ENGINEERING PLANS FOR

DME SPORTS DORMITORY

DAYTONA BEACH, FLORIDA

JULY, 2019

REVIEWED FOR CODE COMPLIANCE
SITE COPY
CITY OF DAYTONA BEACH

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: Site Plan
DATE: 1-30-20 FILE: DEV2019-128

APPROVED DEV2019-128
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

INDEX OF SHEETS

C1. COVER
C2. EXISTING CONDITIONS
C3. SATELLITE TRACT DEMOLITION PLAN
C4. SATELLITE TRACT DIMENSION PLAN
C5. SATELLITE TRACT PAVING, DRAINAGE & UTILITY PLAN
C6. OFFISTE PAVING, DRAINAGE & UTILITY PLAN
C7. STORMWATER DETAILS & SECTIONS
C8. CONSTRUCTION DETAILS
C9. CITY CONSTRUCTION DETAILS
C10. MAINTENANCE OF TRAFFIC PLAN
L-1. TREE REMOVAL CALCULATIONS
L-2. LANDSCAPING PLAN
L-3. IRRIGATION PLAN
L-4. LANDSCAPING AND IRRIGATION DETAILS
A1. ARCH. FLOOR PLAN
A2. ARCH. ELEVATIONS
S1. SURVEY
S2. SURVEY

UTILITY NOTES:

1. THE LOCATION OF ALL EXISTING UTILITIES AND SITE CONDITIONS SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM BEST INFORMATION AVAILABLE, AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES, AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLAN OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE CONTRACTOR. THE CONTRACTOR SHALL COOPERATE WITH THE RESPECTIVE UTILITY COMPANIES DURING RELOCATION OPERATIONS. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO STARTING CONSTRUCTION.
2. ALL CONSTRUCTION & MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST AWWA STANDARD, APPROVED DEP PERMITS, AND LOCAL GOVERNMENT STANDARD PROVIDING THE UTILITY SERVICE. CONTRACTOR SHALL CALL 1-800-SUNSHINE (1-800-432-4770) PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.
3. ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND.
4. THE LOCAL GOVERNMENT PROVIDING UTILITY SERVICE SHALL BE CONTACTED 48 HOURS IN ADVANCE OF INITIATING CONSTRUCTION ON ANY EXISTING OR PROPOSED UTILITIES.
5. ALL SERVICE LATERALS TO BUILDINGS SHALL BE CLEARLY MARKED AT THE SURFACE DURING CONSTRUCTION.
6. ALL UNDERGROUND UTILITIES SHALL HAVE A MINIMUM OF THREE (3') FEET OF COVER UNLESS OTHERWISE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. IN ACCORDANCE WITH THE APPROVED PERMITS.
7. WHEN TRENCH EXCAVATION EXCEEDS FIVE (5') FEET IN DEPTH THE CONTRACTOR SHALL CONFORM TO OSHA STD. 29CFR SEC. 1926.65O. THE CONTRACTOR SHALL PROVIDE WRITTEN ASSURANCE OF COMPLIANCE WITH THIS LAW. A TRENCH SAFETY SYSTEM SHALL BE PROVIDED BY THE CONTRACTOR.
8. WATER SERVICES 3/4" TO 2-1/2" SHALL BE POLYETHYLENE SERVICE TUBING AND HAVE A RECOMMENDED WATER PRESSURE RATING OF 200 PSI. SERVICE SHALL HAVE A COPPER TUBE OUTSIDE DIAMETER PER ASTM D-2737 AND BE MANUFACTURED FROM VIRGIN RESIN MEETING THE REQUIREMENTS OF ASTM D-1248 AND SHALL HAVE A STANDARD DIMENSION RATION OF 9 (SDR9) AND A PLASTIC PIPE INSTITUTE RATING OF PE 3408.
9. WATER MAINS 4 INCHES AND LARGER SHALL CONFORM TO THE AWWA STANDARD FOR POLYVINYL CHLORIDE (PVC) PIPE AS OUTLINED IN THE ANSI/AWWA C900 FOR CLASS 150, DR 18. ALL ASTM STANDARD REFERENCES INCLUDED AS PART OF THE AWWA C900 STANDARD SHALL APPLY. IN ANY CASE OF CONFLICT, THE REQUIREMENTS OF THE AWWA C900 STANDARD SHALL PREVAIL.
10. DUCTILE IRON PIPE SHALL BE CLASS 150 CEMENT LINED MEETING AWWA STANDARD A21.50, A21.51 AND A21.4.
11. ALL NEW WATER LINES SHALL BE CLEANED, DISINFECTED, PRESSURE TESTED AND BACTERIOLOGICAL TESTED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA C 600 AND C 651 AND RULE 62-555.345 F.A.C.
12. DETECTION TAPE (IF REQUIRED) ON WATER AND SEWER MAINS. SHALL BE MAGNETIC AND LOCATED 18" BELOW GRADE.
13. UNDERGROUND WATER MAINS SHALL BE SEPARATED HORIZONTALLY AND VERTICALLY FROM SANITARY SEWER MAINS, STORM SEWERS, WASTEWATER, STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, ON-SITE SEWAGE TREATMENT, DISPOSAL SYSTEMS, SANITARY AND STORM SEWER MANHOLES PER F.S. 62-555.314(1) AND (2).
    UNDERGROUND WATER MAIN JOINTS SHALL BE SEPARATED FROM OTHER PIPELINE JOINTS PER F.S. 62-555-314(2)C. UNDERGROUND WATER MAINS SHALL BE SEPARATED FROM SANITARY OR STORM SEWER MANHOLES PER F.S. 62-555.314(3).
    UNDERGROUND WATER MAINS LAID LESS THAN THREE(3) FEET HORIZONTALLY AND CROSSING ANOTHER PIPELINE WHERE THE MINIMUM VERTICAL SEPARATION OR MINIMUM JOINT SEPARATION IS LESS THAN THAT SPECIFIED SHALL COMPLY WITH THE EXCEPTION SPECIFIED IN F.S. 62-555.314(5).
14. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
15. ALL SEWER CLEANOUTS IN TRAFFIC AREAS SHALL BE FLUSH WITH THE PAVEMENT. THESE SEWER CLEANOUTS SHALL HAVE BRASS CAPS W/ COUNTER SUNK SQUARE PLUGS.
16. PVC GRAVITY SEWER SHALL BE SDR 35, JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. ALL PVC SEWER SHALL BEAR THE "NSF-DW SEAL."
17. ELECTRICAL POWER SERVICE SHALL BE UNDERGROUND MEETING THE SPECIFICATIONS OF FP&L OR THE GOVERNING UTILITY COMPANY.
18. FIRE HYDRANT PLACEMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE GOVERNING MUNICIPAL REQUIREMENTS.

EROSION AND SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT ALL ACTIVITIES WITHIN THE LIMITS OF THE PERMITTED CONSTRUCTION AREA OR PROPERTY BOUNDARY, AS APPLICABLE.
2. PRIOR TO INITIATING CONSTRUCTION ON SITE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED. THIS SHALL INCLUDE ANY SILT SCREENING, HAY BALES OR OTHER EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS, DESCRIBED IN THE SITE PERMITS OR OTHERWISE REQUIRED DUE TO SITE CONSTRUCTION ACTIVITIES.
3. STORM WATER PONDS AND ANY REQUIRED CONVEYANCE FACILITIES SHALL BE CONSTRUCTED IMMEDIATELY AFTER CLEARING AND ROUGH GRADING IS COMPLETED.
4. PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED WITHIN 7 DAYS OF ESTABLISHING FINISHED GRADES. OTHER FORMS OF EROSION CONTROL MAY BE APPROVED BY THE ENGINEER OR BY OTHER PERMIT CONDITIONS.
5. ALL FORMS OF EROSION CONTROL SHALL BE REMOVED AFTER CONSTRUCTION AND PRIOR TO FINAL INSPECTION.

