUFACTURED IN CONFORMANCE WITH ASTM B-209. METAL PIPE SHALL NOT BE ALLOWED WITHIN THE ROAD RIGHT-OF-WAY.
12.1.1.2. PIPE SHALL BE SPIRAL RIB DRAINAGE PIPE WITH 3/4" x 3/4" RIBS, APPROXIMATELY 7-1/2" ON CENTER. GAUGE THICKNESS SHALL MEET FDOT STANDARD 945-1.
12.1.1.3. PIPE COUPLING BANDS SHALL BE 12" WIDE STANDARD SPLIT BANDS OF THE SAME ALLOY AS THE PIPE AND MAY BE ONE GAUGE LIGHTER THAN THE PIPE.
12.1.1.4. POLYURETHANE OR OTHER SEALANT SHALL BE USED WITH COUPLING BANDS ON ALL NON-PERFORATED PIPE.
12.1.1.5. CONTECH ULTRA-FLO
12.1.2. REINFORCED CONCRETE (RCP)
12.1.2.1. REQUIREMENTS OF SECTION 449 OF THE FDOT STANDARD SPECIFICATIONS, ALL REINFORCED CONCRETE SHALL BE CLASS III WATER TIGHT AND CONFORM TO THE STANDARD SPECIFICATIONS.
12.1.2.2. JOINTS IN RCP SHALL EMPLOY O-RING TYPE GASKETS AS SPECIFIED IN SECTION 942-1 OF FDOT STANDARD SPECIFICATIONS AND ASTM C443-98.
12.1.2.3. PRECAST CONCRETE MANHOLES AND CATCH BASINS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION C-478 AND 641.
12.1.2.4. CONCRETE FOR PRECAST MANHOLES AND CATCH BASINS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
12.1.2.5. REINFORCED CONCRETE MANHOLES AND CATCH BASINS SHALL CONFORM TO ASTM SPECIFICATION A-615 AND A-305, LATEST REVISION.
12.1.2.6. ALL RE-BAR SPLICES IN CONCRETE STRUCTURES SHALL HAVE A MINIMUM LAP OF 24 BAR DIAMETERS.
12.1.2.7. ALL JOINTS IN CONCRETE STRUCTURES SHALL BE FINISHED WATERTIGHT.
12.1.2.8. ALL SPACES AROUND PIPING ENTERING OR LEAVING MANHOLES AND CATCH BASINS SHALL BE COMPLETELY FILLED WITH 2:1 CEMENT MORTAR.
12.1.2.9. ALL CONCRETE PIPE SHALL HAVE MODIFIED TONGUE AND GROOVE JOINT AND HAVE RUBBER MULDED JOINTS AS SPECIFIED.
12.1.3. HIGH DENSITY POLYETHYLENE PIPE (HDPE)
12.1.3.1. HIGH DENSITY POLYETHYLENE PIPE FOR STORM SEWERS SHALL CONFORM TO FDOT 948-2.
12.1.4. POLYVINYL-CHLORIDE PIPE (PVC)
12.1.4.1. POLYVINYL-CHLORIDE PIPE FOR STORM SEWERS SHALL CONFORM TO FDOT 948-1.
12.1.4.2. CONTECH A2000 PVC
12.2. CONCRETE PIPE FOR STORM DRAINAGE SYSTEMS SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS FOR PIPES AND BRIDGES, CURRENT EDITION, SECTION 430.
12.3. BEDDING AND INITIAL BACKFILL OVER DRAINAGE PIPE SHALL BE SAND WITH NO ROCK LARGER THAN 3/4" & 2" DIAMETER, RESPECTIVELY.
12.4. BACKFILL MATERIAL UNDER PAVED AREAS SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 (INCLUDES SWALE AREAS).
12.5. BACKFILL MATERIAL UNDER AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 (INCLUDES SWALE AREAS).
12.6. CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SILT SCREENERS IN CATCH BASINS AND AT LOCATIONS AS DIRECTED BY THE ENGINEER UNTIL FINAL ACCEPTANCE OCCURS.

13. FDEP GENERAL WATER NOTES
13.1. ALL PIPE, PIPE FITTINGS, JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS AND METERS SHALL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.
13.2. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NST INTERNATIONAL STANDARD 61 AS ADOPTED IN RULE 62-555.335, F.A.C., OR OTHER CURRENT STANDARDS, REGULATION OR REQUIREMENTS REFERENCED IN PARAGRAPH 62-333.320(3)(B), F.A.C.
13.3. ALL PIPE AND PIPE FITTINGS INSTALLED SHALL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)(3), F.A.C., USING BLUE AS PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE. SHALL HAVE A RED EXTERIOR WALL WITH WHITE STRIPES OR SOLID WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO OR APPLIED TO THE PIPEWALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES AND APPLIED TO THE PIPEWALL. PIPE STRIPES DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE TOP OF THE PIPE. FOR PIPE WITH AN INTERNAL DIAMETER OF 90-DEGREE INTERVALS AROUND THE PIPE AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE, IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING PIPE AND IS LOCATED ABOVE THE TOP OF THE PIPE, FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE SHALL BE PAINTED BLUE OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.)
13.4. NEW OR ALTERED WATER MAINS CONSTRUCTED OF POLYVINYL CHLORIDE PIPE SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C603 OR C605, RESPECTIVELY, AS INCORPORATED INTO RULE 62-555.330, F.A.C. AND ALL OTHER NEW OR ALTERED WATER MAINS CONSTRUCTED OF POLYVINYL CHLORIDE PIPE SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600 AS INCORPORATED INTO RULE 62-333.330.

14. EDEP GENERAL SEWER NOTES
14.1. APPROVED DUCTILE IRON PIPE TESTS ARE SPECIFIED FOR ALL FLEXIBLE PIPE. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY: 1) NO PIPE SHALL EXCEED A DEFLECTION OF 5% (2) USING A RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR THE AVERAGE DEFLECTION OF THE PIPE. DEFLECTION DEPENDS ON THE AWWA ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED, AND 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.
14.2. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT: 1) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 100 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM; 2) EXFILTRATION OR INFILTRATION TEST BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET; and 3) AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C924 FOR CONCRETE PIPE, ASTM C1141 FOR DUCTILE IRON PIPE, AND FOR OTHER MATERIALS APPROPRIATE.
14.3. DESIGN REQUIREMENTS THAT BENCH ARE PROVIDED ON EACH SIDE OF MANHOLE CHANNEL WHEN THE PIPE DIAMETER(S) ARE LESS THAN THE MANHOLE DIAMETER AND THAT NO LATERAL SEWER, SERVICE CONNECTION, OR DROP MANHOLE PIPE DISCHARGES ONTO THE SURFACE OF THE BENCH.
14.4. DESIGN REQUIREMENTS: 1) MANHOLE LIFT HOLES AND GROUND ADJUSTMENT RINGS BE SEALED WITH NON-SHRINK MORTAR OR OTHER APPROPRIATE MATERIAL; 2) INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATERTIGHT CONNECTION OR ANOTHER WATERTIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL; AND 3) WATERTIGHT MANHOLE COVERS BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OR HIGH WATERS.
14.5. MANHOLE INSPECTION AND TESTING FOR WATERTIGHTNESS OR DAMAGE PRIOR TO PLACING INTO SERVICE AREA SPECIFIED. AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C924.
14.6. SUITABLE COUPLINGS APPROVED BY THE ENGINEER AND COMPLYING WITH ASTM SPECIFICATIONS ARE REQUIRED FOR JOINING DISMILAR MATERIALS.

15. GENERAL WATER AND SEWER NOTES
15.1. ALL APPLICABLE PERMITS MUST BE OBTAINED AND ALL APPLICABLE FEES AND CHARGES

MUST BE PAID PRIOR TO COMMENCEMENT OF CONSTRUCTION.

15.2. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH **####** ATTENDED BY THE CONTRACTOR, ENGINEER AND INTERESTED PARTIES PRIOR TO ANY CONSTRUCTION.
15.3. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES ON THE SITE, A CURRENT SET OF APPROVED CONSTRUCTION PLANS. THE PLANS SHALL BE MADE AVAILABLE TO THE MUNICIPALITY'S ENGINEER OR HIS DESIGNEE UPON REQUEST.
15.4. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES SHOWN ON THE APPROVED PLANS. APPROVAL OF PLANS BY THE MUNICIPALITY IN NO WAY IMPLIES VERIFICATION OF THE ACCURACY OF THOSE PLANS OR FEATURES DEPICTED THEREON. THE OWNER'S ENGINEER SHALL BRING TO THE ATTENTION OF THE MUNICIPALITY'S ENGINEER ANY DISCREPANCIES WITHIN THE PLANS OR VARIATION FROM THE APPROVED PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES AND IMPROVEMENTS FROM DAMAGE, DISRUPTION OF SERVICE, OR DESTRUCTION AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES AND UTILITIES. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. ANY AND ALL CONFLICTS WITH EXISTING UTILITIES SHALL BE REVEALED TO THE MUNICIPALITY'S ENGINEER. THE CONTRACTOR SHALL INFORM THE MUNICIPALITY'S ENGINEER AT LEAST 48 HOURS IN ADVANCE OF COMMENCING CONSTRUCTION AND/OR CONNECTING TO A MUNICIPAL FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING OF, AND PAYMENT FOR, SUCH TESTS AS MAY BE DEEMED NECESSARY BY THE OWNER'S ENGINEER OR THE MUNICIPAL ENGINEER, AND AS CALLED FOR IN THE PLANS AND SPECIFICATIONS.
15.7. THE OWNER'S ENGINEER SHALL MAKE SUFFICIENT INSPECTIONS OF THE WORK TO ENABLE HIM TO CERTIFY THE INSTALLATION AS BEING IN CONFORMANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS.
15.8. THE OWNER'S REPRESENTATIVE WILL INFORM THE CONTRACTOR WHEN TO BACK FILL THE WORK, AND WILL WITNESS ALL PRESSURE, BACTERIOLOGICAL AND INFILTRATION/EXFILTRATION TESTS.
15.9. SANITARY SEWERS AND FORCE MAINS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS SHALL BE ABOVE WATER MAINS. THE CONTRACTOR SHALL PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE. WHERE SANITARY SEWERS OR FORCE MAINS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE BETWEEN THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP), MIN. CLASS 52 AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 12 INCHES SHALL BE MAINTAINED AT ALL CROSSINGS. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES VERTICAL CLEARANCE, THE PIPE SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.
15.10. A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHAFT LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. WHERE A WATER MAIN IS NOT POSSIBLE TO MAINTAIN A 18 INCH VERTICAL PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SANITARY SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP AND THE SANITARY SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP WITH A MINIMUM VERTICAL SEPARATION OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. THE SEWER OR FORCE MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
15.11. NO DEVIATION FROM APPROVED PLANS SHALL BE PERMITTED WITHOUT THE WRITTEN CONSENT OF THE MUNICIPAL ENGINEER.
15.12. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THESE PLANS WITH ANY PAVING AND DRAINAGE PLANS IN THIS PROJECT WORK AREA.
15.13. ALL INSTALLATIONS WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE IN CONFORMITY WITH THE COUNTY ENGINEERING DIVISION "MINIMUM STANDARDS".
15.14. ALL INSTALLATIONS AND TESTING OF DUCTILE IRON PIPE SHALL COMPLY WITH ANSI/AWWA C-600-99 (OR CURRENT EDITION).
15.15. MINIMUM VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER AND SANITARY SEWER MAINS TO COMPLY WITH RULES 62-604.400(2)(g) - (i), F.A.C. AND 62-604.400 (3), F.A.C. AS NOTED BELOW.
NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE EXISTING OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
AT THE UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
15.16. COATINGS AND LININGS (DIP):
15.16.1. DUCTILE IRON PIPE AND FITTINGS FOR UNDERGROUND SERVICE SHALL RECEIVE AN EXTERIOR BITUMINOUS COATING OF COAL TAR VARNISH OR ASPHALT BASE PAINT, 1.0-MIL FILM THICKNESS IN ACCORDANCE WITH ANSI/AWWA A21.51/C-151.
15.16.2. EXPOSED DUCTILE IRON PIPE AND FITTINGS FOR WATER SHALL RECEIVE A FACTORY APPLIED EXTERIOR COATING OF UNIVERSAL RUST-INHIBITIVE PRIMER, 2.0 MILS DRY FILM THICKNESS.
15.16.3. DUCTILE IRON PIPE AND FITTINGS FOR WASTEWATER SERVICE SHALL RECEIVE A FACTORY APPLIED INTERIOR CERAMIC EPOXY COATING WITH A MINIMUM DRY THICKNESS OF 40 MILS IN ACCORDANCE WITH ANSI A21.4 PROTECTO 401 OR APPROVED EQUAL.
15.16.4. DUCTILE IRON PIPE AND FITTINGS FOR WASTEWATER SERVICE SHALL RECEIVE AN EXTERIOR COATING AS SPECIFIED ABOVE AND SHALL BE CEMENT MORTAR LINED AND BITUMINOUS SEALED IN ACCORDANCE WITH ANSI A21.4.
15.17. WASTEWATER APPLICATIONS:
15.17.1.1. FOR GRAVITY SEWER ONLY SDR 26 PVC
15.17.2. DIP
15.17.2.1. PRESSURE CLASS 350 FOR 4"-24" DIAMETER PIPE
15.17.2.2. PRESSURE CLASS 250 FOR 30" OR GREATER DIAMETER PIPE
15.17.2.3. CLASS 53 FOR FLANGED APPLICATIONS
15.18. FORCE MAINS SHALL BE TESTED IN ACCORDANCE WITH AWWA STANDARD C-600 LATEST REVISION. THE COMPLETE SYSTEM SHALL BE HYDROSTATICALLY TESTED UNDER A MINIMUM CONSTANT PRESSURE OF 150 PSI FOR A MINIMUM OF TWO HOURS. LEAKAGE TESTS SHALL BE PERFORMED AT THE ABOVE MENTIONED PRESSURE UNTIL THE LEAKAGE IS LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:
$$L = \frac{SD \times VP}{L}$$

WHERE: L = ALLOWABLE LEAKAGE IN GPH
D = NOMINAL PIPE DIAMETER IN INCHES
S = LENGTH OF PIPE IN FEET BEING TESTED
P = AVERAGE TEST PRESSURE IN PSI

NOTE: THE SECTION OF MAIN BEING TESTED SHALL BE LIMITED TO A MAXIMUM LENGTH OF 2000'.

16. WATER SYSTEM NOTES
16.1. ALL WATER MAINS LARGER THAN 12" SHALL BE DUCTILE IRON PIPE (DIP). ALL PIPE MATERIAL SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
16.1.1. PVC (NOT ALLOWED)
16.1.1.1. 8" AND 6" DIA. CLASS 200, DR14
16.1.1.2. 8" AND 6" DIA. CLASS 150, DR18 ANS/AWWA C900-07
16.1.2. DIP
16.1.2.1. 15.1.1.1. ANSI/AWWA C151/A21.51 - 02 AND CEMENT MORTAR LINED AND SEALED PER ANSI/AWWA C104/A21.4-02
16.1.2.2. PRESSURE CLASS 350 FOR 4"-24" DIAMETER PIPE
16.1.2.3. PRESSURE CLASS 250 FOR 30" OR GREATER DIAMETER PIPE
16.1.2.4. CLASS 53 FOR FLANGED APPLICATIONS
16.2. ALL DUCTILE IRON PIPE WATER MAINS SHALL BE INSTALLED WITH A MINIMUM CLEAR COVER OF 30 INCHES. ALL PVC WATER MAINS SHALL BE INSTALLED WITH MINIMUM CLEAR COVER OF 36 INCHES.
16.3. ALL TRENCHING, PIPE-LAYING, BACKFILL, PRESSURE TESTING AND DISINFECTING MUST COMPLY WITH THE COUNTY OFFICE MINIMUM CONSTRUCTION REQUIREMENTS.
16.4. MINIMUM CLEARANCE BETWEEN STORM STRUCTURES AND WATER MAINS SHALL BE 6", AND MAXIMUM DEFLECTION OF EACH JOINT SHALL BE 2" WHERE DEFLECTION IS REQUIRED.
16.5. ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON MEETING ANSI/AWWA C-110/A21.10-03 SPECIFICATIONS, WITH 250 PSI MINIMUM WORKING PRESSURE. FITTINGS MUST BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C151/A21.51-02 AND C-104/A21.4-03.
16.6. MCO-A-LUG OR APPROVED EQUAL RESTRAINED JOINT CONSTRUCTION, IF APPROVED BY THE ENGINEER, SHALL BE USED TO MINIMIZE OR ELIMINATE THRUST BLOCKS.
16.7. GATE VALVES 4 INCH AND LARGER SHALL BE RESILIENT SEAT AND SHALL MEET ANSI/AWWA C-509-01 SPECIFICATIONS (LATEST REVISION). VALVES SHALL BE MUELLER OR APPROVED EQUAL.
16.8. MIN. VALVE SPACING SHALL BE AS PER SECTION 8.2 OF THE TEN STATES STANDARDS.
16.9. FIRE HYDRANTS SHALL BE AS REQUIRED BY THE MUNICIPAL UTILITY AND AT A MINIMUM

SHALL BE TRAFFIC BREAKAWAY TYPE MUELLER CO. CENTURION MODEL NO. A-423 OR APPROVED EQUAL AND SHALL BE INSTALLED WITH THE CENTER OF THE HOSE NOZZLE 18" ABOVE FINISHED GRADE OR AS DIRECTED BY ENGINEER.
16.10. CONTRACTOR SHALL SUBMIT REQUIRED NUMBER OF COPIES AS REQUESTED BY THE ENGINEER OF THE PROPOSED MATERIALS.
16.10.1. PIPE AND FITTINGS
16.10.2. VALVES
16.10.3. FIRE HYDRANTS
16.10.4. CURB AND CORP. STOPS
16.10.5. WATER SERVICE TUBING
16.10.6. U BRACKETS
16.10.7. WATER SERVICE CASING
16.10.8. ALL OTHERS AS REQUESTED BY THE ENGINEER OR THE OWNER.
16.11. WHEN THE CONTRACTOR HAS TO CROSS OVER WATER MAINS, A 14-GAUGE MULTISTRAND COPPER WIRE OR APPROVED EQUAL MATERIAL SHALL BE INSTALLED CONTINUOUSLY ALONG THE LENGTH OF THE PIPE. THE WIRE SHALL BE BROUGHT UP AND A MINIMUM OF FOUR FEET OF EXCESS WIRE SHALL BE COILED AT EACH VALVE. A GREEN LOCATOR (MODEL NO. 1253 AS MANUFACTURED BY AUTOMATION PRODUCTS CO.) OR APPROVED EQUAL SHALL BE INSTALLED AT EVERY WATER SERVICE.
16.12. THE COMPLETE WATER SYSTEM SHALL BE HYDROSTATICALLY TESTED UNDER A MINIMUM CONSTANT PRESSURE OF 150 PSI FOR A MINIMUM 2 HOURS TEST AND SHALL NOT EXCEED THE LEAKAGE REQUIREMENTS AS PER ANSI/AWWA SPECIFICATIONS C600-05 IN ACCORDANCE WITH THE FOLLOWING LEAKAGE FORMULA:
$$L = \frac{SD \times VP}{L}$$

WHERE: L = ALLOWABLE LEAKAGE IN GPH
D = NOMINAL PIPE DIAMETER IN INCHES
S = LENGTH OF PIPE IN FEET BEING TESTED
P = AVERAGE TEST PRESSURE IN PSI
NOTE: THE SECTION OF MAIN BEING TESTED SHALL BE LIMITED TO A MAXIMUM LENGTH OF 2000'. NO ALLOWABLE LEAKAGE SHALL BE PERMITTED FOR FIRE HYDRANTS.
16.1. DISINFECTION OF WATER MAINS SHALL COMPLY WITH ANSI/AWWA C-651-05 STANDARD.
16.14. THE CONTRACTOR SHALL SUPPLY AND INSTALL APPROVED REFLECTIVE MARKERS IN THE SURFACE OF ALL STREET CORNER PAVEMENT RADI SHALL BE 25 FEET UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.
16.15. PAVEMENT RESTORATION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
16.16. ALL WATER MAINS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320, F.A.C.
16.17. RESTRAINED JOINT PIPE SHALL BE USED FOR ALL BENDS, TEES, CROSSES, PLUGS AND FIRE HYDRANTS PER THE STANDARD DETAILS AND MUNICIPAL UTILITY REQUIREMENTS.
17. FIRE SAFETY NOTES
17.1. ALL FIRE HYDRANTS SHALL COMPLY WITH THE FOLLOWING INSTALLATION CRITERIA:
17.1.1. ALL FIRE HYDRANTS SHALL FALL WITHIN 6 FEET FROM THE EDGE OF PAVED ROAD SURFACE OR DRIVEWAY.
17.1.2. THE 4-1/2" OUTLET SHALL FACE THE ROADWAY.
17.1.3. UNOBSTRUCTED SPACE (6') SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FIRE HYDRANT UNLESS OTHERWISE REQUIRED OR APPROVED BY THE FIRE CHIEF.
LANDSCAPING SHALL NOT OBSCURE THE FIRE HYDRANT.
17.1.4. FIRE DEPARTMENT SHALL APPROVE ALL FIRE HYDRANT LOCATIONS.
17.1.5. REFLECTORS IN THE ROADWAY TO INDICATE FIRE HYDRANT LOCATIONS SHALL BE PROVIDED AND INSTALLED AS DIRECTED BY THE ENGINEER.
17.1.6. MINIMUM WATER FLOW REQUIRED FOR FIRE HYDRANTS SHALL BE 750 GPM OR AS REQUIRED BY THE MUNICIPAL AUTHORITY.
18. PAVING
18.17. GENERAL
18.17.1. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF THE LIME/ROCK BASE AND PRIOR TO THE PLACEMENT OF THE PAVEMENT.
18.17.2. ALL STREET CORNER PAVEMENT RADI SHALL BE 25 FEET UNLESS OTHERWISE NOTED ON THE PLANS.
18.17.3. TWO ROWS OF BAHIA SOD SHALL BE LAID ALONG CURB WITHIN TWO WEEKS OR AS DIRECTED BY THE ENGINEER OF INSTALLING FIRST LIFT OF ASPHALT.
18.18. MATERIALS
18.18.1. LIME/ROCK BASE MATERIAL SHALL HAVE A MINIMUM OF 70% CARBONATES (CALCIUM AND MAGNESIUM) WITH A MINIMUM LBR OF 100.
18.18.2. SUBGRADE MATERIAL SHALL HAVE A MINIMUM LBR OF 40 AND INSTALLED AT 98% AASHTO T-180 STANDS. (INCLUDES STABILIZED ROADWAY SHOULDERS)
18.18.3. PRIME COAT AND TACK COAT SHALL MEET FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS.
18.18.4. SURFACE COURSE SHALL BE EQUAL TO FDOT TYPE S-3 (SP9.5 EQUIVALENT) ASPHALT CONCRETE. CONTRACTOR TO SUBMIT FDOT APPROVED ASPHALT MIX SHOP DRAWINGS FOR ENGINEER'S REVIEW/APPROVAL PRIOR TO PLACEMENT OF ANY ASPHALT.
18.19. INSTALLATION
18.19.1. LIME/ROCK BASE MATERIAL SHALL BE 8" THICK OR AS SHOWN AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
18.19.2. LIME/ROCK BASE MATERIAL SHALL BE PLACED IN TWO OR MORE EQUAL LIFTS.
18.19.3. ASPHALTIC CONCRETE SHALL BE AS INDICATED ON PLANS, AND PLACED IN TWO (2) LIFTS.
18.19.4. PRIME COAT SHALL BE PLACED ON ALL LIME/ROCK BASES IN ACCORDANCE WITH FDOT STANDARDS.
18.19.5. TACK COAT SHALL BE PLACED AS REQUIRED IN ACCORDANCE WITH FDOT STANDARDS.
18.20. TESTING
18.20.1. ALL SUBGRADE, LIME/ROCK AND ASPHALT TESTS REQUIRED SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER AND/OR **####**.
18.21. PAVING
18.21.1. ALL PAVEMENT, INSTALLATION AND MAINTENANCE SPECIFICATIONS SHALL MEET THE REQUIREMENTS OF **####**.
19. SIGNING AND MARKING
19.1. PAVEMENT MARKINGS, REFLECTIVE PAVEMENT MARKERS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD) AND COUNTY AND/OR **####** TRAFFIC ENGINEERING DIVISION STANDARDS.
19.2. ALL CURB AND TACK COAT SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH REFLECTORIZED THERMOPLASTIC IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION SECTION 711.
19.3. REFLECTIVE PAVEMENT MARKERS SHALL BE CLASS A MARKERS MANUFACTURED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION 706 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
19.4. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED DESIGN SHALL BE REMOVED. METHODS OF REMOVAL TO BE APPROVED BY COUNTY AND/OR **####** TRAFFIC ENGINEERING DEPARTMENT.
19.5. ALL SIGNS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
19.6. ALL R1-1 SIGNS SHALL HAVE HIGH INTENSITY SHEETING.
19.7. ALL TEMPORARY PAVEMENT MARKINGS WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE PAINT IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND/OR **####** TRAFFIC ENGINEERING DEPARTMENT MINIMUM STANDARDS UNLESS OTHERWISE NOTED EXCEPT ON FINAL LIFT WHICH SHALL BE FOIL BACK TAPE OR PAPER TAPE.
19.8. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL UTILITY MARKINGS ONCE THE WORK IS COMPLETED. CONTRACTOR SHALL USE SPECIAL CARE WHEN REMOVING THE UTILITY MARKINGS. THE REMOVAL METHOD NEEDS TO BE SUCH THAT IT DOES NOT DAMAGE THE SURFACES OF THE EXISTING WORK ALREADY IN PLACE. IF WATER-BLASTING OLDER ASPHALT PAVEMENT, CARE NEEDS TO BE TAKEN TO NOT DISCOLOR THE ASPHALT OR POLISH THE AGGREGATE. IF THE REMOVALS ARE ON OLDER CONCRETE SURFACES, THE ENTIRE SURFACE OF A PANEL OR SECTION NEEDS TO BE BLASTED TO SHOW UNIFORM COLOR THROUGHOUT THAT SAME PANEL OR SECTION. IN ANY CASE (ASPHALT OR CONCRETE SURFACE), THE METHOD NEEDS TO BE SUCH THAT A SLICK SURFACE IS NOT LEFT BEHIND. FINAL PAYMENT TO THE CONTRACTOR MAY BE WITHHELD UNTIL THE UTILITY MARKS ARE PROPERLY REMOVED.
20. LANDSCAPE NOTES
20.1. ALL CONSTRUCTION ACTIVITY INCLUDING TRENCHING, IS TO BE A MINIMUM OF SIX (6) FEET FROM THE DEFLECTION OF ANY TREE THAT IS DESIGNATED TO REMAIN PER CODE SECTION 27-45.
20.2. ALL TREES PLANTED IN ISLANDS CONTAINING HYDRANTS OR FDC'S MUST COMPLY WITH FLORIDA FIRE PREVENTION CODE 18.3.4.1 - CLEARANCES OF 7'-6" IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT

| LINE TYPE & SYMBOLS LEGEND | |
|---|---|
| CLEARING & DEMOLITION LINETYPES | |
| | EXISTING FENCE (TO BE REMOVED) |
| | EXISTING CURB (TO BE REMOVED) |
| | EXISTING WALL (TO BE REMOVED) |
| | EXISTING TREE LINE/SHRUBS (TO BE REMOVED) |
| | EXISTING WATER EDGE (TO BE REMOVED) |
| | EXISTING SANITARY SEWER LINE (TO BE REMOVED) |
| | EXISTING SANITARY SEWER FORCE MAIN LINE (TO BE REMOVED) |
| | EXISTING STORM DRAINAGE LINE (TO BE REMOVED) |
| | EXISTING WATER MAIN LINE (TO BE REMOVED) |
| | EXISTING UTILITY LINE (TO BE ABANDONED) |
| PROPOSED IMPROVEMENTS LINETYPES & SYMBOLS | |
| | PROPOSED BASELINE |
| | PROPOSED BURIED ELECTRIC LINE |
| | PROPOSED EASEMENT LINE |
| | PROPOSED FENCE LINE |
| | PROPOSED GUARDRAIL |
| | PROPOSED LIMITS OF CONSTRUCTION LINE |
| | PROPERTY BOUNDARY LINE |
| | PROPOSED LOT LINE |
| | PROPOSED PROPERTY SETBACK LINE |
| | PROPOSED EDGE OF PAVEMENT & CURB LINE |
| | PROPOSED ROADWAY CENTERLINE |
| | RIGHT OF WAY LINE |
| | PROPOSED TREE/LANDSCAPE LINE |
| | PROPOSED SANITARY SEWER FORCE MAIN LINE |
| | PROPOSED SANITARY SEWER SERVICE LATERAL LINE |
| | PROPOSED SANITARY SEWER LINE |
| | PROPOSED EXFILTRATION TRENCH LINE |
| | PROPOSED STORM DRAINAGE LINE |
| | PROPOSED EDGE OF WATER LINE |
| | PROPOSED TOP OF BANK LINE |
| | PROPOSED TOE OF BANK LINE |
| | PROPOSED WALL LINE |
| | PROPOSED FIRE MAIN LINE |
| | PROPOSED POTABLE WATER SERVICE LINE |
| | PROPOSED POTABLE WATER MAIN LINE |
| | PROPOSED NON-POTABLE RECLAIMED WATER LINE |
| | PROPOSED AIR RELEASE VALVE |
| | PROPOSED VALVE |
| | PROPOSED PLUG WITH BLOWOFF VALVE |
| | PROPOSED FIRE HYDRANT |
| | PROPOSED BACKFLOW PREVENTER |
| | PROPOSED WATER METER |
| | PROPOSED FIRE DEPARTMENT SIAMESE CONNECTION (FDC) |
| | PROPOSED DOUBLE DETECTOR CHECK VALVE (DDCV) |
| | PROPOSED SANITARY SEWER MANHOLE/CLEANOUT |
| | PROPOSED STORM DRAINAGE CATCH BASIN |
| | PROPOSED STORM DRAINAGE MANHOLE |
| | PROPOSED YARD DRAIN |
| | PROPOSED MITERED END SECTION |
| | PROPOSED FDOT TYPE 5 INLET |
| | PROPOSED FDOT TYPE 6 INLET |
| | PROPOSED FDOT TYPE 9 INLET |
| | PROPOSED STORMWATER POLLUTION PREVENTION SILT FENCE |
| | PROPOSED TURBIDITY BARRIER/CURTAIN |
| | PROPOSED INLET PROTECTION |
| EXISTING LINETYPES | |
| | EXISTING BURIED ELECTRIC LINE |
| | EXISTING BURIED CABLE/TELEVISION LINE |
| | EXISTING BURIED COMMUNICATION LINE |
| | EXISTING FIRE LINE |
| | EXISTING GAS LINE |
| | EXISTING NON-POTABLE RECLAIMED WATER LINE |
| | EXISTING OVERHEAD WIRE LINE |
| | EXISTING ABANDONED UTILITY LINE |
| | EXISTING SANITARY FORCE MAIN |
| | EXISTING SANITARY SEWER LATERAL |
| | EXISTING SANITARY SEWER LINE |
| | EXISTING STORM SEWER LINE |
| | EXISTING POTABLE WATER LINE |
| | EXISTING POTABLE WATER SERVICE LINE |

| GENERAL ABBREVIATIONS | |
|-----------------------|---|
| AC | ASBESTOS CEMENT |
| ALUM | ALUMINUM |
| ARV | AIR RELEASE VALVE |
| BE | BURIED ELECTRIC |
| BFP | BACKFLOW PREVENTER |
| BFV | BUTTERFLY VALVE |
| B/L | BASELINE |
| BOP | BOTTOM OF PIPE |
| BSP | BACTERIOLOGICAL SAMPLE POINT |
| BT | BURIED TELEPHONE |
| CATV | CABLE TELEVISION |
| CB | CATCH BASIN |
| CIP | CAST IRON PIPE |
| CL | CENTERLINE |
| CONC | CONCRETE |
| CV | CHECK VALVE |
| DDCV | DOUBLE DETECTOR CHECK VALVE |
| DIA | DIAMETER |
| DIP | DUCTILE IRON PIPE |
| ELEV | ELEVATION |
| EP | EXISTING PAVEMENT EDGE |
| EXIST | EXISTING |
| F&I | FURNISH & INSTALL |
| FDEP | FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION |
| FDOT | FLORIDA DEPT. OF TRANSPORTATION |
| FH | FIRE HYDRANT |
| FM | FORCE MAIN |
| FPL | FLORIDA POWER & LIGHT |
| GE | GRATE ELEVATION |
| GV | GATE VALVE |
| HDPE | HIGH DENSITY POLYETHYLENE |
| IE | INVERT ELEVATION |
| LAT | LATERAL |
| LF | LINEAR FEET |

| GENERAL ABBREVIATIONS | |
|-----------------------|--------------------------------------|
| MAX | MAXIMUM |
| MEG | MATCH EXISTING GRADE |
| MES | MITERED END SECTION |
| MFR | MANUFACTURER |
| MH | MANHOLE |
| MIN | MINIMUM |
| MJ | MECHANICAL JOINT |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OE | OVERHEAD ELECTRIC |
| OHW | OVERHEAD WIRE |
| PC | POINT OF CURVATURE |
| PHDPE | PERFORATED HIGH DENSITY POLYETHYLENE |
| PL | PROPERTY LINE |
| PRB | POLLUTION RETARDANT BAFFLE |
| PROP | PROPOSED |
| PSI | POUNDS PER SQUARE INCH |
| PV | PLUG VALVE |
| PVC | POLY VINYL CHLORIDE |
| RCP | REINFORCED CONCRETE PIPE |
| RE | RIM ELEVATION |
| RED | REDUCER |
| REQD | REQUIRED |
| RJ | RESTRAINED JOINT |
| R/W | RIGHT-OF-WAY |
| SAN SWR | SANITARY SEWER |
| STRM SWR | STORM SEWER |
| TEL | TELEPHONE |
| TOP | TOP OF PIPE |
| TYP | TYPICAL |
| UR | UTILITY RISER |
| VCP | VITRIFIED CLAY PIPE |
| WL | WATER LINE |
| WM | WATER METER |

| EXISTING SYMBOLS LEGEND | |
|-------------------------|-------------------------|
| SYM. | DESCRIPTION |
| | AERIAL TARGET |
| | BENCH MARK |
| | CONCRETE MONUMENT |
| | IRON PIN |
| | NAIL & DISC |
| | IRON ROD AND CAP |
| | HUB AND TACK |
| CONTROL | |
| | 11.25° PIPE BEND |
| | 22.5° PIPE BEND |
| | 45° PIPE BEND |
| | 90° PIPE BEND |
| PIPE FITTINGS | |
| | CROSS PIPE FITTING |
| | TEE PIPE FITTING |
| | WYE PIPE FITTING |
| | REDUCER PIPE FITTING |
| ELECTRICAL | |
| | ELECTRICAL MANHOLE |
| | ELECTRICAL OUTLET |
| | GROUND LIGHT |
| | ELECTRICAL JUNCTION BOX |
| | ELECTRICAL METER |
| | TRANSFORMER |

| EXISTING SYMBOLS LEGEND | |
|-------------------------|-----------------------------|
| SYM. | DESCRIPTION |
| | GAS MANHOLE |
| | GAS VALVE |
| | MONITORING WELL |
| | VENT PIPE |
| GAS / FUEL | |
| | TELEPHONE RISER |
| | TELEPHONE MANHOLE |
| | CATV RISER |
| TELE / TV | |
| | BACKFLOW PREVENTER |
| | AIR RELEASE VALVE |
| | FIRE HYDRANT |
| | SIAMESE CONNECTION |
| | WATER METER |
| | WATER VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WELL |
| | IRRIGATION CONTROL VALVE |
| | IRRIGATION CONTROL BOX |
| | SPRINKLER |
| WATER / IRRIGATION | |
| | GENERIC TREE |
| | OAK TREE |
| | PALM TREE |
| | MANGROVE TREE |
| | CITRUS TREE |
| | BUSH-CROTON |
| TREES | |

| EXISTING SYMBOLS LEGEND | |
|-------------------------|---------------------------|
| SYM. | DESCRIPTION |
| | CLEAN OUT |
| | SANITARY MANHOLE |
| | STAND PIPE |
| | SEWER VALVE |
| | GREASE TRAP MANHOLE |
| SANITARY SEWER | |
| | CATCH BASIN |
| | STORM MANHOLE |
| | YARD DRAIN |
| | CURB INLET |
| STORM SEWER | |
| | BORING HOLE LOCATION |
| | VALVE (UNKNOWN) |
| | BOLLARD |
| | FLAG POLE |
| | MANHOLE (UNKNOWN) |
| | SATELLITE DISH |
| | SIGNS |
| | PARKING METER |
| | A/C UNIT |
| | MAILBOX |
| | PEDESTRIAN SIGNAL UNIT |
| | TRASH RECEPTACLE |
| | TOPOGRAPHIC ELEVATION |
| MISCELLANEOUS | |
| | GUY WIRE |
| | GUY POLE |
| | WOOD LIGHT POLE |
| | METAL LIGHT POLE |
| | CONCRETE LIGHT POLE |
| | CONCRETE UTILITY POLE |
| | METAL UTILITY POLE |
| | WOOD UTILITY POLE |
| | MAST ARM & SIGNAL SUPPORT |
| UTILITY POLES | |

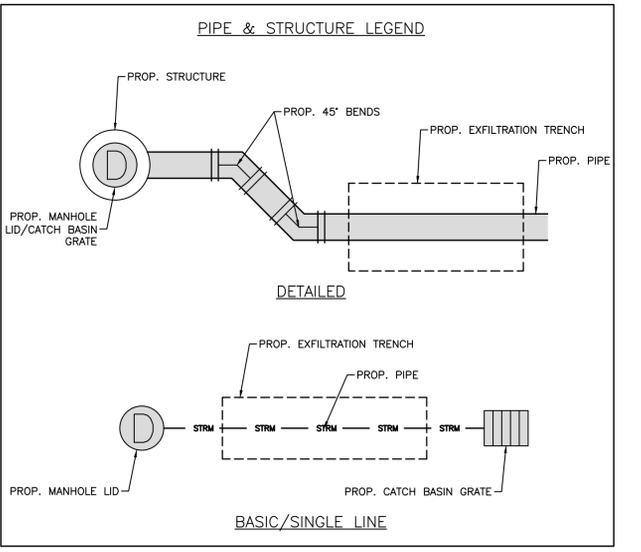
| TAGS | |
|------|------------------------|
| | STRUCTURE CALLOUT |
| | SECTION SYMBOL |
| | DETAIL SYMBOL |
| | SPOT ELEVATION SYMBOLS |
| | NOTE SYMBOL |
| | CROSSING SYMBOL |

| HATCH PATTERN LEGEND | |
|--------------------------------------|--|
| | EXISTING CONCRETE PAVEMENT/SIDEWALK |
| | EXISTING CONCRETE PAVERS |
| CLEARING & DEMOLITION HATCH PATTERNS | |
| | EXISTING BUILDING/STRUCTURE (TO BE REMOVED) |
| | EXISTING ASPHALT ROADWAY/SURFACE (TO BE REMOVED) |
| | EXISTING CONCRETE SIDEWALK/SURFACE (TO BE REMOVED) |
| PROPOSED IMPROVEMENTS HATCH PATTERNS | |
| | PROPOSED CONCRETE PAVEMENT/SIDEWALK |
| | PROPOSED ASPHALT PAVEMENT |
| | PROPOSED ASPHALT RESTORATION |
| | PROPOSED CONCRETE PAVERS |
| | PROPOSED GREEN SPACE |
| | PROPOSED STORMWATER POLLUTION PREVENTION SOIL TRACKING MEASURE/ GRAVEL CONSTRUCTION ENTRANCE |

| SINGLE LINE PIPE FITTING LEGEND | | | |
|---------------------------------|--|---------|--|
| 11.25° BEND | | CROSS | |
| 22.5° BEND | | REDUCER | |
| 45° BEND | | TEE | |
| 90° BEND | | WYE | |

| LINE WEIGHTS | |
|--------------|--|
| EXISTING | SHADED SOLID & DASHED LINES & TEXT DENOTE EXISTING EQUIPMENT, STRUCTURES AND WORK. |
| FUTURE | NON-SHADED DASHED LINES & TEXT DENOTE FUTURE EQUIPMENT, STRUCTURES AND WORK. |
| PROPOSED | NON-SHADED, BOLD, SOLID LINES & TEXT DENOTE PROPOSED EQUIPMENT, STRUCTURES AND WORK. |

NOTES:
1. FOR GRAPHICAL CLARIFICATION ON PLANS CONTAINING BACKGROUND AERIAL PHOTOS, EXISTING ITEMS ARE SHOWN HOLLOW WHEREAS PROPOSED ARE SHOWN SOLID.
2. FOR GRAPHICAL CLARIFICATION THROUGHOUT THE PLAN SET, PROPOSED EQUIPMENT, STRUCTURES AND WORK NOT PERTAINING TO A SUB-SECTION OF THE SET (I.E. PAVEMENT MARKING & SIGNAGE PLAN, PAVING GRADING & DRAINAGE PLAN, UTILITY PLAN, ETC.) MAY BE SHADDED IN AN EFFORT TO EMPHASIZE PROPOSED EQUIPMENT, STRUCTURES AND WORK ASSOCIATED WITH THE SUB-SECTION IN A MANNER OF DISTINCT DIFFERENTIATION FROM THAT OF EXISTING EQUIPMENT, STRUCTURES, AND UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND VERIFY EXISTING CONDITIONS, AS WELL AS MAINTAIN KNOWLEDGE AND UNDERSTANDING OF THE PROPOSED WORK SPECIFIED WITHIN THE CONSTRUCTION SET.