DEMOLITION NOTES:

1. CONTRACTOR SHALL CALL 1-800-SUNSHINE (1-800-432-4770) PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.
2. AREAS OF THE SITE WITHIN THE DEMOLITION LIMITS SHALL BE CLEARED OF ALL EXISTING PHYSICAL IMPROVEMENTS TO WITHIN TWO (2') FEET OF EXISTING GRADE. FOOTINGS, UNDERGROUND PIPING & RELATED IMPROVEMENTS SHALL BE REMOVED IN THEIR ENTIRETY. CARE SHALL BE TAKEN TO PRESERVE ALL EXISTING UTILITIES AND TO PRESERVE EXISTING STRUCTURES CONTIGUOUS TO THE LIMITS OF DEMOLITION. UTILITY LOCATES SHALL BE OBTAINED PRIOR TO INITIATING ANY DEMOLITION.
3. ALL DEMOLISHED MATERIALS SHALL BE COLLECTED AND DISPOSED IN AN APPROVED MANOR. THE COST OF DEMOLITION AND DISPOSAL OF DEMOLISHED MATERIALS SHALL BE PAID BY THE CONTRACTOR.
4. AFTER DEMOLITION IS COMPLETED, THE SITE SHALL BE FILLED TO THE PROPOSED SUB GRADE ELEVATION SPECIFIED ON THE PAVING AND DRAINAGE PLANS. FILL SHALL BE PLACED IN SIX (6") LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY USING THE AASHTO T-180 TEST METHOD. ISOLATED VOIDS SHALL BE FILLED AND COMPACTED IN THE SAME MANOR.
5. PRIOR TO AND DURING DEMOLITION OPERATIONS, THE CONTRACTOR SHALL MINIMIZE THE POTENTIAL FOR AIRBORNE DISPERSION OF DEMOLISHED MATERIALS, DUST, SAND AND THE LIKE.
6. ALL EXISTING SURFACE IMPROVEMENTS AND UNDERGROUND STORM DRAINAGE FOUNDATIONS SHALL BE REMOVED WITHIN THE PROJECT BOUNDARY LIMITS.

DEWATERING NOTES:

1. CONTRACTOR SHALL PERFORM DEWATERING ACTIVITIES IN STRICT ACCORDANCE WITH THE LATEST SJRWMD REQUIREMENTS, AND WITHIN PUMPING RATE THRESHOLDS ALLOWED BY SJRWMD WITHOUT REQUIRING A CONSUMPTIVE USE PERMIT.
2. ALL WATER SHALL BE PUMPED TO TEMPORARY STILLING BASINS FOR SEDIMENTATION/TURBIDITY CONTROL. STILLING BASINS SHALL HAVE FILTER CLOTH AND HAY BALES IN PLACE ALONG DOWNSTREAM LIMITS PRIOR TO DEWATERING NATURING ACTIVITIES.
3. DEWATERING ACTIVITIES SHALL NOT EXCEED 100,000 GPD ON AN ANNUAL AVERAGE BASIS.

EARTHWORK AND EMBANKMENT NOTES:

1. ALL EARTHWORK AND RELATED OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 120 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION PLANS.
2. EMBANKMENTS, BERMS, AND OTHER EARTHEN STRUCTURES SHALL BE CONSTRUCTED OF MATERIAL CONTAINING NO MUCK, STUMPS, ROOTS, BRUSH, ROCK, RUBBISH, OR OTHER MATERIAL DESIGNATED AS UNDESIRABLE.
3. EMBANKMENTS, BERMS, AND OTHER EARTHEN STRUCTURES SHALL BE COMPACTED IN SIX (6") INCH LIFTS TO A DENSITY OF 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557, MODIFIED PROCTOR.
4. IN FINAL SHAPING OF EARTHWORK, A TOLERANCE OF 0.25 FEET ABOVE OR BELOW THE DESIGN ELEVATIONS WILL BE ALLOWED, EXCEPT AS NOTED UNDER SECTION 120-11.2 (1 THROUGH 4) OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. NO CONSTRUCTION IS PERMITTED BEYOND THE LIMITS OF THE PROJECT BOUNDARY.

CURBING NOTES:

1. TERMINATING CURBS SHALL HAVE TRANSITIONS FROM 6" TO 0" OVER A LENGTH OF 2 FEET.
2. WHERE TERMINATING CURBS AND SIDEWALKS MEET, THE CURB SHALL TRANSITION OVER 2 FEET TO MATCH THE FINISHED ELEVATION OF THE SIDEWALK.
3. CONTRACTOR TO USE INTEGRAL CURB WITH CONCRETE PAVING SPECIFICATION OR FDOT TYPE "D" CURB WITH ASPHALT PAVING SPECIFICATION.

SITE DATA:

EXISITNG ZONING: PD-G
EXISTING FUTURE LAND USE: MIXED USE

PARKING SPECIFICATIONS:
1 SPACE PER EMPLOYEE AND 1 SPACE PER 10 STUDENTS
4 EMPLOYEES = 4 SPACES
80 STUDENTS = 80/10 = 8 SPACES
TOTAL PARKING REQUIRED = 12 SPACES (11 REG, 1 H.C.)
TOTAL PARKING PROVIDED = 33 SPACES (31 REG, 2 H.C.)

LOT SPECIFICATIONS:
TOTAL PROJECT AREA:160,892.38 S.F. = 3.69 Ac.
TOTAL WETLAND AREA: 0 S.F. = 0 Ac.

DESCRIPTION EXISTING	S.F.	Ac.	%
BUILDING:	1,731.22	0.04	1.1
PVMT/CONC:	6,032.35	0.14	3.7
TOTAL IMPERVIOUS AREA:	7,763.57	0.18	4.8
TOTAL PERVIOUS AREA:	153,128.81	3.51	95.2
TOTAL AREA:	160,892.38	3.69	100.0

DESCRIPTION PROPOSED	S.F.	Ac.	%
GROSS BUILDING FLOOR AREA: (INCLUDES EXTERIOR PORCHES AND COVERED WALKWAYS)	16,748.00	0.38	10.4
BUILDINGS: (INTERIOR FLOOR AREA UNDER AIR)	15,651.00	0.36	9.7
PVMT/CONC:	27,747.68	0.64	17.2
TOTAL IMPERVIOUS AREA:	43,398.68	1.00	26.9
SWA POND (SHWL):	11,121.12	0.25	7.0
TOTAL PERVIOUS AREA:	106,372.58	2.44	66.1
TOTAL AREA:	160,892.38	3.69	100.0

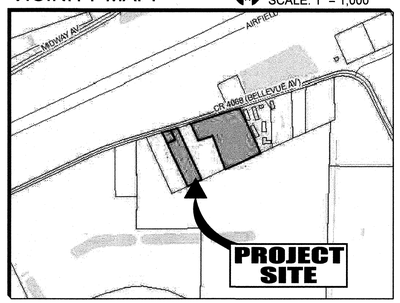
SETBACKS (REQUIRED):	SETBACKS (PROPOSED):
MIN. FRONT = 30'	FRONT = 100.96'
MIN. SIDE = 10'	SIDE = 10'
MIN. REAR = 20'	REAR = 567.03'
MAX. BUILDING HEIGHT = 45'	BUILDING HEIGHT = 20'
MAX. LOT COVERAGE = 35%	LOT COVERAGE = 27.1%

NOTES:
1. USDA NRCS SOIL TYPE: 08 BASINGER FINE SAND, HYDROLOGIC GROUP "A/D" AND 49, POMONA FINE SAND, HYDROLOGIC GROUP "A/D" USDA SOIL CONSERVATION SERVICE, VOLUSIA COUNTY
2. PARCEL LOCATED IN FLOOD ZONE "X" (AREA OF MINIMAL FLOOD HAZARD) AS SCALED FROM FLOOD INSURANCE RATE MAP, VOLUSIA COUNTY, FL. PANEL #362 OF 930 MAP #12127C0362H, DATED SEPTEMBER 19, 2017.
3. TAX PARCEL NUMBER(S): 5239-00-00-0610; 5239-00-00-0611
4. SITE ADDRESS: 2501 BELLEVUE AVE., DAYTONA BEACH, FL 32114

GENERAL NOTES:
1. BOUNDARY AND TOPOGRAPHIC SURVEYS PERFORMED BY MYER LAND SURVEYING, INC. JOB 19177, DATED 6/10/19, BEARING BASIS FLORIDA EAST ZONE, STATE PLANE COORDINATE SYSTEM 83(86) AND ELEVATIONS ARE BASED ON N.A.V.D DATUM OF 1988.
2. AREAS WITHIN THE PUBLIC RIGHT-OF-WAY AND OFF SITE WHICH HAVE BEEN DISTURBED BY CONSTRUCTION SHALL BE CLEARED OF ALL DEBRIS, REGRADED AND SODDED W/ BAHIA SO AS TO RESTORE THE AREA TO A STABILIZED AND PLANTED STATE.
3. ALL MATERIALS (PIPES, STRUCTURES, ETC.) AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "FDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION", THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS", AND THE "FLORIDA BUILDING CODE 2017".
4. SIDEWALK SPECIFICATIONS:
    4" FDOT CLASS 1 PORTLAND CEMENT CONCRETE (2500 PSI @ 28 DAYS)
    W/ 6" CLEAN STABILIZED SAND SUBGRADE (MIN. 95% COMPACTION PER AASHTO T-99)
    6" THICK @ DRIVEWAYS (3000 PSI @ 28 DAYS) W/ 12" SUBGRADE IN 6" LIFTS.
    EXPANSION AND CONTRACTION JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT RECOMMENDATIONS.
5. ONSITE PAVEMENT SPECIFICATIONS: (ASPHALT / CONCRETE)
    CONCRETE:
    6" FDOT CLASS 1 PORTLAND CEMENT CONCRETE (3OOO PSI @ 28 DAYS
    MAX. 5" SLUMP)
    10" CLEAN STABILIZED SAND SUBGRADE (MIN. 98% COMPACTION, AASHTO T-180)
    EXPANSION AND CONTRACTION JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH PCA RECOMMENDATION
    ASPHALT:
    1 1/2" SP 9.5 ASPHALTIC CONCRETE STRUCTURE COURSE (MIN. 98% COMPACTION, NUCLEAR DENSITY BACK SCATTER METHOD).
    6" LIMEROCK BASE (LBR 100 MIN. 98% COMPACTION, AASHTO T-180)
    8" STABILIZED SUBGRADE (LBR 40 MIN. 98% COMPACTION, AASHTO T-180)
6. CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL "AS-BUILT" INFORMATION CONTAINING AT A MINIMUM: BUILDING LOCATION, TYPICAL PARKING STALL WIDTHS AND LENGTHS, PAVEMENT AND SIDEWALK WIDTHS, CROSS SLOPES AND DRAINAGE DIRECTIONS, BUILDING FINISHED FLOOR ELEVATION, PAVEMENT, SIDEWALK AND STORMWATER AREA SPOT GRADES, UTILITY LOCATIONS AND TOP OF PIPE GRADES. ADDITIONAL INFORMATION MAY BE NEEDED FOR CITY. A CERTIFICATION TO THIS EFFECT SIGNED AND SEALED BY A P.L.S. SHALL GO TO THE OWNER (OWNERS BANK IF REQUIRED), CITY AND ENGINEER.
7. ALL TRAFFIC CONTROL DEVICES, INCLUDING SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
8. PAVEMENT SHALL BE PAINT STRIPPED AND WHEEL STOPPED AS SHOWN. WHERE NOTED, THERMOPLASTIC WITH GLASS SPHERES STRIPING SHALL BE USED. RIGHT-OF-WAY PAINT STRIPING SHALL BE THERMOPLASTIC WITH GLASS SPHERES IN ACCORDANCE WITH F.D.O.T. INDEX #17346. RIGHT-OF-WAY REFLECTIVE PAVEMENT MARKERS (RPM'S) SHALL BE INSTALLED (WHEN REQUIRED) IN ACCORDANCE WITH F.D.O.T. INDEX # 17352.
9. OWNER/ DEVELOPER: MICHAEL PINAGGIO, PRESIDENT, DIRECT MAIL EXPRESS, 2421 BELLEVUE AVENUE, DAYTONA BEACH, FL. 32114, TELEPHONE: (386) 257-2500
    CIVIL ENGINEERING: THE PERFORMANCE GROUP, INC., JOSEPH HOPKINS, 100 MARINA POINT DR., DAYTONA BEACH, FL 32114, TELEPHONE: (386) 239-7166, FAX: (386) 239-7120
    SURVEYOR: MYER LAND SURVEYING, INC., MICHAEL M. MYER, 306 RIDGEWOOD AVE., HOLLY HILL, FL 32117, TELEPHONE: (386) 255-6304
    ARCHITECT: BPF DESIGN, INC., BRIAN P. FREDLEY, ASSOC. AIA, 207 FAIRVIEW AVE., DAYTONA BEACH, FL. 32114, TELEPHONE: (386) 257-0502
    LANDSCAPE ARCHITECT: THE STERN DESIGN GROUP, P.A., JAN STERN, R.L.A., 1685 PROMENADE CIR., PORT ORANGE, FL 32129, TELEPHONE: (386) 788-3788
    WATER SEWER: CITY OF DAYTONA BEACH, 301 S. RIDGEWOOD AVENUE, DAYTONA BEACH, FL. 32114, TELEPHONE: (386) 258-3110
    ELECTRIC: FLORIDA POWER & LIGHT CO., 3000 SPRUCE CREEK ROAD PORT ORANGE, FL 32127, 386-322-3414
    TELEPHONE: BELLSOUTH, 900 N. NOVA ROAD, DAYTONA BEACH, FL 32117, 386-254-8003
    GAS: TECO PEOPLES GAS, 1722 RIDGEWOOD AVE., HOLLY HILL, FL 32117, 386-671-2220
    CABLE: BRIGHT HOUSE NETWORK, 209 DUNLAWTON AVE., PORT ORANGE, FL. 32127, 386-760-9950

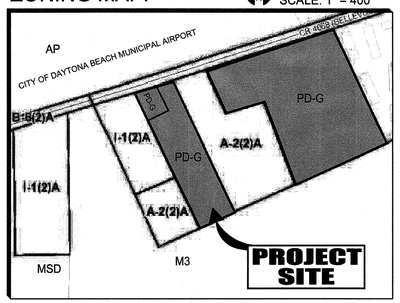
VICINITY MAP:

SCALE: 1" = 1,000'



ZONING MAP:

SCALE: 1" = 400'



FEMA MAP:

SCALE: 1" = 500'



PROJECT DESCRIPTION:

THE SCOPE OF THE PROJECT IS TO DEMOLISH EXISTING RESIDENCE AND CONSTRUCT A NEW STUDENT DORMITORY AND RELATED SITE IMPROVEMENTS. THERE ARE 20 STUDENT UNITS TO HOUSE 4 STUDENTS EACH AND 2 STAFF UNITS TO HOUSE 2 STAFF MEMBERS EACH.

ADDRESS NOTES:

1. ADDRESS NUMBERS SHALL BE ARABIC NUMERALS. NUMBERS SHALL BE IN A COLOR CONTRASTING WITH THE STRUCTURE OR BACKGROUND SURFACE, AND NOT BE LESS THAN SIX (6) INCHES IN HEIGHT.
2. THE ADDRESS NUMBER SHALL BE AFFIXED HORIZONTALLY IN A CONSPICUOUS PLACE ON THE BUILDING SO THAT THE NUMBER IS CLEARLY LEGIBLE FROM THE STREET.

NOTE:
ALL DESIGN AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH FBC 2017 WITH SUPPLEMENTS FOR MINIMUM 140 MPH WIND LOADS.

LEGAL DESCRIPTION:

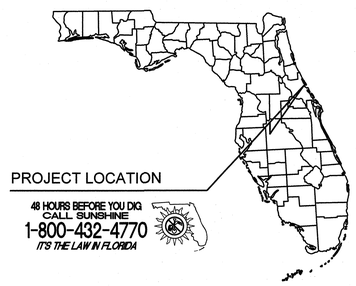
The westerly 200 feet of the easterly 600 feet of the westerly 800 feet South of the DeLand-Daytona Road, of the SAMUEL WILLIAMS GRANT, in Section 39, Township 15 South, Range 32 East, according to the Public Records of Volusia County, Florida. Also described as:

The westerly 200 feet of the following described parcel as measured along the southerly line of the DeLand Road; The easterly 600 feet of the westerly 800 feet South of the DeLand-Daytona Road, of SAMUEL WILLIAMS GRANT, in Section 39, Township 15 South, Range 32 East, more particularly described as follows:

To wit: Beginning at a point in the southerly line of the Deland-Daytona Road at a point 200 feet easterly from the westerly line of said SAMUEL WILLIAMS GRANT, measured along the southerly line of said DeLandDaytona Road; Thence easterly along the southerly line of said DeLand-Daytona Road, a distance of 600 feet; Thence southerly parallel to the westerly line of the said SAMUEL WILLIAMS GRANT, to a point the on the southerly line of said SAMUEL WILLIAMS GRANT; Thence westerly along the southerly line of SAMUEL WILLIAMS GRANT, a distance of 600 feet more or less to a point which is 200 feet easterly from the westerly line of said SAMUEL WILLIAMS GRANT, measured on a line parallel to the southerly line of the DeLand-Daytona Road; Thence northerly parallel to the westerly line of SAMUEL WILLIAMS GRANT to the Point of Beginning,

Total Acreage: 3.69 Acres more of less.