NOTE:
THE LEGEND SHOWN HEREON IS REPRESENTATIVE OF ALL MILLER LEGG DRAFTING STANDARDS AND IS NOT PROJECT SPECIFIC.



CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-6771
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com



PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073



| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: MD
REVIEWED BY: JM
DESIGNED BY: MG

SHEET TITLE:
CIVIL LEGEND, ABBREVIATIONS, & SYMBOLS

SHEET NUMBER:
C-1.1

V:\PROJECTS\2023\23-00155 - COCONUT CREEK OAK TRAILS PARK DRAWINGS\30% DESIGN SUBMITTAL\23-00155_CVR.DWG by JROMER 5/1/2024 3:01:12 PM

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

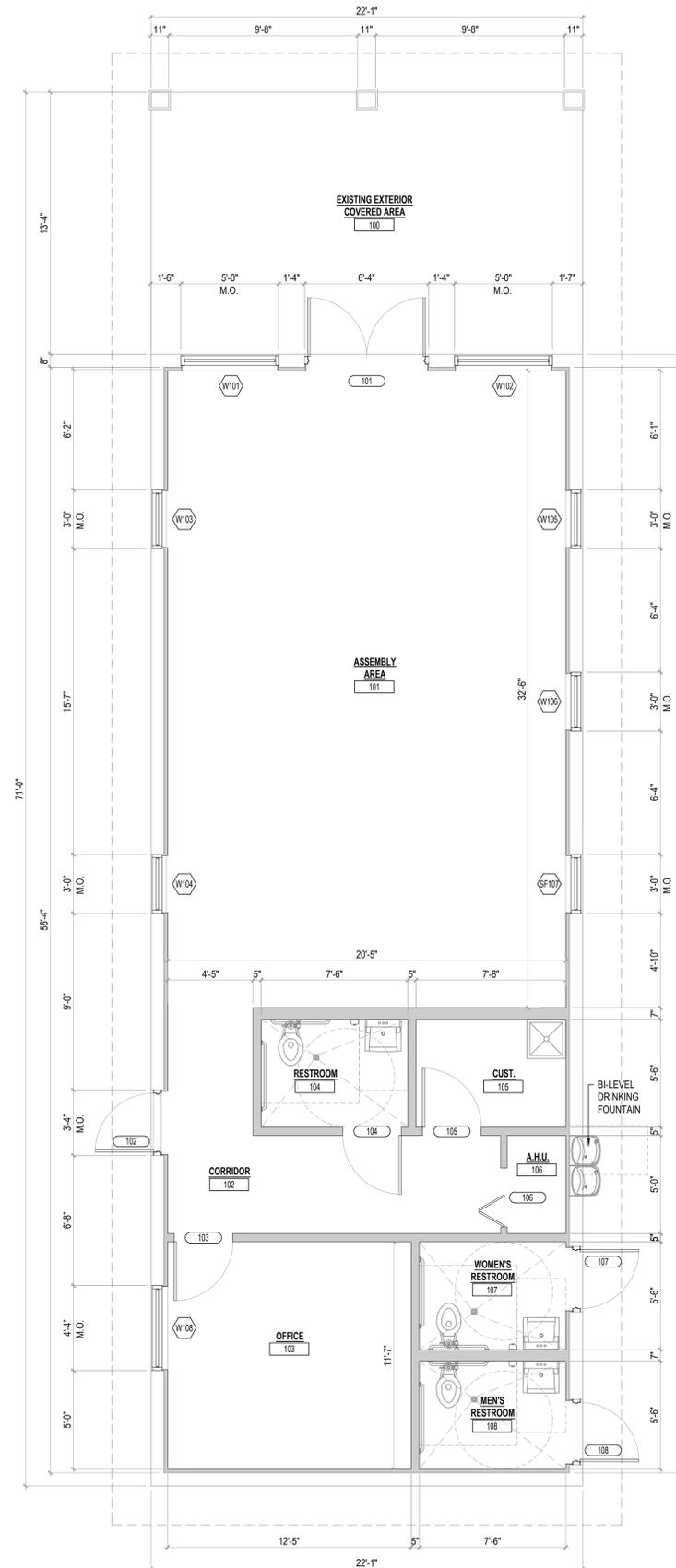
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: BH
REVIEWED BY: CJ
DESIGNED BY: CJ

SHEET TITLE:

FLOOR PLAN

SHEET NUMBER:

A-1.0



| | |
|--|--|
| | NEW INTERIOR PARTITION WITH WALL TYPE TAG |
| | EXISTING WALL TO REMAIN |
| | FLOOR DRAIN |
| | INSTALL NEW INTERIOR / EXTERIOR DOOR AND FRAME |

1 FLOOR PLAN
SCALE: 1/4" = 1'-0"

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: BH
REVIEWED BY: CJ
DESIGNED BY: CJ

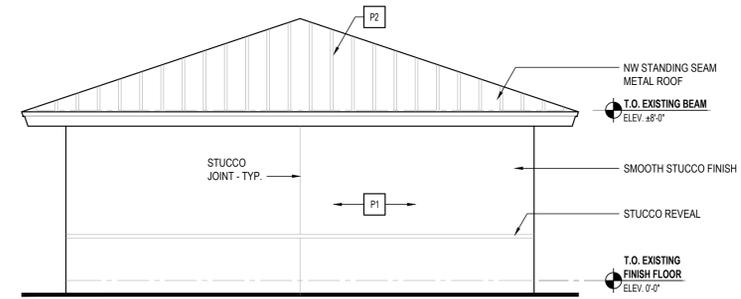
SHEET TITLE:

EXTERIOR ELEVATIONS

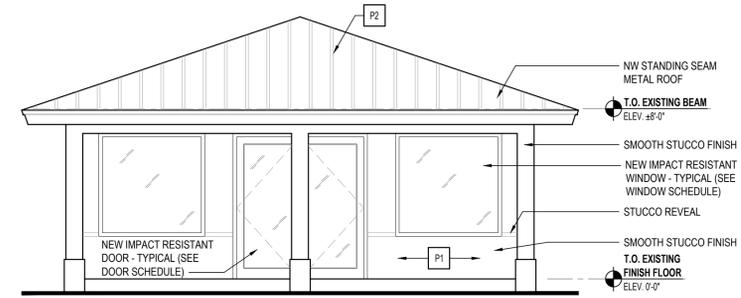
SHEET NUMBER:

A-2.0

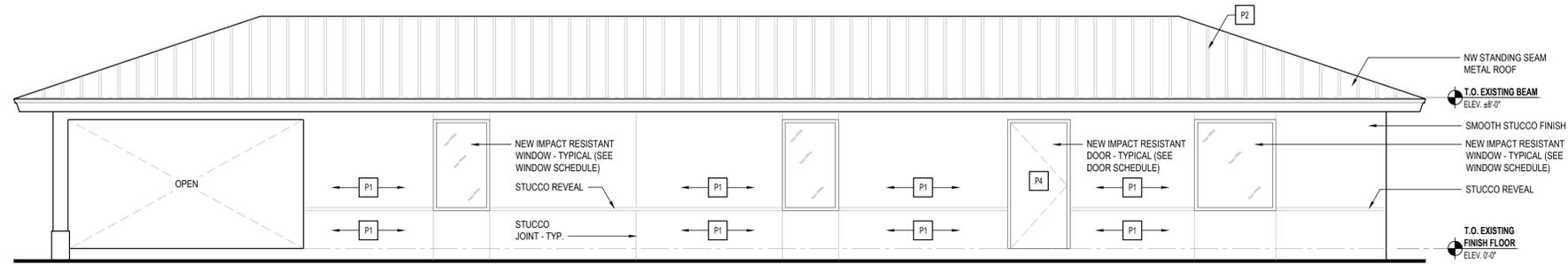
| MATERIAL/FINISH SCHEDULE | | |
|---|------------------------|--|
| P-1 | EXTERIOR WALL | - BM OC25 - CLOUD COVER |
| P-2 | ROOF (METAL PANELS) | - DARK GRAY |
| P-3 | WINDOW AND DOOR FRAME | - DARK BRONZE |
| P-4 | EXTERIOR H.M. DOOR | - BM AF700 - STORM |
| P-5 | CEILING (COVERED AREA) | - LAMBOO VSF SOLID-PLY COLOR: HAZEL |
| BM SHALL REFER TO BENJAMIN MOORE PAINT CODE | | |



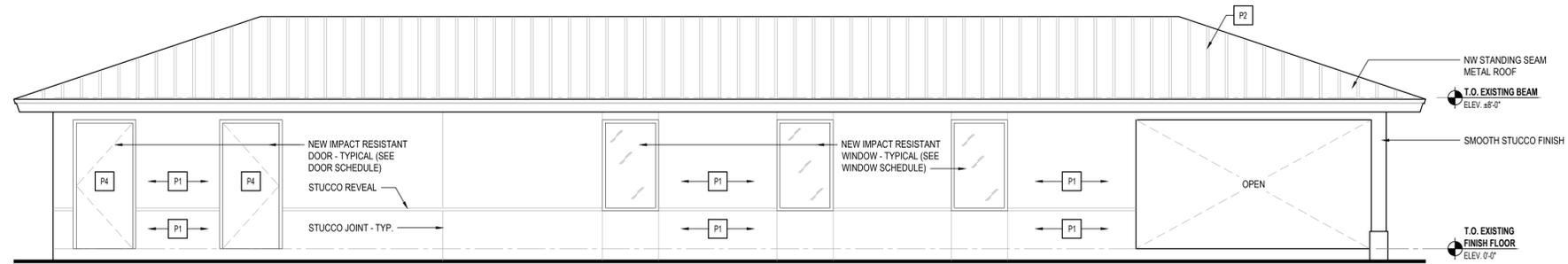
4 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



3 NORTH ELEVATION
SCALE: 1/4" = 1'-0"



2 WEST ELEVATION
SCALE: 1/4" = 1'-0"



1 EAST ELEVATION
SCALE: 1/4" = 1'-0"

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7871
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinmakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024

PROJECT NUMBER: 23-00155

DRAWN BY: BH

REVIEWED BY: CJ

DESIGNED BY: CJ

SHEET TITLE:
WINDOW AND DOOR SCHEDULES AND DETAILS

SHEET NUMBER:
A-3.0

INTERIOR FINISH LEGEND

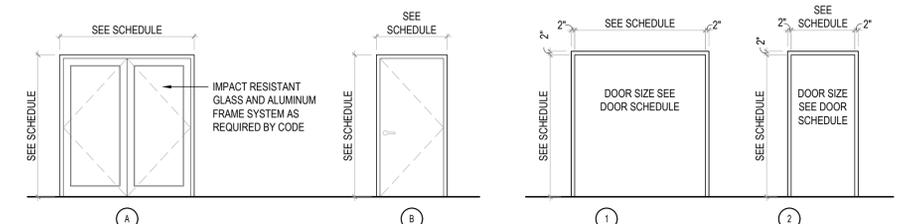
| SYMBOL | DESCRIPTION (SPECIFIED VENDOR IF APPLICABLE) |
|-----------------|--|
| FLOORING | |
| F-1 | PORCELAIN TILE |
| F-2 | TERRAZZO TILE |
| F-3 | EXPOSED CONCRETE |
| BASE | |
| B-1 | VINYL BASE |
| B-2 | COVE BASE |
| WALLS | |
| W-1 | GYPSUM W.B. PAINTED |
| W-2 | PORCELAIN TILE |
| CEILING | |
| GYP. BD. | GYPSUM W.B. PAINTED |

FINISH SCHEDULE

| No | ROOM | FLOOR FINISH | NORTH WALL | | SOUTH WALL | | EAST WALL | | WEST WALL | | CEILING | CEILING HEIGHT | REMARKS |
|-----|------------------|--------------|------------|--------|------------|--------|-----------|--------|-----------|--------|----------|----------------|----------|
| | | | BASE | FINISH | BASE | FINISH | BASE | FINISH | BASE | FINISH | | | |
| 100 | COVERED AREA | F-1 | - | - | - | - | - | - | - | - | GYP. BD. | 8'-0" A.F.F. | NON-SLIP |
| 101 | ASSEMBLY AREA | F-2 | B-1 | W-2 | B-1 | W-2 | B-1 | W-2 | B-1 | W-2 | GYP. BD. | 8'-0" A.F.F. | - |
| 102 | CORRIDOR | F-2 | B-1 | W-2 | B-1 | W-2 | B-1 | W-2 | B-1 | W-2 | GYP. BD. | 8'-0" A.F.F. | - |
| 103 | OFFICE | F-2 | B-1 | W-2 | B-1 | W-2 | B-1 | W-2 | B-1 | W-2 | GYP. BD. | 8'-0" A.F.F. | - |
| 104 | RESTROOM | F-1 | B-2 | W-3 | B-2 | W-3 | B-2 | W-3 | B-2 | W-3 | GYP. BD. | 8'-0" A.F.F. | - |
| 105 | CUSTODIAL | F-1 | B-1 | W-3 | B-1 | W-2 | B-1 | W-2 | B-1 | W-2 | GYP. BD. | 8'-0" A.F.F. | - |
| 106 | A.H.U. CLOSET | F-3 | - | W-2 | - | W-2 | - | W-2 | - | W-2 | GYP. BD. | 8'-0" A.F.F. | - |
| 107 | WOMEN'S RESTROOM | F-1 | B-2 | W-3 | B-2 | W-3 | B-2 | W-3 | B-2 | W-3 | GYP. BD. | 8'-0" A.F.F. | - |
| 108 | MEN'S RESTROOM | F-1 | B-2 | W-3 | B-2 | W-3 | B-2 | W-3 | B-2 | W-3 | GYP. BD. | 8'-0" A.F.F. | - |

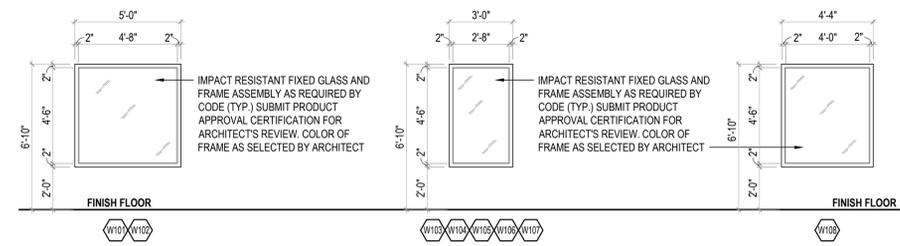
DOOR SCHEDULE

| No | SIZE | ROOM No | DOOR | | FRAME | | THRESH LD | CLOSER | FIRE RATED | DESIGN PRESSURE | | IMPACT RESISTANT | REMARKS |
|-----|---------------|------------|--------------|----------|----------|----------|-----------|--------|------------|-----------------|----|------------------|-------------------|
| | | | FROM / TO | MATERIAL | ELEV. | MATERIAL | | | | ELEV. | P+ | | |
| 101 | 6'-0" x 6'-8" | 100 / 101 | ALUM / GLASS | A | ALUMINUM | 1 | YES | YES | - | - | - | YES | STOREFRONT SYSTEM |
| 102 | 3'-0" x 6'-8" | EXT. / 102 | H.M. | B | H.M. | 2 | YES | YES | - | - | - | YES | - |
| 103 | 3'-0" x 6'-8" | 102 / 103 | WOOD | B | H.M. | 2 | - | - | - | - | - | - | - |
| 104 | 3'-0" x 6'-8" | 102 / 104 | WOOD | B | H.M. | 2 | - | - | - | - | - | - | - |
| 105 | 3'-0" x 6'-8" | 102 / 105 | WOOD | B | H.M. | 2 | - | - | - | - | - | - | - |
| 106 | 3'-0" x 6'-8" | 102 / 106 | WOOD | B | H.M. | 2 | - | - | - | - | - | - | BI-FOLD WOOD DOOR |
| 107 | 3'-0" x 6'-8" | EXT. / 107 | H.M. | B | H.M. | 2 | YES | YES | - | - | - | YES | - |
| 108 | 3'-0" x 6'-8" | EXT. / 108 | H.M. | B | H.M. | 2 | YES | YES | - | - | - | YES | - |

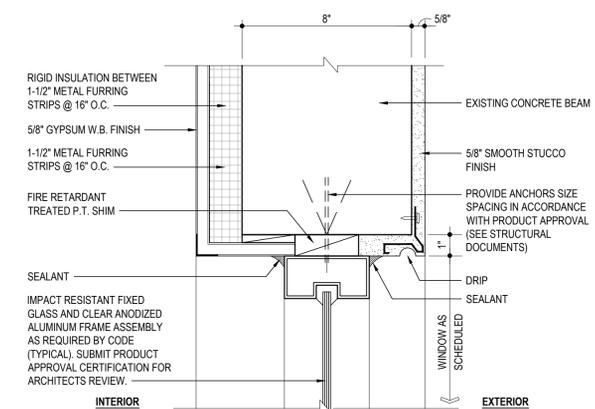


3 DOOR TYPES
SCALE: 1/4" = 1'-0"

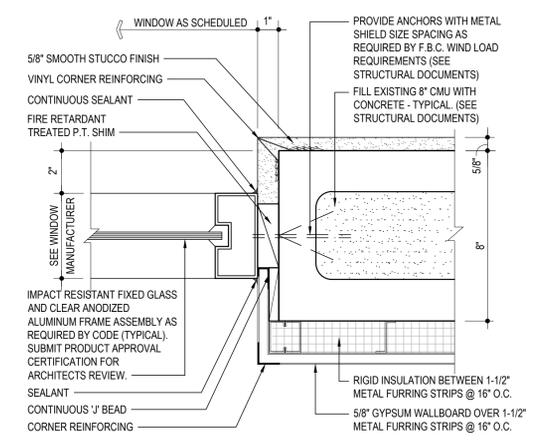
2 DOOR FRAME TYPES
SCALE: 1/4" = 1'-0"



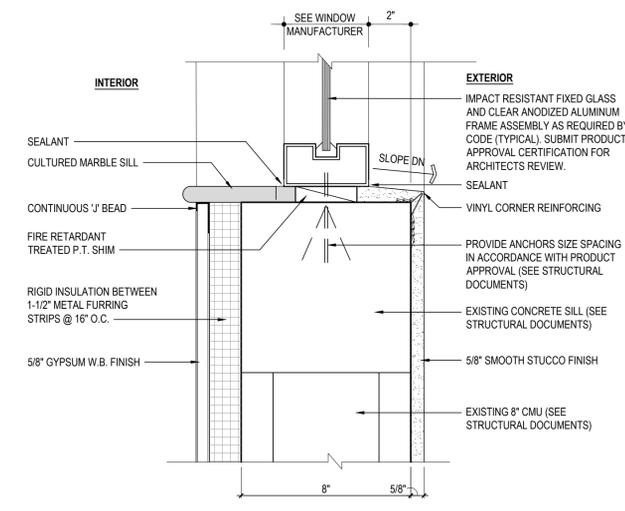
1 WINDOW TYPES
SCALE: 1/4" = 1'-0"



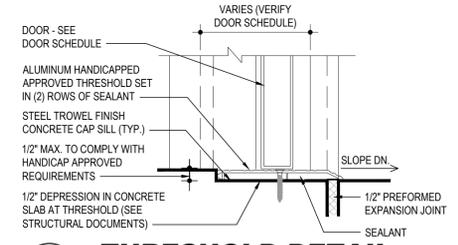
6 WINDOW HEAD DETAIL
SCALE: 3/8" = 1'-0"



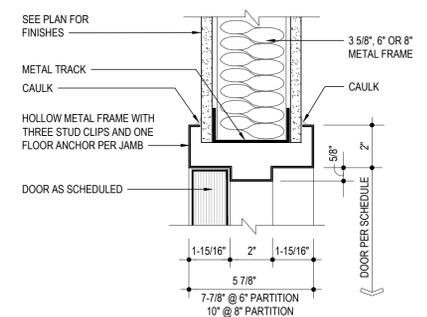
5 WINDOW JAMB DETAIL
SCALE: 3/8" = 1'-0"



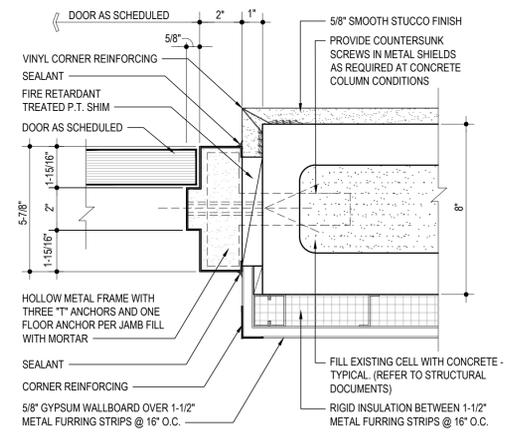
4 WINDOW SILL DETAIL
SCALE: 3/8" = 1'-0"



9 THRESHOLD DETAIL
SCALE: 3/8" = 1'-0"



8 INTERIOR DOOR HEAD / JAMB DETAIL
SCALE: 3/8" = 1'-0"



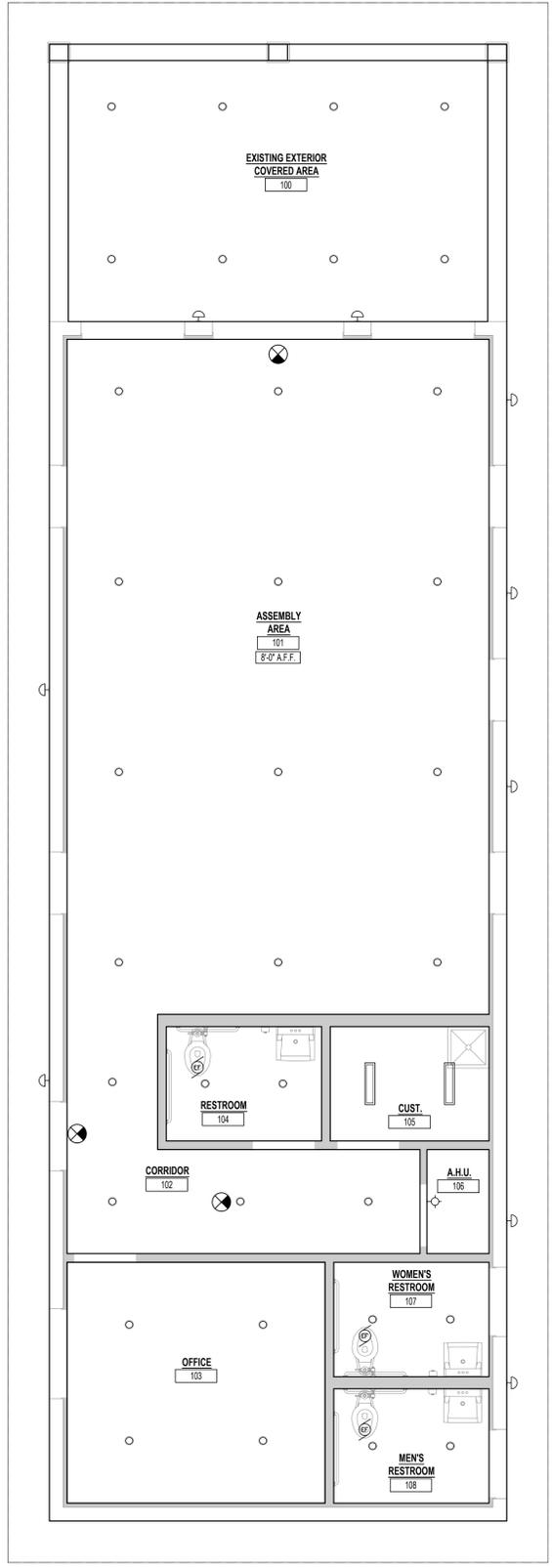
7 DOOR HEAD / JAMB DETAIL
SCALE: 3/8" = 1'-0"

P:\2023 PROJECTS\2340 - OAK TRAIL PARK COCONUT CREEK\B. PROJECT PRODUCTION\1. ARCH\2340 - A-3.0 - WINDOW ELEVATIONS AND DETAILS.DWG BY BH/LES 4/25/2024 2:42:04 PM

P:\2023 PROJECTS\2340 - OAK TRAIL PARK COCONUT CREEK\B. PROJECT PRODUCTION\1. ARCH\2340 - RCP-1.0 - REFLECTED CEILING PLAN.DWG by BHAYLES E/1/2024 1:23:27 PM

REFLECTED CEILING LEGEND

| | |
|--|--|
| | 8'-0" HIGH PAINTED GYPSUM WALL BOARD CEILING |
| | RECESSED LIGHT FIXTURE |
| | 2' CEILING MOUNTED LIGHT FIXTURE |
| | WALL MOUNTED LIGHT FIXTURE |
| | EXTERIOR WALL SCONCE |
| | EXIT LIGHT |
| | EXHAUST FAN |



MILLER LEGG
 South Florida Office: 13680 NW 5th Street
 Suite 200, Sunrise, Florida · 33325
 954-436-7000
 www.millerlegg.com

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5805 Blue Lagoon Drive, Suite 285
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: BH
 REVIEWED BY: CJ
 DESIGNED BY: CJ

SHEET TITLE:

REFLECTED CEILING PLAN

SHEET NUMBER:

RCP-1.0

1 **REFLECTED CEILING PLAN**
 SCALE: 1/4" = 1'-0"



CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: BH
REVIEWED BY: CJ
DESIGNED BY: CJ

SHEET TITLE:

RENDERING

SHEET NUMBER:

R-1.0



1

NATURE CENTER RENDERING

N.T.S.

GENERAL STRUCTURAL NOTES

GENERAL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR AND SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND DETAILS BEFORE PROCEEDING WITH WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND ENGINEERS.
- DETAILS SHOWN IN ANY SECTION APPLY TO ALL SIMILAR SECTIONS AND CONDITIONS UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT ALL WORK IN PROGRESS UNTIL THE BUILDING IS COMPLETED.
- ALL STRUCTURAL ITEMS FOR THIS PROJECT HAVE BEEN DESIGNED IN ACCORDANCE WITH APPROPRIATE PROVISIONS OF EACH OF THE FOLLOWING:
 - THE FLORIDA BUILDING CODE, (EIGHTH EDITION) 2023.
 - ACI STANDARD 318-19 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
 - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402-22).
 - AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" 360-16.
 - NDS FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT.
 - ASCE 7-22 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES".
- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE ARCHITECTURAL AND MECHANICAL DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT PRIOR TO PERFORMING WORK. IN CASE OF CONFLICT THE MOST STRINGENT CONDITION SHALL APPLY.
- ALL DIMENSIONS MUST BE COORDINATED WITH ARCHITECTURAL DRAWINGS AND WITH EQUIPMENT MANUFACTURER (I.E. WINDOW, DOOR, AIR HANDLER, ETC.). CONTRACTOR MUST OBTAIN AN ARCHITECTURAL DIRECTIVE IN CASE OF ANY CONFLICT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN IN STRUCTURAL DRAWINGS.
- ROOFTOP EQUIPMENT ANCHORAGE & OUTDOOR RACK MOUNTED EQUIPMENT ANCHORAGE. ALL ROOF TOP EQUIPMENT CURBS, ROOF TOP MECHANICAL EQUIPMENT, EQUIPMENT TIE DOWNS, AND CONNECTIONS OF ALL EQUIPMENT TO OUTDOOR RACKS OR BUILDING STRUCTURE FOR WIND LOADING ARE TO BE DESIGNED AND ENGINEERED BY A REGISTERED SPECIALTY ENGINEER RETAINED BY THE MECHANICAL EQUIPMENT SUPPLIER. SIGNED AND SEALED DRAWINGS AND CALCULATIONS ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL. THE EQUIPMENT MANUFACTURER SHALL PROVIDE THE ATTACHMENT OF THE UNIT TO THE STRUCTURE AND SUBMIT TO THE ENGINEER LOADS, LOCATIONS, AND METHODS OF ATTACHMENT. THE STRUCTURAL ENGINEER WILL MAKE PROVISIONS IN THE DESIGN OF THE PRIMARY STRUCTURAL FRAME TO ACCOMMODATE THE LOADS AND ATTACHMENTS SUBMITTED BY THE MANUFACTURER.
- ALLOWANCES FOR THIS PROJECT:
 - 100 CUBIC YARDS OF 4,000 PSI STRUCTURAL CONCRETE.
 - 10 TONS REINFORCED STEEL.
 - 10 TONS STRUCTURAL STEEL FRAMING.
 - \$100,000 ALLOWANCE FOR ADDITIONAL WOOD FRAMING AND CONNECTIONS.
 - \$200,000 ALLOWANCE FOR EXTERIOR RESTORATION.
 - CONTRACTOR SHALL GIVE CREDIT TO OWNER FOR ANY UNUSED PORTION OF THIS ALLOWANCE AT THE END OF THE PROJECT.

CONCRETE AND REINFORCING:

- ALL CONCRETE WORK SHALL CONFORM TO THE LATEST ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI-318".
- ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTHS AS INDICATED BELOW:

| CONCRETE STRENGTH | MAX WATER CEMENT RATIO | TYPE AGGREGATE | LOCATION USED |
|-------------------|------------------------|----------------|-----------------|
| 4000 PSI | 0.45 | STONE | CONCRETE U.N.O. |
| 3000 PSI | 0.52 | STONE | SLAB ON GRADE |

- IN CASE A LIGHT WEIGHT MIX IS SPECIFIED, THE STRENGTH AND WATER CEMENT RATIO SHOULD BE AS INDICATED IN THE TABLE ABOVE.
- STRUCTURAL LIGHT WEIGHT CONCRETE SHOULD HAVE A DENSITY BETWEEN 80 PCF AND 115 PCF.
- ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE, NEW BILLET STEEL, DEFORMED BARS, CONFORMING TO ASTM A-615, GRADE 60. ALL BARS SHALL BE SECURELY SUPPORTED AND WIRED IN PLACE. PRIOR TO POURING CONCRETE, ALL REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A-706.
- ALL WELDED WIRE FABRIC (W.W.F.) IN FLAT SHEETS ONLY AND SHALL CONFORM TO ASTM A-185.
- UNLESS NOTED, ALL BARS MARKED CONTINUOUS SHALL BE SPLICED AT ALL LAP POINTS AND CORNERS AND DEVELOPED AT NON-CONTINUOUS ENDS AS PER TYPICAL DETAILS. SPLICE CONTINUOUS TOP BARS AT CENTER BETWEEN SUPPORTS AND SPLICE CONTINUOUS BOTTOM BARS AT SUPPORTS.
- CONCRETE COVER FOR REINFORCING BARS SHOWN IN TYPICAL DETAILS.
- UNLESS NOTED, TEMPERATURE REINFORCING (ASTM A-615-60) TO BE 0.0018 X CONCRETE AREA.
- PROVIDE #4 @ 12" O.C. WITH STANDARD HOOK. TOP BARS IN ALL SLABS AT DISCONTINUOUS ENDS UNLESS OTHERWISE NOTED ON PLANS. LENGTH OF BARS 1/4 OF SPAN, MINIMUM 3'-0". UNLESS OTHERWISE NOTED PROVIDE #4 @ 12" O.C. IN ALL CANTILEVERS. BAR LENGTH SHALL BE CANTILEVER SPAN PLUS 10'-0" PLUS STANDARD HOOK AT CANTILEVER ENDS.
- WHERE PIPE SLEEVES (UP TO 2" IN DIAMETER) PASS THROUGH CONCRETE BEAMS, PROVIDE ADDITIONAL STIRRUP EACH SIDE OF SLEEVE. SLEEVES FOR PIPES 2" IN DIAMETER OR LARGER MUST BE STEEL OR CAST IRON, AND THE LOCATION MUST BE APPROVED BY THE STRUCTURAL ENGINEER.
- ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED JUST BEFORE PLACING NEW CONCRETE IN ACCORDANCE WITH THE BUILDING CODE.
- FOR CHAMFER OF EXPOSED CORNERS OF BEAMS AND/OR COLUMNS, SEE ARCHITECTURAL DRAWINGS.
- CONTRACTOR SHALL COORDINATE PLACEMENT OF, OR BOX OUT FOR, ALL PIPE SLEEVES, OPENINGS, ETC. REQUIRED FOR VARIOUS TRADES.
- CONTRACTOR SHALL COORDINATE AND NOTIFY OTHER TRADES IN SUFFICIENT TIME TO ALLOW THEM TO SET ANCHORS, INSERTS, BOLTS, HANGERS, ETC., AS REQUIRED FOR THEIR USE.
- SEE ARCHITECTURAL DRAWINGS FOR DETAILS OF FLASHING REGLETS, FASCIA DETAILS, ETC.
- UNDER NO CIRCUMSTANCES SHALL CONCRETE BE PUMPED THROUGH ALUMINUM PIPES. CONCRETE SHALL NOT BE PLACED IN CONTACT WITH ALUMINUM, ALUMINUM MIXING DRUMS, TRUCK MIXERS, BUGGIES, CHUTES, CONVEYORS, TREMIE PIPES, AND OTHER EQUIPMENT MADE OF ALUMINUM SHALL NOT BE USED ON THIS PROJECT.
- SLUMPS OF OVER 4 INCHES WILL NOT BE PERMITTED UNLESS THE HRWR ADMIXTURE (SUPER PLASTICIZER) IS USED. MAXIMUM SLUMP IS THEN 8 INCHES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- NO ADMIXTURE SHALL BE USED IN CONCRETE EXCEPT WITH THE PERMISSION OF THE ENGINEERS AND AFTER LABORATORY DESIGN MIX APPROVAL. ALL ADMIXTURES SHALL CONTAIN NO MORE CHLORIDE IONS THAN ARE PRESENT IN MUNICIPAL DRINKING WATER.
- WATER REDUCING ADMIXTURE SHALL CONFORM TO THE ASTM C-494, TYPE A, AND SHALL BE USED IN ALL CONCRETE.
- AIR ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260. AIR CONTENT OF CONCRETE SHALL BE USED AS FOLLOWS:
 - FOR CONCRETE EXPOSED TO SOIL AND/OR WEATHER, 5%.
 - FOR INTERIOR WALLS, COLUMNS, AND SLABS, 3%.
- FLY ASH - ASTM C618, TYPE C OR TYPE F SHOULD BE USED BUT NOT TO EXCEED 20% CEMENTITIOUS CONTENT.
- ALL EXPOSED CONCRETE SHALL RECEIVE A CURING COMPOUND. THE CURING COMPOUND SHALL CONFORM TO ASTM C309 AND SHALL HAVE 30% SOLIDS MINIMUM. WATER/BLANKET CURING AS PER ACI RECOMMENDATION MAY BE USED AS ALTERNATE.
- UNLESS NOTED IN PROJECT SPECIFICATIONS, A TESTING LAB SHOULD PERFORM THE FOLLOWING TEST:
 - ATTENDANCE AT THE PROJECT SITE DURING ALL CONCRETE PLACING OPERATIONS
 - CONTROL THE ADDITION OF MIXING WATER TO MAINTAIN THE REQUIRED WATER/CEMENT RATIO AND INDICATED IN THE REPORT ANY ADDED WATER TO THE MIX AND THE LOCATION OF PLACEMENT.
 - ENSURE THAT THE CONCRETE IS OF THE PROPER TEMPERATURE WHEN PLACED.
 - AIR CONTENT TESTS - AT LEAST TWO TESTS SHALL BE MADE FOR EACH DAY'S PLACING OR FROM EACH BATCH OF CONCRETE FROM WHICH CYLINDERS ARE CAST.
 - SLUMP TESTS - AT FREQUENT INTERVALS TO PROPERLY CONTROL THE CONSISTENCY AND AT LEAST ONE AT THE TIME OF CASTING EACH GROUP OF CYLINDERS AND AT LEAST ONE TEST FOR EVERY 25 CUBIC YARDS.
 - CONCRETE COMPRESSION CYLINDERS SHALL BE TAKEN FROM THE CONCRETE OF EACH STRENGTH PLACED ON ANY ONE DAY AT LEAST ONE SET OF FIVE REPRESENTATIVE 6" X 12" TEST CYLINDERS. FOR LARGE PLACEMENTS ON ANY ONE DAY, THERE SHALL BE TAKEN NOT LESS THAN ONE SET OF FIVE REPRESENTATIVE TYPE CYLINDERS FOR EACH 100 CUBIC YARDS OF CONCRETE OF EACH STRENGTH PLACED. TWO CYLINDERS ARE TO BE TESTED AT 7 DAYS, TWO AT THE AGE OF 28 DAYS, AND THE FIFTH CYLINDER IN RESERVE FOR FURTHER TESTING. ASCERTAIN THAT THE TEST SPECIMENS ARE PROPERLY PROTECTED UNTIL SHIPPED TO THE TESTING LABORATORY. RECORD AND IDENTIFY EACH CYLINDER WITH THE LOCATION OF THE CONCRETE FROM WHICH THE SPECIMEN WAS TAKEN. KEEP MARKING IN SEQUENCE.