CITY OF DAYTONA BEACH
VOLUSIA COUNTY, FLORIDA



48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
IT'S THE LAW IN FLORIDA

NO.	DATE	PLAN REVISION	APPROVED
1	9/23/19	REVISED PER COUNTY COMMENTS DATED 8/10/19	JHH
2	10/15/19	REVISED PER CODB COMMENTS DATED 9/25/19	JHH
3	10/23/19	REVISED PER COUNTY COMMENTS DATED 10/21/19	JHH

DME SPORTS REV. SITE PLAN #250

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
100 MARINA POINT DR., DAYTONA BEACH, FL. 32114
PHONE: (386)239-7166 FAX: (386)239-7120

JOSEPH HUGH HOPKINS LICENSE NO. 48089 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH A. HOPKINS, P.E. 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.

Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OU=A01410C0000016D83FDF4E3000437F, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-08 10:56:09
Foxit PhantomPDF Version: 9.6.0

BUS. CERT. LIC. 7175

DAYTONA BEACH INTERNATIONAL AIRPORT
ZONING: APA
FLU: PUBLIC/SEMI-PUBLIC (PSP)

BELLEVUE BUSINESS PARK
ZONING: I-1(2)A
FLU: ACTIVITY CENTER (AC)

MARCUS & JAMES ALLEN
ZONING: I-1(2)A & A-2(2)A
FLU: ACTIVITY CENTER (AC)

DAYTONA BEACH KENNEL CLUB, INC.
ZONING: A-2(2)A
FLU: ACTIVITY CENTER (AC)

SOUTHEASTERN HAY & NURSERY, INC.
ZONING: M3
FLU: INDUSTRIAL (AC)

Bellevue Avenue
100' R/W Record
45 MPH POSTED

SATELLITE LOT ADDITION

PARENT TRACT

SATELLITE TRACT

BUILDING "A"

BUILDING "B"

BUILDING "C"

BUILDING "D"

BUILDING "E"

EXISTING 2 STORY BUILDING, TO BE DEMOLISHED

EXISTING PAVING

EXISTING GRAVEL OVERFLOW PARKING

EXISTING PRACTICE FIELD

POSTS WITH NET

FOOTBALL GOAL POST

15' UTILITY EASEMENT

UTILITY EASEMENT

DRAINAGE EASEMENT

70.00' DRAINAGE EASEMENT

53.00' DRAINAGE EASEMENT

58.00' DRAINAGE EASEMENT

25' D. E.

RETENTION

INLET

MES

GRAPHIC SCALE: 1"= 50'

0 25 50 100

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE _____ FILE: _____
DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER COOB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DR. DAYTONA BEACH, FL 32114
PHONE: (386)239-1166 FAX: (386)239-1162

EXISTING CONDITIONS

DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION

TREE LEG
- OAK
- PINE
- PALM
- HACKBERRY
- SWEETGUM
- CHINABERRY
- CHINESE TALLOW
- AUSTRAILIAN PINE

NOTE:
Number beside tree indicates diameter at 4.5' Above Grade.

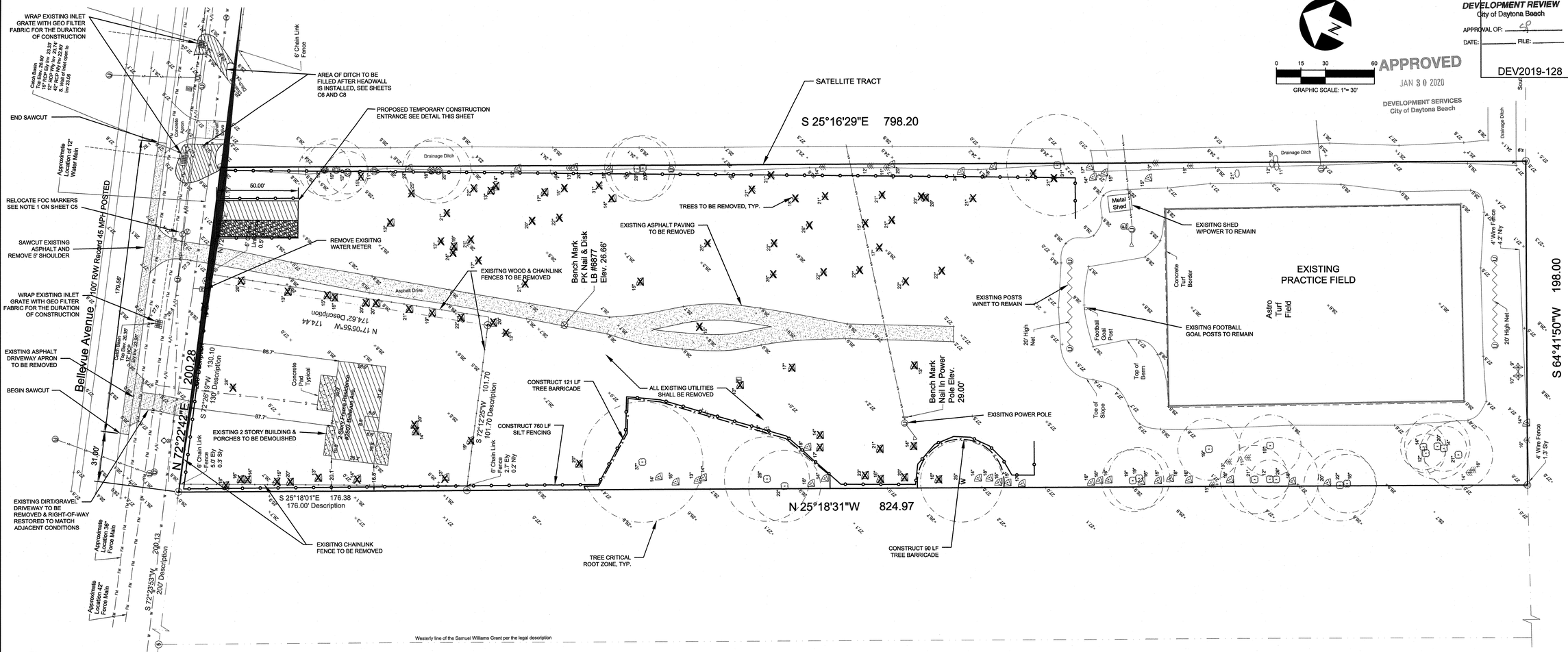
All trees may not be present.

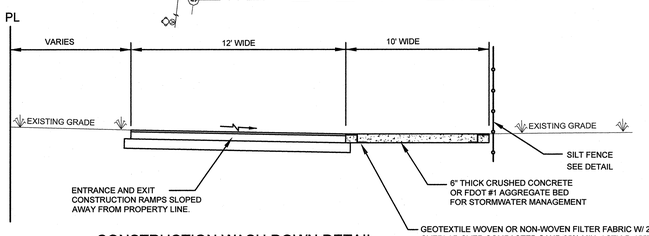
JOSEPH HUGH HOPKINS LICENSE NO. 48059 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH H. HOPKINS, P.E. 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

Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OU=A01410C0000016D83FDFA8F00004378, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-08 10:56:56
Foxit PhantomPDF Version: 9.6.0 BUS. CERT. LIC. 7175

SCALE:	1"=50'
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	250
250-REV SITE PLAN 2019 2B	
SHEET	C2 OF 10





CONSTRUCTION WASH DOWN DETAIL

NOT TO SCALE

SWPPP NOTES:

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

1. STORMWATER POLLUTION PREVENTION MEASURES TO BE PRECTICED IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION NPDES STORWATER DISCHARGE PERMIT REQUIREMENTS.

2. INSPECTIONS AND REPORTS OF SWPPP MEASEURES TO BE PERFORMED BY A QUALIFIED INSPECTOR (PROVIDED BY THE OPERATOR) TO INSPECT ALL POINTS OF DISCHARGE INTO SURFACE WATERS OF THE STATE OR AN MS4 (INCLUDING ON-SITE DISCHARGE TO WETLANDS AS WELL AS PROJECT OUTFALL STRUCTURES); DISTURBED AREA OF THE CONSTRUCTION SITE THAT HAVE NOT FINALLY STABILIZED; AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; STRUCTURAL CONTROLS; AND, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE PROJECT SITE. AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER AS DESCRIBED IN SECTION V.D.4a,b&c OF THE NPDES PERMIT REQUIREMENTS.

3. THE FOLLOWING NON-STORMWATER DISCHARGES MAY BE AUTHORIZED UNDER THE NPDES PERMIT PROVIDED THE NON-STORMWATER COMPONENT OF THE DISCHARGE IS IN COMPLIANCE WITH PARAGRAPH V.D.5: DISCHARGES FROM FIRE HYDRANT FLUSHINGS; CONTROL DUST IN ACCORDANCE WITH PART V.D.2.c.(2); POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; IRRIGATION DRAINAGE: EXTERNAL BUILDING WASHDOWN, PAVEMENT WASHWATERS AND FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIAL.

4. IF THE PROJECT DISCHARGES OR HAS DISCHARGED STORMWATERTO A PERMITTED MS4, YOU MUST SEND A COPY OF THE NOI AND THE NOT OR THE ACKNOWLEDGEMENT LETTER TO THE MS4 COORDINATOR WOTHIN 7 CALENDAR DAYS FOR TRACKING.

5. IF THE CONTRACTOR DISCHARGES THROUGH THE CITY'S MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4), THE CONTRACTOR SHALL OBTAIN THE CITY REQUIRED DEWATERING PERMIT AND DESIGNATE THE CITY OF DAYTONA BEACH'S MS4 ON THE FDEP NPDES CONSTRUCTION GENERIC PERMIT NOI.

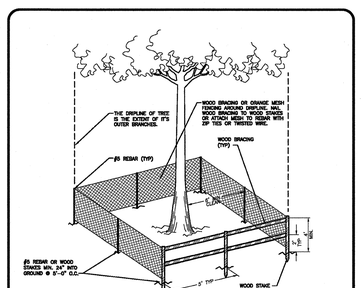
6. THE CONTRACTOR IS TO COORDINATE AN INITIAL EROSION CONTROL INSPECTION WITH THE CITY'S NPDES COORDINATOR PRIOR TO CLEARING OPERATIONS.

TREE LEGEND:

- OAK
- PINE
- PALM
- HACKBERRY
- SWEETGUM
- CHINABERRY
- CHINESE TALLOW
- AUSTRAILIAN PINE

NOTE:
Number beside tree indicates diameter at 4.5' Above Grade.

All trees may not be present.



NOTES:
1. PROTECT DESIGNATED EXISTING TREES SCHEDULED TO REMAIN AGAINST:
   A. DAMAGING ROOT SYSTEM, INCLUDING, OR DISMEMBERING OF ROOTS.
   B. SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION OR EXCAVATION MATERIALS WITHIN DRIP-LINE.
   C. FOOT OR VEHICULAR TRAFFIC.
   D. SOIL COMPACTION WITHIN DRIP-LINE.
2. ERECT TEMPORARY WOODEN BARRICADES AS SHOWN ON THIS SHEET, BEFORE COMMENCEMENT OF ANY SITE CLEARING OR GRADING. BARRICADES SHALL BE 4' HIGH MINIMUM WITH 4"x4" POSTS AND 2in. 2"x4" RAILS AT 2' AND 4' ABOVE GRADE AND SHALL BE SET DEEP ENOUGH IN THE GROUND TO BE STABLE WITHOUT ADDITIONAL SUPPORT, ALL FENCING SHALL BE ORANGE MESH FENCE SECURELY ATTACHED TO THE BARRICADES. BARRICADES SHALL BE PLACED AT THE DRIP-LINE AND SHALL ENCLOSE ALL TREES TO BE RETAINED TO REMAIN WITHIN SHALL BE PLACED INSIDE OF PROTECTIVE BARRICADES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIAL, MACHINERY, CHEMICALS, OR TEMPORARY SOIL DEPOSITS. ON TREES LARGER THAN 12" DBH, BARRICADES SHALL BE NO CLOSER THAN 10' FROM FACE OF TREE. WHEN PAVING, EXCAVATION, OR HARDSCAPE MUST BE DONE WITHIN BARRICADES, BARRICADES SHALL BE MOVED BACK TO A DISTANCE EQUAL TO 1/2 THE DRIP-LINE RADIUS. THE WORK MUST BE TUNDH AT THIS TIME BY THE CONTRACTOR TO INSURE THAT NO DAMAGE TO THE TREE OCCURS.
3. BARRICADES SHALL REMAIN IN PLACE UNTIL ALL GRADING AND CONSTRUCTION IS COMPLETED.
4. NO SIGNS, WIRES OR OTHER ATTACHMENTS SHALL BE USED TO IMPAIR THEIR HEALTH DURING CONSTRUCTION.
5. NO GRADE CHANGES ARE TO BE MADE WITHIN THE BARRICADES WITHOUT PRIOR APPROVAL OF THE OWNER OR HIS DESIGNATED REPRESENTATIVE.

THE CITY OF DAYTONA BEACH ENGINEERING DIVISION — TREE PROTECTION BARRICADE DETAIL L-8

EROSION & SEDIMENT CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND MAKING AVAILABLE ONSITE, ALL REQUIRED FEDERAL, STATE, AND LOCAL PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY POTENTIAL STORM WATER DISCHARGES TO THE CITY'S PERMITTED MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) MUST BE DESIGNATED ON THE FDEP NPDES CONSTRUCTION GENERIC PERMIT AND A COPY OF THE NOTICE OF INTENT PROVIDED TO THE CITY OF DAYTONA BEACH STORM WATER COORDINATOR. THE CONTRACTOR SHALL MAINTAIN COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL PERMITS REQUIREMENTS.

2. THE CONTRACTOR SHALL AS A MINIMUM, PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN IN ACCORDANCE WITH FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) GUIDELINES.

3. INITIAL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND APPROVED BY THE CITY PRIOR TO ANY LAND DISTURBING ACTIVITIES.

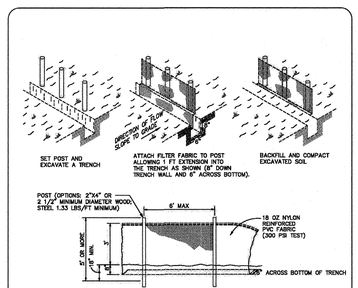
4. PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES (BEST MANAGEMENT PRACTICES) REQUIRED TO RETAIN SEDIMENT ONSITE AND TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS. IF A PROJECT SPECIFIC EROSION AND SEDIMENT CONTROL PLAN IS APPROVED AS PART OF A PERMIT, THE PRACTICES MUST BE IN ACCORDANCE WITH THE APPROVED PLAN. IF SPECIFIC SITE CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL OF SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY.

5. CONTRACTORS SHALL MINIMIZE DISTURBANCES OF EXISTING VEGETATION AND DRAINAGE PATTERNS TO MAXIMUM EXTENT PRACTICABLE. STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN 7 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

6. STORM WATER RETENTION, DETENTION, STORAGE AND CONVEYANCE SYSTEMS MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA SERVED BY THOSE SYSTEMS. ADEQUATE MEASURES MUST BE TAKEN TO PREVENT SILTATION OF THESE TREATMENT SYSTEMS AND CONTROL STRUCTURES DURING CONSTRUCTION. SILTATION MUST BE REMOVED FROM THE STORM WATER SYSTEM UPON REACHING SIDE CAPACITY AND IMMEDIATELY PRIOR TO FINAL GRADING AND STABILIZATION OF THE PROJECT.

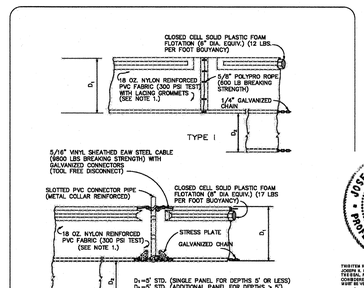
7. CITY DEWATERING PERMITS SHALL BE OBTAINED AND APPROVED PRIOR TO ANY DEWATERING INTO THE CITY'S PERMITTED MS4 SYSTEM.