FOUNDATION NOTES:

- FOUNDATIONS FOR THIS PROJECT HAVE BEEN DESIGNED ASSUMING THE SOIL IS SUITABLE TO SUPPORT 2000 PSF SPREAD FOOTINGS WITH SETTLEMENT NOT TO EXCEED 1/8". CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER TO DO A SOIL EXPLORATION WHICH MUST INCLUDE BORINGS AT A MINIMUM RATE OF ONE FOR EVERY 3000 SQUARE FOOT OF BUILDING BUT NOT LESS THAN TWO BORINGS. THE BORINGS MINIMUM DEPTH SHOULD BE TWENTY FIVE FEET (25'-0") OR TWICE THE LARGEST DIMENSION OF THE LARGEST FOUNDATION WHICH EVER IS GREATER. THESE REQUIREMENTS MAYBE MODIFIED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER. A REPORT SIGNED AND SEALED BY A PROFESSIONAL GEOTECHNICAL ENGINEER MUST BE SUBMITTED TO MCE PRIOR TO ANY FOUNDATION WORK.
- FILL AND SUBGRADE PREPARATION SHALL BE AS NEEDED TO OBTAIN THE SAFE BEARING PRESSURE INDICATED ON NOTE 1. ALL ORGANICS AND UNSUITABLE SOIL SHOULD BE REMOVED. A MINIMUM OF 88% COMPACTION MUST BE OBTAINED UNLESS GEOTECHNICAL ENGINEER RECOMMENDATIONS ALLOW FOR A LOWER PERCENT OF COMPACTION.
- ALL COLUMN FOOTINGS SHALL BE CENTERED UNDER COLUMN CENTERLINES UNLESS OTHERWISE NOTED.
- BACKFILLING AGAINST FOUNDATION WALLS SHALL BE DONE CAREFULLY WITH SMALL COMPACTION EQUIPMENT. AFTER SLABS ON GROUND ARE IN PLACE AND CONCRETE HAS SET, NO TRUCKS, BULLDOZERS, ETC. SHALL BE ALLOWED CLOSER THAN 6'-0" TO ANY FOUNDATION WALL. ANY WALL 3'-0" OR HIGHER MUST BE BRACED DURING THE CONSTRUCTION PROCESS.
- NO FOUNDATIONS SHALL BE PLACED ABOVE 1 VERTICAL ON 2 HORIZONTAL SLOPES EXTENDED FROM THE CLOSEST EDGE OF ANY UNDISTURBED SOIL OR OTHER FOUNDATION STRUCTURE. BOTTOM OF FOOTINGS SHALL NOT BE LESS THAN 1'-0" BELOW EXISTING GRADE (U.N.O.).
- FOR FOUNDATIONS SIZE AND REINFORCING SEE SCHEDULE.
- ELEVATOR PIT DIMENSIONS - VERIFY WITH ELEVATOR MANUFACTURERS APPROVED SHOP DRAWINGS.
- WATER PROOFING MATERIALS SHALL BE PROVIDED ON ALL SIDES AND BOTTOM OF ELEVATOR CORE AND ESCALATOR PIT.
- TERMITE PROTECTION INCLUDING PIPING SLEEVES MUST FOLLOW THE REQUIREMENTS OF SECTIONS 1816.1 AND 1816.2 OF THE FLORIDA BUILDING CODE, 7TH EDITION, 2020.

MASONRY:

- DESIGN AND CONSTRUCTION SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ASCE 7-16) / TMS 402-16.
- MINIMUM NET COMPRESSIVE STRENGTH OF BLOCK ASSEMBLY SHALL BE 2000 P.S.I. (7m) MORTAR FOR MASONRY SHALL BE TYPE "S" OR "M".
- FOR ALL EXTERIOR AND INTERIOR BEARING, BED JOINTS ARE TO COVER 100% OF THE MASONRY SURFACES AND ALL HEAD JOINTS ARE TO COVER 100% OF THE PROJECTED AREA OF THE FACE SHELLS.
- FILL ALL CELLS AS REQUIRED WITH 3000 P.S.I. GROUT. SLUMP SHALL BE 8 TO 11 INCHES. SUBMIT DESIGN MIX FOR APPROVAL.
- MINIMUM HORIZONTAL JOINT REINFORCING SHALL BE 9 GAUGE HOT DIP GALVANIZED TRUSS OR LADDER TYPE JOINT REINFORCING AT 1'-0" O.C., PROVIDE MANUFACTURE "T" AND "L" SHAPES FOR INTERSECTIONS AND CORNERS, (MINIMUM LAP 6").
- MINIMUM VERTICAL REINFORCING SHALL BE (1)-#5 @ 48" OR (1)-#4 @ 32" O.C., (U.N.O.).
- PROVIDE ADDITIONAL VERTICAL REINFORCING BAR AT EVERY CORNER, INTERSECTION, CONTROL JOINT, AND OPENING EDGES (U.N.O.).
- MINIMUM SPLICE FOR VERTICAL REINFORCING IS SHOWN IN DETAIL 4-023, SPLICE FOR HORIZONTAL JOINT REINFORCING = 6".
- WALLS ARE DESIGNED TO BE BRACED BY FLOOR OR ROOF MEMBERS. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING DURING CONSTRUCTION.
- ALL CELLS BELOW FIRST FLOOR FINISHED ELEVATION MUST BE FULLY GROUT FILLED.
- ALL KNOCK OUT BLOCK HORIZONTAL BARS SHALL HAVE CORNER BARS AT ALL CORNERS AND WALL INTERSECTIONS. SIZE AND NUMBER OF CORNER BARS SHALL BE SHOWN AS HORIZONTAL BARS.
- ALL INTERSECTING WALLS AND CORNER WALLS SHALL BE LAID IN AN OVERLAPPING MASONRY BONDING PATTERN, WITH ALTERNATE UNITS HAVING A BEARING OF NOT LESS THAN 3 INCHES ON UNIT BELOW.

SHOP DRAWINGS:

- NO STRUCTURAL DRAWINGS SHALL BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- ALL DIMENSIONAL COORDINATION SHALL BE DONE BY THE CONTRACTOR AND/OR HIS DETAILER.
- DETAILER SHALL CHECK ALL ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ALL ATTACHMENTS, CLIPS, OPENINGS, OR DUCT WORK AFFECTING STRUCTURAL MEMBERS. ALL ITEMS SHALL BE SHOWN ON SHOP DRAWINGS.
- ALL SHOP DRAWINGS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT. DISTRIBUTION AS PER ARCHITECT INSTRUCTIONS.
- PROVIDE SUFFICIENT SPACE ON SHOP DRAWINGS NEAR TITLE BOX (ABOUT 40 SQUARE INCHES) FOR STAMPS AND ENGINEERS COMMENTS.
- THE SHOP DRAWINGS SHALL BEAR INITIALS OF DETAILER'S CHECKER AND CONTRACTOR PRIOR TO SUBMISSION.
- COMPLETED ERECTION PLANS SHALL BE SUBMITTED PRIOR TO OR IN CONJUNCTION WITH DETAIL DRAWINGS, BUT IN NO CASE SHALL DETAIL DRAWINGS BE SUBMITTED PRIOR TO ERECTION PLANS.
- DETAILER SHALL SUBMIT AN INDEX OF THE DETAIL DRAWINGS WITH EACH SHOP DRAWING SUBMITTAL.
- SHOP DRAWINGS NOT COMPLYING WITH ALL THE ABOVE ITEMS SHALL BE RETURNED FOR CORRECTIONS WITHOUT PROCESSING.
- RESUBMITTED SHOP DRAWINGS SHALL HAVE THE FOLLOWING CHANGES INCORPORATED: FIRST RESUBMISSION TO HAVE LETTER "A" ADDED TO DRAWING NUMBER AND ANY CHANGES MARKED ON THE DRAWING MARKED 1 AT EACH ITEM CHANGED. ALL ITEMS TO BE NOTED IN REVISION BOX. SUBSEQUENT RESUBMISSION SHALL BEAR CHANGES "B" AND 2 AND 3 ETC. AS IN 11A.
- CONTRACTOR SHALL HAVE SHOP DRAWINGS WHICH HAVE BEEN SATISFACTORILY REVIEWED BY THE ARCHITECT AND/OR ENGINEER AND CONFIRMED BY THE CONTRACTOR BEFORE PROCEEDING WITH ANY WORK.
- DETAILER SHALL USE THE SAME STRUCTURAL ELEMENTS NUMBERS IN HIS DETAILS AS THOSE SHOWN ON CONTRACT DRAWINGS.
- SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOULD BE SUBMITTED TO MCE WITH A MINIMUM TIME TO BE REVIEWED OF 10 WORKING DAYS. IN CASE OF A LARGE SUBMITTAL OR MORE THAN ONE SUBMITTAL FOR THE SAME PROJECT, AN ADDITIONAL WORKING DAY IS REQUIRED FOR EVERY 5 DRAWINGS/SHEETS OVER 30 DRAWINGS/SHEETS. THE TIME INDICATED ABOVE IS FOR MCE REVIEW ONLY. CONTRACTOR MUST INCLUDE ENOUGH TIME FOR DELIVERY, ARCHITECTURAL REVIEW, AND OWNERS REVIEW AND WORK THIS TIME IN THE PROJECT SCHEDULE AS NEEDED.
- THERE SHALL BE NO DEVIATION FROM THESE CONSTRUCTION DOCUMENTS. IF ANY CHANGES ARE PROPOSED BY THE CONTRACTOR OR THE PROVIDER OF THE SHOP DRAWINGS, THEY SHOULD BE CLEARLY INDICATED, SIGNED AND SEALED DRAWINGS AND CALCULATIONS BY A FLORIDA PROFESSIONAL ENGINEER MUST BE PROVIDED. ANY CHANGES WITHOUT PROPER DOCUMENTATION INDICATED ABOVE WILL RESULT IN SOME REVISIONS BY THE ENGINEER OF RECORD AND/OR ARCHITECT. THE COST FOR THESE REVISIONS INCLUDING ENGINEER AND ARCHITECTURAL FEES SHALL BE PAID BY THE CONTRACTOR.

DEMOLITION NOTES:

- PROVIDE AND MAINTAIN SHORING, BRACING OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION TO REMAIN, AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED.
- PROCEED WITH SELECTIVE DEMOLITION SYSTEMATICALLY, FROM HIGHER TO LOWER LEVEL. COMPLETE SELECTIVE DEMOLITION OPERATIONS ABOVE EACH FLOOR OR TIER BEFORE DISTURBING SUPPORTING MEMBERS ON THE NEXT LOWER LEVEL.
- NEATLY CUT OPENINGS AND HOLES PLUMB, SQUARE AND TRUE TO DIMENSIONS REQUIRED. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION. USE HAND TOOLS OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING, NOT HAMMERING OR CHOPPING, TO MINIMIZE DISTURBANCE OF ADJACENT SURFACES. TEMPORARILY COVER OPENINGS TO REMAIN.
- REMOVE STRUCTURAL FRAMING AND LOWER STRUCTURAL MEMBERS TO GROUND BY METHOD SUITABLE TO AVOID FREE FALL AND TO PREVENT GROUND IMPACT OR DUST GENERATION.
- LOCATE SELECTIVE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING.
- NEW OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS ARE NOT PERMITTED.

DELEGATED DESIGN

- SELECT SCOPE ITEMS IN THE PROJECT ARE CUSTOM DESIGNED AND ENGINEERED. THE ENGINEERING RESPONSIBILITY IS DELEGATED TO THE CONTRACTOR AND RELATED SUBCONTRACTORS.
- CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS FOR SUCH ELEMENTS DESIGNATED TO BE DESIGNED BY A DELEGATED ENGINEER.
- DELEGATED ENGINEERING WILL ADDRESS ALL LOADING REQUIREMENTS INCLUDING WIND PRESSURES IN ACCORDANCE WITH THE LATEST FLORIDA BUILDING CODE. REFER TO THE COMPONENTS AND CLADDING PRESSURES PROVIDED FOR DESIGN PRESSURES ELEMENTS SHALL BE IN CONFORMANCE WITH.
- DELEGATED ENGINEERED DRAWINGS SHALL DEFINE MATERIAL THICKNESS, CONNECTIONS, ETC. OF THE SUBMITTED SYSTEM.
- DELEGATED ENGINEERED DRAWINGS AND CALCULATIONS WILL BE REVIEWED AS PART OF THE SUBMITTAL PROCESS.
- BUILDING COMPONENTS THAT ARE NOT SPECIFIED AS DELEGATED TO OTHER ENGINEERS SHALL BE SUBMITTED WITH APPROPRIATE FLORIDA PRODUCT APPROVAL INFORMATION IN THE SUBMITTAL. WHERE A FLORIDA PRODUCT APPROVAL DOES NOT EXIST FOR A COMPONENT REQUIRING APPROVAL, THE DESIGN SHALL BE DELEGATED TO AN ENGINEER ON THE CONTRACTOR'S TEAM.
- DELEGATED ENGINEERING AND DEFERRED SUBMITTALS:
 - DEFERRED SUBMITTALS SHALL HAVE THE SHOP DRAWINGS AND DELEGATED DESIGN SUBMITTALS (INCLUDING CALCULATIONS) SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
 - DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL FOR REVIEW AND SHALL BE FORWARDED TO THE BUILDING OFFICIAL.
 - DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
 - THE FOLLOWING ITEMS ARE CONSIDERED DEFERRED SUBMITTALS BY THE REGISTERED DESIGN PROFESSIONAL:
 - EXTERIOR OR LOAD BEARING COLD FORMED METAL FRAMING
 - EXTERIOR CURTAIN WALL SYSTEM
 - EXTERIOR AWNINGS, SUNSHADES, EYEBROWS AND CANOPIES
 - ARCHITECTURAL PRECAST CONCRETE
 - METAL FABRICATIONS, RAILINGS, LADDERS AND GRATINGS
 - STEEL STAIRS
 - PRE-FABRICATED / PRE-ENGINEERED WOOD TRUSSES
 - PRE-FABRICATED / PRE-ENGINEERED COLD FORMED METAL TRUSSES
 - MECHANICAL PIPING SUPPORTS
 - STRUCTURAL STEEL CONNECTIONS
 - STEEL BAR JOISTS
 - METAL DECKING
 - POST-TENSION
 - ROOF TOP EQUIPMENT AND ANCHORAGES
 - WINDOW WASHING AND FALL ARREST SYSTEMS
 - STRUCTURAL PRECAST CONCRETE

POST-INSTALLED ANCHORS

- POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. SPECIAL INSPECTIONS ARE REQUIRED PER THE PROVISIONS SET FORTH BELOW. CONTRACTOR TO CONTACT MANUFACTURER'S REPRESENTATIVE FOR PROPER PRODUCT INSTALLATION TRAINING ON INITIAL ANCHORS.
- SUBSTITUTION REQUESTS, FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW, SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE BUILDING CODE.
- EXPANSION ANCHORS SHALL BE STUD TYPE WITH A SINGLE PIECE OF THREE SECTION WEDGE AND ZINC PLATED IN ACCORDANCE WITH ASTM B633. THE ANCHORS SHALL MEET FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I FOR CONCRETE EXPANSION ANCHORS. ANCHORS SHALL BE HILTI KWIK BOLT 3 AS SUPPLIED BY HILTI INC. TULSA OKLAHOMA. ANCHORS SHALL BE INSTALLED IN HOLES DRILLED WITH HILTI CARBIDE TIPPED DRILL BITS OR MATCHED TOLERANCE DIAMOND CORE BITS. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- INJECTED ADHESIVE ANCHORS SHALL BE USED FOR INSTALLATION OF THREADED RODS. ADHESIVE SHALL BE FURNISHED IN A SIDE BY SIDE REFILL PACK WHICH KEEP COMPONENT A AND B SEPARATE. INJECTION ADHESIVE SHALL BE HILTI HIT HY 200 AS SUPPLIED BY HILTI INC. TULSA OKLAHOMA. ANCHOR RODS MEET ASTM F1554 (36 KSI). NUTS AND WASHERS SHALL BE FURNISHED TO MEET THE REQUIREMENTS OF AN ASTM F1554 (36 KSI) STEEL ROD.

PURPOSE OF DRAWING STATEMENT:

THESE STRUCTURAL DRAWINGS REPRESENT A LEVEL OF COMPLETION EQUIVALENT TO APPROXIMATELY 30% OF THE SCHEMATIC DESIGN AND DO NOT REPRESENT A COMPLETED STRUCTURAL DESIGN. ANY BIDDING OR PROCUREMENT BASED ON THESE DRAWINGS WILL BE DONE AT THE CONTRACTOR'S RISK AND MUST BE ACCOMPANIED BY APPROPRIATE CONTRACTOR CONTINGENCIES TO ACCOUNT FOR THE UNCOMPLETED NATURE OF THE DOCUMENTS AND EVENTUAL CHANGES AS THE DESIGN PROGRESSES.



South Florida Office: 13680 NW 5th Street
Suite 200, Sunrise, Florida 33325
954-436-7000
www.millerlegg.com

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinackergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com



4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

PROJECT NAME:

OAK TRAILS PARK
IMPROVEMENTS

4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

SEAL:



CAROLYN VEGA GONZALEZ, P.E.
FL. LIC. NO. 94034

| N° | REVISIONS | DATE |
|----|-----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05-01-2024

PROJECT NUMBER: 23-00155

DRAWN BY: JAC

REVIEWED BY: CVG

DESIGNED BY: CVG

SHEET TITLE:

GENERAL
STRUCTURAL NOTES

SHEET NUMBER:

S-1.1



4101 RAVENSWOOD RD., STE. 320
FT LAUDERDALE, FLORIDA 33312
P | 954.210.7671 F | 813.287.3622
www.mceengineers.com

THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF MASTER CONSULTING ENGINEERS, INC. AND MAY NOT BE REPRODUCED, COPIED, ALTERED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM MASTER CONSULTING ENGINEERS, INC.

CA: 8426 PROJ. NO. 1159-009-31
© COPYRIGHT 2023

TO THE BEST OF OUR KNOWLEDGE INFORMATION AND BELIEF, THESE STRUCTURAL PLANS CONFORM TO AND SATISFY THE FLORIDA BUILDING CODE, EIGHTH EDITION 2023, ACI 318-19 AND LOCAL CODES AS APPLICABLE

Scale
1/8" = 1'-0"

4/29/2024, 6:12:44 PM

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnaekergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com



4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

PROJECT NAME:

**OAK TRAILS PARK
IMPROVEMENTS**

4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

SEAL:



CAROLYN VEGA GONZALEZ, P.E.
FL. LIC. No. 94034

| N ^o | REVISIONS | DATE |
|----------------|-----------|------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN
DATE ISSUED: 05-01-2024
PROJECT NUMBER: 23-00155
DRAWN BY: JAC
REVIEWED BY: CVG
DESIGNED BY: CVG

SHEET TITLE:

**WIND DESIGN DATA
AND LOAD SCHEDULE**

SHEET NUMBER:

S-1.2

Scale
As indicated

EXISTING LOAD SCHEDULE:

| | | |
|--|----------|-----------------|
| TOP CHORD DEAD LOAD: | | |
| TRUSSES | = | 7.0 PSF |
| 3/4" PLYWOOD SHEATING | = | 3.0 PSF |
| ROOFING AND INSULATION | = | 12.0 PSF |
| MISCELLANEOUS | = | 3.0 PSF |
| TOTAL DEAD LOAD - TOP CHORD | = | 25.0 PSF |
| BOTTOM CHORD DEAD LOAD: | | |
| MECHANICAL DUCT ALLOWANCE | = | 4.0 PSF |
| ELECTRICAL | = | 2.0 PSF |
| PLUMBING | = | 3.0 PSF |
| FIRE SPRINKLERS | = | 3.0 PSF |
| CEILING (5/8" DRYWALL) | = | 3.0 PSF |
| TOTAL DEAD LOAD - TOP CHORD | = | 15.0 PSF |
| TOTAL DEAD LOAD - ROOF FRAMING: | = | 40.0 PSF |
| DEAD LOAD FOR UPLIFT CALCULATION: | = | 8.0 PSF |
| ROOF FRAMING LIVE LOAD: | | |
| LIVE LOAD | = | 20.0 PSF |

WIND DESIGN DATA:

CODE:
FLORIDA BUILDING CODE, 2020 (7th Ed.) ASCE/SEI 7-16

BASIC WIND SPEED 170 mph (Vu1)
132 mph (Vasd)

CATEGORY (RISK) II
EXPOSURE C
BUILDING EAVE HEIGHT 8ft.
ENCLOSURE CLASSIFICATION ENCLOSURED
INTERNAL PRESSURE COEFFICIENT ± 0.18

* GLAZED OPENINGS IN RISK CATEGORY II, III, IV LOCATED IN HURRICANE PRONE REGIONS SHALL BE PROTECTED IN ACCORDANCE WITH FBC 2020 SEC. 1609.1.2

MAIN BUILDING - ROOF

COMPONENTS AND CLADDING (ULTIMATE) UPLIFT PRESSURE SCHEDULE

| PATTERN | ZONE | EFFECTIVE WIND AREA | | | | | |
|---------|------|---------------------|-----------------|-----------------|----------------|----------------|----------------|
| | | 10 sf | 20 sf | 50 sf | 100 sf | 200 sf | 500 sf |
| | 1 | +47 PSF/-106PSF | +41 PSF/-94PSF | +33 PSF/-78PSF | +26 PSF/-65PSF | +26 PSF/-53PSF | +26 PSF/-53PSF |
| | 2 | +47 PSF/-138PSF | +41 PSF/-125PSF | +33 PSF/-107PSF | +26 PSF/-93PSF | +26 PSF/-80PSF | +26 PSF/-80PSF |
| | 3 | +47 PSF/-85PSF | +41 PSF/-85PSF | +33 PSF/-85PSF | +26 PSF/-85PSF | +26 PSF/-85PSF | +26 PSF/-85PSF |
| | 2ov | -133 PSF | -122 PSF | -107 PSF | -95 PSF | -84 PSF | -69 PSF |
| | 3ov | -181 PSF | -161 PSF | -135 PSF | -115 PSF | -95 PSF | -69 PSF |

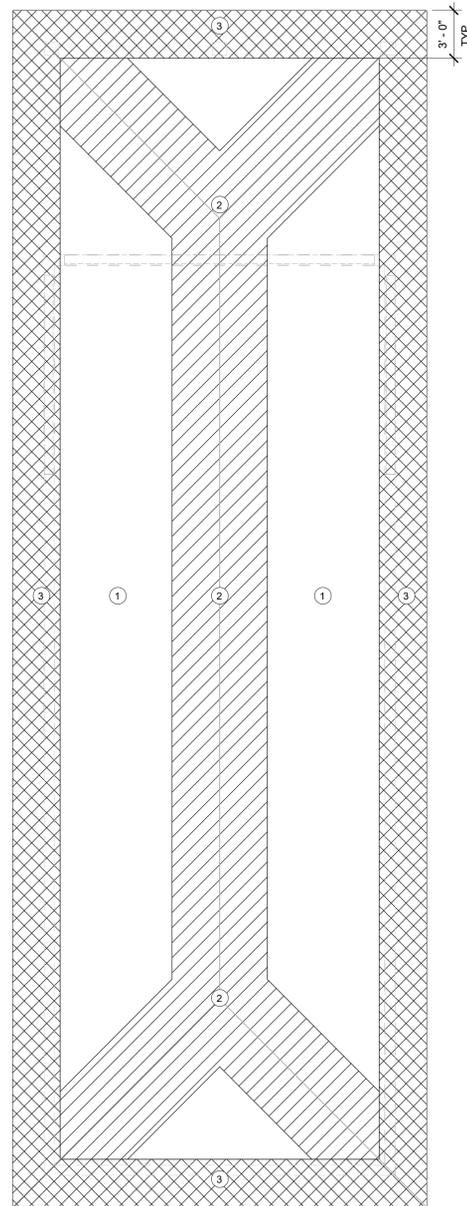
MAIN BUILDING - WALLS

COMPONENTS AND CLADDING (ULTIMATE) UPLIFT PRESSURE SCHEDULE

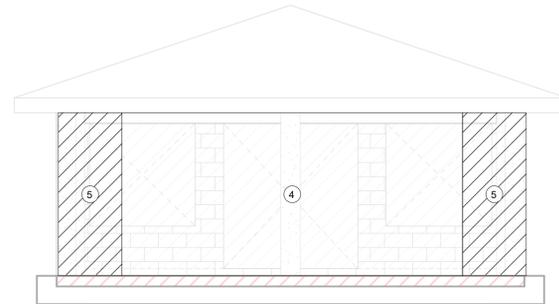
| PATTERN | ZONE | EFFECTIVE WIND AREA | | | | | |
|---------|------|---------------------|----------------|----------------|----------------|----------------|----------------|
| | | 10 sf | 20 sf | 50 sf | 100 sf | 200 sf | 500 sf |
| | 4 | +64 PSF/-69PSF | +61 PSF/-66PSF | +57 PSF/-62PSF | +54 PSF/-59PSF | +51 PSF/-57PSF | +47 PSF/-53PSF |
| | 5 | +64 PSF/-85PSF | +61 PSF/-79PSF | +57 PSF/-72PSF | +54 PSF/-66PSF | +51 PSF/-60PSF | +47 PSF/-53PSF |

NOTE:

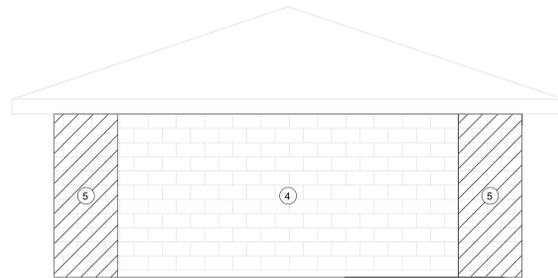
- ALL EXTERIOR DOORS & WINDOW ASSEMBLIES SHALL SATISFY THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (SEVENTH EDITION 2020, SECTION 1709.5). ALL CONNECTIONS TO BUILDING STRUCTURE SHALL HAVE THE CAPACITY TO WITHSTAND THE PRESSURES INDICATED ON SCHEDULES.
- PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES, RESPECTIVELY.
- ALL WIND PRESSURE VALUES INDICATED ARE IN POUNDS PER SQUARE FOOT (PSF). MULTIPLY ULTIMATE WIND PRESSURE BY 0.60 FOR ASD PRESSURE.
- FOR NET UPLIFT CALCULATION, THE WEIGHT OF THE STRUCTURAL MEMBER AND THE STRUCTURAL DECK SUPPORTED ARE THE ONLY TWO LOADS THAT CAN BE DEDUCTED FROM THE UPLIFT PRESSURES INDICATED ON SCHEDULES.



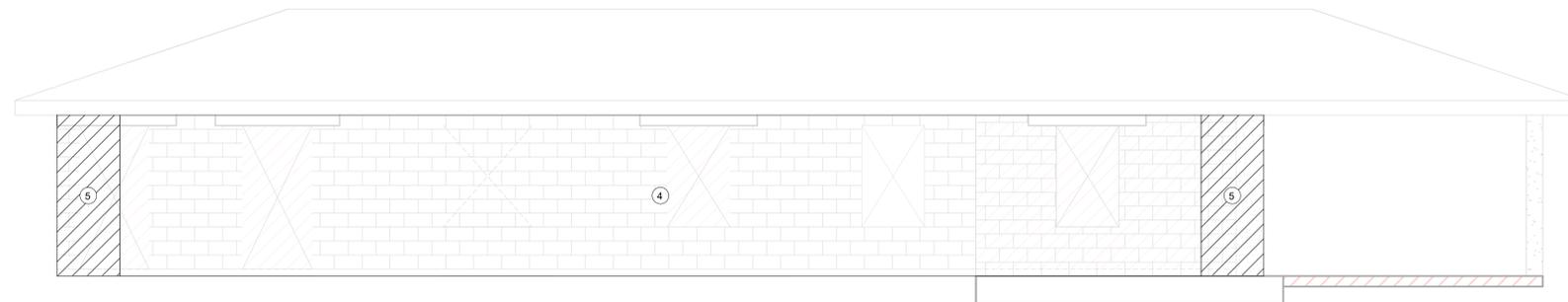
WIND DESIGN - PLAN
SCALE: 3/16" = 1'-0"



WIND DESIGN - NORTH
SCALE: 1/4" = 1'-0"



WIND DESIGN - SOUTH
SCALE: 1/4" = 1'-0"



WIND DESIGN - EAST
SCALE: 1/4" = 1'-0"



WIND DESIGN - WEST
SCALE: 1/4" = 1'-0"



4101 RAVENSWOOD RD., STE. 320
FT LAUDERDALE, FLORIDA 33312
P | 954.210.7671 F | 813.287.3622
www.mceengineers.com

THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF MASTER CONSULTING ENGINEERS, INC. AND MAY NOT BE REPRODUCED, COPIED, ALTERED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM MASTER CONSULTING ENGINEERS, INC.
CA: 8426 PROJ. NO. 1159-009-31
© COPYRIGHT 2023

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THESE STRUCTURAL PLANS CONFORM TO AND SATISFY THE FLORIDA BUILDING CODE, EIGHT EDITION 2023, ACI 318-19 AND LOCAL CODES AS APPLICABLE

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com



4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

PROJECT NAME:

**OAK TRAILS PARK
IMPROVEMENTS**

4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

SEAL:



CAROLYN VEGA GONZALEZ, P.E.
FL LIC. No. 94034

| N° | REVISIONS | DATE |
|----|-----------|------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05-01-2024

PROJECT NUMBER: 23-00155

DRAWN BY: JAC

REVIEWED BY: CVG

DESIGNED BY: CVG

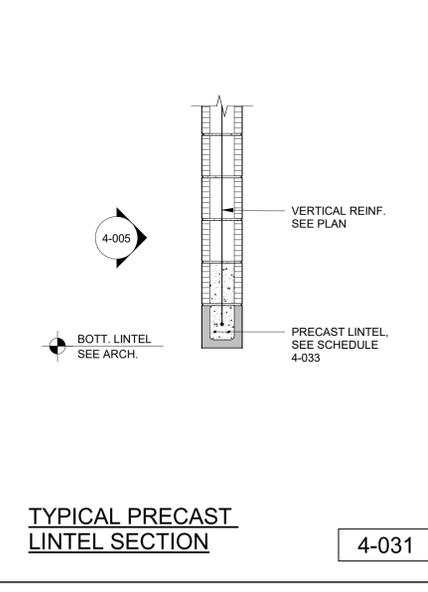
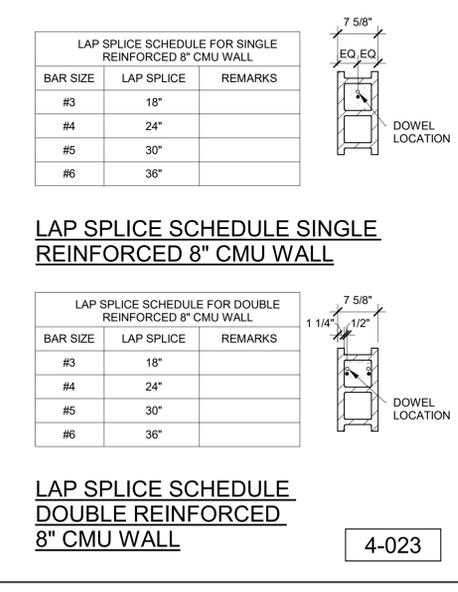
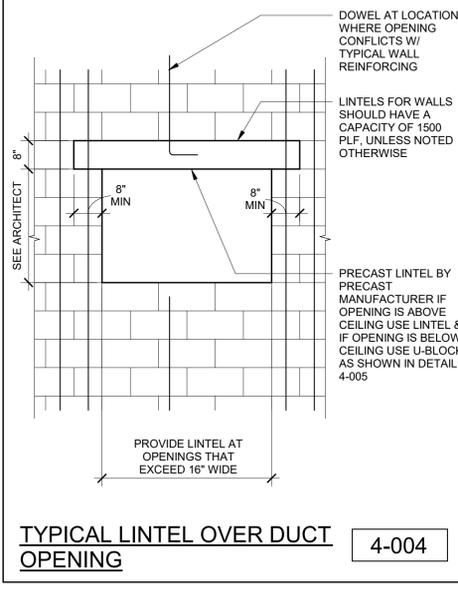
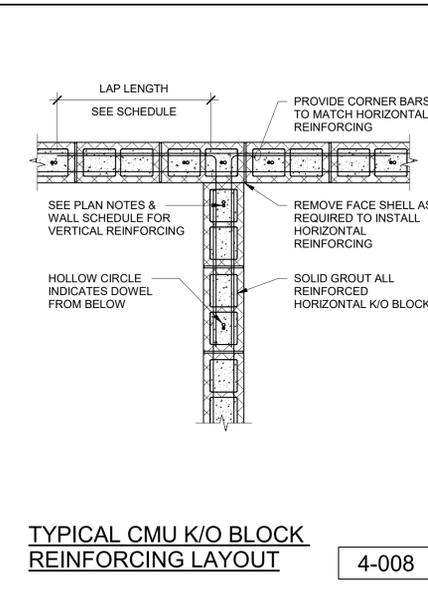
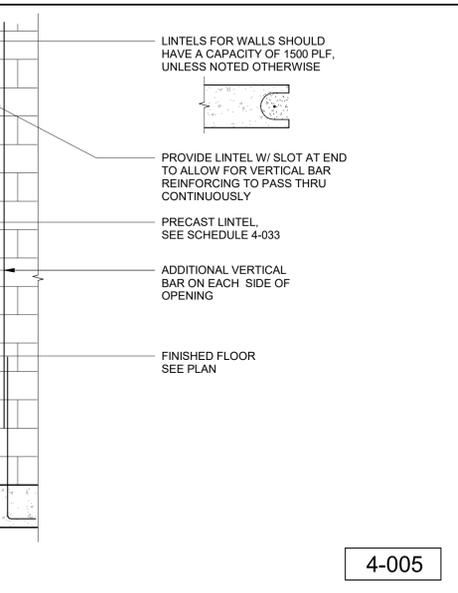
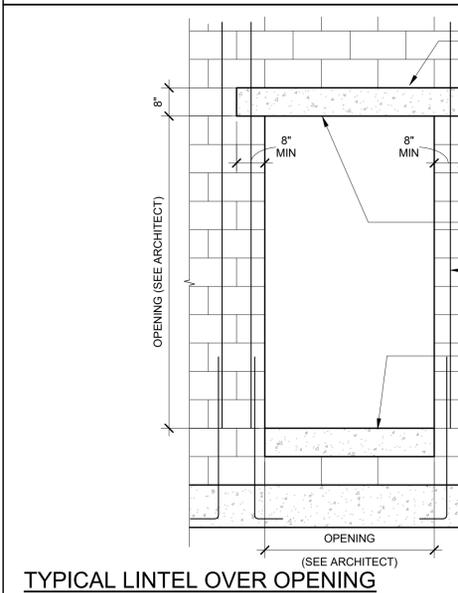
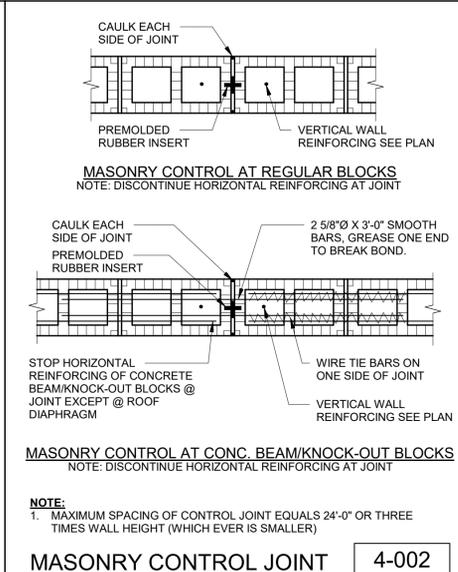
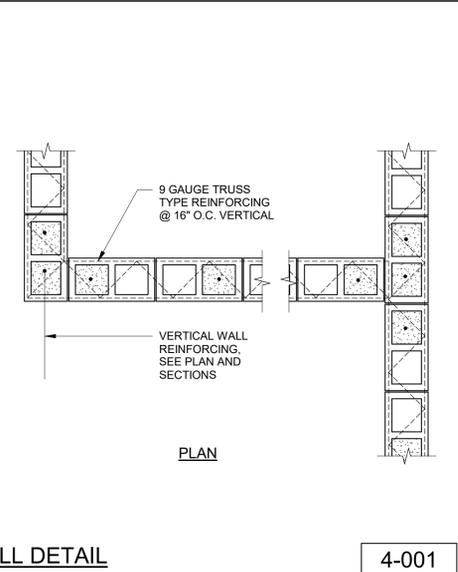
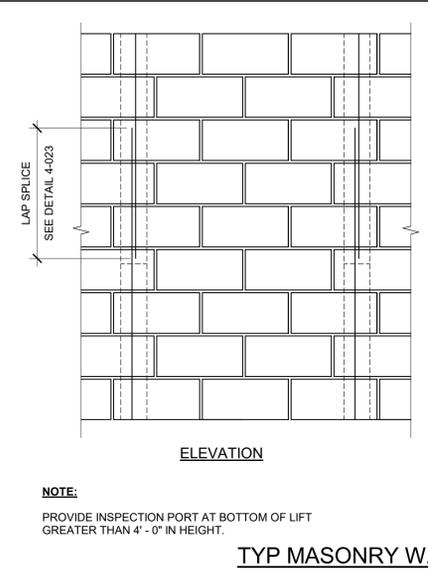
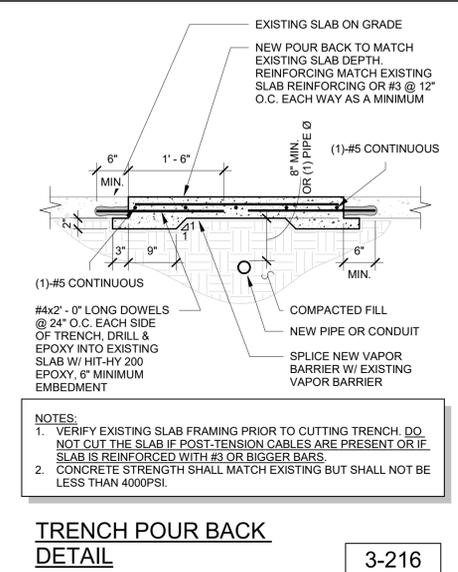
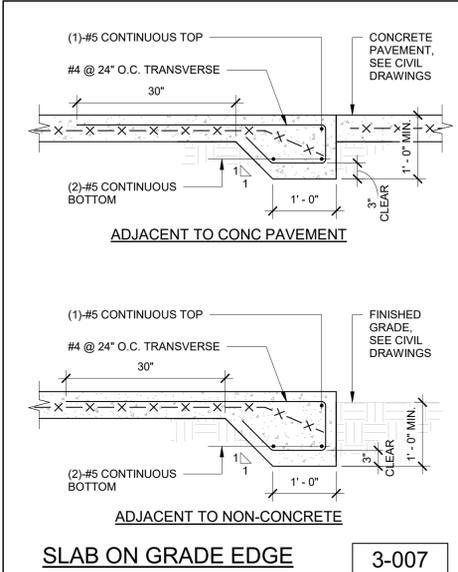
SHEET TITLE:

TYPICAL DETAILS

SHEET NUMBER:

S-3.1

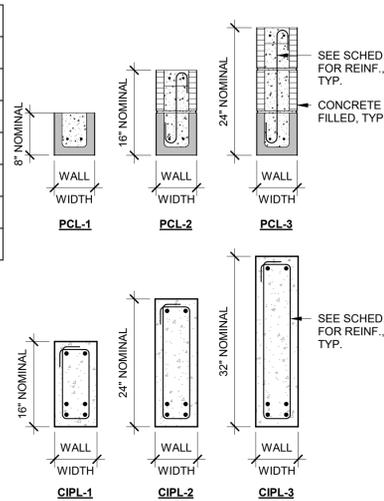
Scale
As indicated



MASTER CONSULTING ENGINEERS, INC.
STRUCTURAL CONSULTANTS
4101 RAVENSWOOD RD., STE. 320
FT LAUDERDALE, FLORIDA 33312
P | 954.210.7671 F | 813.287.3622
www.mceengineers.com
THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF MASTER CONSULTING ENGINEERS, INC. AND MAY NOT BE REPRODUCED, COPIED, ALTERED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM MASTER CONSULTING ENGINEERS, INC.
CA: 8426 PROJ. NO. 1159-009-31
© COPYRIGHT 2023
TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THESE STRUCTURAL PLANS CONFORM TO AND SATISFY THE FLORIDA BUILDING CODE, EIGHT EDITION 2023, ACI 318-19 AND LOCAL CODES AS APPLICABLE

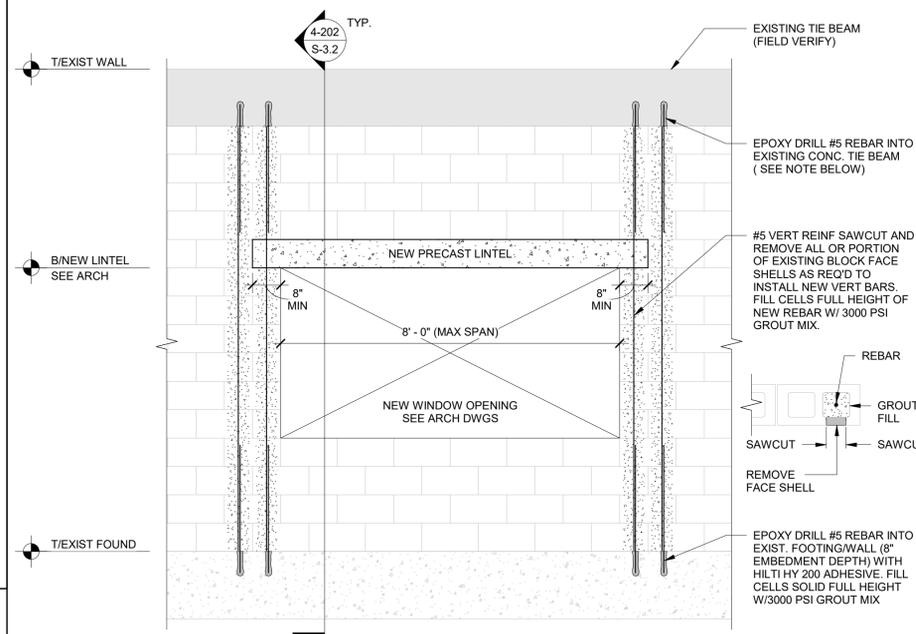
| CMU LINTEL SCHEDULE | | | | | |
|---------------------|--------------|--------------------|-----------------|--------------------|-----------------|
| WALL THICKNESS | LINTEL DEPTH | BOTTOM REINFORCING | TOP REINFORCING | STIRRUPS & SPACING | OPENING SIZE |
| PCL-1 | 8" | (2)-#5 | - | - | UP TO 4'-4" |
| PCL-2 | 16" | - | - | - | 4'-4" TO 6'-4" |
| PCL-3 | 24" | - | - | - | 6'-4" TO 8'-4" |
| CIPL-1 | 16" | - | - | - | 4'-4" TO 6'-4" |
| CIPL-2 | 24" | - | - | - | 6'-4" TO 8'-4" |
| CIPL-3 | 32" | - | - | - | 8'-4" TO 10'-8" |

- NOTES:**
- PRECAST CONCRETE LINTELS CAN BE INSTALLED AT ALL OPENINGS PER SCHEDULE. CAST IN PLACE CONCRETE LINTELS SHALL BE PLACED WHERE SHOWN ON PLANS. SUBSTITUTED UPON APPROVAL BY ENGINEER.
 - GROUTED LINTEL (THROUGH) BLOCKS SHALL EXTEND A MINIMUM OF 8" BEYOND FACE OF OPENING EACH SIDE UNLESS NOTED OTHERWISE. THE FIRST TWO VERTICAL CELLS EACH OF THE OPENING SHALL BE GROUTED AND CONTAIN (2) #5 VERTICAL EACH FACE.
NOTE: THE FIRST CELL EACH SIDE OF THE OPENING SHALL BE GROUTED TO LINTEL LEVEL. SECOND CELL SHALL BE GROUTED TO ROOF LEVEL.
 - SEE SPECIFIC DETAIL FOR BRICK LEDGE SUPPORT ANGLE OF LOOSE LINTEL SCHEDULE.
 - CONSTRUCTION/CONTROL JOINT SHALL NOT BE LOCATED WITHIN WIDTH OF OPENING, NOR SHALL IT BE LOCATED WITHIN 24" OF THE OPENING ON EITHER SIDE.
 - CONCRETE LINTEL BEARING EACH SIDE OF LINTEL TO BE EQUAL TO DEPTH OF LINTEL, TYPICAL UNLESS NOTED OTHERWISE.



TYP. PRECAST/C.I.P. LINTEL DETAIL

4-033

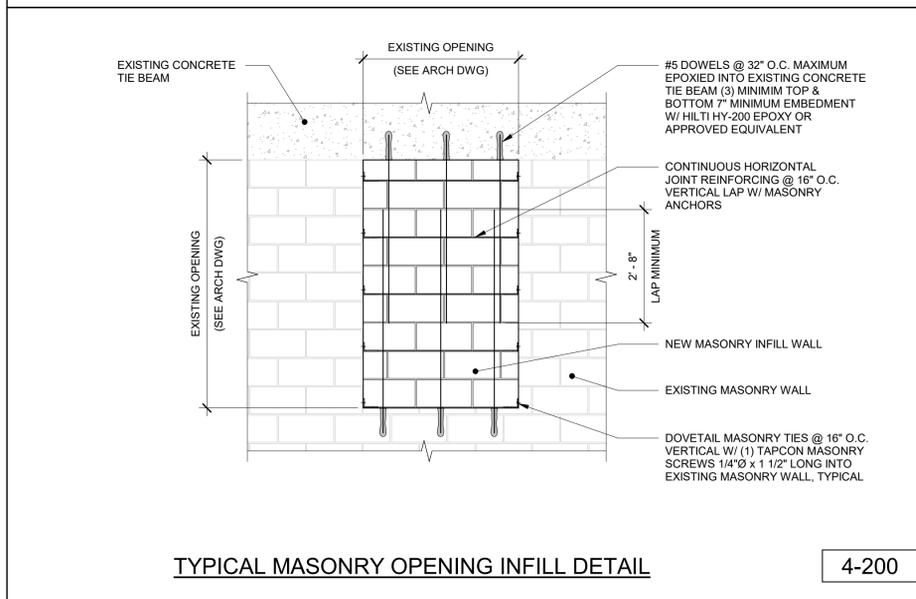


PROCEDURE NOTES:

- LOCATE AND LAYOUT NEW WALL OPENINGS.
- CUT FACE OF FIRST BLOCK OVER FINISHED FLOOR TO LAYOUT REINFORCEMENT DOWELS.
- LAYOUT THE ADDED BARS LOCATION AS SHOWN ON DETAIL 4-034.
- SAW CUT AND BREAK OUT THE FACE SHELL OF CMU WALL TO INSTALL DOWEL. DRILL & EPOXY DOWEL INTO EXISTING FOOTING (8" MIN.) BEND BAR INTO THE CELL SPACE. (REPEAT PROCEDURE AT TOP OF WALL UNDER TIE BEAM).
- AT TOP OF WALL BREAK EXTERIOR FACE OF CMU WALL AS NEEDED TO INSTALL THE NEW ADDITIONAL VERTICAL REBAR.
- FORM ALL OPENINGS UP TO THE TIE BEAM. FILL CELLS WITH 3000 PSI CONCRETE.

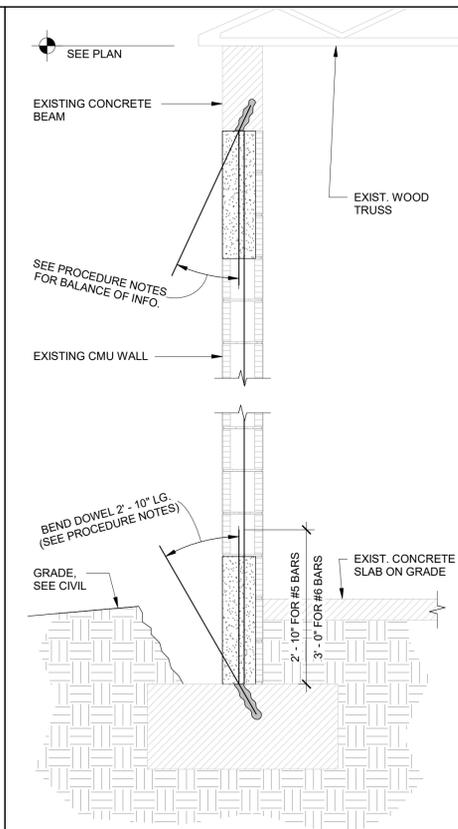
TYPICAL MASONRY OPENING INFILL DETAIL

4-087



TYPICAL MASONRY OPENING INFILL DETAIL

4-200



PROCEDURE NOTES:

- DIG EXTERIOR OF BUILDING TO EXPOSE EXISTING FOUNDATION.
- LAYOUT THE ADDED BARS LOCATION AS SHOWN ON PLAN.
- BREAK THE EXTERIOR FACE OF CMU WALL TO INSTALL DOWEL (REBAR). DRILL & EPOXY DOWEL (REBAR) INTO EXISTING FOOTING (8" MIN. EMBED.) BEND BAR INTO THE CELL SPACING. (REPEAT PROCEDURE ON THE TOP UNDER TIE BEAM).
- ON TOP OF THE WALL BREAK EXTERIOR FACE OF CMU WALL AS NEEDED TO INSTALL THE NEW ADDED VERTICAL REBAR.
- FORM ALL OPENINGS DONE TO THE EXTERIOR WALL UP TO THE TOP ONE UNDER THE TIE BEAM. FILL CELLS WITH 3000 PSI CONCRETE.
- AFTER CONCRETE REACH 75% OF ITS DESIGN STRENGTH, DRY PACK THE TOP CELL WITH NON-SHRINKAGE, NON-METALIC GROUT WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI.

REINFORCING EXISTING MASONRY WALL CELL DETAIL

4-202

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com



4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

PROJECT NAME:

OAK TRAILS PARK
IMPROVEMENTS

4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

SEAL:



CAROLYN VEGA GONZALEZ, P.E.
FL. LIC. No. 94034

| N° | REVISIONS | DATE |
|----|-----------|------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05-01-2024

PROJECT NUMBER: 23-00155

DRAWN BY: Author

REVIEWED BY: Checker

DESIGNED BY: Designer

SHEET TITLE:

TYPICAL DETAILS

SHEET NUMBER:

S-3.2



4101 RAVENSWOOD RD., STE. 320
FT LAUDERDALE, FLORIDA 33312
P | 954.210.7671 F | 813.287.3622
www.mceengineers.com

THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF MASTER CONSULTING ENGINEERS, INC. AND MAY NOT BE REPRODUCED, COPIED, ALTERED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM MASTER CONSULTING ENGINEERS, INC.

CA: 8426 PROJ. NO. 1159-009-31
© COPYRIGHT 2023

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THESE STRUCTURAL PLANS CONFORM TO AND SATISFY THE FLORIDA BUILDING CODE, EIGHT EDITION 2023, ACI 318-19 AND LOCAL CODES AS APPLICABLE

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5805 Blue Lagoon Drive, Suite 285
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com



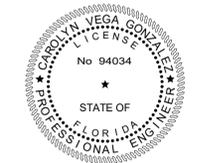
4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

PROJECT NAME:

**OAK TRAILS PARK
IMPROVEMENTS**

4900 W. COPANS ROAD
COCONUT CREEK, FL 33063

SEAL:



CAROLYN VEGA GONZALEZ, P.E.
FL LIC. No. 94034

| N ^o | REVISIONS | DATE |
|----------------|-----------|------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05-01-2024

PROJECT NUMBER: 23-00155

DRAWN BY: JAC

REVIEWED BY: CVG

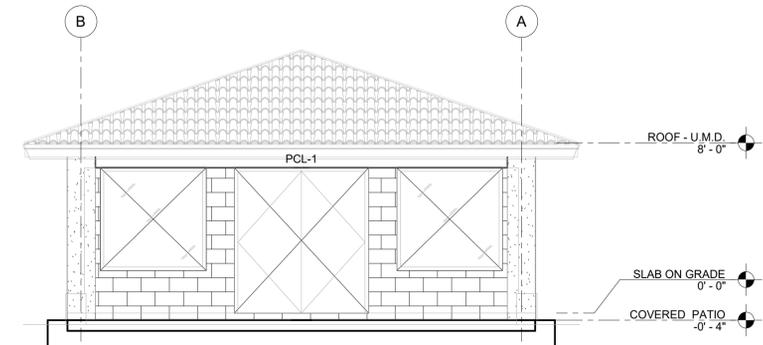
DESIGNED BY: CVG

SHEET TITLE:

ELEVATIONS

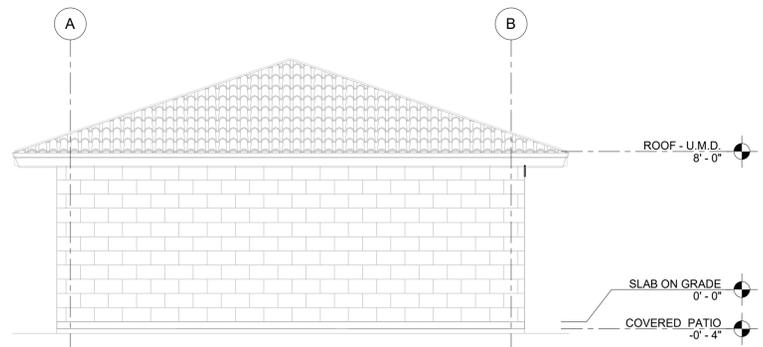
SHEET NUMBER:

S-5.1



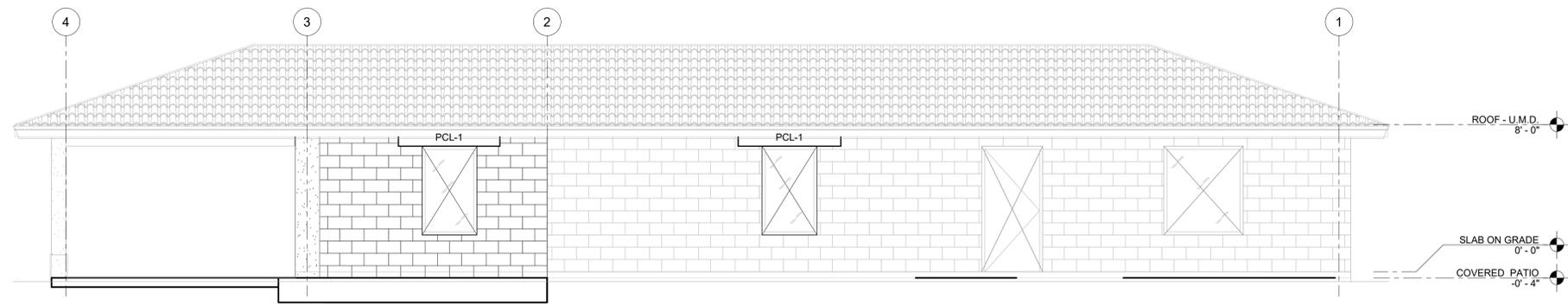
ELEVATION NORTH

SCALE: 1/4" = 1'-0"



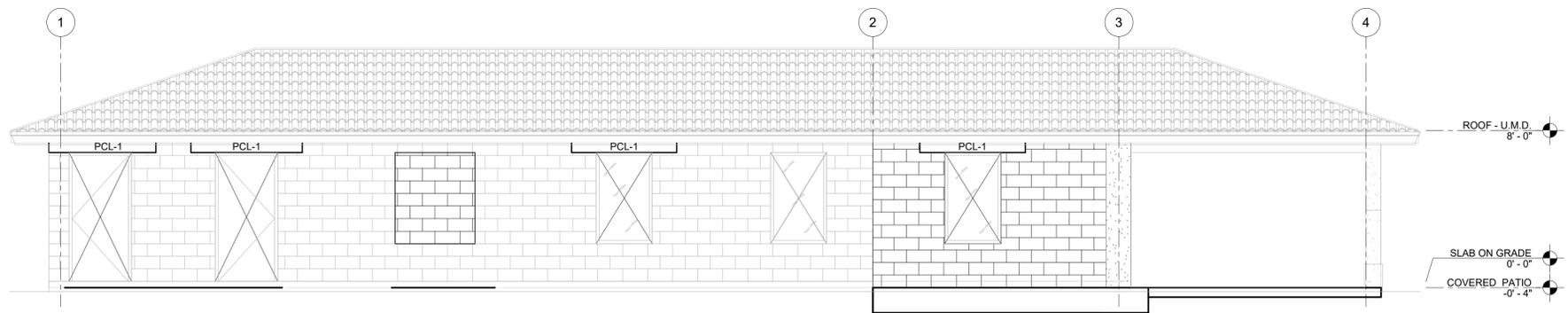
ELEVATION SOUTH

SCALE: 1/4" = 1'-0"



ELEVATION WEST

SCALE: 1/4" = 1'-0"



ELEVATION EAST

SCALE: 1/4" = 1'-0"



4101 RAVENSWOOD RD., STE. 320
FT LAUDERDALE, FLORIDA 33312
P | 954.210.7671 F | 813.287.3622
www.mceengineers.com

THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF MASTER CONSULTING ENGINEERS, INC. AND MAY NOT BE REPRODUCED, COPIED, ALTERED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM MASTER CONSULTING ENGINEERS, INC.
CA: 8426 PROJ. NO. 1159-009-31
© COPYRIGHT 2023

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THESE STRUCTURAL PLANS CONFORM TO AND SATISFY THE FLORIDA BUILDING CODE, EIGHT EDITION 2023, ACI 318-19 AND LOCAL CODES AS APPLICABLE

Scale
1/4" = 1'-0"
4/29/2024 6:12:48 PM

MECHANICAL SYMBOLS LEGEND

DUCTWORK

NEW WORK

EXISTING DUCTWORK AND/OR PIPING

HATCH INDICATES DEMO ITEM

SUPPLY AIR DUCT - SECTION

RETURN AIR DUCT - SECTION

EXHAUST AIR DUCT - SECTION

SUPPLY DUCT UP THRU ROOF OR FLOOR/CEILING ASSEMBLY

RETURN DUCT UP THRU ROOF OR FLOOR/CEILING ASSEMBLY

ELBOW TURNED UP

ELBOW TURNED DOWN

OFFSET IN DUCTWORK - UP

OFFSET IN DUCTWORK - DOWN

TEE WITH DOUBLE THICKNESS

MITERED ELBOW - WHERE USED PROVIDE TURNING VANES

RADIUS ELBOW

CEILING DIFFUSER - BOTTOM DUCT CONNECTION

STANDARD BRANCH TAKEOFF

MANUAL DAMPER

4-WAY DISCHARGE SQUARE SUPPLY AIR DIFFUSER

RETURN AIR REGISTER/GRILLE

EXHAUST AIR REGISTER/GRILLE

SIDEWALL REGISTER OR GRILLE

FLEXIBLE CONNECTION

CEILING DIFFUSER - SIDE DUCT CONNECTION

TYPE

A-350 AIR QUANTITY

AIR DISTRIBUTION DESIGNATION

FLEXIBLE ROUND DUCT

FIRE DAMPER AND ACCESS DOOR.

RECTANGULAR DUCT, FIRST FIGURE IS SIDE SHOWN

COMBINATION FIRE AND SMOKE DAMPER, WITH ACCESS DOOR.

BACKDRAFT DAMPER

ROUND DUCT, DIAMETER SHOWN

MOTORIZED DAMPER

NEW PIPING

EXISTING PIPING

SPIN-IN COLLAR WITH VOLUME DAMPER

HUMIDITY SENSOR

THERMOSTAT OR TEMPERATURE SENSOR

SMOKE DETECTOR

FIRE STAT

STATIC PRESSURE SENSOR

SMOKE DAMPER

FIRE/SMOKE DAMPER

FIRE DAMPER

CARBON DIOXIDE SENSOR

VARIABLE FREQUENCY DRIVE

MOTOR STARTER

ENERGY MANAGEMENT SYSTEM

POINT OF CONNECTION

POINT OF DISCONNECTION

FLOOR PLAN:

ENLARGED PLAN REFERENCE

ENLARGED PLAN TAG, FLOOR PLAN REFERENCE

SECTION TAG

MECHANICAL ABBREVIATIONS

- A AIR
- AAV AUTOMATIC AIR VENT
- AC AIR CONDITIONING
- ACU AIR CONDITIONING UNIT
- AD ACCESS DOOR, AIR DRYER
- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- AHU AIR HANDLING UNIT
- ALUM ALUMINUM
- AP ACCESS PANEL
- APD AIR PRESSURE DROP
- ATC AUTOMATIC TEMPERATURE CONTROL
- AV AIR VENT
- BDD BACK DRAFT DAMPER
- BDT BOTTOM
- BFP BACKFLOW PREVENTER
- BTU BRITISH THERMAL UNIT
- BV BALL VALVE
- C CELSIUS, DEGREE CELSIUS
- CENT CENTRIFUGAL
- CFM CUBIC FEET PER MINUTE
- CHWS&R CHILLED WATER SUPPLY & RETURN
- CLS CEILING
- CO CLEAN OUT
- COND CONDENSATE
- DB DRY BULB, DOWN BLOW
- DCW DOMESTIC COLD WATER
- DEG DEGREE
- DELV DELIVERY
- DHW DOMESTIC HOT WATER
- DISC DISCONNECT
- DN DOWN
- DPS DIFFERENTIAL PRESSURE SWITCH
- E EXISTING
- EA EXHAUST AIR, EACH
- EAT ENTERING AIR TEMPERATURE
- EDB ENTERING DRY BULB
- EF EXHAUST FAN
- EFF EFFICIENCY
- ELEV ELEVATION
- EMS ENERGY MANAGEMENT SYSTEM
- ENT ENTERING
- ERG EXISTING RETURN GRILLE
- EWB ENTERING WET BULB
- F FAHRENHEIT
- FD FIRE DAMPER, FLOOR DRAIN
- FPM FEET PER MINUTE
- FPS FEET PER SECOND
- F/SD FIRE/SMOKE DAMPER
- FT FEET
- GPH GALLONS PER HOUR
- GPM GALLONS PER MINUTE
- HHWS&R HEATING HOT WATER SUPPLY&RETURN
- HOA HAND-OFF-AUTOMATIC
- HP HORSEPOWER, HEAT PUMP
- HR HOUR
- HVAC HEATING VENTILATING AND AIR CONDITIONING
- HZ HERTZ (CYCLES PER SECOND)
- ID INSIDE DIAMETER
- IN INCH
- KW KILOWATT
- LDB LEAVING DRY BULB
- LWB LEAVING WET BULB
- LOR LIMIT OF REMOVAL
- MAX MAXIMUM
- MBC MASTER BUILDING CONTROLLER
- MBH THOUSAND BTU PER HOUR
- MD MANUAL DAMPER
- MIN MINIMUM
- N NORTH
- NA NOT APPLICABLE
- NO OR # NUMBER, NORMALLY OPEN
- NTS NOT TO SCALE
- OA OUTSIDE AIR
- OBD OPPOSED BLADE DAMPER
- OD OUTSIDE DIAMETER
- OPER OPERATING
- PG PRESSURE GAUGE
- PSI POUNDS PER SQUARE INCH
- PSIG POUNDS PER SQUARE INCH GAUGE
- RA RETURN AIR
- REG REGISTER
- RF RETURN FAN
- RG RETURN GRILLE
- RH RELATIVE HUMIDITY
- RHC REHEAT COIL
- RM ROOM
- SA SUPPLY AIR
- SF SUPPLY FAN
- S/FD SMOKE/FIRE DAMPER

MECHANICAL LEGEND

- CHWS -CHILLED WATER SUPPLY
- CHWR -CHILLED WATER RETURN
- HWS -HOT WATER SUPPLY
- HWR -HOT WATER RETURN
- CD -CONDENSATE DRAIN
- RL -REFRIGERANT LIQUID
- RS -REFRIGERANT SUCTION
- GATE VALVE
- BALL VALVE
- CALIBRATE BALANCING VALVE
- BUTTERFLY VALVE
- GAS COOK
- UNION
- STRAINER
- PSI REG.
- CHECK VALVE
- CONNECTION, BOTTOM
- CONNECTION, TOP
- ELBOW,TURNED DOWN
- ELBOW, TURNED UP
- REDUCER, CONCENTRIC
- REDUCER, ECCENTRIC STRAIGHT CROWN
- CAP

MECHANICAL SCOPE OF WORK:

THIS BRIEF DESCRIPTION OF THE SCOPE OF WORK IS NOT ALL INCLUSIVE AND IS COMPLEMENTED BY THE SET OF CONSTRUCTION DOCUMENTS AND SPECIFICATIONS

- PROVIDE NEW AHU-1/CU-1 AND ASSOCIATED COMPONENTS SUCH AS REFRIGERANT, CONDENSATE PIPING AND NEW CONTROLS.
- DEMOLISH AND PROVIDE NEW EXHAUST FAN FOR BATHROOMS.

PROJECT DESIGN CONDITIONS

| TEMPERATURE CONDITIONS | | | |
|---|--------------|----------|---------------------------|
| OUTDOOR | | | |
| | DRY BULB (F) | WET BULB | COMMENTS |
| SUMMER | 92 | 77 | (4% MEAN COINCIDED DB1WB) |
| WINTER | 34 | X | (99.6% DB) |
| DAILY RANGE | 16.6 | X | |
| LOCATION BASED ON ASHRAE WEATHER DATA FOR MIAMI FLORIDA | | | |
| INDOOR | | | |
| | DRY BULB (F) | RH% | COMMENTS |
| OCCUPIED COOLING | 76 | 50-55 | PLUS OR MINUS 2 DEGREES |
| OCCUPIED HEATING | 70 | X | PLUS OR MINUS 2 DEGREES |
| UNOCCUPIED COOLING | 85 | 60-65 | |
| UNOCCUPIED HEATING | 60 | X | |
| VENTILATION IS BASED ON OCCUPANCY PER ASHRAE 62.1-2019 | | | |
| ENVELOPE AND EQUIPMENT EFFICIENCIES ARE BASED ON ASHRAE 90.1 2019 AND THE FLORIDA BUILDING CODE 2020 | | | |
| THIS PROJECT IS DESIGNED UNDER THE 2020 FLORIDA BUILDING CODE AND THE 2020 FLORIDA FIRE PREVENTION CODE | | | |

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

SYMBOLS, SPECIFICATIONS,
FIXTURE SCHEDULES

SHEET NUMBER:

M001

SGM ENGINEERING

5301 WATERFORD DISTRICT DR. SUITE 750 MIAMI, FL 33126
TEL: 954-421-1944 FAX: 954-421-1924 CA-00006208

SGM #: 2024-115 WWW.SGMENGINEERING.COM
COPYRIGHT ©2024 SGM ENGINEERING, INC.

MECHANICAL GENERAL NOTES

- THE CONTRACTOR SHALL DEMONSTRATE EACH HVAC SYSTEMS PERFORMANCE IN THE PRESENCE OF THE ARCHITECT AND THE OWNER'S PROJECT MANAGER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ANY ADDITIONAL SYSTEM TEST REQUIRED IF IN THE OPINION OF THE ARCHITECT AND THE OWNERS PROJECT MANAGER THE SYSTEMS DO NOT PERFORM AS SPECIFIED.
- IF THE INTENT OF ARCHITECT/ ENGINEER WITH REGARD TO ANY DETAIL IS NOT CLEAR, OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUCH MATTERS WILL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER IN WRITING BEFORE THE SUBMISSION OF BIDS, AND THE ARCHITECT/ ENGINEER SHALL MAKE CORRECTION OR EXPLANATION IN WRITING. OTHERWISE, NO EXTRA CHARGE WILL BE ALLOWED FOR THE WORK OR MATERIAL WHICH THE ARCHITECT/ENGINEER WILL REQUIRE, PROVIDED THAT IT COMES WITHIN A REASONABLE INTERPRETATION OF THE DRAWINGS AND SPECIFICATIONS.
- THE PLANS AND SPECIFICATIONS ARE INTENDED AS A GENERAL DESCRIPTION OF THE WORK TO BE PERFORMED. ALL ITEMS NOT SPECIFICALLY MENTIONED OR SHOWN, BUT NECESSARY FOR THE COMPLETION OF THE INSTALLATION, SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MECHANICAL, ARCHITECTURAL, STRUCTURAL AND ELECTRICAL PLANS BEFORE SUBMITTING HIS FINAL BID. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO FAMILIARIZE HIMSELF WITH THE PLANS.
- UNFORESEEN CONDITIONS MAY EXIST AND WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES IN ROUTING AND/OR BURIAL DEPTHS AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAYBE NECESSARY. IT IS INTENDED THAT SUCH DEVIATIONS SHALL BE CONSIDERED AS PART OF THIS CONTRACT. SUCH DEVIATIONS MAY NOT BE CONSIDERED AS PART OF THIS CONTRACT WHEN PROPERLY DOCUMENTED IN WRITING. THE PLANS ARE NOT COMPLETELY TO SCALE. CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL SITE UTILITIES, ETC., PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.
- ALL PIPING AND DUCT IS TO BE CONCEALED ABOVE CEILING OR IN NEW WALLS UNLESS SPECIFICALLY NOTED AS EXPOSED OR SURFACE MOUNTED. CONTRACTOR TO COORDINATE WITH THE GENERAL CONTRACTOR TO PAINT ALL EXPOSED PIPING TO MATCH CORRESPONDING EXPOSED AREAS.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2023 FLORIDA BUILDING CODE AND ALL LOCAL CODES.
- THE SIZE AND LOCATION OF EQUIPMENT INSTALLED UNDER DIVISION 23 MECHANICAL SHALL BE COORDINATED WITH OTHER TRADES. CONNECTION TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. TRANSITIONS TO ALL EQUIPMENT SHALL BE VERIFIED AND PROVIDED FOR EQUIPMENT FURNISHED.
- PROVIDE A VOLUME DAMPER AT EVERY BRANCH DUCT AND AS SHOWN ON THE DOCUMENTS FOR ALL DUCTWORK SYSTEMS. ALL DAMPERS MAY NOT BE SHOWN ON THE DOCUMENTS FOR CLARITY.
- VERIFY EXISTING CONDITIONS IN FIELD AND COORDINATE WITH ALL TRADES INCLUDING, BUT NOT LIMITED TO, ARCHITECTURAL, STRUCTURAL, LIGHTING, POWER, SYSTEMS, PLUMBING, FIRE PROTECTION AND OTHER EXISTING AND NEW WORK.
- AHU'S, AND EXHAUST FANS SHALL REMAIN PROPERTY OF THE OWNER. ALL SHEET METAL AND PIPING WILL BE DISPOSED BY THE GC.
- DISCONNECT SWITCHES REQUIRED FOR THE MECHANICAL EQUIPMENT SHALL BE PROVIDED BY DIVISION 26 ELECTRICAL EXCEPT WHEN INDICATED ON SCHEDULE.
- INSTALLING DAMPERS ABOVE GYPSUM BOARD CEILING SHALL BE AVOIDED. ALL VOLUME DAMPERS INSTALLED ABOVE GYPSUM BOARD CEILING SHALL HAVE A REMOTELY OPERATED DAMPER. FIELD VERIFY LOCATION OF DEVICE.
- PROVIDE 6" HIGH CONCRETE PADS UNDER ALL FLOOR MOUNTED EQUIPMENT, WITH CHAMFERED EDGES AND 6" EXTENSION BEYOND EQUIPMENT UNLESS NOTED OTHERWISE.
- ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION. SUPPORT ALL OBJECTS FROM STRUCTURE WITHOUT PENETRATING THE CEILING.
- SLEEVE AND SEAL ALL PIPING PENETRATIONS THROUGH BUILDING PARTITIONS. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS IN CHILLED WATER PIPING.
- REFER TO TYPICAL DETAILS FOR PIPING AND INSTALLATION OF EQUIPMENT.
- CONDENSATE DRAINS FROM ALL MECHANICAL EQUIPMENT SHALL BE COORDINATED FOR PROPER DRAINAGE TO SUIT EQUIPMENT FURNISHED. FOLLOW MANUFACTURER'S RECOMMENDATIONS.
- ALL CONDENSATE DRAIN LINES SHALL BE INSULATED AND INSTALLED WITH A 'P' TRAP AT THE UNIT WITH A MINIMUM DEPTH OF 2" OR PER MANUFACTURER'S INSTRUCTIONS, WHICHEVER IS GREATER. SEE CONDENSATE DRAIN DETAIL ON Mxxxx.
- ALL CONDENSATE DRAIN LINES SHALL BE PROVIDED WITH AN OVERFLOW SWITCH IN ACCORDANCE WITH FMC-2020 SECTION 307.2.3
- ALL CONDENSATE DRAIN LINES SHALL BE PROVIDED WITH AN OVERFLOW SWITCH IN ACCORDANCE WITH FMC-2020 SECTION 307.2.3.
- UNLESS OTHERWISE NOTED, ALL EQUIPMENT AND VALVE DRAINS SHALL BE INDEPENDENTLY PIPED FULL SIZE TO THE NEAREST PLUMBING DRAIN OR DRY WELL.
- ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH NFPA 90A AND 90B, AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- DUCT SIZES SHOWN ARE MINIMUM INSIDE DIMENSIONS.
- BEFORE FABRICATION, VERIFY AND COORDINATE ALL DIMENSIONS IN FIELD. DUCT SIZES AND ALL OPENINGS THROUGH BUILDING CONSTRUCTION SHALL SUIT EQUIPMENT FURNISHED.
- ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS AND PIPING (INCLUDING DIVIDING DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST.
- ALL DUCTWORK AND PIPING IS SHOWN SCHEMATICALLY. PROVIDE ALL TRANSITIONS, ELBOWS, FITTINGS, ETC., TO ALLOW SMOOTH FLOWS. ALL SPLIT DUCT FITTINGS SHALL TRANSITION TO FULL SIZE OF THE SUM OF BOTH BRANCHES UPSTREAM OF SPLIT.
- ACCESS PANELS IN DUCTWORK AND CEILINGS SHALL BE PROVIDED WHERE REQUIRED FOR OPERATION, BALANCING AND MAINTENANCE OF ALL MECHANICAL EQUIPMENT.
- ALL DUCT BENDS FROM VERTICAL TO THE HORIZONTAL AND ANGLED TURNS OF DUCTWORK SHALL HAVE LONG RADIUS ELBOWS INSTALLED.
- EXHAUST DUCTWORK SHALL BE UNINSULATED GALVANIZED STEEL.
- MAINTAIN CLEARANCE OF A MINIMUM OF 6" BETWEEN DUCTWORK, PIPING, EQUIPMENT, ETC., AND ALL FIRE RATED AND FIRE/SMOKE RATED PARTITIONS TO ALLOW FOR INSPECTIONS OF RATED WALLS.
- PROVIDE FLEXIBLE DUCT CONNECTIONS ON ALL DUCTS CONNECTING TO EACH FAN, AIR HANDLING UNIT AND FAN COIL UNIT.
- FLEXIBLE DUCT SIZE SHALL MATCH DIFFUSER NECK SIZE TO WHICH IT IS CONNECTED.
- FLEXIBLE DUCTWORK SHALL BE FULLY EXTENDED NOT TO EXCEED 8'-0" IN LENGTH.
- COORDINATE DIFFUSER, GRILLE AND REGISTER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND EQUIPMENT OF ALL TRADES.
- COORDINATE WITH ARCHITECT BEFORE PURCHASING GRILLES, REGISTERS, DIFFUSERS, LOUVERS AND OTHER AIR DISTRIBUTION DEVICES TO VERIFY FINISH.
- DAMPERS AND INSIDES OF DUCTS VISIBLE THROUGH GRILLES, REGISTERS AND DIFFUSERS SHALL BE PAINTED FLAT BLACK.
- ALL OPERABLE THERMOSTAT PARTS SHALL BE MOUNTED 48" ABOVE FINISHED FLOOR.
- COORDINATE THERMOSTAT AND HUMIDISTAT LOCATIONS WITH FURNITURE/EQUIPMENT LAYOUTS, WINDOWS AND DOOR SWING AREAS.
- ALL CONTROL WIRING AND HARDWARE TO COMPLETE THE HVAC CONTROL SYSTEM SHALL BE FURNISHED AND INSTALLED UNDER DIVISION 23 MECHANICAL OF THESE CONTRACT DOCUMENTS UNLESS INDICATED OTHERWISE ON DRAWINGS.
- ALL HVAC EQUIPMENT LOCATIONS AND WEIGHTS SHALL BE COORDINATED AND APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR AND OWNER PRIOR TO PURCHASE AND INSTALLATION.
- PROVIDE ALL MANUFACTURER INSTALLATION AND MAINTENANCE MANUALS FOR EQUIPMENT INSTALLED FOR ENGINEER REVIEW BEFORE RELEASE TO THE OWNER.
- ALL SUPPLY AND RETURN DUCTWORK SHALL BE GALVANIZED STEEL. DUCTWORK SHALL BE SUPPORTED WITH MINIMUM 1" SHEET METAL STRAPS AT 5'-0" ON CENTERS.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING MATERIALS, EQUIPMENT, APPLIANCES AND DEVICES THAT ARE TO BE REUSED SHALL BE RECONDITIONED, TESTED AND PLACED IN GOOD AND PROPER WORKING CONDITION AND APPROVED. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID.
- AHU AND CONDENSING UNIT BASIS OF DESIGN IS TRANE, NO EXCEPTIONS.
- EXHAUST FANS BASIS OF DESIGN IS BRAUN, NO EXCEPTIONS.