THE CITY OF DAYTONA BEACH ENGINEERING DIVISION — EROSION AND SEDIMENT CONTROL NOTES ST-5



NOTES:
1. MATERIALS, CONSTRUCTION METHODS AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DESIGN STANDARDS CURRENT EDITION.
2. CONTRACTOR SHALL PROVIDE SILT FENCES, TURBIDITY BARRIERS OR APPROVED BARRIERS AT ALL STORMWATER DISCHARGE POINTS FOR EROSION CONTROL AND SEDIMENT CONTROL DURING CONSTRUCTION, DEPENDING UPON FLOW VELOCITIES AND VOLUME, REDUNDANT (MULTIPLE) PARALLEL FENCES MAY BE NEEDED.
3. CONTRACTOR SHALL ROUGH GRADE STORMWATER SWALES AND RETENTION AREAS IN COMPLIANCE WITH BEST MANAGEMENT PRACTICES PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY OF DAYTONA BEACH AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, STATE, FEDERAL, AND THE SJRWMD.

THE CITY OF DAYTONA BEACH ENGINEERING DIVISION — STAKED SILT FENCE DETAIL ST-13



NOTE:
1. USE 18 OZ. NYLON REINFORCED PVC FABRIC FOR STANDING WATER. USE FILTER FABRIC FOR FLOWING WATER.

NOTICE:
COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE CITY.

THE CITY OF DAYTONA BEACH ENGINEERING DIVISION — FLOATING TURBIDITY BARRIER DETAIL ST-14

JOSEPH HUGH HOPKINS LICENSE NO. 48069 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH A. HOPKINS, P.E. 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.

Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OU=A01410C0000016D83F0FA3E0000437F, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr, Daytona Beach, FL 32114
Date: 2020-01-08 10:57:30
Foxit PhantomPDF Version: 9.6.0.US. CERT. LIC. 7175

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER COOR COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT

JOSEPH H. HOPKINS, P.E. NO. 48069
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DR - DAYTONA BEACH, FL 32114
PHONE: (270)908-1997 - EMAIL: JHH@TPGDB.COM

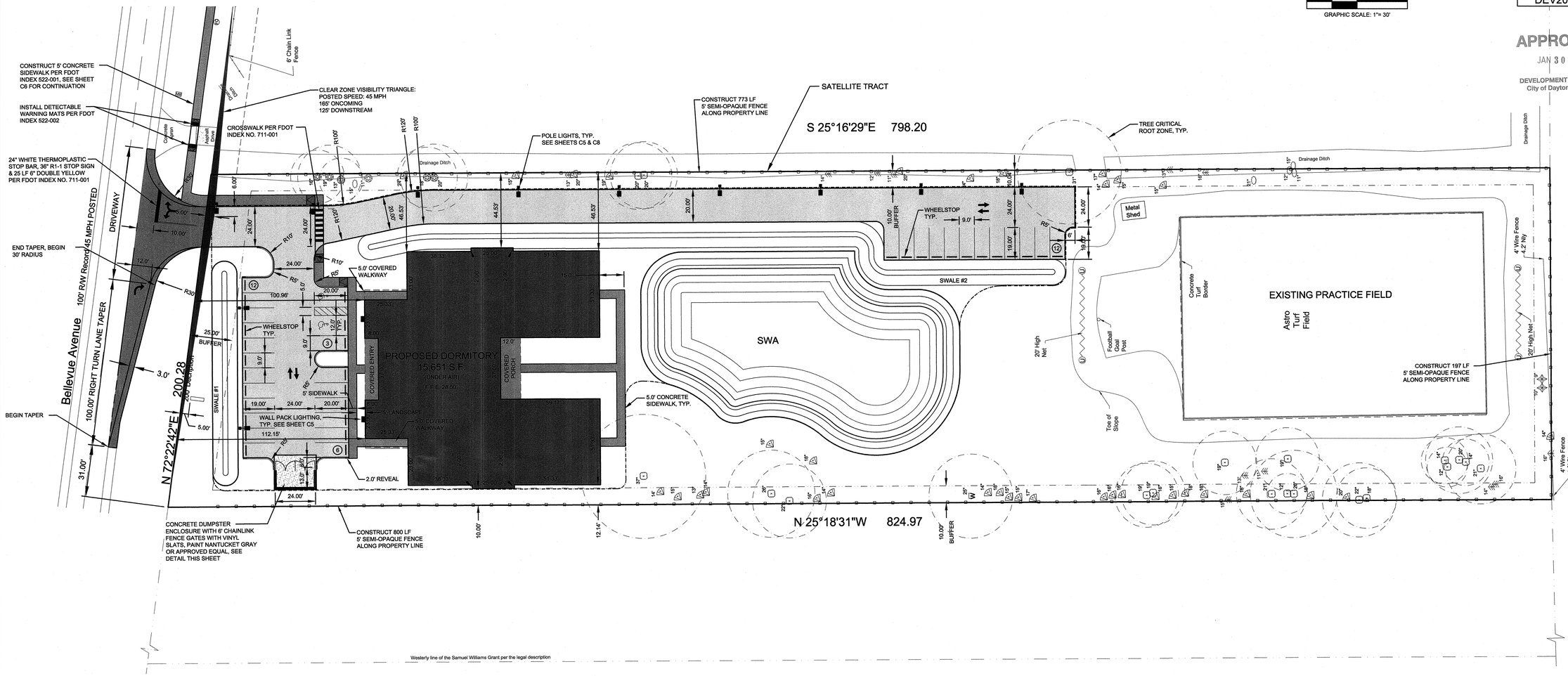
DEMOLITION PLAN

DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION

SCALE:	1"=30'
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	250
	250-REV SITE PLAN 2019 2B

SHEET C3 OF 10



GRAPHIC SCALE: 1"= 30'

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE: _____ FILE: _____

DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

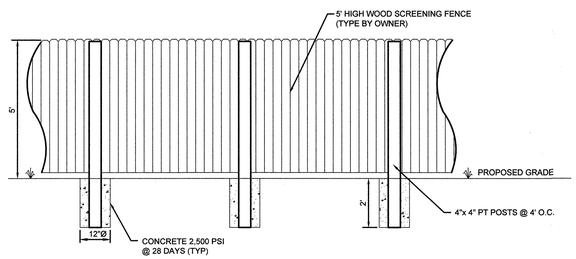
NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER COBB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DRIVE, DAYTONA BEACH, FL 32114
PHONE: (386)239-1184 FAX: (386)239-1213

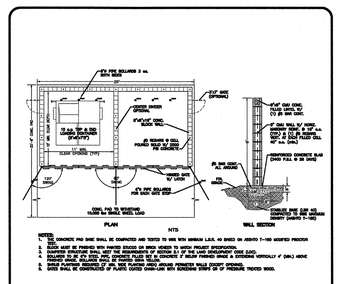
SATELLITE TRACT DIMENSION PLAN

DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION



WOOD SCREENING FENCE DETAIL
NOT TO SCALE



THE CITY OF DAYTONA BEACH
ENGINEERING DIVISION

CMU DUMPSTER ENCLOSURE (MULTIPLE UNIT) DETAIL
C-11

Drawing Date: 05/2007
Scale: NTS
Designed: TM
Drawn: TM
Review Date: 10/2013
File Name: det-11

JOSEPH HUGH HOPKINS LICENSE NO. 48059 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH H. HOPKINS, P.E. 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.

Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OU=A01410C0000016D83FDFA8F0003437F, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-08 10:58:06
Foxit PhantomPDF Version: 9.6.0 BUS. CERT. LIC. 7175

SCALE:	1"=30'
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	
250	
250-REV SITE PLAN 2019 2B	

SHEET C4 OF 10

FIRE SYSTEM NOTES:

1. FDC PIPING SHALL BE DR-14, 200 PSI RATED OR EQUIVALENT.
2. PRIVATE FIRE HYDRANT BODY SHALL BE PAINTED RED. BONNETS SHALL BE PAINTED BASED UPON THE ACTUAL FLOW NUMBERS.
3. PROVIDE KNOX LOCKABLE PLUGS FOR THE FDC.
4. MAINTAIN 7.6 FEET CLEARANCE TO THE FRONT AND SIDES OF ALL HYDRANTS.
5. MOUNT KNOX BOX BETWEEN 5' AND 6' HIGH ON THE BUILDING EXTERIOR AT THE MAIN ENTRANCE
6. A LICENSED FIRE SPRINKLER CONTRACTOR SHALL CONDUCT A FIRE FLOW TEXT ON THE NEWLY INSTALLED HYDRANT, MAKING COPIES AVAILABLE TO CITY PERSONNEL, PRIOR TO THE ISSUANCE OF CO.
7. TWO-WAY RADIO COMMUNICATION ENHANCEMENT SYSTEM MAY BE REQUIRED AT THE TIME OF BUILDING CONSTRUCTION OR AT A LATER DATE, IF THE FIRE DEPARTMENT RADIO COMMUNICATION IS DEEMED TO BE INADEQUATE.
8. PVC FIRE MAIN SHALL BE AWWA C900, CLASS 150 DR 18. SEE NOTE 9 OF THE UTILITY NOTES ON THE COVER SHEET.
9. BUILDING CONSTRUCTION TYPE: "R". SIGN TO BE MOUNTED ON THE BUILDING'S EXTERIOR 5' TO 6' ABOVE FINISHED FLOOR AT THE MAIN ENTRANCE.
10. THE BUILDING WILL BE IN COMPLIANCE WITH NFPA 1:11.10.1 (6TH EDITION FL FIRE PREVENTION CODE) IN REGARD TO F.D. TWO-WAY RADIO COMMUNICATION ENHANCEMENT SYSTEMS. THE POSSIBLE NEED FOR SUCH A SYSTEM WILL BE DETERMINED BY THE FIRE MARSHAL OR APPROPRIATE CITY OFFICIAL BASED UPON TESTING PERFORMED BY AN AUTHORIZED COMMUNICATION CONTRACTOR UTILIZING RADIO STRENGTH GRID TESTING OF THE PROPERTY IN ACCORDANCE WITH NFPA 71 (2013) AND NFPA 1221 (2016).
11. THE REQUIRED GRID TESTING TO DETERMINE IS AN ENHANCEMENT SYSTEM IS REQUIRED, IS TO BE COMPLETED PRIOR TO BUILDING C.O. SHOULD A TWO-WAY RADIO COMMUNICATION ENHANCEMENT SYSTEM BE DETERMINED TO BE REQUIRED, IT MUST BE INSTALLED PRIOR TO BUILDING C.O.

SITE LIGHTING FIXTURE SCHEDULE

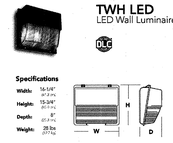
MARK	DESCRIPTION
P1	LITHONIA LIGHTING CATALOG #: TWH LED 30C 1000 40K T3M MVOLT DDBXD, WALL MOUNTED AT 10' HIGH. DRIVE CURRENT @ 1000mA; SYSTEM WATTS 78W; 30 LEDS = 8,375.5 LUMENS
P2	LITHONIA LIGHTING CATALOG #: DSXWPM LED 20C 1000 AMBPC T3S MVOLT HS, MOUNTED ON A 15' POLE. DRIVE CURRENT 1000mA; SYSTEM WATTS 74W; 20 LEDS = 4,480 LUMENS

POLE FOUNDATIONS TO BE IN ACCORDANCE WITH MFR. SPECIFICATIONS.

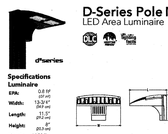
SHEET NOTES:

1. COORDINATE RELOCATION OF FIBER OPTIC RISER TO A LOCATION 3' MINIMUM OUTSIDE PROPOSED PAVED DRIVEWAY.
2. THE CLEAR ZONE IS A MINIMUM OF 18' FROM THE OUTSIDE EDGE OF THE TRAVEL LANE. ALL ACTIVITIES SHALL TAKE PLACE OUTSIDE THE CLEAR ZONE.
3. SEE VOLUSIA COUNTY NOTE NUMBER 5 FOR OFFSITE PAVEMENT SPECIFICATIONS, SHEET C10.

WALL MOUNTED LIGHT FIXTURE (P1)



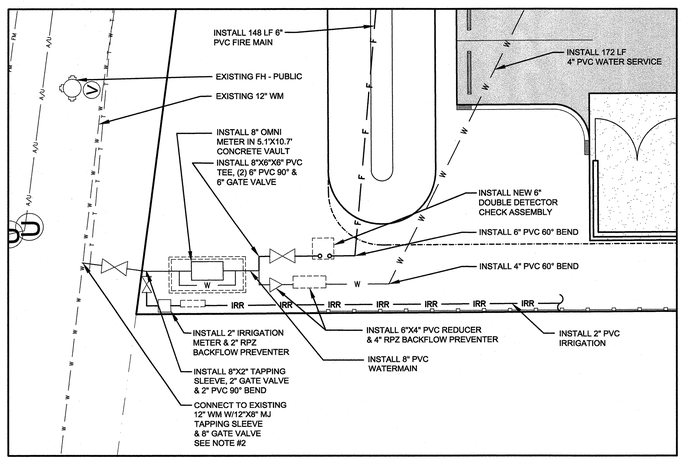
POLE MOUNTED LIGHT FIXTURE (P2)



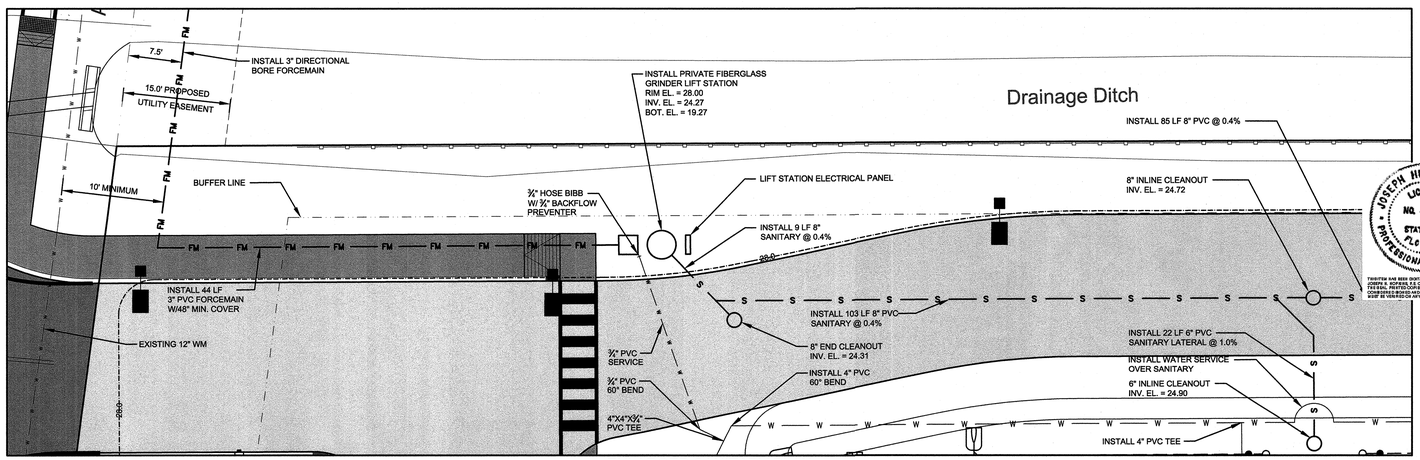
0 15 30 60
GRAPHIC SCALE: 1"= 30'

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: CP
DATE: _____ FILE: _____
DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach



ENLARGED WATER PLAN
SCALE: 1"= 10'



ENLARGED SANITARY PLAN
SCALE: 1"= 10'

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER CODB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DRIVE, DAYTONA BEACH, FL 32114
PHONE: (386)239-1164 FAX: (386)239-7120