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaeas.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

MECHANICAL GENERAL NOTES

SHEET NUMBER:

M002

SGM
ENGINEERING

5301 WATERFORD
DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #: 2024-115
WWW.SGMENGINEERING.COM
COPYRIGHT ©2024 SGM ENGINEERING, INC.

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

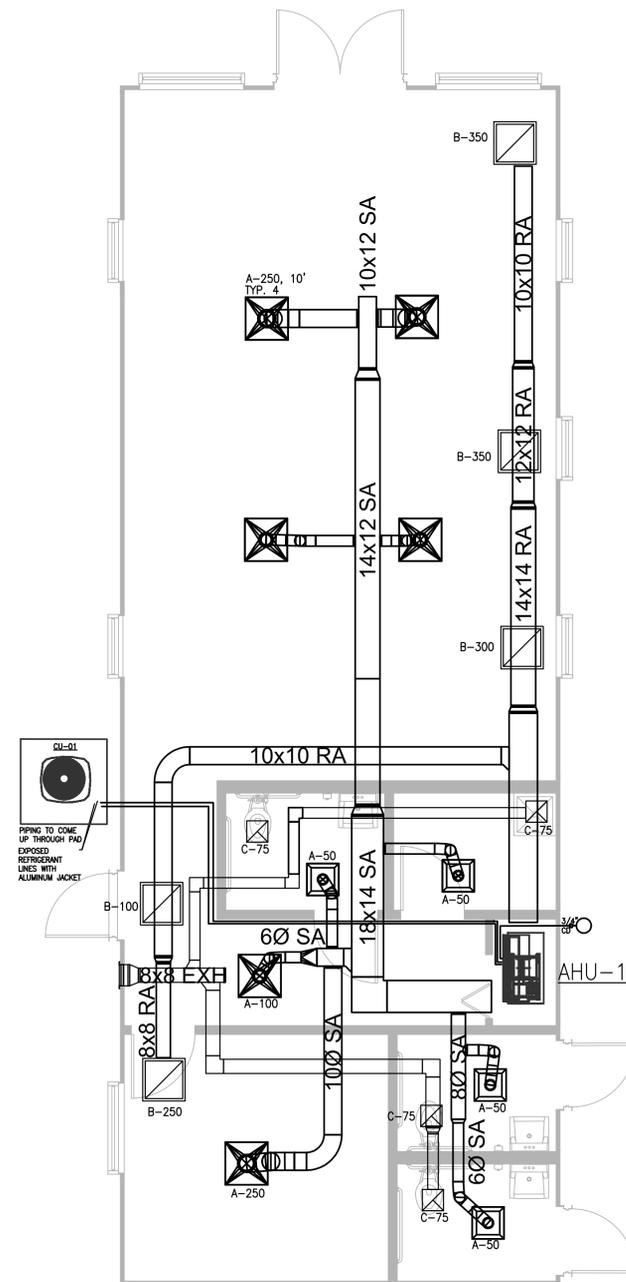
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

MECHANICAL FLOOR PLAN

SHEET NUMBER:

M201



GENERAL NOTES:

- A. REFER TO SHEET M001 AND M002 FOR MECHANICAL GENERAL NOTES AND SYMBOLS LEGEND.
- B. REFER TO PROJECT SPECIFICATIONS FOR EQUIPMENT AND INSTALLATION REQUIREMENTS. IF THERE IS ANY DISCREPANCY BETWEEN SPECIFICATIONS AND DRAWINGS, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- C. COORDINATE WORK SCHEDULE WITH OWNER.
- D. DRAWINGS ARE DIAGRAMMATIC AND REPRESENT THE GENERAL LAYOUT OF MECHANICAL COMPONENTS, FOR EXACT BUILDING DIMENSIONS SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- E. DUCTWORK ROUTING SHALL BE COORDINATED WITH ALL TRADES.
- F. COORDINATE WITH ELECTRICAL CONTRACTOR LOCATION OF DISCONNECTS. DO NOT BLOCK SERVICE CLEARANCE TO EQUIPMENT.
- G. DUCTWORK SHALL REMAIN SEALED DURING CONSTRUCTION. DURING START-UP INSTALL FILTERS AT ALL RETURN AND EXHAUST GRILLES. IF DUCTWORK IS LEFT UNCOVERED DURING CONSTRUCTION, CONTRACTOR WILL BE REQUIRED TO CLEAN ALL DUCTWORK PRIOR TO UNIT START-UP.
- H. PROVIDE DOUBLE WALL INSULATED DUCTWORK FOR THE FIRST 20 FEET OF SUPPLY AND RETURN FOR EACH AIR HANDLING UNIT.
- I. DOOR ACCESS SHALL BE PROVIDED TO ALL FIRE DAMPERS AND SMOKE DAMPERS
- J. ALL EXPOSED PIPING SHALL BE PROVIDED WITH ALUMINUM JACKET
- K. REFER TO SCHEDULES AND DETAILS FOR FURTHER INFORMATION

PLAN KEY NOTES:

- 1. PROVIDE NEW AHU AND ASSOCIATED CONTROLS SYSTEM. CONTRACTOR TO PROVIDE NEW 6" THICK CONCRETE PAD. REFERENCE DETAILS FOR INSTALLATION INFORMATION. REFERENCE SCHEDULES FOR MAKE AND MODEL. REFERENCE CONTROLS SEQUENCE AND SCHEMATICS FOR CONTROLS INFORMATION.
- 2. PROVIDE NEW INSULATED COPPER L CONDENSATE LINE. ROUTE TO DRYWELL OUTSIDE AND DISCHARGE VIA AIR GAP. REFER TO SHEET M801 FOR INSTALLATION DETAIL.
- 3. PROVIDE NEW INSULATED REFRIGERANT LINES. VERIFY HORIZONTAL AND VERTICAL LENGTH OF PIPING AND SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. ROUTE NEW LINES TO CU-1 LOCATED OUTSIDE. PROVIDE ALUMINUM JACKETING TO ALL EXPOSED REFRIGERANT LINES. REFER TO SHEET M801 FOR INSTALLATION DETAILS.



MECHANICAL FLOOR PLAN

SCALE: 1"=40'



SGM ENGINEERING
5301 WATERFORD DISTRICT DR. SUITE 750 MIAMI, FL 33126
TEL: 954-421-1944 FAX: 954-421-1924 CA-00006208
WWW.SGMENGINEERING.COM
SGM #: 2024-115 COPYRIGHT ©2024 SGM ENGINEERING, INC.

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW, 74th Street
Coconut Creek, FL 33073

SEAL:

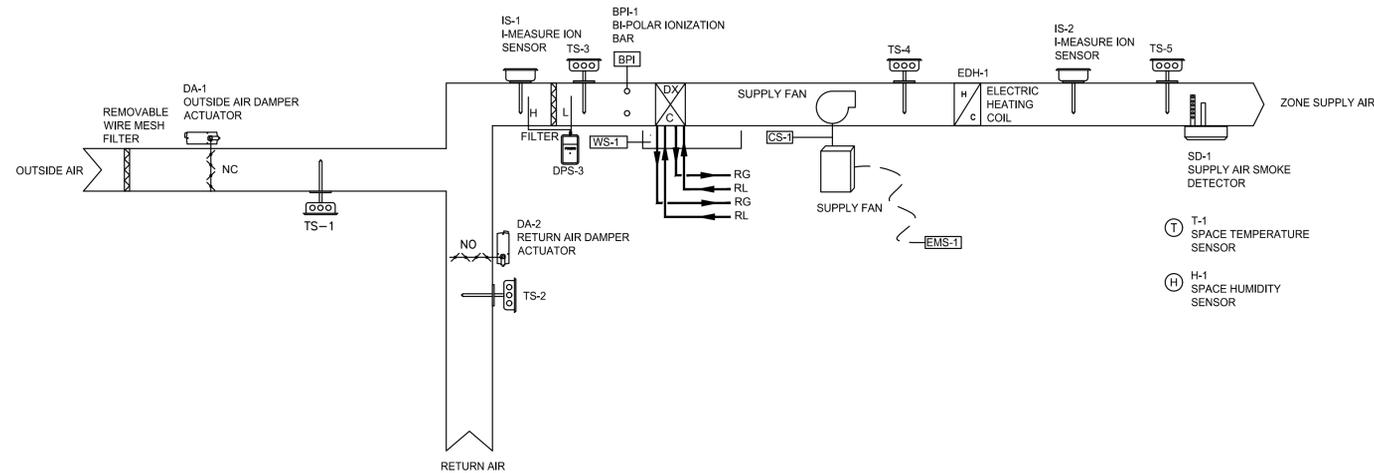
REVISIONS

SUBMITTAL:
30% SCHEMATIC DESIGN
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:
MECHANICAL CONTROL DRAWINGS

SHEET NUMBER:
M601

SGM ENGINEERING
5301 WATERFORD DISTRICT DR. SUITE 750 MIAMI, FL 33126
TEL: 954-421-1944 FAX: 954-421-1924 CA-00006208
SGM #: 2024-115 COPYRIGHT ©2024 SGM ENGINEERING, INC. WWW.SGMENGINEERING.COM



CONSTANT VOLUME DX AIR HANDLING UNIT CONTROL DIAGRAM

NTS
(AHU-7)

CONSTANT VOLUME DX AIR HANDLING UNIT (AHU) SEQUENCE OF OPERATION

UNOCCUPIED: WHEN THE BUILDING IS INDEXED FOR UNOCCUPIED OPERATION BY THE OCCUPANCY SCHEDULE AT THE EMS, THE AHU FAN SHALL BE DE-ENERGIZED. THE OUTSIDE AIR DAMPER (DA-1) SHALL BE CLOSED AND THE COMPRESSORS SHALL BE OFF. THE BI-POLAR IONIZATION BAR (BPI-1) SHALL BE DE-ENERGIZED.

NIGHT SET-BACK: THE SPACE TEMPERATURE SENSOR SHALL SIGNAL THE AHU TO START WHEN THE SPACE TEMPERATURE DROPS TO 60°F (ADJUSTABLE), AND STOP WHEN SPACE TEMPERATURE REACHES 64°F (ADJUSTABLE). THE UNIT SHALL OPERATE AS DESCRIBED IN THE WARM-UP MODE.

NIGHT SET-UP: THE SPACE TEMPERATURE SENSOR SHALL SIGNAL THE AHU TO START WHEN THE SPACE TEMPERATURE RISES TO 85°F (ADJUSTABLE), THE COMPRESSORS SHALL STAGE/MODULATE TO MAINTAIN AHU DISCHARGE TEMPERATURE. THE UNIT SHALL STOP WHEN SPACE TEMPERATURE DROPS TO 80°F. THE UNIT SHALL OPERATE AS DESCRIBED UNDER COOL-DOWN MODE.

MORNING COOL DOWN OR WARM UP PERIOD: MAINTAIN THE OUTSIDE AIR CLOSED AND RUN AHU FOR A PERIOD OF 1 HOUR (ADJ.) PRIOR TO OCCUPANCY. THE AHU SHALL START AND MAINTAIN A DISCHARGE TEMPERATURE OF 55°F (ADJ.) SENSED BY TS-5 DURING COOL DOWN ONLY AND DURING WARM UP COMPRESSORS SHALL BE OFF.

OCCUPIED: WHEN THE BUILDING IS INDEXED FOR OCCUPIED OPERATION BY THE OCCUPANCY SCHEDULE AT THE EMS, THE OUTSIDE AIR DAMPER (D-1) AND RETURN AIR DAMPER (D-2) SHALL MODULATE TO MAINTAIN OUTSIDE AIR SETPOINTS. THE COMPRESSORS SHALL STAGE/MODULATE TO MAINTAIN THE SPACE SETPOINT TEMPERATURE. BI-POLAR IONIZATION SYSTEM (BP-1) SHALL ENERGIZE.

TEMPERATURE CONTROL: THE COMPRESSORS SHALL STAGE/MODULATE TO MAINTAIN THE SPACE TEMPERATURE SETPOINT OF 75°F (ADJ.) AS SENSED BY THE SPACE TEMPERATURE SENSOR T-1; MINIMUM FLOW SHALL MAINTAIN MINIMUM REQUIRED OUTSIDE AIRFLOW.

WHEN THE SPACE TEMPERATURE FALLS TO 72°F (ADJ.), THE COMPRESSORS SHALL BE OFF AND THE ELECTRIC HEATER SHALL MODULATE TO MAINTAIN THE ZONE TEMPERATURE SETPOINT OF 68°F (ADJ.) AS SENSED BY THE SPACE TEMPERATURE SENSOR. MAINTAIN DEAD BAND OF NOT LESS THAN 4 DEGREES BETWEEN COOLING AND HEATING SETPOINTS.

SMOKE CONTROL: SHOULD PRODUCTS OF COMBUSTION BE DETECTED BY THE SUPPLY AIR SMOKE DETECTOR (BY OTHERS), THE SUPPLY FAN SHALL BE DE-ENERGIZED BY THE FIRE ALARM SYSTEM. THE AHU SHALL AUTOMATICALLY START ONCE THE FIRE ALARM IS RESET. MANUAL RESET IS NOT ACCEPTABLE.

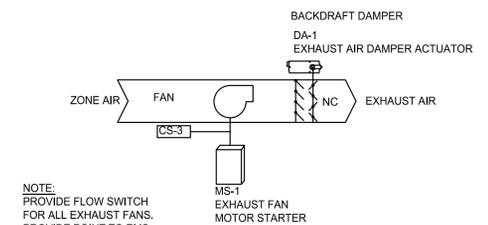
FAN STATUS: THE EMS SHALL MONITOR THE FAN STATUS AS SENSED BY THE CURRENT SWITCH (CS-1). SHOULD THE SUPPLY FAN BE COMMANDED ON AND A OFF STATUS BE SENSED, AN ALARM SHALL BE GENERATED AT THE EMS.

UNOCCUPIED HUMIDITY RESET: SHOULD ROOM HUMIDITY SENSOR RISE ABOVE 60% RH (ADJ) FOR 1 HOUR (ADJ), THE EMS SHALL ACTIVATE THE AHU AND STAGE/MODULATE THE COMPRESSORS TO MAINTAIN 50°F (ADJ) DISCHARGE TEMPERATURE AS SENSED BY TS-4. THE OUTSIDE AIR DAMPERS SHALL REMAIN CLOSED IN THIS MODE. AFTER 1 HOUR (ADJ) OR ONCE THE RH DROPS AT THE SPACE RH SENSOR TO BELOW 55% RH, RETURN TO UNOCCUPIED MODE OF OPERATION. MODULATE REHEAT COIL TO MAINTAIN SPACE UNOCCUPIED HEATING SETPOINT.

OCCUPIED HUMIDITY RESET: SHOULD ROOM HUMIDITY SENSOR RISE ABOVE 60% RH (ADJ) FOR 1 HOUR (ADJ). THE COIL DISCHARGE TEMPERATURE SHALL RESET TO 54°F. ONCE HUMIDITY HAS REMAINED BELOW SET POINT FOR A PERIOD OF TEN MINUTES, SUPPLY AIR TEMPERATURE SET POINT WILL RETURN TO NORMAL. DURING DEHUMIDIFICATION, THE ELECTRIC RE-HEAT SHALL MODULATE TO MAINTAIN SPACE TEMPERATURE AT (COOLING SET POINT MINUS 2°F). IF THE COMPRESSORS OPERATE AT 100% FOR A PERIOD OF 20 MINUTES (ADJ.) AND RELATIVE HUMIDITY IS STILL ABOVE SET POINT, A HIGH HUMIDITY ALARM WILL BE GENERATED.

| TAG | POINT NAME | HARDWARE POINTS | | | | SOFTWARE POINTS | | | SHOWON GRAPHIC | REMARKS | |
|-------|--|-----------------|--------|---------|--------|------------------|----------|-------|----------------|---------|-------|
| | | ANALOG | | DIGITAL | | ADJUSTABLE VALUE | SCHEDULE | TREND | | | ALARM |
| | | INPUT | OUTPUT | INPUT | OUTPUT | | | | | | |
| TS-1 | OUTSIDE AIR TEMPERATURE | X | | | | | | X | X | | |
| TS-2 | RETURN AIR TEMPERATURE | X | | | | | | X | X | | |
| TS-3 | MIXED AIR TEMPERATURE | X | | | | | | X | X | | |
| TS-4 | COOLING COIL DISCHARGE AIR TEMPERATURE | X | | | | | | X | X | | |
| TS-5 | SUPPLY AIR TEMPERATURE | X | | | | | | X | X | | |
| SD-1 | SUPPLY AIR SMOKE DETECTOR | | | X | | | | | X | | |
| T-1 | SPACE TEMPERATURE SENSOR | X | | | X | X | X | X | X | | |
| H-1 | SPACE HUMIDITY SENSOR | X | | | | | | X | X | | |
| DA-1 | OUTSIDE AIR DAMPER | | X | | | X | X | X | X | | |
| STR-1 | SUPPLY FAN SPEED | | X | | | | | X | X | | |
| STR-1 | SUPPLY FAN START/STOP | | | X | | X | X | X | X | | |
| CS-1 | SUPPLY FAN STATUS | | | X | X | | | X | X | | |
| DA-2 | RETURN AIR DAMPER FEEDBACK | X | | | | | | X | X | | |
| DA-2 | RETURN AIR DAMPER | | X | | X | X | X | X | X | | |
| BPI-1 | BI-POLAR IONIZATION BAR | | | X | | | | X | X | | |
| EDH-1 | ELECTRIC DUCT HEATER | | X | | | X | X | X | X | | |
| IS-1 | SUPPLY ION SENSOR | X | | | | | | X | X | 1 | |
| WS-1 | WATER SENSING SWITCH | | | X | | | | X | X | | |

REMARKS:
1. SET SENSITIVITY TO 200k IONS/CCM

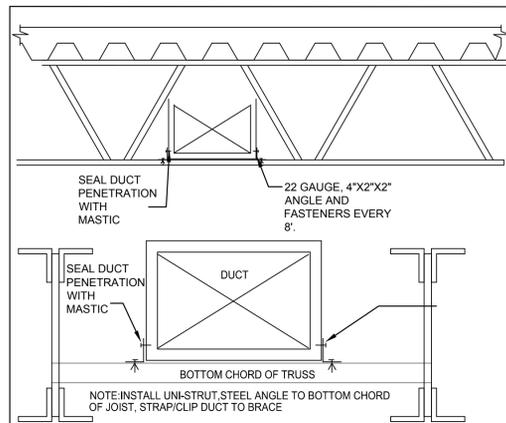


NOTE:
PROVIDE FLOW SWITCH FOR ALL EXHAUST FANS.
PROVIDE POINT TO EMS.

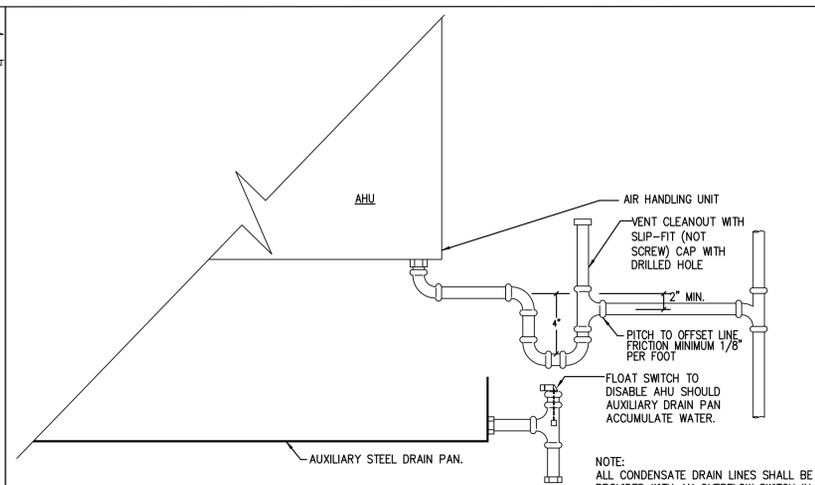
UPON START COMMAND FROM BAS OR HOA SWITCH, MOTORIZED DAMPER SHALL OPEN AND FAN SHALL START. BAS SHALL MONITOR FAN STATUS BY CURRENT-SENSING RELAY. UPON STOP COMMAND, FAN SHALL STOP AND DAMPER SHALL CLOSE.

EXHAUST FAN CONTROL DIAGRAM

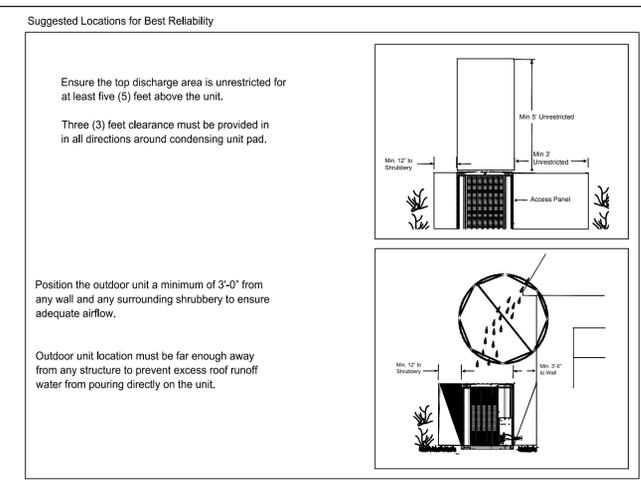
NTS



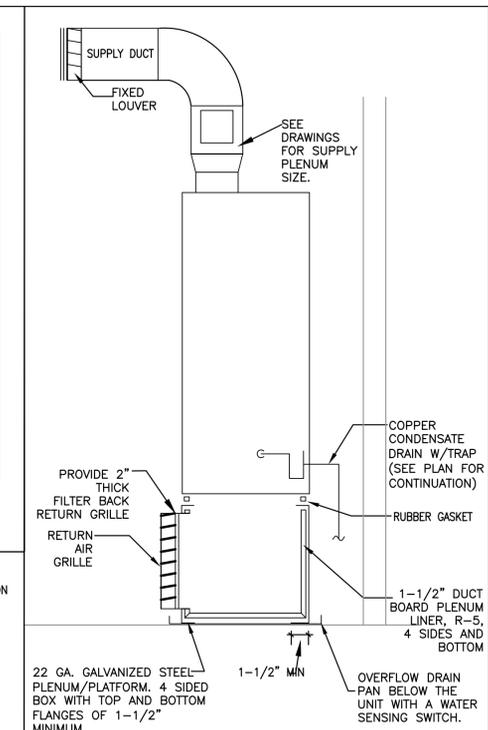
01 M801 DUCT SUPPORT DETAIL
NOT TO SCALE



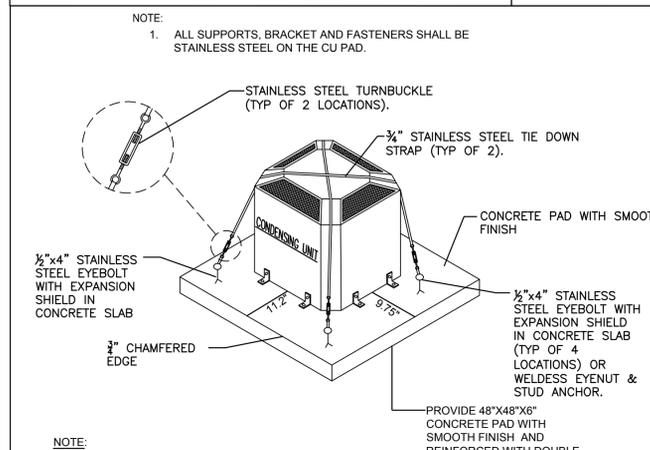
02 M801 CONDENSATE TRAP DETAIL
NOT TO SCALE



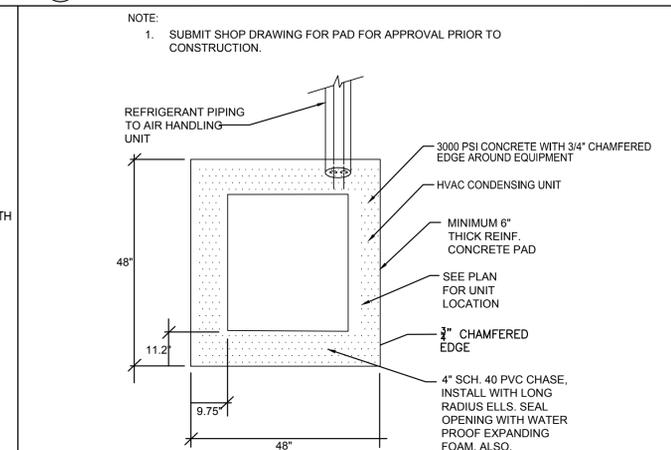
03 M801 CONDENSING UNIT CLEARANCE DETAIL
NOT TO SCALE



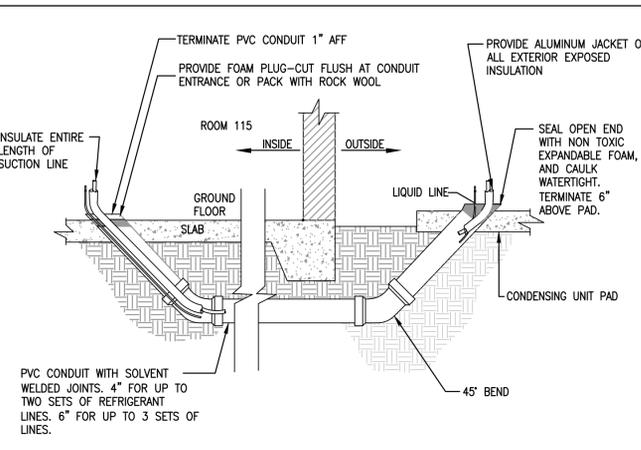
07 M801 AHU-01 MOUNTING DETAIL
NOT TO SCALE



04 M801 TYPICAL CONDENSING UNIT ANCHORING DETAIL
NOT TO SCALE



05 M801 CONDENSING UNIT PAD DETAIL
NOT TO SCALE

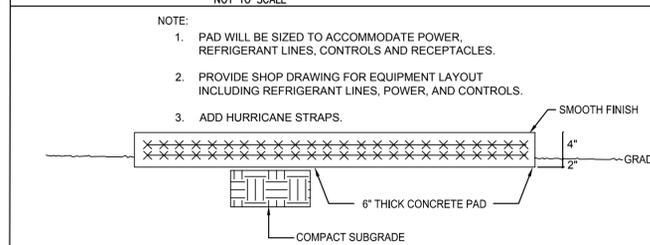


06 M801 UNDERGROUND REFRIGERANT LINES
NOT TO SCALE

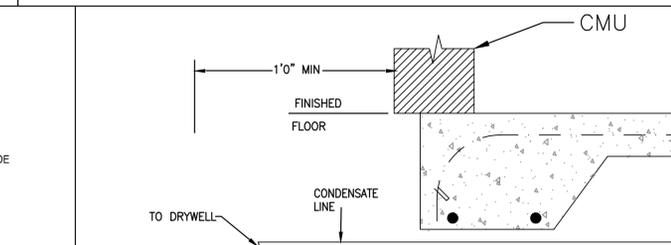
22 GA. GALVANIZED STEEL PLENUM/PLATFORM, 4 SIDED BOX WITH TOP AND BOTTOM FLANGES OF 1-1/2" MINIMUM.

| MINIMUM UNIT CLEARANCE TABLE | | |
|------------------------------|------------------------------------|---------------------------------|
| | TO COMBUSTIBLE MATERIAL (REQUIRED) | SERVICE CLEARANCE (RECOMMENDED) |
| SIDES | 0" | 2" |
| FRONT | 0" | 21" |
| BACK | 0" | 0" |
| INLET DUCT | 0" | 1" |
| OUTLET DUCT | 1"+ | N/A |

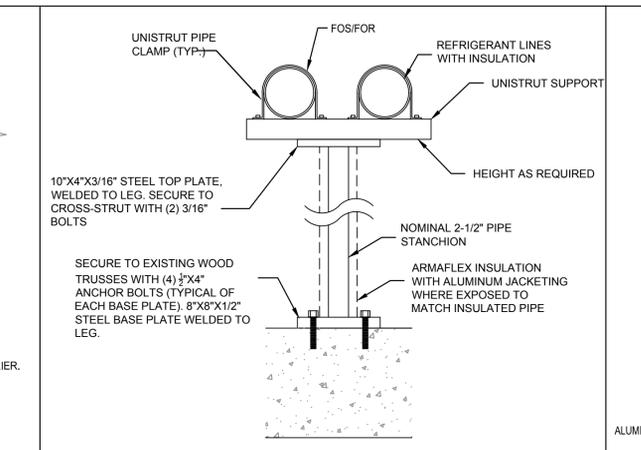
NOTE: INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES FOR SERVICE.



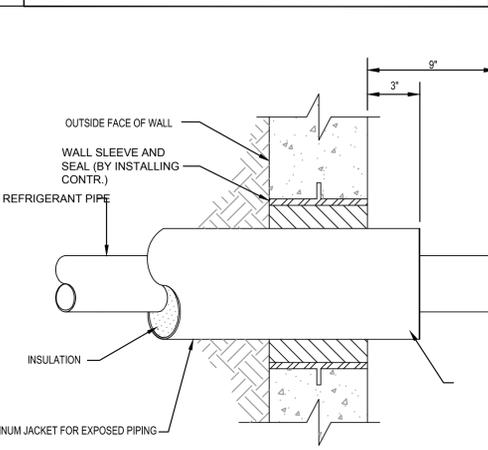
08 M801 CONDENSING UNIT PAD DETAIL
NOT TO SCALE



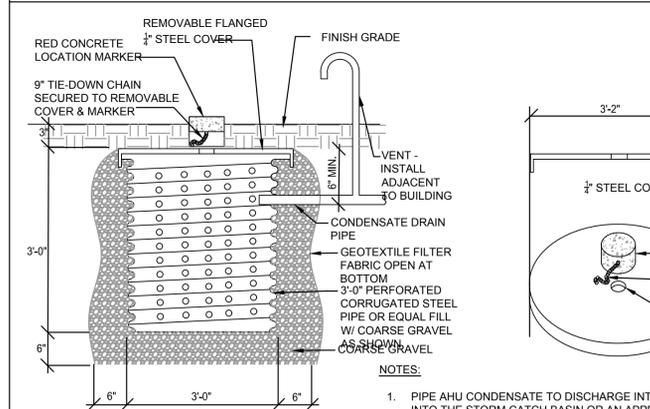
09 M801 CONDENSATE PIPING TERMINATION DETAIL
NOT TO SCALE



10 M801 INSULATED PIPE SUPPORT
NOT TO SCALE



11 M801 WALL PENETRATION DETAIL
NOT TO SCALE



12 M801 DRYWELL DETAIL
NOT TO SCALE

- NOTES:
1. PIPE AHU CONDENSATE TO DISCHARGE INTO THE SANITARY SEWER. DISCHARGE INTO THE STORM CATCH BASIN OR AN APPROVED CONDENSATE DRYWELL IS PERMITTED VIA AN AIR CONDENSATE DISPOSAL SHALL BE PERMITTED ONLY IF A SANITARY DRAIN IS NOT AVAILABLE.
 2. PROVIDE GEOTEXTILE FILTER FABRIC AROUND GRAVEL FOR CONTAINMENT PURPOSES.

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:

Coconut Creek
4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

MECHANICAL DETAILS

SHEET NUMBER:

M801

SGM ENGINEERING

5301 WATERFORD DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #: 2024-115
WWW.SGMENGINEERING.COM
COPYRIGHT ©2024 SGM ENGINEERING, INC.

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5301 Waterford District Drive, Suite 750
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinnaingroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY SIGNED BY MANUEL E. HERNANDEZ ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

SYMBOLS, SPECIFICATIONS, FIXTURE SCHEDULES

SHEET NUMBER:

E001

SGM ENGINEERING

5301 WATERFORD DISTRICT DR. SUITE 750 MIAMI, FL 33126
 TEL: 954-421-1944 FAX: 954-421-1924 CA-00006208

SGM #: 2024-115 COPYRIGHT © 2024 SGM ENGINEERING, INC. WWW.SGMENGINEERING.COM

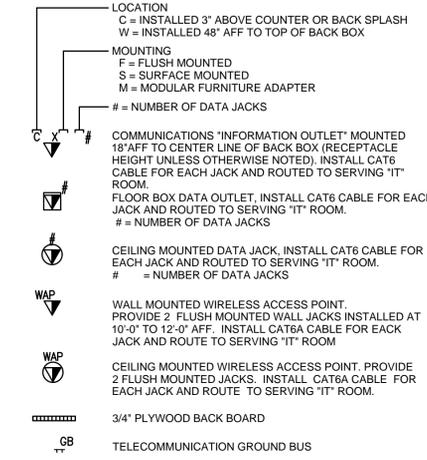
GENERAL NOTES

- ALL INSTALLATION SHALL BE IN ACCORDANCE WITH:
 - FLORIDA BUILDING CODE (8TH EDITION 2023)
 - NFPA 70 NATIONAL ELECTRICAL CODE (2020 EDITION)
 - NFPA 101 LIFE SAFETY CODE (2021 EDITION)
 - NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (2019 EDITION)
 - NFPA 1 NATIONAL FIRE ALARM CODE (2018, PART OF THE NFPA 700 2020 EDITION)
 - FLORIDA FIRE PREVENTION CODE (FFPC) (8TH EDITION 2023)
 - LOCAL REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION
 - SPECIFICATIONS.
- THE CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THIS WORK SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT SPECIFICATIONS BEFORE COMMENCING ANY WORK. THE PROJECT SPECIFICATIONS AND DRAWINGS FORM THE BASIS OF THIS CONTRACT REQUIREMENTS AND INCLUDE THE TYPE AND GRADE OF MATERIALS TO BE INSTALLED. EQUIPMENT TO BE FURNISHED, THE MANNER BY WHICH TO BE INSTALLED AND WHERE TO BE LOCATED. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT SPECIFICATIONS AND DRAWINGS, ASSUME THE MOST STRINGENT AND/OR COSTLY REQUIREMENT APPLIES.
- EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO INSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
- CONTRACTOR SHALL COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL DEVICES WITH THE ARCHITECTURAL PLANS, INCLUDING BUT NOT LIMITED TO ARCHITECTURAL DETAILS, ELEVATIONS AND MILLWORK/CASEWORK DETAILS. ALL FINAL LOCATIONS SHALL BE APPROVED BY OWNER ON FIELD PRIOR TO ANY ROUGH INS.
- THE BUSINESS OPERATION OF THE BUILDING SHALL NOT BE DISRUPTED DURING THE EXECUTION OF THIS WORK WITHOUT PRIOR NOTIFICATION AND APPROVAL BY THE OWNER.
- ALL EXISTING ITEMS DESIGNATED TO REMAIN, SUCH AS LIGHTING FIXTURES, OUTLETS, SWITCHES, FIRE ALARM DEVICES, ETC. THAT ARE IN CONFLICT WITH NEW CEILING OR WALLS, SHOULD BE RELOCATED AND LEFT IN OPERATION. CONTRACTOR TO WALK THE SITE AND BECOME FAMILIAR WITH RELOCATION OF EXISTING DEVICES PRIOR TO CONSTRUCTION.
- WHERE CIRCUITS ARE INDICATED TO BE INSTALLED IN EXISTING PANELS, VERIFY ACTUAL SPACES OR SPACES IN SAID PANELBOARDS AND USE THE SPARE DEVICES OR FURNISH NEW CIRCUIT BREAKERS AS INDICATED ON THE DRAWINGS.
- UNLESS SPECIFICALLY INDICATED AS EXISTING, ALL EQUIPMENT, CONDUIT, WIRE AND ALL ACCESSORIES, REQUIRED AS PART OF THE INSTALLATION, AND USE OF STATED EQUIPMENT, SHALL BE PROVIDED BY THE CONTRACTOR AS A PART OF THIS PROJECT.
- WHERE THE CONTRACTOR PROPOSES ALTERNATE SOLUTIONS, DIFFERENT ROUTINGS OF CONDUIT, DIFFERENT LOCATIONS OF EQUIPMENT, ETC., THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OF THE RAMIFICATIONS OF THE PROPOSED CHANGE THAT ARE NOT INCLUDED IN HIS PROPOSAL, BUT BECOME APPARENT AT A LATER DATE, AND SHALL BEAR THE CONSEQUENCES OF CORRECTING ANY AND ALL CONFLICTS, DEFICIENCIES OR OTHER PROBLEMS AT NO INCREASE IN COST OR INCREASE IN CONSTRUCTION TIME ALLOTTED.
- THE CONTRACTOR SHALL INCLUDE IN HIS SCOPE: (1) THE LABOR AND MATERIALS REQUIRED FOR CREATING OPENINGS FOR CONDUIT PENETRATIONS THROUGH WALLS, SLABS AND ROOF STRUCTURES; AS WELL AS THE SEALING OF THESE PENETRATIONS; (2) THE ROUTING OF CONDUITS AROUND IMPENETRABLE OBSTACLES, SUCH AS POURED-IN-PLACE BEAMS, COLUMNS, LINTELS AND SIMILAR OBSTRUCTIONS AND; (3) THE SEALING OF PENETRATIONS OF CONDUITS INTO WHICH NEW WIRE IS PULLED AS A PART OF THIS PROJECT, TO INCLUDE FIREPROOFING WHERE NECESSARY.
- IF THE INTENT OF THE ENGINEER WITH REGARD TO ANY DETAIL IS NOT CLEAR, OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUCH MATTERS SHALL BE BROUGHT TO THE ENGINEER IN WRITING BEFORE THE SUBMISSION OF BIDS, AND THE ENGINEER SHALL ISSUE CORRECTION OR CLARIFICATION IN WRITING. OTHERWISE, NO EXTRA COSTS OR EXTENSIONS OF TIME WILL BE ALLOWED FOR THE WORK OR MATERIAL THAT THE A/E WILL REQUIRE, PROVIDED THAT IT COMES WITHIN A REASONABLE INTERPRETATION OF THE DRAWINGS AND SPECIFICATIONS.
- NO WIRING SHALL BE DONE PRIOR TO THE CONTRACTOR'S REVIEW OF THE PROJECT EQUIPMENT SHOP DRAWINGS AND COORDINATION WITH THE DESIGN DOCUMENTS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ARCHITECT/ENGINEER ATTENTION FOR FINAL RESOLUTION. WORK THAT HAS TO BE REPLACED DUE TO LACK OF PROPER SHOP DRAWINGS CO-ORDINATION SHALL BE DONE AT CONTRACTORS EXPENSE
- EXISTING SYSTEMS SHOWN ARE BASED ON VISUAL INSPECTION AND EXISTING DRAWINGS, BUT THEY MAY NOT REFLECT THE ACTUAL CONDITIONS IN EVERY CASE. THE CONTRACTOR SHALL INSPECT THE SITE AND EXAMINE THE WORK BEFORE SUBMITTING HIS PROPOSAL. THE CONTRACTOR SHALL NOTE THE LOCATION OF EXISTING FACILITIES, THE EXTENT OF HIS WORK, AND INTERFERENCE BY OTHER TRADES WITH HIS WORK. ANY DISCREPANCIES SHOULD BE DISCUSSED WITH THE ENGINEER. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED.
- CONDUIT RUNS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC. ALL CONDUITS SHALL BE RUN CONCEALED, EXCEPT IN EQUIPMENT ROOMS AND WHERE APPROVED BY THE ENGINEER.
- FURNISH AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH APPLICABLE CODE REQUIREMENTS.
- FIRESTOP ALL PENETRATIONS (MADE BY THIS CONTRACTOR) THROUGH FIRE-RATED WALLS, FLOORS AND CEILINGS.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO THIS CONTRACTOR'S WORK. PATCH ALL UNUSED OPENINGS (CREATED BY THIS CONTRACTOR) TO MATCH SURROUNDING CONDITIONS.
- ALL FEEDERS ARE TO HAVE LESS THAN 2% TOTAL VOLTAGE DROP AND ALL BRANCH CIRCUITS SHALL HAVE LESS THAN 3% VOLTAGE DROP. WIRING TO RECEPTACLES SHALL BE #12 THWN MINIMUM.
- EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, THE CONTRACTOR SHALL PROVIDE NEW CONDUIT FOR ALL CONDUCTORS THAT ARE INSTALLED AS A PART OF THIS PROJECT. INSULATED PLASTIC BUSHINGS ARE TO BE PROVIDED ON ALL CONDUIT STUB-OUTS AND STUB-UPS.
- THE INSTALLATION OF ALL DEVICES, INCLUDING MOUNTING HEIGHTS, SHALL BE FULLY ADA AND NFPA COMPLIANT.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL DOOR SWINGS PRIOR TO ROUGH-IN OF BOXES MOUNTED IN WALLS.
- THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EQUIPMENT TO BE COMPLETELY FREE OF INTERNAL DEBRIS AND EXTERIOR PAINT, MARKS, DIRT AND ALL SCRATCHES SHALL BE TOUCHED UP.
- ALL EMPTY/SPARE CONDUITS SHALL HAVE PULL STRINGS WITH LABELING TAGS AT EACH END.
- ALL RACEWAYS SHALL HAVE A GREEN INSULATED COPPER EQUIPMENT-GROUNDING CONDUCTOR.
- ALL BRANCH CIRCUITS AND FEEDERS SHALL BE PROVIDED WITH SEPARATE GROUNDING CONDUCTORS.
- CONTRACTOR TO HAVE ON FIELD AT ALL TIMES THE LATEST PRINT OF DRAWINGS AND BOOK SPECIFICATIONS.
- THE USE OF SET-SCREW FITTINGS ARE PROHIBITED. ALL FITTINGS, INCLUDING EMT FITTINGS SHALL BE COMPRESSION TYPE.
- ALL FITTINGS SHALL BE STEEL COMPRESSION TYPE.
- ALL CONDUIT SHALL BE A MINIMUM SIZE OF 3/4".
- ALL DISCONNECTS, SWITCHES AND RECEPTACLES SHALL BE LABELED WITH PANEL AND CIRCUIT NUMBER.
- REVISED PANEL SCHEDULES MUST BE TYPED WRITTEN.

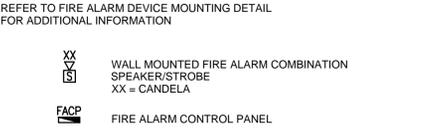
| LIGHTING FIXTURE SCHEDULE | | | | | |
|---------------------------|---|---------------------|----------|---------------|-------------------|
| TYPE | DESCRIPTION | DESIGN SELECTION | VOLTS | LAMPS/FIXTURE | MAX INPUT WATTAGE |
| A | 6" DIAMETER LED DOWNLIGHT, DAMP LOCATION LISTED, MINIMUM 1000 LUMEN OUTPUT, WITH WIDE FLANGE REFLECTOR OPTION AND WIDE DIAMETER HOUSING KIT | HALO HLB6099401EMWR | 120/277V | LED | 13W |

- NOTES**
- ALL LED FIXTURES SHALL HAVE MINIMUM 80 CRI.
 - ALL LED FIXTURES SHALL HAVE CORRELATED COLOR TEMPERATURE OF 4000/4100K, UNLESS OTHERWISE NOTED.
 - FIXTURES WITH ELECTRONIC BALLAST SHALL HAVE 20% MAXIMUM HARMONIC DISTORTION.
 - FINAL FIXTURE FINISHES SHALL BE SELECTED DURING SUBMITTAL PROCESS BY ARCHITECT FROM EXTENDED STANDARD COLOR CHART FOR EACH FIXTURE.
 - CONFIRM COLOR OF EXTERIOR FIXTURES LAMP SOURCE PRIOR TO PURCHASE, MATCH EXISTING BUILDING'S FIXTURES.
 - ALL FIXTURES SHALL BE LABELED WITH MAXIMUM ALLOWABLE WATTAGE. MAXIMUM IS THE WATTAGE OF LAMP AS SHOWN IN SCHEDULE.
 - ALL FIXTURES, WHETHER STANDARD OR NOT, REQUIRE LISTING BY A NATIONALLY RECOGNIZED TESTING LABORATORY.
 - ALL FIXTURE NOTED AS EMERGENCY FIXTURES SHALL SUPPLY A MINIMUM OF 90MIN BACK-UP BATTERY POWER
 - ALL LED FIXTURES SHALL HAVE INTERNAL DISCONNECTING MEANS ON LINE SIDE INCLUDING GROUNDED CONDUCTOR PER NEC 410.130(G). UL INTERNAL DISCONNECT TO BE INSTALLED BY FACTORY AND TO BE INCLUDED IN ALL SUBMITTALS.
 - WHEN FIXTURE MODEL DIFFERS FROM FIXTURE DESCRIPTION, THEN THE FIXTURE DESCRIPTION SHALL GOVERN.

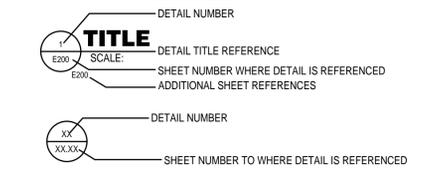
PREMISE DISTRIBUTION SYSTEM



FIRE ALARM SYSTEM



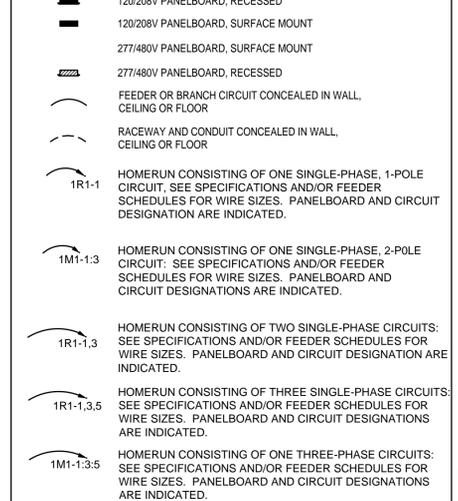
MISCELLANEOUS SYMBOL LEGEND



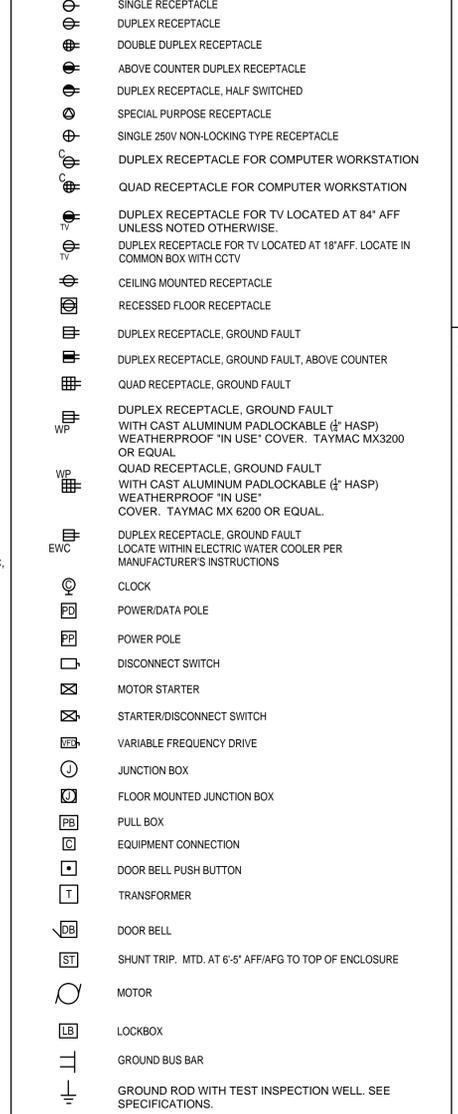
ABBREVIATIONS

| | | | |
|-------|---------------------------------------|------|--------------------------------|
| A | AMPERES | LTG | LIGHTING |
| AE | AUDIO ENHANCEMENT | m | METER |
| AFC | ABOVE FINISHED CEILING | mm | MILLIMETER |
| AF | ABOVE FINISHED FLOOR | MAX | MAXIMUM |
| AFG | ABOVE FINISHED GRADE | MCB | MAIN CIRCUIT BREAKER |
| AIC | AMPERES INTERRUPTING CAPACITY | MCC | MOTOR CONTROL CENTER |
| AL | ALUMINUM | MCP | MOTOR CIRCUIT PROTECTOR |
| AWG | AMERICAN WIRE GAUGE | MFR | MANUFACTURER |
| BFC | BELOW FINISHED CEILING | MH | METAL HALIDE |
| BFG | BELOW FINISHED GRADE | MIN | MINIMUM |
| C | CONDUIT | MISC | MISCELLANEOUS |
| CAB | CABINET | MMS | MANUAL MOTOR STARTER SWITCH |
| CKT | CIRCUIT | MTR | MOTOR |
| CLG | CEILING | MTD | MOUNTED |
| CL | CENTERLINE | MTG | MOUNTING |
| CT's | CURRENT TRANSFORMERS | NAC | NOTIFICATION APPLIANCE CIRCUIT |
| CU | COPPER | NEC | NATIONAL ELECTRICAL CODE |
| DISC | DISCONNECT(ING) | NL | NIGHT LIGHT, UNSWITCHED |
| DWG | DRAWING(S) | PNL | PANEL |
| EA | EACH | PSI | PULL STATION INSIDE |
| ECB | ENCLOSED CIRCUIT BREAKER | PVC | POLYVINYL CHLORIDE |
| EF | EXHAUST FAN | REC | RECEPTACLE |
| EMT | ELECTRICAL METALLIC TUBING | RGS | RIGID GALVANIZED STEEL |
| EQUIP | EQUIPMENT | SPD | SURGE PROTECTION DEVICE |
| EUH | ELECTRIC UNIT HEATER | TEL | TELEPHONE |
| EWC | ELECTRIC WATER COOLER | TYP | TYPICAL |
| EWH | ELECTRIC WATER HEATER | UON | UNLESS OTHERWISE NOTED |
| EXH | EXHAUST | VA | VOLT-AMPERES |
| EXIST | EXISTING | VFD | VARIABLE FREQUENCY DRIVE |
| EXP | EXPLOSION PROOF | W | WATTS |
| FA | FIRE ALARM | WP | WEATHER PROOF |
| FLA | FULL LOAD AMPERES | XFMR | TRANSFORMER |
| FLUOR | FLUORESCENT | | |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER | | |
| GFP | GROUND FAULT PROTECTION | | |
| GND | GROUND | | |
| HGT | HEIGHT | | |
| HID | HIGH INTENSITY DISCHARGE | | |
| HPS | HIGH PRESSURE SODIUM | | |
| HDA | HAND-OFF-AUTOMATIC | | |
| HP | HORSEPOWER | | |
| HVAC | HEATING/VENTILATING/ AIR CONDITIONING | | |
| HV | HIGH VOLTAGE | | |
| INC | INCANDESCENT | | |
| JB | JUNCTION BOX | | |
| KV | KILO-VOLTS | | |
| kVA | KILO-VOLTS-AMPERES | | |
| kVAR | KILO-VOLTS-AMPERES REACTIVE | | |
| KW | KILO-WATTS | | |
| KWH | KILO-WATT-HOURS | | |

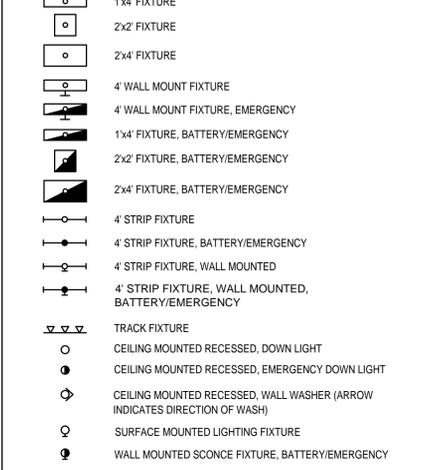
POWER DISTRIBUTION



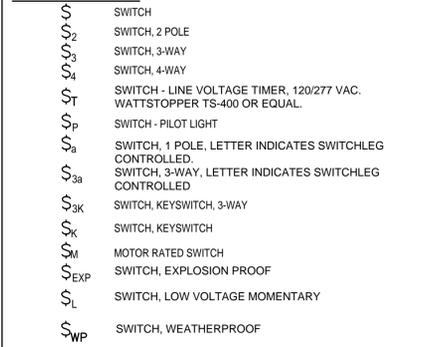
POWER DEVICES



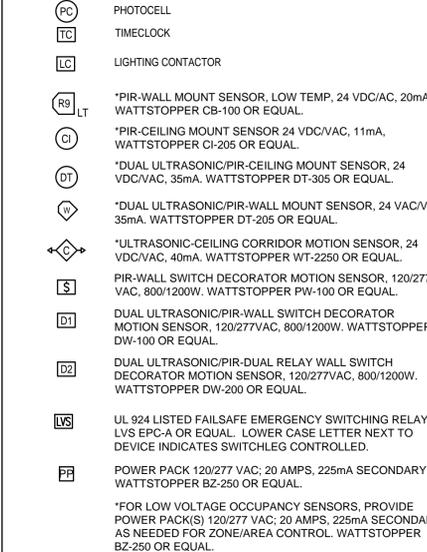
LIGHTING FIXTURES



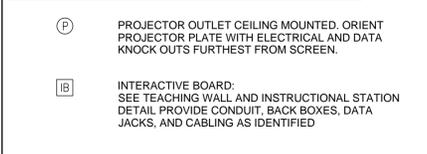
SWITCHES



LIGHTING CONTROL DEVICES



TECH/SOUND ENHANCEMENT



ELECTRICAL SPECIFICATIONS

SECTION 26 05 00 – COMMON WORK RESULTS FOR ELECTRICAL

- ALL ELECTRICAL WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH ALL GOVERNING CODES AND STANDARDS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING.
 - NFPA 70 NATIONAL ELECTRICAL CODE (2020 EDITION)
 - FLORIDA BUILDING CODE (8TH EDITION 2023)
 - NFPA 72 NATIONAL FIRE CODE (2019 EDITION)
 - FLORIDA FIRE PREVENTION CODE (8TH EDITION)
- LOCAL REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- UTILIZE CORDIAL WORKMANSHIP FOR THE INSTALLATION OF ALL WORK. INSTALL WORK LEVEL, PLUMB, AND TRUE WITH THE BUILDING STRUCTURE AND WALLS. SECURE ALL WORK IN PLACE WITH SUPPORTS THAT ARE SUFFICIENT IN SIZE AND QUANTITY TO PERMANENTLY SUPPORT THE WORK IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- THE DEMOLITION OF EXISTING AND/OR THE STOCKING OF NEW BUILDING MATERIALS SHALL NOT HINDER OR INTERFERE WITH EMERGENCY ACCESS TO THE PROPERTY OR VICINITY THEREOF (INCLUDING FIRE LANS).
- ALL MATERIALS SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY. (IE. UL, CSA, MET, ETC)
- ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECT, EXCEPT WHERE SPECIFICALLY SHOWN TO REUSE EXISTING MATERIALS.
- ALL WORK SHALL BE SUITABLE FOR THE ENVIRONMENT THAT IT IS INSTALLED.
- COORDINATE THE INSTALLATION OF THE UTILITY TRANSFORMER WITH THE APPROPRIATE POWER COMPANY. CONFIRM WITHIN 10 DAYS OF THE AWARD OF CONTRACT THAT THE AVAILABLE FAULT CURRENT AT THE TRANSFORMER SECONDARY BUSHINGS DOES NOT EXCEED THE DESIGNED FAULT CURRENT AT THE SERVICE ENTRANCE EQUIPMENT. NOTIFY THE ENGINEER IMMEDIATELY IF THE DESIGNED FAULT CURRENT IS EXCEEDED.
- WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SCHEDULE PROVIDED BY THE OWNER/GC. CONTRACTOR SHALL SUPPLY ALL HANDPOWER (INCLUDING SHIFT WORK, OVERTIME, AND HOLIDAYS) AND MATERIALS AS REQUIRED TO COMPLY WITH THIS SCHEDULE.
- VISIT THE SITE OF THE PROPOSED PROJECT TO BECOME FAMILIAR WITH CONDITIONS AND NATURE OF THE WORK PRIOR TO SUBMITTING BIDS. NOTIFY THE ENGINEER OF DISCREPANCIES OR OMISSIONS FOR INTERPRETATION OR DECISION PRIOR TO SUBMITTING BIDS. SUBMISSION OF A PROPOSAL WILL BE EVIDENCE THAT SUCH FAMILIARIZATION HAS BEEN ATTAINED.
- ANY DEMOLISHED ITEMS SHALL BE DISPOSED OF OR RECYCLED OFF SITE IN ACCORDANCE WITH STATE STATUTES UNLESS NOTED SPECIFICALLY TO BE TURNED OVER TO OWNER.
- WHERE CONTRACTOR PROPOSES ALTERNATE SOLUTIONS, DIFFERENT ROUTINGS OF CONDUIT, DIFFERENT LOCATIONS OF EQUIPMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OF THE RAMIFICATIONS OF THE PROPOSED CHANGE THAT ARE NOT INCLUDED IN HIS PROPOSAL, BUT BECOME APPARENT AT A LATER DATE, AND SHALL BE RESPONSIBLE FOR ALL COST AND CONSEQUENCES OF CORRECTING ANY AND ALL CONFLICTS, DEFICIENCIES OR PROBLEMS THAT INCREASE COST, INCREASE CONSTRUCTION TIME OR CREATE CODE VIOLATIONS.
- INFORMATION SHOWN ON THE DRAWINGS AS TO THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE DATA AVAILABLE TO THE ENGINEER. IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COORDINATION WITH OTHER TRADES FOR LOCATION AND BURIAL DEPTHS WILL BE REQUIRED AND ANY SUCH REQUIRED DEVIATIONS SHALL BE CONSIDERED PART OF THIS SCOPE OF WORK. SITE UTILITY INFORMATION IS NOT GUARANTEED, THEREFORE THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF EXISTING UTILITIES PRIOR TO BEGINNING WORK. PROTECT ANY EXISTING UTILITIES TO REMAIN FROM DAMAGE DURING THE COURSE OF CONSTRUCTION.
- PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR A COMPLETE AND OPERATING ELECTRICAL SYSTEM. THE PLANS AND SPECIFICATIONS ARE INTENDED AS A GENERAL DESCRIPTION OF THE WORK TO BE PERFORMED. ALL ITEMS NOT SPECIFICALLY MENTIONED OR SHOWN, BUT NECESSARY FOR THE COMPLETION OF THE INSTALLATION, SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. THIS CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH THE MECHANICAL, PLUMBING, ARCHITECTURAL, STRUCTURAL, CIVIL AND ELECTRICAL PLANS BEFORE SUBMITTING BIDS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO CONTRACTOR'S FAILURE TO BECOME FAMILIAR WITH THE PROJECT.
- IF, THROUGH ERRORS OR OMISSIONS, THE INTENT OF THE ARCHITECT OR ENGINEER, WITH REGARD TO ANY DETAIL, IS NOT CLEAR OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUCH MATTERS WILL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER IN WRITING PRIOR TO SUBMISSION OF A BID. THE ARCHITECT OR ENGINEER SHALL MAKE CORRECTION OR CLARIFICATION IN WRITING. NO ADDITIONAL COMPENSATION WILL BE PERMITTED FOR WORK OR MATERIALS WHICH THE ARCHITECT OR ENGINEER MAY REQUIRE, PROVIDED IT COMES WITHIN A REASONABLE INTERPRETATION OF THE DRAWINGS AND SPECIFICATIONS.
- PROVIDE TEMPORARY LIGHTING AND POWER FOR THE PROJECT IN ACCORDANCE WITH OSHA STANDARDS. ADEQUATE DISTRIBUTION AND OUTLETS SHALL BE PROVIDED TO POWER ALL CONTRACTORS 120V SINGLE PHASE TOOLS WITHIN 100' OF ALL WORK SPACES.
- ALL SYSTEMS SHALL BE TESTED FOR PERFORMANCE VERIFICATION IN THE PRESENCE OF THE OWNER, AT THE COMPLETION OF THE PROJECT. ALLOW 4 HOURS FOR TRAINING OWNERS PERSONNEL ON ALL SYSTEMS.
- THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EQUIPMENT TO BE COMPLETELY FREE OF INTERNAL DEBRIS, EXTERIOR PAINT/MARKS, AND DIRT.
- PROVIDE 1 YEAR WARRANTY FOR ALL MATERIALS AND LABOR FROM THE DATE OF CERTIFICATE OF OCCUPANCY.
- CONTRACTOR PERFORMING ANY PART OF THIS SCOPE OF WORK SHALL BE A STATE CERTIFIED (TYPE E.C. LICENSE) ELECTRICAL CONTRACTOR. PROVIDE FIELD SUPERINTENDENT WHO HAS A MINIMUM OF FOUR (4) YEARS PREVIOUS SUCCESSFUL EXPERIENCE ON PROJECTS OF COMPARABLE SIZE AND COMPLEXITY. SUPERINTENDENT SHALL BE ON THE SITE AT ALL TIMES DURING CONSTRUCTION AND MUST HAVE AN ACTIVE JOURNEYMAN OR MASTER ELECTRICAL LICENSE FOR THE JURISDICTION WHERE THE WORK IS BEING PERFORMED.
- WORK IS IN CONNECTION WITH EXISTING BUILDINGS WHICH MUST REMAIN IN OPERATION WHILE WORK IS BEING PERFORMED. WORK SHALL BE IN ACCORDANCE WITH THE SCHEDULE REQUIRED BY THE CONTRACT. SCHEDULE WORK FOR MINIMUM OUTAGES ACCEPTABLE TO OWNER. NOTIFY OWNER 72 HOURS IN ADVANCE OF ANY SHUT-DOWN OF EXISTING SYSTEMS. PERFORM WORK DURING NON-SCHOOL OPERATING HOURS UNLESS OTHERWISE ACCEPTED BY OWNER. PROTECT EXISTING BUILDINGS AND EQUIPMENT DURING CONSTRUCTION.
- THE USE OF ANY PROCESS INVOLVING ASBESTOS OR PCB, AND THE INSTALLATION OF ANY PRODUCT, INSULATION, COMPOUND OR MATERIAL CONTAINING OR INCORPORATING ASBESTOS OR PCB, IS PROHIBITED. THE REQUIREMENTS OF THIS SPECIFICATION FOR COMPLETE AND OPERATING ELECTRICAL SYSTEMS SHALL BE MET WITHOUT THE USE OF ASBESTOS OR PCB.
- WITHIN 30 DAYS OF SYSTEM ACCEPTANCE, CONTRACTOR IS TO PROVIDE THE OWNER WITH AS-BUILT DRAWINGS OF THE SINGLE LINE DIAGRAM OF THE ELECTRICAL DISTRIBUTION SYSTEM AND FLOOR PLANS INDICATING LOCATIONS OF EQUIPMENT SERVED. ALSO, PROVIDE OPERATIONS AND MAINTENANCE MANUALS FOR EQUIPMENT REQUIRING MAINTENANCE AND THE CONTACT INFORMATION FOR A QUALIFIED SERVICE AGENCY.

SECTION 26 05 19 – LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

- ALL POWER CONDUCTORS SHALL BE COPPER WITH DUAL RATED THHN/THWN 600V INSULATION.
- PROVIDE ALL FEEDERS WITH CONDUCTORS SIZED SUCH THAT THEY DO NOT EXCEED 2% VOLTAGE DROP PER FBC ENERGY CONSERVATION C405.7.3.1.
- PROVIDE ALL BRANCH CIRCUITS WITH CONDUCTORS SIZED SUCH THAT THEY DO NOT EXCEED 3% VOLTAGE DROP PER FBC ENERGY CONSERVATION C405.7.3.2. THE FOLLOWING METHOD SHALL BE USED FOR TYPICAL BRANCH CIRCUITS:
 - ALL 120V, 20A BRANCH CIRCUIT CONDUCTORS LESS THAN 60' IN LENGTH FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL UTILIZE #12 MINIMUM THROUGHOUT AND #12 GROUND.
 - ALL 120V, 20A BRANCH CIRCUIT CONDUCTORS WHERE THE LENGTH IS 60' TO 120' FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL UTILIZE #10 MINIMUM THROUGHOUT AND #10 GROUND, UNLESS OTHERWISE NOTED.
 - ALL 120V, 20A BRANCH CIRCUIT CONDUCTORS WHERE THE LENGTH IS 120' TO 240' FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL BE # 8 CONDUCTOR MINIMUM THROUGHOUT AND #8 GROUND, UNLESS OTHERWISE NOTED.
 - ALL 120V, 20A BRANCH CIRCUIT CONDUCTORS WHERE THE LENGTH IS GREATER THAN 240' FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL BE # 6 CONDUCTOR MINIMUM THROUGHOUT AND #6 GROUND, UNLESS OTHERWISE NOTED.
 - ALL 277V, 20A BRANCH CIRCUIT CONDUCTORS LESS THAN 140' IN LENGTH FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL UTILIZE # 12 CONDUCTOR MINIMUM THROUGHOUT AND #12 GROUND, UNLESS OTHERWISE NOTED.
 - ALL 277V, 20A BRANCH CIRCUIT CONDUCTORS WHERE THE LENGTH IS 140' TO 220' FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL BE # 10 CONDUCTOR MINIMUM THROUGHOUT AND #10 GROUND, UNLESS OTHERWISE NOTED.
 - ALL 277, 20A BRANCH CIRCUIT CONDUCTORS WHERE THE LENGTH IS 220' TO 340' FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL BE # 8 CONDUCTOR MINIMUM THROUGHOUT AND #8 GROUND, UNLESS OTHERWISE NOTED.
 - ALL 277V, 20A BRANCH CIRCUIT CONDUCTORS WHERE THE LENGTH IS GREATER THAN 340' FROM THE CIRCUIT BREAKER TO ANY DEVICE SHALL UTILIZE # 6 CONDUCTOR MINIMUM THROUGHOUT AND #6 GROUND, UNLESS OTHERWISE NOTED.
- PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR ALL DIMMER CIRCUITS FROM THE LOAD BACK TO THE DIMMER.
- DO NOT PULL CONDUCTORS INTO CONDUIT UNTIL CONDUIT IS COMPLETE FROM END TO END AND ALL WORK, WHICH MAY CAUSE DAMAGE TO CONDUCTORS, IS COMPLETED.
- USE PULLING MEANS THAT WILL NOT DAMAGE CABLES OR RACEWAY. USE MANUFACTURERS APPROVED PULLING COMPOUND OR LUBRICANT WHERE NECESSARY. DO NOT EXCEED THE MANUFACTURER'S RECOMMENDED MAXIMUM PULLING TENSIONS AND SIDEWALL PRESSURE VALUES.
- TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS ACCORDING TO MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. IF MANUFACTURER'S TORQUE VALUES ARE NOT INDICATED, USE THOSE SPECIFIED IN UL 486A AND UL 486B.
- NO SPLICES SHALL BE MADE IN JUNCTION BOX, AND OUTLET BOXES (WIRE NO. 6 AND LARGER) WITHOUT WRITTEN ACCEPTANCE OF ENGINEER.
- ALL INTERIOR POWER AND LIGHTING TAPS AND SPLICES IN NO. 8 OR SMALLER SHALL BE FASTENED TOGETHER BY MEANS OF "SPRING TYPE" CONNECTORS. ALL TAPS AND SPLICES IN WIRE LARGER THAN NO. 8 SHALL BE MADE WITH COMPRESSION TYPE CONNECTORS AND TAPED TO PROVIDE INSULATION EQUAL TO WIRE.
- ALL EXTERIOR BELOW GRADE POWER AND LIGHTING TAPS AND SPLICES SHALL BE MADE WITH COMPRESSION TYPE CONNECTORS AND COVERED WITH RAYCHEM HEAVYWALL CABLE SLEEVES (TYPE CRSM-CT, WCSM OR MCK) WITH TYPE "S" SEALANT COATING WITH SLEEVE KITS AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS OR BE TERMINATED/CONNECTED TO IN ABOVE GRADE TERMINAL BOXES SUITABLE FOR SUCH EXTERIOR USE.

SECTION 26 05 26 – GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

- PROVIDE CONTINUOUS GROUNDING SYSTEM IN ACCORDANCE WITH NEC 250 AND AS INDICATED.
- PROVIDE COPPER EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS. SIZE GROUNDING CONDUCTOR IN ACCORDANCE WITH NEC 250.
- PROVIDE AT LEAST (3) 30" X 3/4" COPPER GROUND RODS SPACED 30' APART TO FORM A DELTA FOR THE GROUNDING ELECTRODE. TEST GROUND RESISTANCE OF THE DELTA RODS TO BE 5 OHM OR LESS WITHOUT CONNECTION TO THE REMAINDER OF THE GROUNDING ELECTRODE. IF RESISTANCE IS GREATER THAN 5 OHMS, DRIVE ADDITIONAL GROUND RODS TO ACHIEVE 5 OHMS OR LESS.
- EFFECTIVELY GROUND METAL WATER PIPING, STRUCTURAL STEEL, UFER GROUNDS, COUNTERPOISE AND GROUND RODS SHALL BE CONNECTED TO FORM THE GROUNDING ELECTRODE IN ACCORDANCE WITH NEC 250. PROVIDE THE GROUNDING ELECTRODE CONDUCTOR IN ACCORDANCE WITH NEC 250.
- EQUIPMENT GROUND CONDUCTORS SHALL BE INSULATED AND HAVE A CONTINUOUS OUTER FINISH THAT IS GREEN. EQUIPMENT GROUNDING CONDUCTORS LARGER THAN #6AWG SHALL BE PERMITTED TO BE PERMANENTLY IDENTIFIED AT ONLY THOSE POINTS WHERE THE CONDUCTOR IS ACCESSIBLE.
- GROUND BARS SHALL BE COPPER OF THE SIZE AND DESCRIPTION AS SHOWN ON THE DRAWINGS. IF NOT SIZED ON DRAWINGS, BUS BAR SHALL BE MINIMUM 1/4" X 4" BUS GRADE COPPER, SPACED FROM WALL ON INSULATING 2" POLYESTER MOLDED INSULATOR STANDOFF/SUPPORTS, AND BE 12" OR GREATER MINIMUM OVERALL LENGTH, ALLOWING 2" LENGTH PER LUG CONNECTED THERETO. INCREASE OVERALL LENGTH AS REQUIRED TO FACILITATE ALL LUGS REQUIRED WHILE MAINTAINING 2" SPACING. SIZE OF BUS BAR USED IN MAIN ELECTRICAL ROOM SHALL BE SIMILAR EXCEPT MINIMUM OF 4" HIGH AND 24" LONG.
- ALL CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC WELDED UNLESS OTHERWISE NOTED HEREIN. ALL CONNECTIONS ABOVE GRADE AND IN ACCESSIBLE LOCATIONS MAY BE BY EXOTHERMIC WELDING OR BY BRAISING OR CLAMPING WITH DEVICES UL LISTED AS SUITABLE FOR USE EXCEPT IN LOCATIONS WHERE EXOTHERMIC WELDING IS SPECIFICALLY SPECIFIED IN THESE SPECIFICATIONS OR CALLED FOR ON DRAWINGS.
- BOND LIGHTNING PROTECTION SYSTEM GROUNDS TO ELECTRICAL SERVICE SYSTEM GROUND, ALL PIPING ENTERING OR LEAVING ALL BUILDINGS, AND COUNTERPOISE SYSTEM GROUND WHERE PROVIDED.
- ONE 30 FT. GROUND ROD ELECTRODE SHALL BE DRIVEN VERTICALLY TO A MINIMUM DEPTH OF 30 FT. PLUS 1 FT. BELOW GRADE IN EACH MANHOLE, HANDHOLE OR PULLBOX (IN GROUND). BOND ROD TO METAL COVER WITH APPROPRIATE LUG AND BARE CU CONDUCTOR.
- INSTALL GROUNDING BUS IN ALL EXISTING PANELBOARDS OF REMODELED AREAS, FOR CONNECTION OF NEW GROUNDING CONDUCTORS, CONNECTED TO BUILDING GROUNDING ELECTRODE.

SECTION 26 05 33 – RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

- ALL WIRING SHALL BE INSTALLED IN ADEQUATELY SIZED CONDUIT UNLESS OTHERWISE NOTED. USE "MINIMUM FOR ALL CONDUITS.
- CONCEAL ALL CONDUITS IN WALLS, ABOVE FINISHED CEILING, IN FLOOR SLABS AND UNDERGROUND EXCEPT IN MECHANICAL AND ELECTRICAL ROOMS.
- CREATE ALL OPENINGS FOR CONDUIT PENETRATIONS THROUGH WALLS, SLABS, AND ROOF OPENINGS. SEAL ALL PENETRATIONS ADEQUATELY. PROVIDE FIRE PENETRATION SEALING OF ALL OPENINGS THROUGH FIRE RATED WALLS, CEILING, AND FLOOR IN ACCORDANCE WITH THE APPROPRIATE UL LISTED FIRE PENETRATION DETAILS.
- COORDINATE THE INSTALLATION OF ALL CONDUITS WITH STRUCTURAL, MECHANICAL, PLUMBING, AND OTHER CONTRACTORS PRIOR TO INSTALLATION.
- USE SCHEDULE 40 PVC FOR ALL EXTERIOR BELOW GRADE WORK. USE GRC FOR EXPOSED EXTERIOR WORK. SWEEPS SHALL BE UTILIZED FOR ALL UTILITY CONDUITS AND AS NEEEDED BY THE CONTRACTOR FOR PULLING PURPOSES.
- EMT SHALL BE USED FOR ALL INTERIOR WORK EXCEPT USE GRC WHERE CONDUIT IS SUBJECT TO DAMAGE. STEEL SET SCREW INSULATED THROAT FITTINGS SHALL BE USED IN DRY LOCATIONS. STEEL COMPRESSION INSULATED THROAT FITTINGS SHALL BE USED IN WET OR DAMP LOCATIONS.
- USE FLEXIBLE METAL CONDUIT IN DRY LOCATIONS AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT IN DAMP OR WET LOCATIONS FOR THE FINAL CONNECTION OF MOTORS, TRANSFORMERS AND OTHER EQUIPMENT WITH VIBRATION.
- ALL UNUSED OR SPARE CONDUITS SHALL BE CAPPED AND LABELED (OPPOSITE END LOCATION AND USE) AT BOTH ENDS. PROVIDE WITH A PULL STRING.
- ALL CONDUIT AND CABLE SUPPORTS SHALL BE LISTED AND LABELED FOR THEIR INTENDED INSTALLATION. TIE WIRE SHALL NOT BE UTILIZED FOR SUPPORT.
- PROVIDE OUTLET BOXES THAT ARE 4' SQUARE STEEL WITH PLASTER RING SIZED IN ACCORDANCE WITH THE NEC FOR DRY LOCATIONS. USE MINIMUM 1 1/2" DEEP BOXES. COORDINATE THE APPROPRIATE RING TYPE WITH THE DEVICE OR FIXTURE TO BE INSTALLED.
- PROVIDE OUTLET BOXES THAT ARE CAST ALUMINUM WITH THREADED HUBS FOR EXPOSED DAMP OR WET LOCATIONS.
- USE NEMA 1 RATED BOXES FOR PULL BOXES IN DRY LOCATIONS. USE NEMA 3R RATED BOXES FOR ALL EXTERIOR ABOVE GROUND PULL BOXES. USE STAINLESS STEEL OR PVC BOXES IF EXPOSED TO CORROSIVE ENVIRONMENT
- EXTERIOR IN GROUND BOXES SHALL BE NEMA 6 RATED FOR UNDERWATER SUBMERSION. PROVIDE APPROPRIATE CONCRETE RING AND COVER OVER NEMA 6 BOXES FOR ACCESS AND MECHANICAL PROTECTION. PROVIDE TRAFFIC RATED COVERS FOR CONCRETE RINGS IN ALL AREAS.
- FLOOR BOXES FOR SLAB ON GRADE SHALL BE PVC WITH BRASS COVERS AND RINGS. FLOOR BOXES IN ALL OTHER RATED FLOORS SHALL BE DEEP CAST STEEL WITH BRASS COVERS AND RINGS. UTILIZE FLOOR THRU BOXES WITH BRASS COVERS FOR USE IN EXISTING FIRE RATED FLOORS.
- COORDINATE ALL POWER AND SYSTEM DEVICE BOX LOCATIONS SO THAT THEY ARE LOCATED AT THE SAME HEIGHT WHEN LOCATED ADJACENT TO EACH OTHER.
- THIS CONTRACTOR SHALL GET FINAL APPROVAL FROM THE ARCHITECT FOR THE LOCATIONS OF ALL EXTERIOR LIGHT FIXTURES, POWER OUTLETS, AND SYSTEM DEVICES PRIOR TO THE INSTALLATION OF BOXES AND CONDUIT.
- ITEMS LOCATED IN TILE SURFACES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE DIMENSIONS GIVEN AND SHALL BE HORIZONTALLY AND VERTICALLY CENTERED AND ALIGNED WITH THE TILE JOINTS.
- LOCATE CEILING MOUNTED ITEMS AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS. WHERE ITEMS ARE NOT SHOWN ON THE REFLECTED CEILING PLAN, CONSULT THE ARCHITECT AND LOCATE ACCORDINGLY.
- WHERE INSTALLATION ABOVE COUNTER IS INDICATED, INSTALL ITEM 1" FROM THE BOTTOM OF THE BOX OR ITEM TO THE TOP OF THE COUNTER (OR BACKSPLASH IF SO EQUIPPED).
- INSTALL FIXTURE BOXES ABOVE DOORS A MINIMUM OF 1" FROM THE BOTTOM OF THE BOX OR FIXTURE TO THE TOP OF THE DOOR FRAME. PRIOR TO BOX INSTALLATION, VERIFY THAT THERE IS SUFFICIENT WALL SPACE ABOVE THE DOOR IS AVAILABLE FOR THE ITEM TO BE INSTALLED.
- INSTALL LIGHTING FIXTURE BOXES SHOWN WALL MOUNTED ABOVE MIRRORS CENTERED WITH THE MIRROR AND 1" FROM THE BOTTOM OF THE BOX OR FIXTURE TO THE TOP OF THE MIRROR.
- THE CONTRACTOR SHALL VERIFY THE EXACT DIRECTION OF ALL DOOR SWINGS PRIOR TO THE ROUGH IN OF BOXES MOUNTED IN WALLS.

SECTION 26 05 53 – IDENTIFICATION FOR ELECTRICAL SYSTEMS

- PROVIDE ENGRAVED LABELS FOR ALL LOADCENTERS, PANELBOARDS, DISTRIBUTION PANELBOARDS, SWITCHBOARDS, SWITCHBOARD/DISTRIBUTION PANEL MOUNTED CIRCUIT BREAKERS, DISCONNECT SWITCHES AND TRANSFORMERS THAT IDENTIFY THE ITEM OR LOAD SERVED, VOLTAGE, AMPERAGE AND WHERE IT ORIGINATES. SCREWS SHALL BE USED TO ATTACH THE LABELS (DO NOT USE TAPE OR ADHESIVE). FIRST LINE SHALL HAVE WHITE 3/8" LETTERS AND ALL OTHER LINES SHALL BE 1/4" LETTERS. LABELS SHALL BE BLACK FOR NORMAL POWER AND RED FOR EMERGENCY POWER.
- TYPED CIRCUIT DIRECTORIES SHALL BE PROVIDED FOR EACH LOADCENTER OR PANELBOARD INDICATING THE LOAD SERVED AND ROOM IDENTIFICATION.
- LABEL EACH JUNCTION BOX WITH INDELIBLE MARKER AS TO THE SYSTEM WITHIN OR CIRCUIT NUMBERS CONTAINED WITHIN.
- POWER CONDUCTORS SHALL BE LABELED WITH VINYL OR VINYL-CLOTH, SELF ADHESIVE, WRAPAROUND TYPE LABELS WITH PREPRINTED NUMBERS AND LETTERS TO INDICATE THE PANEL AND CIRCUIT NUMBER OF EACH CONDUCTOR.
- PERMANENT, BRIGHT COLORED, CONTINUOUS PRINTED VINYL UNDERGROUND WARNING TAPE WITH PRINTED LEGEND THAT INDICATES THE TYPE OF UNDERGROUND LINE SHALL BE INSTALLED OVER ALL UNDERGROUND CONDUITS.
- GROUNDING CONDUCTORS #6 AWG AND SMALLER SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OUTER FINISH FOR 240 OR 208 V SYSTEMS AND SHALL BE IDENTIFIED BY A CONTINUOUS GRAY OUTER FINISH FOR 480V SYSTEMS. THIS IDENTIFICATION SHALL BE PERMANENTLY POSTED AT EACH BRANCH CIRCUIT PANELBOARD OR DISTRIBUTION EQUIPMENT.
- GROUNDING CONDUCTORS LARGER THAN #6 AWG SHALL BE IDENTIFIED AT THE TIME OF INSTALLATION BY A DISTINCTIVE WHITE MARKING AT ITS TERMINATION FOR 240v OR 208v SYSTEMS AND SHALL BE IDENTIFIED BY A DISTINCTIVE GRAY MARKING AT ITS TERMINATION FOR 480V SYSTEMS. THIS MARKING SHALL ENIRCLE THE CONDUCTOR OR INSULATION. THE FOLLOWING COLOR CODING SHALL BE UTILIZED FOR ALL CURRENT CARRYING CONDUCTORS. CONTINUOUS COLOR CODED INSULATION SHALL BE BLACK, RED, BLUE FOR 240V OR 208 V SYSTEMS AND BROWN, ORANGE, YELLOW FOR 480V SYSTEMS. 1" WIDE COLORED TAPE ENCIRCLING THE CONDUCTOR EVERY 2" FOR THE ENTIRE EXPOSED CONDUCTOR MAY BE UTILIZED FOR COLOR CODING CONDUCTORS LARGER THAN #6 AT EACH ACCESSIBLE POINT AND AT EACH TERMINATION POINT IN LIEU OF CONTINUOUS COLOR CODING.
- PROVIDE ARC FLASH LABELING OF ALL ELECTRICAL PANELS, SWITCHGEAR, TRANSFORMERS, DISCONNECTS, ENCLOSED CIRCUIT BREAKERS, CONTROL PANELS, AND MOTOR CONTROLLERS IN ACCORDANCE WITH NFPA 70 110.16. ARC FLASH CALCULATIONS REQUIRED FOR THE LABEL SHALL BE PROVIDED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA AS PART OF THIS CONTRACT. LABEL SHALL INCLUDE ALL INFORMATION AS REQUIRED BY THE MOST CURRENT VERSION OF NFPA 70E.

SECTION 26 27 26 – WIRING DEVICES

- THE COLOR OF WIRING DEVICES SHALL BE SELECTED BY THE ARCHITECT FROM IVORY, WHITE, BLACK, BROWN, OR GRAY.
- LIGHT SWITCHES SHALL BE 20A, 120/277V. SPECIFICATION GRADE, TOGGLE. PROVIDE SINGLE POLE, DOUBLE POLE, 3 WAY, OR 4 WAY AS INDICATED.
- GENERAL USE RECEPTACLES SHALL BE 20A, 120V, SPECIFICATION GRADE, HEAVY DUTY, N5-20R.
- GROUND FAULT INTERRUPTING RECEPTACLES SHALL BE 20A, 120V, HEAVY DUTY, SPECIFICATION GRADE, N5-20R.
- PROVIDE HIGH IMPACT THERMOPLASTIC 1MM THICK WALL PLATES FOR ALL DEVICES. PROVIDE A SINGLE PLATE FOR MULTIPLE GANG MOUNTED DEVICES.
- IN WET LOCATIONS PROVIDE METALLIC SPRING LOADED LIFT COVERS LISTED AND LABELED FOR USE IN WET LOCATIONS WHILE IN USE.
- ALL RECEPTACLES AND SWITCHES SHALL BE GROUND BY MEANS OF A GROUND WIRE FROM DEVICE GROUND SCREW TO OUTLET BOX SCREW AND BRANCH CIRCUIT GROUND CONDUCTOR. STRAP ALONE WILL NOT CONSTITUTE AN ACCEPTABLE GROUND.
- UNLESS OTHERWISE INDICATED, MOUNT FLUSH, WITH LONG DIMENSION VERTICAL AND WITH GROUNDING TERMINAL OF RECEPTACLES ON TOP. GROUP ADJACENT SWITCHES OR RECEPTACLES UNDER MULTIGANG WALL PLATES. PROVIDE PROPER NEC BARRIERS IN BOXES WHICH SERVE DEVICES FOR BOTH THE NORMAL AND EMERGENCY SYSTEMS.
- AT EACH RECEPTACLE "IN" AND "OUT" PHASE AND NEUTRAL CONDUCTORS SHALL HAVE AN ADDITIONAL CONDUCTOR FOR CONNECTION TO DEVICE. THE PRACTICE OF "LOOPING" CONDUCTORS THROUGH RECEPTACLE BOXES SHALL NOT BE ACCEPTABLE.

SECTION 26 51 00 – LIGHTING FIXTURES

- PROVIDE ALL FIXTURES AS INDICATED IN THE FIXTURE SCHEDULE INCLUDING MATCHING LAMP(S) FOR EACH FIXTURE. ALL FIXTURES MUST BE UL LABELED AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURES.
- ALL FLOURESCENT LIGHTING BALLAST SHALL BE ELECTRONIC, LESS THAN 20% HARMONIC DISTORTION, SOUND RATING A, AND BE WIRED TO MAINTAIN FULL LIGHT OUTPUT ON SURVIVING LAMPS IF ONE LAMP FAILS.
- PROVIDE DIMMING BALLAST TO MATCH THE DIMMER SWITCH TO BE INSTALLED WHEN REQUIRED FOR LOW VOLTAGE AND FLOURESCENT LIGHTING.
- ALL FLOURESCENT LAMPS SHALL HAVE HIGH COLOR RENDERING (85 CRI) AND PROVIDE A COLOR TEMPERATURE OF 4100K UNLESS OTHERWISE NOTED.
- EXIT SIGNS SHALL BE INTERNALLY LIGHTED BY LED WITH A 70,000 HOUR MINIMUM LAMP LIFE AND BE SELF POWERED BY BATTERY TO REMAIN LIGHTED FOR 90MIN DURATION UPON LOSS OF POWER. BATTERY SHALL BE WARRANTED FOR A PERIOD OF NOT LESS THAN 5 YEARS.
- ALL EMERGENCY FIXTURES SHALL PROVIDE BATTERY BACK-UP FOR 90 MIN UPON LOSS OF POWER. PROVIDE 1100 LUMEN EMERGENCY BATTERY PACKS FOR 90 MIN BACK UP OF FIXTURES AS INDICATED ON THE PLANS.
- PROVIDE TUBE GUARDS AROUND ALL EXPOSED TUBE (NO LENS) FIXTURES.
- PROVIDE FIXTURE SUPPORTS TO ALLOW FOR A REDUNDANT SUPPORT (ALLOW FOR FAILURE OF ONE SUPPORT POINT) FOR ALL FIXTURES. PROVIDE APPROPRIATE SLOPED CEILING ADAPTERS FOR SLOPED CEILINGS.
- COORDINATE THE CEILING TRIM TYPE WITH THE ACTUAL CEILING TO BE INSTALLED.
- PROVIDE FOUNDATION FOR ALL SITE LIGHTING FIXTURES AND POLES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- ALL EXTERIOR MOUNTED FIXTURES, POLES, AND BASES SHALL BE DESIGNED AND MANUFACTURED TO WITHSTAND 150MPH WIND.



South Florida Office: 13680 NW 5th Street
Suite 200, Sunrise, Florida - 33325
954-436-7000
www.millerlegg.com

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinmakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificae.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY
SIGNED BY
MANUEL E. HERNANDEZ ON
THE DATE ADJACENT TO THE
SEAL.

PRINTED COPIES OF THIS
DOCUMENT ARE NOT
CONSIDERED SIGNED AND
SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY
ELECTRONIC COPIES.

| NO. | REVISIONS |
|-----|-----------|
| | |
| | |
| | |
| | |
| | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

ELECTRICAL SPECIFICATIONS

SHEET NUMBER:

E002

SGM
ENGINEERING

5301 WATERFORD
DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #:
2024-115

WWW.SGMENGINEERING.COM
COPYRIGHT © 2024 SGM ENGINEERING, INC.

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW, 74th Street
Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY
SIGNED BY
MANUEL E. HERNANDEZ ON
THE DATE ADJACENT TO THE
SEAL.

PRINTED COPIES OF THIS
DOCUMENT ARE NOT
CONSIDERED SIGNED AND
SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY
ELECTRONIC COPIES.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

POWER PLAN

SHEET NUMBER:

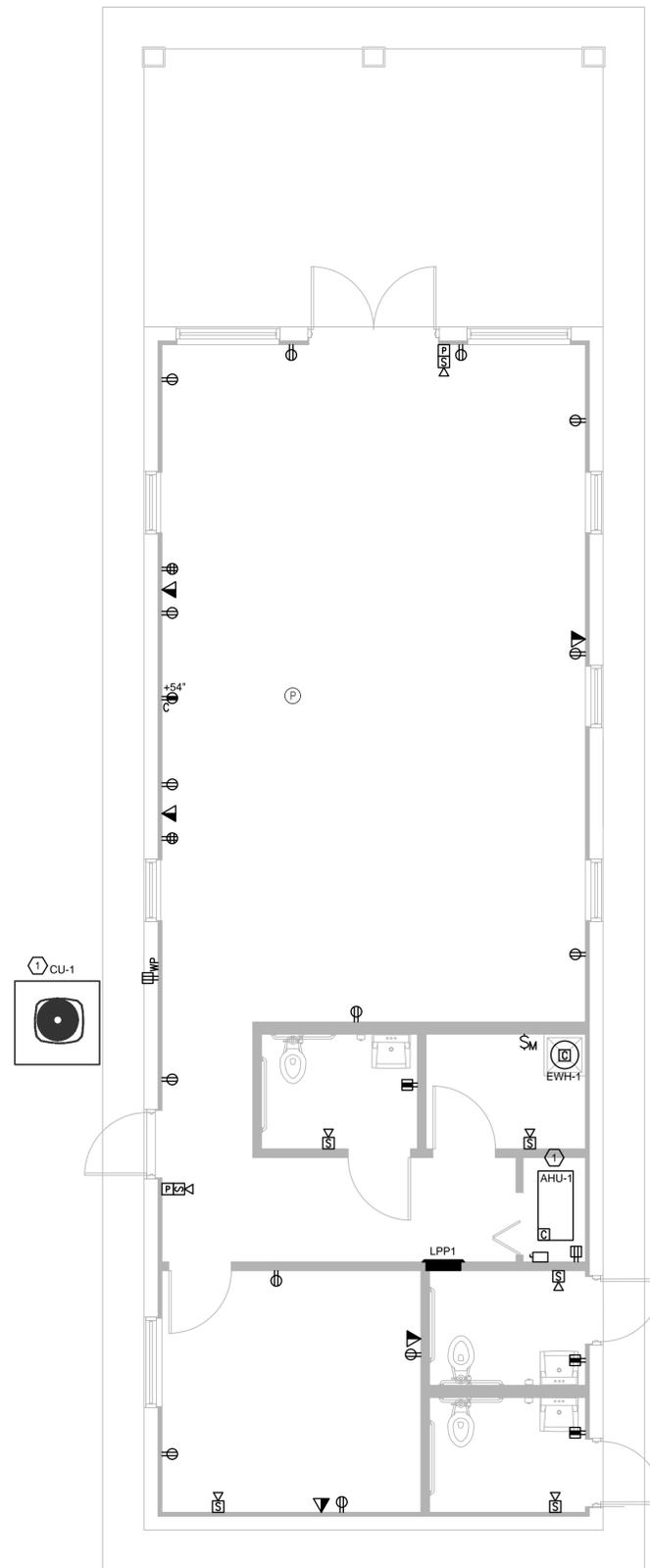
E301

GENERAL NOTES:

- REFER TO SYMBOL LEGEND ON SHEET E-0.01.
- REFER TO BOOK SPECIFICATIONS.
- REFER TO ARCHITECTURAL INTERIOR ELEVATIONS TO COORDINATE EXACT PLACEMENT OF ALL DEVICES, EQUIPMENT, FIXTURES, SWITCHES AND OUTLETS.
- IF CIRCUITS ARE COMBINED AND RUN AS MULTI-WIRE BRANCH CIRCUITS SHARING A COMMON NEUTRAL, THEN EACH UNGROUNDED CONDUCTOR MUST BE DISCONNECTED SIMULTANEOUSLY BY A COMMON TRIP CIRCUIT BREAKER. CONTRACTOR MAY, AT THEIR OPTION, PROVIDE EITHER COMMON TRIP MULTI-POLE CIRCUIT BREAKERS OR UTILIZE MANUFACTURERS LISTED HANDLE TIES IN ORDER TO PROVIDE THE SIMULTANEOUS TRIP. THESE DEVICES ARE NOT SHOWN IN THE PANEL SCHEDULES AND MUST BE PROVIDED BY THIS SCOPE OF WORK. NO MORE THAN 3 CIRCUITS MAY BE COMBINED IN A SINGLE RACEWAY WITHOUT PRIOR APPROVAL BY THE ENGINEER.
- CONTRACTOR TO SEGREGATE ALL GROUNDS AND NEUTRALS ONTO THE CORRECT BUS.
- CONTRACTOR TO CONFIRM THAT THERE IS A GROUND CONDUCTOR FOR EACH LOAD OR THAT THE CONDUIT PATH GROUND IS CONTINUOUS FOR EACH LOAD.
- ENSURE ALL WIRES ARE TAGGED PER IDENTIFICATION SPECIFICATION.
- ENSURE NEW PANEL HEIGHT DOES NOT RESULT IN EXCEEDING 6'-7" TO HIGHEST BREAKER.

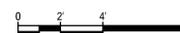
PLAN KEY NOTES:

- NEW MECHANICAL EQUIPMENT TO BE PROVIDED. PROVIDE NEW FEEDER (CONDUIT AND WIRE), AND EXTEND TO NEW UNIT AS NECESSARY. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E701 FOR ADDITIONAL INFORMATION.



POWER PLAN

SCALE: 1/4"=1'-0"



SGM
ENGINEERING

5301 WATERFORD
DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #:
2024-115

WWW.SGMENGINEERING.COM
COPYRIGHT © 2024 SGM ENGINEERING, INC.

EQUIPMENT FEEDER SCHEDULE:

* WIRE SIZES ARE BASED ON NFPA 70 TABLE 310.15(B)(16) 60 DEGREE CUI COLUMN FOR SIZES OF 100A OR LESS, ALL OTHERS BASED ON 75 DEGREE COLUMN.
** DISTANCE SHOWN FOR VOLTAGE DROP CALCULATION ONLY. ACTUAL DISTANCE MAY VARY DEPENDENT ON ROUTING.

| EQUIPMENT DESCRIPTION | VOLTS | PH | NEUT Y/N | MOTOR (LARGEST) | | ADDITIONAL MOTORS | | HEAT STRIPS | | MSC AMPS | TOTAL AMPS | MIN CKT A MCA | PKL C.B. SIZE | DISCONNECT SIZE | OCPD SIZE | STARTER SIZE | NEMA TYPE | WIRE PER WIRE | NEUT WIRE | GND WIRE | # OF RUNS | CONDUIT SIZE | APPROX. DIST.** FT | VOLT DROP % | NOTES |
|-----------------------|-------|----|----------|-----------------|-----|-------------------|-----|-------------|------|----------|------------|---------------|---------------|-----------------|-----------|--------------|-----------|---------------|-----------|----------|-----------|--------------|--------------------|-------------|-------|
| | | | | H.P. | FLA | H.P. | FLA | KW | AMPS | | | | | | | | | | | | | | | | |
| AHU-1 | 208 | 1 | Y | | | | | | | | 0.0 | 15 | | VFD | 1 | | | #12 | #12 | #12 | 1 | 3/4" | | 0.00% | |
| CU-1 | 208 | 1 | Y | | | | | | | | 0.0 | 15 | | | | | | #12 | #12 | #12 | 1 | 3/4" | | 0.00% | |
| EF-1 | 120 | 1 | Y | | | | | | | | 0.0 | 15 | | | | | | #12 | #12 | #12 | 1 | 3/4" | | 0.00% | |
| EF-2 | 120 | 1 | Y | | | | | | | | 0.0 | 15 | | | | | | #12 | #12 | #12 | 1 | 3/4" | | 0.00% | |
| EF-3 | 120 | 1 | Y | | | | | | | | 0.0 | 15 | | | | | | #12 | #12 | #12 | 1 | 3/4" | | 0.00% | |
| EF-4 | 120 | 1 | Y | | | | | | | | 0.0 | 15 | | | | | | #12 | #12 | #12 | 1 | 3/4" | | 0.00% | |
| EW-1 | 120 | 1 | Y | | | | | 1.5 | 12.5 | | 12.5 | 15.6 | 20 | MMS | | | 1 | #12 | #12 | #12 | 1 | 3/4" | | 0.00% | |

GENERAL NOTES:
 (1) - PROVIDE DISC. SW. AT ALL PIECES OF EQUIPMENT NOT WITHIN SIGHT OF THE OVERCURRENT PROTECTIVE DEVICE.
 (2) - FUSES SHOWN FOR REFERENCE ONLY. PROVIDE FUSES AS RECOMMENDED BY EQUIP. MANUF.
 (3) - PROVIDE NEMA OUTDOOR RATED ENCLOSURES FOR ALL DISC. SW'S MOUNTED OUTDOORS.
 (4) - COORDINATE STARTER TYPE WITH MECHANICAL EQUIPMENT.
 (5) - COORDINATE ALL OVERCURRENT PROTECTIVE DEVICES WITH THE ACTUAL EQUIPMENT BEING SUPPLIED. NOTIFY THE ENGINEER IF DISCREPANCIES ARE FOUND.
 (6) - DISCONNECTS BETWEEN MOTORS AND VFD'S SHALL BE PROVIDED WITH AN AUXILIARY CONTACT AND WIRED TO THE E-STOP OF THE VFD.

NOTES:
 (a)

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mcengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS

4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY SIGNED BY MANUEL E. HERNANDEZ ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY:
REVIEWED BY:
DESIGNED BY:

SHEET TITLE:

PANEL SCHEDULES

SHEET NUMBER:

E701

SGM ENGINEERING

5301 WATERFORD DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #: 2024-115
WWW.SGMENGINEERING.COM
COPYRIGHT © 2024 SGM ENGINEERING, INC.

CONSULTANTS:
ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com
MEP:
 SGM Engineering
 5301 Waterford District Drive, Suite 750
 Miami, Florida 33026
 (954) 421-1944
 www.sgmengineering.com
STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (561) 421-7671
 www.mceengineers.com
SUSTAINABILITY CONSULTANT:
 SOCOETEC Consulting, Inc.
 1177 Clare Avenue, Suite 370
 West Palm Beach, Florida 33401
 (561) 801-7574
 www.spinnaekergroup.com
GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8400
 www.pacificaes.com

CLIENT:

 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:
OAK TRAILS PARK IMPROVEMENTS
 4230 NW, 74th Street
 Coconut Creek, FL 33073

SEAL:
 THIS ITEM HAS BEEN DIGITALLY SIGNED BY MANUEL E. HERNANDEZ ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

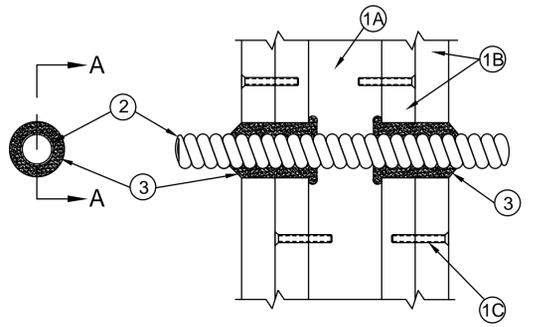
SUBMITTAL:
30% SCHEMATIC DESIGN
 DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY:
 REVIEWED BY:
 DESIGNED BY:

SHEET TITLE:
ELECTRICAL DETAILS
SHEET NUMBER:
E801

SGM ENGINEERING
 5301 WATERFORD DISTRICT DR., SUITE 750
 MIAMI, FL 33126
 TEL: 954-421-1944
 FAX: 954-421-1924
 CA-00006208
 SGM #: 2024-115
 WWW.SGMENGINEERING.COM
 COPYRIGHT © 2024 SGM ENGINEERING, INC.

System No. W-L-1017
 June 15, 2005
 F RATINGS-- 1 AND 2 HR (SEE ITEM 3)
 T RATING-- 0 HR
 L RATING AT AMBIENT-- LESS THAN 1 CFM/sq ft
 L RATING AT 400 F-- LESS THAN 1 CFM/sq ft

1. Wall Assembly - The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nominal 2 by 4 in. lumber spaced 16 in. OC with nominal 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide by 1-3/8 in. deep channels spaced max 24 in. OC.
B. Gypsum Board - Nom 5/8 in. thick, 4 ft. wide with square or tapered edges. The gypsum wallboard type, number of layers and sheet orientation shall be as specified in the individual Wall and Partition Design. Diam of circular through opening cut through gypsum wallboard on each side of wall assembly shall be min 0 in. (point contact) to max 1 in. larger than outside diam of flexible metal conduit (Item 2) installed in through opening. Side edge of circular opening to be min 3 in. from nearest stud in wall cavity.
C. Fasteners - When wood stud framing is employed, gypsum wallboard attached to studs with cement coated nails as specified in the individual Wall or Partition Design. When steel channel stud framing is employed, gypsum wallboard attached to studs with Type S self-drilling, self-tapping bugle-head steel screws as specified in the individual Wall or Partition Design.
2. Through Penetrating Product - Flexible Metal Conduit - Nom 4 in. diam (or smaller) aluminum or steel Flexible Metal Conduit. Max one flexible metal conduit to be installed near center of circular opening in gypsum wallboard. Flexible metal conduit to be rigidly supported on both sides of wall assembly.
AFC CABLE SYSTEMS INC
3. Fill Void or Cavity Material - Caulk - Caulk fill material forced into annular space around entire circumference of through penetrating product to completely fill opening in gypsum wallboard layers on each side of the wall assembly. A min 5/8 in. thickness of caulk is required for the 1 hr F Rating. A min 1-1/4 in. thickness of caulk is required for the 2 hr F Rating.
MINNESOTA MINING & MFG CO - CP 25WB+
 *Bearing the UL Classification Marking

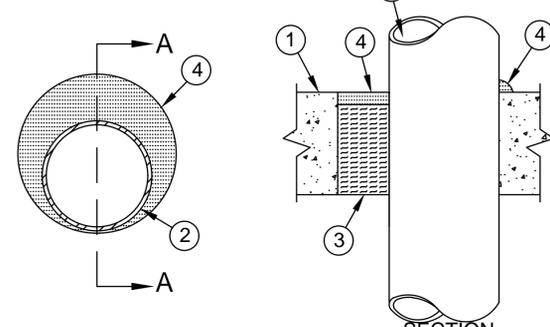


SECTION A-A

MC CABLE THRU GYP BOARD PENETRATION DETAIL
 No Scale

System No. C-AJ-1058
 May 09, 2013
 ANSULUL479 (ASTM E814)
 F Rating 3 Hr
 T Rating 0 Hr
 L RATING AT AMBIENT LESS THAN 1 CFM/SQ FT
 L RATING AT 400 F LESS THAN 1 CFM/SQ FT
 W RATING CLASS 1 (SEE ITEM 4)

System No. C-AJ-1058
 May 09, 2013
 CANULUL S115
 F Rating 3 Hr
 FT Rating 0 Hr
 FH Rating 3 Hr
 FTH Rating 0 Hr
 L RATING AT AMBIENT LESS THAN 1 CFM/SQ FT
 L RATING AT 400 F LESS THAN 1 CFM/SQ FT



SECTION A-A

EMT THRU CONCRETE PENETRATION DETAIL
 No Scale

System No. C-AJ-1044
 June 15, 2005
 F Ratings - 2, 3, and 4 Hr (See Items 2A and 4)
 T Rating - 0 Hr
 L Rating At 400 F - Less than 1 CFM/sq ft
 W Rating - Class 1 (See Item 4)

1. Floor or Wall Assembly - Lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Except as noted in table under Item 4, min thickness of solid concrete floor or wall assembly is 4-1/2 in. (114 mm). Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow core Precast Concrete Units. When floor is constructed of hollow core precast concrete units, packing material (Item 3) and caulk (Item 4) to be installed symmetrically on both sides of floor, flush with floor surface. Wall assembly may also be constructed of any UL Classified Concrete Blocks. Max diam of opening in solid lightweight or normal weight concrete, Floor is 8 in. (813 mm), Max diam of opening in floor constructed of hollow-core precast concrete units is 7 in. (178 mm).
 See Concrete Blocks (CAZT) and Precast Concrete Units (CFTV) categories in the Fire Resistance Directory for names of manufacturers.
1A. Steel Sleeve (Optional, Not Shown) - Max 15 in. (381 mm) ID (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor or wall assembly. Sleeve may extend a max of 2 1/2 in. (63.5 mm) above and 2 1/2 in. (63.5 mm) below top and bottom surfaces of floor or wall assembly. Sleeve may extend a max of 1/2 in. (12.7 mm) beyond either surface of floor or wall.
2. Through Penetrants - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the freestop system. Max annular space between pipe, conduit or tubing and edge of through opening or sleeve is dependent on the penetrants shown in Item 4. Min annular space between pipe or conduit and edge of through opening is 0 in. (0 mm) (point contact). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
A. Steel Pipe - Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. Iron Pipe - Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
C. Conduit - Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.
D. Conduit - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
E. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
F. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
3. Packing Material - Polyethylene backed rock or nom 1 in. (25 mm) thickness of lightly-packed mineral wool batt or glass fiber insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of caulk fill material (Item 4).
4. Fill Void or Cavity Material - Caulk or Sealant - Applied to fill the annular space flush with top surface of floor. In wall assemblies, required caulk thickness to be installed symmetrically on both sides of wall, flush with wall surface. At point contact location between penetrant and sleeve or between penetrant and concrete, a min 1/4 in. (6 mm) diam bead of caulk shall be applied at top surface of floor and at both surfaces of wall. The hourly F Ratings and the min required caulk thicknesses are dependent upon a number of parameters, as shown in the following table:

| Floor or Wall Thickness In. (mm) | Nom Pipe/Tube or Conduit Diam. In. (mm) | Max Annular Space In. (mm) | Min Caulk Thick. In. (mm) | Rating Hr |
|----------------------------------|---|----------------------------|---------------------------|-----------|
| 2-1/2 (64) | 1/2-12 (13-305) | 1-3/8 (35) | 1/2 (13) | 2 |
| 2-1/2 (64) | 1/2-12 (13-305) | 3-1/4 (83) | 1 (25) | 2 |
| 4-1/2 (114) | 1/2-6 (13-152) | 1-3/8 (35) | 1/4 (6) | 2 |
| 4-1/2 (114) | 1/2-12 (13-305) | 1-1/4 (32) | 1/2 (13) | 3 |
| 4-1/2 (114) | 1/2-20 (13-508) | 2 (51) | 1 (25) | 3 |
| 4-1/2 (114) | 1/2-20 (13-508) | 2 (51) | 1 (25) | 3 |
| 4-1/2 (114) | 1/2-12 (13-305) | 3-1/4 (83) | 1 (25) | 3 |
| 4-1/2 (114) | 22-30 (558-762) | 2 (51) | 2 (51) | 3 |
| 5-1/2 (140) | 1/2-6 (13-152) | 1-3/8 (35) | 1 (25) (0) | 4 |

(a) Min 2 in. (51 mm) thickness of mineral wool batt insulation required in annular space.
(b) Min 1 in. (25 mm) thickness of caulk to be installed flush with each surface of floor or wall assembly.
(c) Min 1 in. (25 mm) thickness of caulk to be installed flush with top surface of floor or wall assembly.
3M COMPANY - CP 25WB+ caulk or FB-3000 WT sealant. (Note: W Rating applies only when FB-3000 WT sealant is used.)
 *Bearing the UL Classification Marking

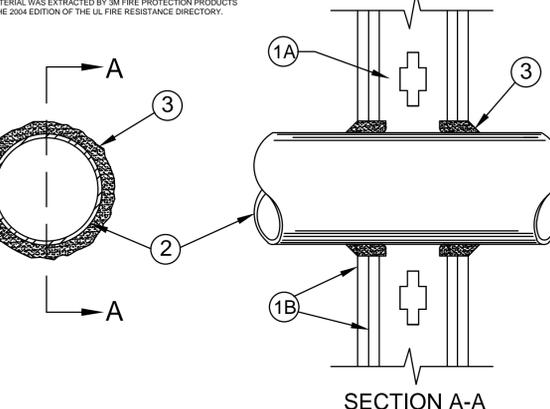
EMT THRU CONCRETE PENETRATION DETAIL
 No Scale

System No. W-L-1001
 June 15, 2005
 F Ratings - 1, 2, 3 and 4 Hr (See Items 2 and 3)
 T Ratings - 0, 1, 2, 3, and 4 Hr (See Item 3)
 L Rating At Ambient - less than 1 CFM/sq ft
 L Rating At 400 F - less than 1 CFM/sq ft

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
A. Studs - Wall framing may consist of either wood studs (nom 2 hr fire rated assemblies) or steel channel studs. Wood studs to consist of nominal 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nominal 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
B. Gypsum Board - Nom 1/2 in. (12.7 mm) thick with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening 26 in. (660 mm).
2. Through Penetrant - One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the freestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
A. Steel Pipe - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
B. Iron Pipe - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
C. Conduit - Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
D. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
E. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
F. Through Penetrating Product - Flexible Metal Pipe - The following types of flexible metal pipe may be used:
1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
OMEGA FLEX INC
2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
TITEXLEX CORP A BUNDY CO
3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
WARD MFG INC
3. Fill Void or Cavity Material - Caulk or Sealant - Min 5/8, 1-1/4, 1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively applied within annular space. Min 1/4 in. (6 mm) diam bead of caulk applied to top surface of floor and at both surfaces of wall. The hourly F Rating of the freestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below.
 The hourly F Rating of the freestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

| Max Pipe or Conduit Diam. In. (mm) | F Rating Hr | T Rating Hr |
|------------------------------------|-------------|-------------|
| 1 (25) | 1 or 2 | 0 or 2 |
| 1 (25) | 3 or 4 | 3 or 4 |
| 4 (102) | 2 or 2 | 0 |
| 6 (152) | 3 or 4 | 0 |
| 12 (305) | 1 or 2 | 0 |

***When copper pipe is used, T Rating is 0 Hr.**
3M COMPANY - CP 25WB+ caulk or FB-3000 WT sealant.
 *Bearing the UL Classification Marking

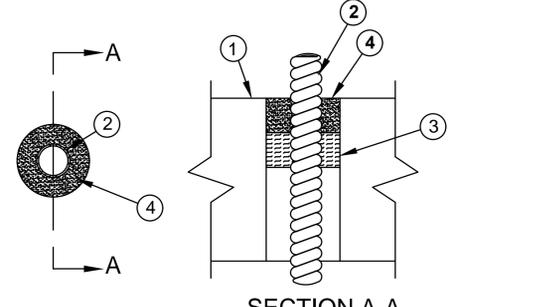


SECTION A-A

EMT THRU GYP BOARD PENETRATION DETAIL
 No Scale

System No. C-AJ-1052
 (FORMERLY SYSTEM NO. 337)
 F RATING--2 HR
 T RATING--0 HR

1. Floor or Wall Assembly - Min 4-1/2 in. thick lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks. Diam of circular through opening in floor or wall assembly to be 3/4 in. to 1-1/2 in. larger than diam of flexible metal conduit (Item 2) installed in through opening. Max diam of opening is 6 in.
 See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrating Product - Nom 4 in. diam (or smaller) aluminum or steel Flexible Metal Conduit. Max one flexible metal conduit to be installed near center of circular through opening in floor or wall assembly. Flexible metal conduit to be rigidly supported on both sides of floor or wall assembly.
AFC CABLE SYSTEMS INC
3. Packing Material - Nom 1 in. thickness of ceramic (alumina silica) fiber blanket or mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed min 1 in. from top surface of floor or from both surfaces of wall.
4. Fill Void or Cavity Material - Caulk - Applied to fill the annular space around the flexible metal conduit. In floors, a min 1 in. depth of fill material to be installed flush with top surface of floor. In walls, a min 1 in. depth of fill material to be installed flush with wall surface on both sides of wall assembly.
MINNESOTA MINING & MFG CO - CP 25WB+
 *Bearing the UL Classification Marking
 **Please refer to the letter from UL on page 11.

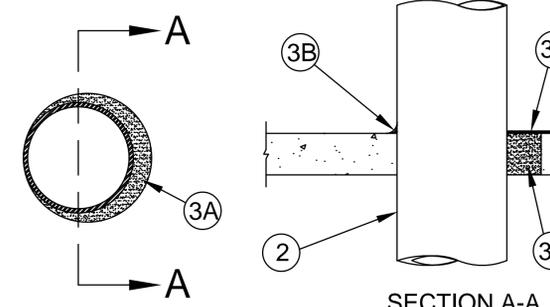


SECTION A-A

MC CABLE THRU CONCRETE PENETRATION DETAIL
 No Scale

System No. C-AJ-1275
 August 26, 2004
 F Rating - 2 Hr
 T Rating - 0 Hr

1. Floor or Wall Assembly - Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks. Max diam of opening is 8 in.
 See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrant - One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the freestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min 0 in. (point contact) to max 1-7/8 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
A. Steel Pipe - Nom 6 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. Iron Pipe - Nom 6 in. diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 6 in. diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
C. Conduit - Nom 6 in. diam (or smaller) rigid steel conduit or nom 4 in. diam (or smaller) steel electrical metallic tubing.
D. Copper Tubing - Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
E. Copper Pipe - Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
3. Freestop System - The details of the freestop system shall be as follows:
A. Packing Material - Min 4-1/2 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be flush with top surface of floor or from both surfaces of wall.
B. Fill Void or Cavity Material - Min 1/8 in. dry (1/8 in. wet) thickness of fill material sprayed or brushed into annular space on top surface of floor or both surfaces of wall to completely cover mineral wool and overlap a min 1/4 in. onto penetrant and top surface of floor or both surfaces of wall.
3M COMPANY - FireDam Spray 100
 *Bearing the UL Classification Marking



SECTION A-A

EMT THRU CONCRETE PENETRATION DETAIL
 No Scale

| PLUMBING SYSTEM LEGEND | | |
|------------------------|-----------------------------------|--------------|
| SYSTEM LINE-TYPE | DESCRIPTION | ABBREVIATION |
| | SANITARY SEWER PIPING ABOVE GRADE | SS |
| | SANITARY SEWER PIPING BELOW GRADE | SS |
| | VENT PIPING | SS |
| | CONDENSATE DRAIN PIPING | CD |
| | COLD WATER PIPING BELOW GRADE | CW |
| | COLD WATER PIPING | CW |
| | HOT WATER PIPING | HW |

ABBREVIATIONS

| | |
|----------|---------------------------|
| CW | COLD WATER |
| HW | HOT WATER |
| HWR | HOT WATER RETURN |
| DWV | DRAIN, WASTE, AND VENT |
| W | WASTE |
| GR | GREASE WASTE |
| FM | FORCE MAIN |
| COND. | CONDENSATE |
| V | VENT |
| VTR | VENT THRU ROOF |
| CO | CLEANOUT |
| WCO | WALL CLEANOUT |
| FCO | FLOOR CLEANOUT |
| ECO | EXTERIOR CLEANOUT (GRADE) |
| B.V. | BALANCING VALVE |
| AB | ABOVE |
| DN | DOWN |
| CLG | CEILING |
| OH | OVERHEAD |
| MIN. | MINIMUM |
| C.P. | CHROME PLATED |
| S.S. | STAINLESS STEEL |
| SL | SLOPE |
| GA | GAUGE |
| BLDG. | BUILDING |
| CONN. | CONNECTION |
| A.H.A.P. | AS HIGH AS POSSIBLE |
| A.F.F. | ABOVE FINISHED FLOOR |
| B.F.F. | BELOW FINISHED FLOOR |
| F.F.E. | FINISHED FLOOR ELEVATION |
| I.E. | INVERT ELEVATION |
| FD | FLOOR DRAIN |
| AD | AREA DRAIN |
| FS | FLOOR SINK |
| RD | ROOF DRAIN |
| CD | CONDENSATE DRAIN |
| CR | CONDENSATE RECEPTOR |
| HB | HOSE BIBB |

| PLUMBING SYMBOL LEGEND | | |
|------------------------|---|--------------|
| SYMBOL | DESCRIPTION | ABBREVIATION |
| | CHECK VALVE | CV |
| | GATE VALVE | GV |
| | BALL VALVE | BV |
| | SOLENOID VALVE | SV |
| | SHUT-OFF COCK | - |
| | BALANCING VALVES | BV |
| | PRESSURE REGULATING VALVE | PRV |
| | ELBOW TURNED DOWN | DN |
| | ELBOW TURNED UP | UP |
| | TEE TURNED UP | UP |
| | P-TRAP | - |
| | TEE TURNED DOWN | DN |
| | VENT THROUGH ROOF | VTR |
| | UNION | - |
| | PLUG OR WALL CLEAN OUT | CO |
| | FLOOR CLEAN OUT | FCO |
| | EXTERIOR CLEAN OUT | ECO |
| | PRESSURE & TEMPERATURE RELIEF VALVE | T & P |
| | FLOOR DRAIN | FD |
| | PROMENADE DRAIN | AD |
| | FLOOR SINK | FS |
| | ROOF DRAIN | RD |
| | WALL HYDRANT | WH |
| | HOSE BIBB | HB |
| | SHOCK ARRESTER | SA |
| | CIRCULATING PUMP | CP |
| | PRESSURE GAGE | - |
| | THERMOMETER | - |
| | EXPANSION LOOP | - |
| | REDUCED PRESSURE ZONE ASSEMBLY | RPZA |
| | GREASE TRAP | - |
| | WATER METER | WM |
| | FLOW ARROW | - |
| | PLUMBING FIXTURE DESIGNATION | XX-1 |
| | FLOOR SLAB ELEVATION | ELEV |
| | INDICATES RISER/DETAIL NUMBER, SHEET FOUND, AND RISER VIEW, (IF APPLICABLE) | - |

GENERAL PLUMBING NOTES

- REFERENCE THE SPECIFICATIONS FOR MATERIALS AND EQUIPMENT STANDARDS.
- THE INSTALLATION OF THE PLUMBING SYSTEMS AND EQUIPMENT SHALL COMPLY WITH ALL APPLICABLE CODES INCLUDING BUT NOT LIMITED TO THE FLORIDA BUILDING CODE, 8TH EDITION (2023), PLUMBING.
- THE CONTRACTOR SHALL COORDINATE THE INTERRUPTION OF ALL UTILITY SERVICES WITH OWNER'S REPRESENTATIVE. PROVIDE A MINIMUM OF FIVE WORKING DAYS ADVANCE NOTICE (OR PER PLUMBING SPECIFICATIONS) OF SCHEDULED UTILITY DISCONNECTION.
- PLANS ARE NOT COMPLETELY TO SCALE. PIPE ROUTING SHOWN IS SCHEMATIC AND IS NOT INTENDED TO INDICATE EXACT LOCATION OF PIPING AND VALVES. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN PROPER CLEARANCES. COORDINATE WITH ALL TRADES AND OTHER POTENTIAL OBSTRUCTIONS AND ROUTE PIPING TO AVOID INTERFERENCES.
- CONCEAL PIPING ABOVE CEILINGS, WITHIN WALLS OR CHASES EXCEPT IN MECHANICAL ROOMS OR AS SPECIFICALLY NOTED.
- PERFORM FIRESTOPPING UNDER DIVISION 07 SECTION 'FIRESTOPPING', AND AS DETAILED ON THE ARCHITECTURAL DRAWINGS.
- PROVIDE ACCESS PANELS TO ALL VALVES LOCATED WITHIN CHASES OR NON-ACCESSIBLE CEILINGS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES. ALL VALVES SHALL BE ACCESSIBLE AND FOR SYSTEM SERVED.
- REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE LOCATIONS AND MOUNTING HEIGHTS.
- INSTALL CODE REQUIRED FIXED AIR GAPS ON ALL INDIRECT WASTE CONNECTIONS SERVING EQUIPMENT, AND APPLIANCES.
- PROVIDE CLEANOUTS ON ALL SANITARY DRAIN & WASTE, STORM DRAIN, AND CONDENSATE DRAIN PIPING AS INDICATED ON THE DRAWINGS, AND AS REQUIRED BY LOCAL AND STATE CODES. INSTALL CLEANOUTS IN ACCESSIBLE LOCATIONS. COORDINATE TOP OF FLOOR/GRADE CLEANOUT ELEVATION WITH TOP OF FINISHED GRADE.
- INSTALL HOSE BIBBS AT 18" ABOVE FINISHED FLOOR OR FINISHED GRADE.
- ALL FLOOR DRAINS SHALL BE INSTALLED WITH TRAP SEAL PROTECTION DEVICES. REFER TO SCHEDULE. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE INSTALLED WITH GRATES FLUSH TO THE FINISHED FLOOR.
- ALL FLOOR, WALL AND CEILING OPENINGS CREATED BY THE REMOVAL OF EXISTING PLUMBING RELATED ITEMS SHALL BE REPAIRED TO MATCH ANY EXISTING ADJACENT FINISHES AND WALL CONSTRUCTION.
- UNLESS NOTED OTHERWISE, SLOPE ALL SANITARY DWV, STORM DRAIN, AND CONDENSATE DRAIN PIPING 3" PIPE SIZE & LARGER A MINIMUM OF 1/8" PER FT. OF RUN, AND 2-1/2" PIPE SIZE AND SMALLER A MINIMUM 1/4" PER FT. OF RUN. SLOPE VENT PIPING DOWN & BACK TO FIXTURES.
- EACH PLUMBING VENT SHALL TERMINATE NOT LESS THAN 10 FT. FROM OR AT LEAST 3 FT. ABOVE ANY WINDOW, DOOR, OPENING, AIR INTAKE, OR VENT SHAFT.
- PROVIDE WATER HAMMER ARRESTORS AT ALL PLUMBING FIXTURES OR BATTERY OF FIXTURES WITH QUICK-CLOSING VALVES. WATER HAMMER ARRESTORS SHALL BE SIZED PER PDI STANDARDS. AIR CHAMBERS SHALL NOT BE CONSIDERED AN EQUAL TO WATER HAMMER ARRESTORS AND SHALL NOT BE INSTALLED. PROVIDE WATER HAMMER ARRESTORS IN ACCESSIBLE LOCATIONS ABOVE CEILING LEVEL IN FINISHED LOCATIONS; PROVIDE ACCESS PANELS AS REQUIRED FOR ACCESS.
- WATER SERVICE PIPE AND THE BUILDING SEWER SHALL BE SEPARATED BY 5 FEET OF UNDISTURBED OR COMPACTED EARTH. THE REQUIRED SEPARATION DISTANCE PIPE SHALL NOT APPLY WHERE THE BOTTOM OF THE WATER SERVICE PIPE WITHIN 5 FEET OF THE SEWER IS A MINIMUM OF 12 INCHES ABOVE THE TOP OF THE HIGHEST POINT OF THE SEWER AND THE PIPE MATERIALS CONFORM TO THE APPLICABLE PLUMBING CODES.
- UNLESS NOTED OTHERWISE, RUN CW & HW PIPING FULL SIZE THRU LENGTH OF CHASE, AND MAKE CONNECTIONS TO FIXTURES AS INDICATED IN THE PLUMBING FIXTURE SCHEDULE. PROVIDE RIGID SUPPORT AND BLOCKING IN CHASE FOR HEADER AND BRANCH PIPING, AND FOR FLUSH VALVES TO PREVENT ANY MOVEMENT.
- PLUMBING PIPING SHALL NOT BE ROUTED OVER ANY RECORDING STUDIOS, ELECTRICAL ROOMS, OR COMMUNICATIONS ROOMS.
- PROVIDE CALIBRATED BALANCING VALVES WITH THREADED CONNECTIONS IN HOT WATER RETURN PIPING, AND BALANCE SYSTEM FOR PROPER OPERATION. REFER TO CIRCULATION PUMP SCHEDULE.
- COORDINATE THE EXACT LOCATION OF FLOOR DRAINS WITH ARCHITECT PRIOR TO CONSTRUCTION. ALL FLOOR DRAINS SHALL BE INSTALLED WITH TRAP GUARD INSERTS. PLEASE REFER TO DETAIL ON P801.
- PROVIDE ALL NECESSARY VALVES, TRAPS, FLOW CONTROLS, FILTERS, BACKFLOW ASSEMBLIES, FAUCETS, STOPS, TAILPIECES, VACUUM BREAKERS, IF NOT FURNISHED WITH EQUIPMENT.
- CONTRACTORS SHALL ROUGH-IN ALL WASTES AND SUPPLIES TO ALL EQUIPMENT ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND MAKE FINAL CONNECTIONS.
- PROVIDE SUPPLY STOPS ON HOT AND COLD WATER PIPE SUPPLYING ALL FIXTURES AND EQUIPMENT.
- PROVIDE APPROVED CHROME PLATED TYPE VACUUM BREAKERS WHERE REQUIRED BY LOCAL CODES, AND AS INDICATED ON PLANS FOR NEW WORK.
- SUBMIT CORE-DRILL PLAN TO STRUCTURAL ENGINEER AND ARCHITECT FOR REVIEW PRIOR TO STARTING ANY WORK.
- PROVIDE DIELECTRIC UNIONS WHERE CONNECTIONS ARE MADE BETWEEN DISSIMILAR METAL PIPE MATERIALS.
- SEE RISER DIAGRAMS FOR PIPE SIZES AND ROUTING NOT SHOWN ON PLANS.
- METERING AND SITE UTILITY CONNECTIONS SHALL BE PROVIDED ON SITE UTILITY DRAWINGS. ALL SERVICES SHOWN ON THIS SET OF PLANS TERMINATE 5'-0" FROM BUILDING, UNLESS SHOWN OTHERWISE ON DRAWINGS. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO SITE UTILITIES (INC. CLEANOUTS, INCREASES, BACKWATER VALVES, ETC.).
- PRESSURE REDUCING VALVES SHALL BE PROVIDED WHERE THE WATER PRESSURE EXCEEDS 80 PSI AT ANY PLUMBING FIXTURE. WATER VELOCITY SHALL NOT EXCEED 8 FEET PER SECOND.
- COORDINATE EXACT LOCATION OF FLOOR DRAINS AND CONDENSATE RECEPTORS FOR HVAC EQUIPMENT WITH MECHANICAL CONTRACTOR. CONDENSATE PIPING SHALL DISCHARGE INTO STORM SYSTEM.
- DO NOT PENETRATE WALL FOOTINGS WITH PIPING. COORDINATE GENERAL CONTRACTOR TO DROP FOOTINGS AS REQUIRED TO CLEAR PLUMBING SERVICES WHERE ABSOLUTELY NECESSARY. ALL PIPING PENETRATING A BEARING WALL OR FOOTING MUST BE SLEEVED AND LOCATION APPROVED BY STRUCTURAL ENGINEER.
- IF THE INTENT OF THE INFORMATION SHOWN ON THESE DOCUMENTS IS NOT CLEAR, OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUCH MATTERS WILL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER IN WRITING BEFORE THE SUBMISSION OF BIDS, AND THE ARCHITECT/ENGINEER SHALL MAKE CORRECTION OF EXPLANATION IN WRITING.
- WHERE THE CONTRACTOR PROPOSES ALTERNATE SOLUTIONS, DIFFERENT ROUTING OF PIPING, DIFFERENT LOCATIONS OF EQUIPMENT, FIXTURES, ETC., THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE RAMIFICATIONS OF THE PROPOSED CHANGE THAT ARE NOT INCLUDED IN HIS PROPOSAL, BUT BECOME APPARENT AT A LATER DATE, AND SHALL BEAR THE CONSEQUENCES OF CORRECTING ANY AND ALL CONFLICTS, DEFICIENCIES OR OTHER PROBLEMS AT NO INCREASE IN COST OR INCREASE IN CONSTRUCTION TIME ALLOTTED.



South Florida Office: 13680 NW 5th Street
Suite 200, Sunrise, Florida ? 33325
954-436-7000
www.millerlegg.com

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK
IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY
SIGNED BY
JULIAN M. HARRIS ON THE
DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS
DOCUMENT ARE NOT
CONSIDERED SIGNED AND
SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY
ELECTRONIC COPIES.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: RR
REVIEWED BY: JH
DESIGNED BY: JH

SHEET TITLE:

SYMBOLS,
SPECIFICATIONS,
FIXTURE SCHEDULES

SHEET NUMBER:

P001

SGM
ENGINEERING

5301 WATERFORD
DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #: 2024-115
WWW.SGMENGINEERING.COM
COPYRIGHT ©2024 SGM ENGINEERING, INC.

GENERAL NOTES:

- a. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE FLORIDA BUILDING CODE 8TH EDITION (2023) AND THE FLORIDA BUILDING CODE 8TH EDITION (2023), PLUMBING.
- b. ALL DEMOLITION WORK SHALL INCLUDE CAPPING ALL EXISTING PLUMBING SYSTEMS IN A TEMPORARY OR PERMANENT MANNER. ALL ACCESSIBLE UNUSED PIPING AND/OR EQUIPMENT SHALL BE REMOVED AND PROPERLY DISPOSED.
- c. SEE PLUMBING FIXTURE SCHEDULE FOR FIXTURE TYPES.
- d. SAW CUT EXISTING FLOOR SLAB TO INSTALL NEW UNDERGROUND PLUMBING.
- e. ALL WALL AND OR FLOOR FINISHES SHOULD BE REPAIRED AFTER DEMOLITION TO MATCH THE EXISTING FINISHES OR NEW FINISHES AS SHOWN ON THE ARCHITECTURAL DRAWINGS.



South Florida Office: 13680 NW 5th Street
Suite 200, Sunrise, Florida ? 33325
954-436-7000
www.millerlegg.com

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33126
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

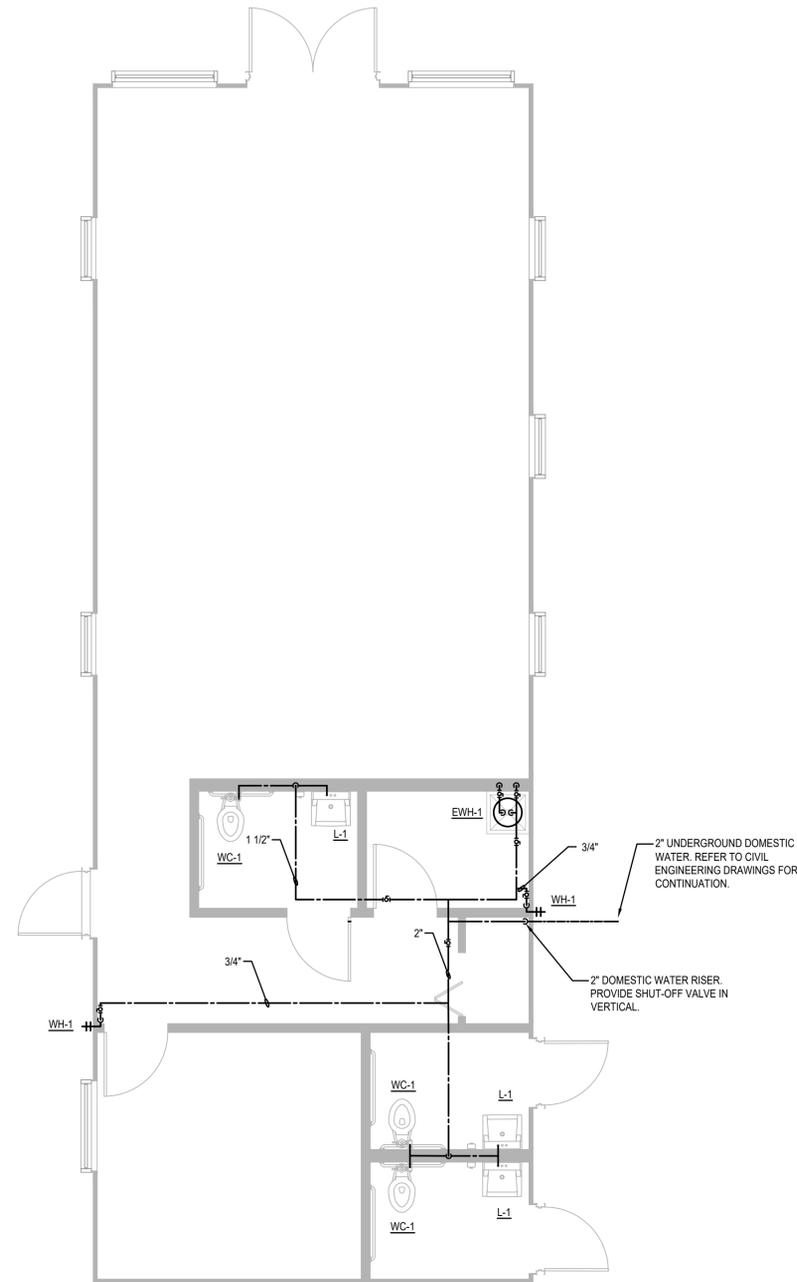
PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY SIGNED BY JULIAN M. HARRIS ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



PLUMBING PRESSURE FLOOR PLAN

SCALE: 1/4"=1'-0"



SGM ENGINEERING

5301 WATERFORD DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #: 2024-115 WWW.SGMENGINEERING.COM COPYRIGHT ©2024 SGM ENGINEERING, INC.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: RR
REVIEWED BY: JH
DESIGNED BY: JH

SHEET TITLE:

PLUMBING PRESSURE FLOOR PLAN

SHEET NUMBER:

P201

GENERAL NOTES:

- a. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE FLORIDA BUILDING CODE 8TH EDITION (2023) AND THE FLORIDA BUILDING CODE 8TH EDITION (2023). PLUMBING.
- b. ALL DEMOLITION WORK SHALL INCLUDE CAPPING ALL EXISTING PLUMBING SYSTEMS IN A TEMPORARY OR PERMANENT MANNER. ALL ACCESSIBLE UNUSED PIPING AND/OR EQUIPMENT SHALL BE REMOVED AND PROPERLY DISPOSED.
- c. SEE PLUMBING FIXTURE SCHEDULE FOR FIXTURE TYPES.
- d. SAW CUT EXISTING FLOOR SLAB TO INSTALL NEW UNDERGROUND PLUMBING.
- e. ALL WALL AND OR FLOOR FINISHES SHOULD BE REPAIRED AFTER DEMOLITION TO MATCH THE EXISTING FINISHES OR NEW FINISHES AS SHOWN ON THE ARCHITECTURAL DRAWINGS.

MILLER LEGG
 South Florida Office: 13680 NW 5th Street
 Suite 200, Sunrise, Florida ? 33325
 954-436-7000
 www.millierlegg.com

CONSULTANTS:

ARCHITECT:
 Justin Architects
 2400 E. Commercial Boulevard, Suite 201
 Fort Lauderdale, FL 33308
 (954) 771-2724
 www.justinarc.com

MEP:
 SGM Engineering
 5301 Waterford District Drive, Suite 750
 Miami, Florida 33126
 (954) 421-1944
 www.sgmengineering.com

STRUCTURAL ENGINEER:
 Master Consulting Engineers
 4101 Ravenswood Road, Suite 320
 Fort Lauderdale, Florida 33312
 (954) 210-7671
 www.mceengineers.com

SUSTAINABILITY CONSULTANT:
 SOCOTEC Consulting, Inc.
 1177 Clare Avenue, Suite 7
 West Palm Beach, Florida 33401
 (561) 801-7576
 www.spinakergroup.com

GEOTECHNICAL:
 Pacifica Engineering Services
 601 N. Congress Avenue, Suite 303
 Delray Beach, Florida 33445
 (561) 419-8460
 www.pacificaes.com

CLIENT:

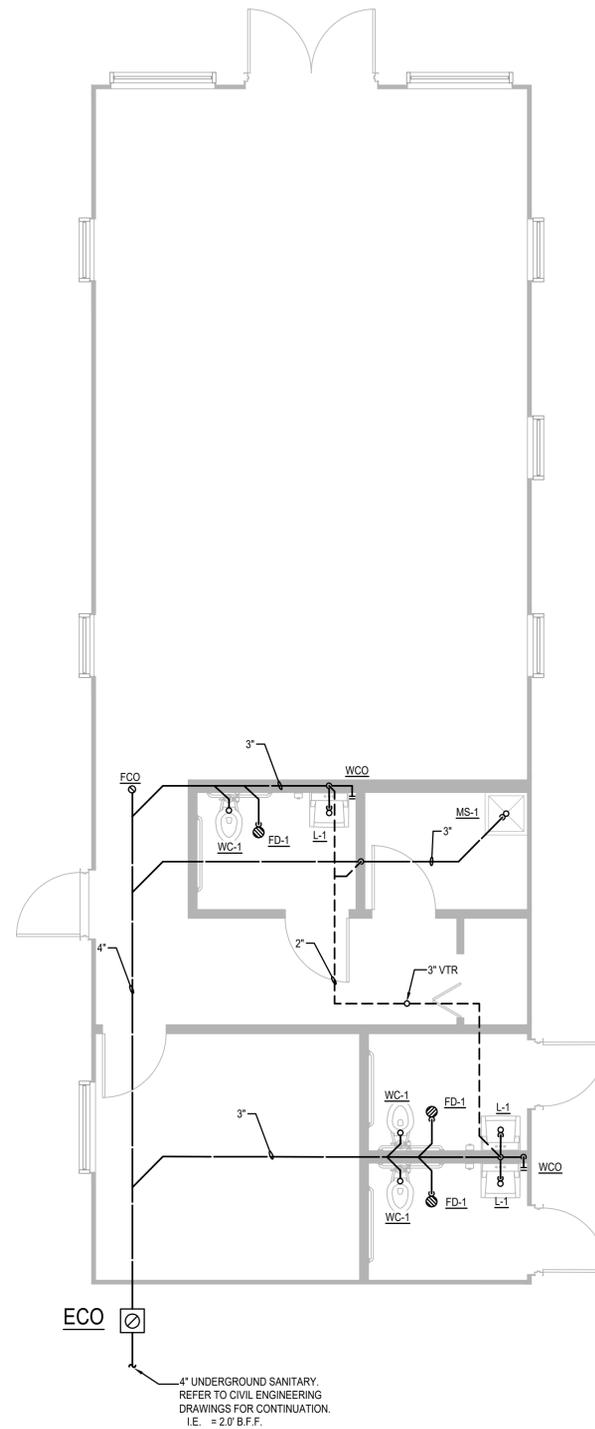
Coconut Creek
 4900 W. Copans Road
 Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
 4230 NW. 74th Street
 Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY SIGNED BY JULIAN M. HARRIS ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



PLUMBING GRAVITY FLOOR PLAN

SCALE: 1"=40'
 0 20' 40' 80'

SGM ENGINEERING
 5301 WATERFORD DISTRICT DR. SUITE 750 MIAMI, FL 33126
 TEL: 954-421-1944 FAX: 954-421-1924 CA-00006208
 WWW.SGMENGINEERING.COM
 SGM #: 2024-115 COPYRIGHT ©2024 SGM ENGINEERING, INC.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:
30% SCHEMATIC DESIGN
 DATE ISSUED: 05/01/2024
 PROJECT NUMBER: 23-00155
 DRAWN BY: RR
 REVIEWED BY: JH
 DESIGNED BY: JH

SHEET TITLE:
 PLUMBING GRAVITY FLOOR PLAN

SHEET NUMBER:
 P301

CONSULTANTS:

ARCHITECT:
Justin Architects
2400 E. Commercial Boulevard, Suite 201
Fort Lauderdale, FL 33308
(954) 771-2724
www.justinarc.com

MEP:
SGM Engineering
5301 Waterford District Drive, Suite 750
Miami, Florida 33026
(954) 421-1944
www.sgmengineering.com

STRUCTURAL ENGINEER:
Master Consulting Engineers
4101 Ravenswood Road, Suite 320
Fort Lauderdale, Florida 33312
(954) 210-7671
www.mceengineers.com

SUSTAINABILITY CONSULTANT:
SOCOTEC Consulting, Inc.
1177 Clare Avenue, Suite 7
West Palm Beach, Florida 33401
(561) 801-7576
www.spinnakergroup.com

GEOTECHNICAL:
Pacifica Engineering Services
601 N. Congress Avenue, Suite 303
Delray Beach, Florida 33445
(561) 419-8460
www.pacificaes.com

CLIENT:



4900 W. Copans Road
Coconut Creek, FL 33063

PROJECT NAME:

OAK TRAILS PARK IMPROVEMENTS
4230 NW. 74th Street
Coconut Creek, FL 33073

SEAL:

THIS ITEM HAS BEEN DIGITALLY SIGNED BY JULIAN M. HARRIS ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |

SUBMITTAL:

30% SCHEMATIC DESIGN

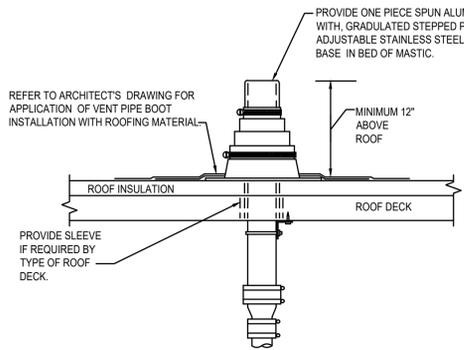
DATE ISSUED: 05/01/2024
PROJECT NUMBER: 23-00155
DRAWN BY: RR
REVIEWED BY: JH
DESIGNED BY: JH

SHEET TITLE:

PLUMBING DETAILS

SHEET NUMBER:

P801



REFER TO ARCHITECT'S DRAWING FOR APPLICATION OF VENT PIPE BOOT INSTALLATION WITH ROOFING MATERIAL.

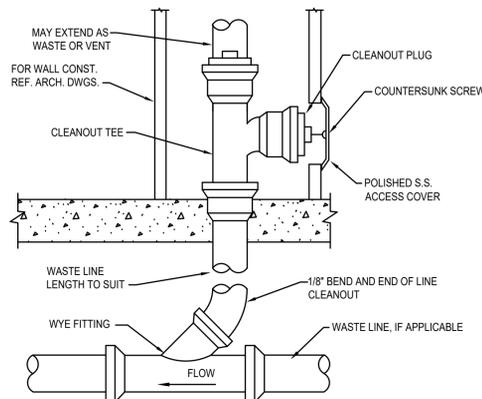
PROVIDE ONE PIECE SPUN ALUMINUM BASE WITH GRADUATED STEPPED PVC BOOT, AND ADJUSTABLE STAINLESS STEEL CLAMPS. SET BASE IN BED OF MASTIC.

MINIMUM 12" ABOVE ROOF

PROVIDE SLEEVE IF REQUIRED BY TYPE OF ROOF DECK.

VENT THROUGH ROOF DETAIL

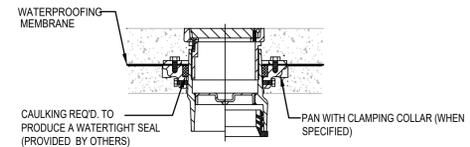
NOT TO SCALE



NOTE:
MOUNT BOTTOM OF HOT WATER HEATER AT 60° AFF.

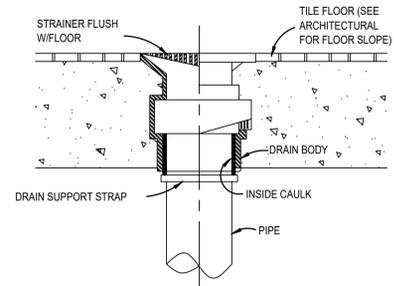
WATER HEATER DETAIL (FOR JOIST APPLICATIONS)

No Scale



FLOOR CLEANOUT DETAIL

NOT TO SCALE

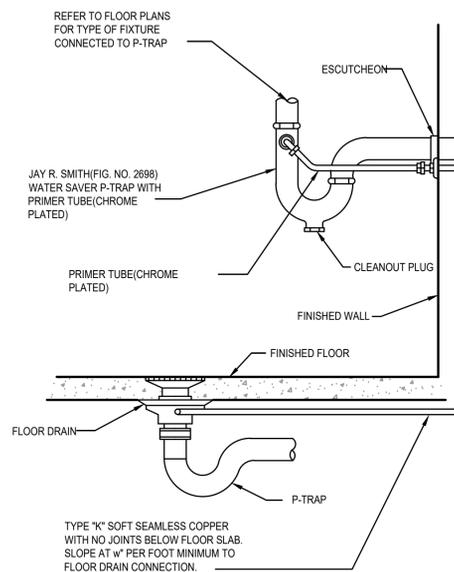


FLOOR DRAIN DETAIL

NOT TO SCALE

WALL CLEANOUT DETAIL

NOT TO SCALE



GREY WATER TRAP PRIMER DETAIL

NOT TO SCALE

REFER TO FLOOR PLANS FOR TYPE OF FIXTURE CONNECTED TO P-TRAP

JAY R. SMITH (FIG. NO. 2696) WATER SAVER P-TRAP WITH PRIMER TUBE (CHROME PLATED)

PRIMER TUBE (CHROME PLATED)

TYPE "K" SOFT SEAMLESS COPPER WITH NO JOINTS BELOW FLOOR SLAB. SLOPE AT 1/8" PER FOOT MINIMUM TO FLOOR DRAIN CONNECTION.

SGM
ENGINEERING

5301 WATERFORD DISTRICT DR.
SUITE 750
MIAMI, FL 33126
TEL: 954-421-1944
FAX: 954-421-1924
CA-00006208

SGM #: 2024-115
WWW.SGMENGINEERING.COM
COPYRIGHT ©2024 SGM ENGINEERING, INC.