SATELLITE TRACT PAVING, DRAINAGE & UTILITY PLAN

DME SPORTS, LLC

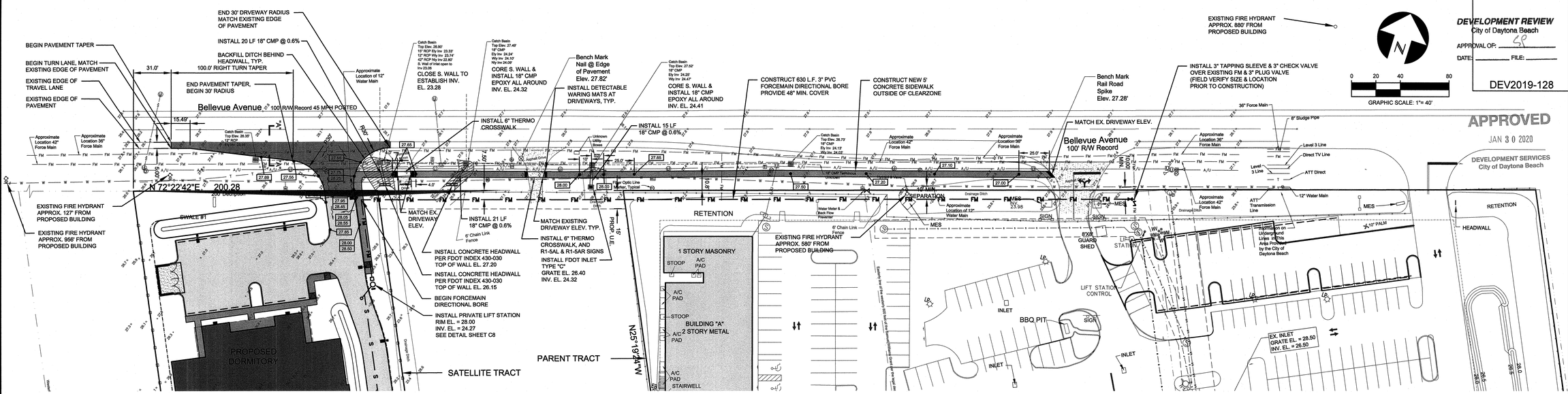
NOT RELEASED FOR CONSTRUCTION

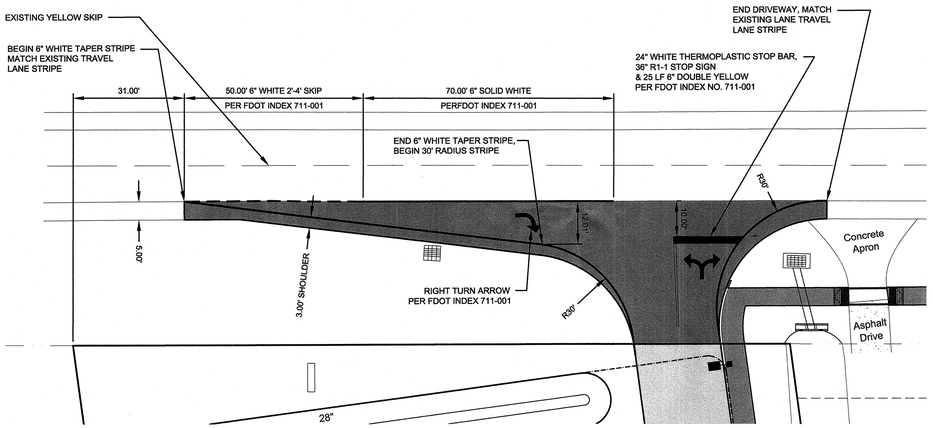
Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OU=A01410C000001 6D83FDFA8F0900437F, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-08 10:58:45
Foxit PhantomPDF Version: 9.6.0

JOSEPH HUGH HOPKINS LICENSE NO. 48059 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH H. HOPKINS, P.E. 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

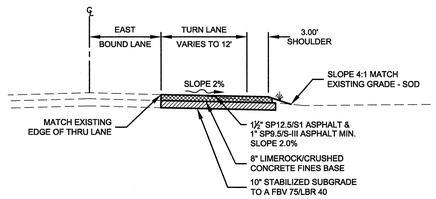
SCALE:	AS NOTED
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	250
250-REV SITE PLAN 2019 2B	
SHEET	C5 OF 10





OFFSITE STRIPING PLAN

SCALE: 1"= 20'



BELLEVUE AVE. TURN LANE SECTION A-A

SCALE: 1"= 10'

UTILITY TEST NOTES:

WATER TEST: HYDROSTATIC AND LEAK TEST: POTABLE WATER MAINS SHALL BE FILLED AND HYDROSTATICALLY TESTED TO A PRESSURE OF 150 PSI. THE PRESSURE SHALL BE MAINTAINED FOR A 2 HOUR PERIOD. THE LEAKAGE RATE SHALL BE COMPUTED DURING THE TEST PERIOD AND SHALL NOT EXCEED 5 GAL/HR PER MILE OF PIPE AT THE GIVEN TEST PRESSURE. IN THE EVENT THE TEST FAILS, REPAIRS SHALL BE MADE AND THE SYSTEM SHALL BE RETESTED.

FORCEMAIN TEST: HYDROSTATIC AND LEAK TEST: SANITARY SEWER MAINS SHALL BE FILLED AND HYDROSTATICALLY TESTED TO A PRESSURE OF 100 PSI. THE PRESSURE SHALL BE MAINTAINED FOR A 2 HOUR PERIOD. THE LEAKAGE RATE SHALL BE COMPUTED DURING THE TEST PERIOD AND SHALL NOT EXCEED 1.5 GAL/HR PER MILE OF PIPE AT THE GIVEN TEST PRESSURE. IN THE EVENT THE TEST FAILS, REPAIRS SHALL BE MADE AND THE SYSTEM SHALL BE RETESTED.

GRAVITY SEWER TEST: GRAVITY SEWERS SHALL BE INSTALLED WITH MINIMAL HORIZONTAL DEVIATION. HORIZONTAL DEVIATION SHALL NOT EXCEED 4 INCHES PER LENGTH OF PIPE. DEFLECTION SHALL BE LIMITED TO A MAXIMUM OF 5%. USE RIGID BALL OR MANDREL FOR DEFLECTION TEST WITH A DIAMETER OF NOT LESS THAN 95% OF THE TEST PIPE DIAMETER. BEDDING SHALL CONFORM TO ASTM CLASS III CRITERIA WITH SOIL COMPACTION AT A MINIMUM OF 95% IN ACCORDANCE WITH AASHO T-99 TEST METHOD. THE GRAVITY SEWER MAINS SHALL BE TESTED FOR BOTH INFILTRATION AND EXFILTRATION. THE LEAKAGE RATE FOR EITHER TEST TEST SHALL NOT EXCEED 50 GAL/INCH OF PIPE DIAMETER PER MILE OF PIPE PER DAY.

FORCEMAIN NOTES:

1. FORCEMAINS LESS THAN 18" MAY USE OVC C-900 OR C905 DR-18. FORCEMAINS 18" AND LARGER SHALL BE DUCTILE IRON PIPE (dip), CLASS 350, EPOXY LINED. ALL NON DUCTILE IRON PIPE HORIZONTAL DIRECTIONAL DRILL FORCEMAINS SHALL HAVE A MINIMUM WORKING PRESSURE OF 160 PSI. THE CITY MAY REQUIRE A HIGHER PRESSURE RATING DEPENDING ON SITE CONDITIONS. INSIDE DIAMETER OF NON DIP HORIZONTAL DIRECTIONAL DRILL PIPE SHALL MATCH THE INSIDE DIAMETER OF CONNECTION PIPES. DIRECTIONAL DRILLS SHALL HAVE FUSED MJ ADAPTERS.
2. FORCEMAIN MINIMUM DEPTH OF COVER SHALL BE 48". ALL FORCEMAINS SHALL BE DISTINCTLY MARKED BY GREEN STRIPES OR GREEN COLOR.
3. ALL FITTINGS, VALVES, ETC. SHALL BE DUCTILE IRON (MJ OR FLANGED) AND RESTRAINED. ALL FORCEMAINS SHALL USE THRUST RESTRAINT AS CALCULATED BY A PROGRAM AVAILABLE AT (EBAA.COM)
4. ALL IN-LINE SANITARY SEWER FORCEMAIN VALVES SHALL BE PLUG VALVES UNLESS OTHERWISE NOTED. VALVES SHALL BE INSTALLED AT EACH END OF THE FORCEMAIN AND ON STUB OUTS.
5. ALL C-900 PVC PIPE REQUIREMENTS REFERENCE THE C-900 STANDARDS. DR UPDATES FOR BURST PROTECTION MAY BE REQUIRED WHEN USING C-900 STANDARDS.
6. INFORMATION ON UNDERGROUND LINES IN THIS AREA PROVIDED BY THE CITY OF DAYTONA BEACH. THE CITY OF DAYTONA BEACH DOES NOT WARRANTY THE ACCURACY, COMPLETENESS, RELIABILITY AND/OR SUITABILITY OF THE INFORMATION. FIELD VERIFICATION IS REQUIRED.

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER COB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DR. DAYTONA BEACH, FL 32114
PHONE (386)239-1166 FAX: (386)239-7126

OFFSITE PAVING, DRAINAGE & UTILITY PLAN

DME SPORTS, LLC

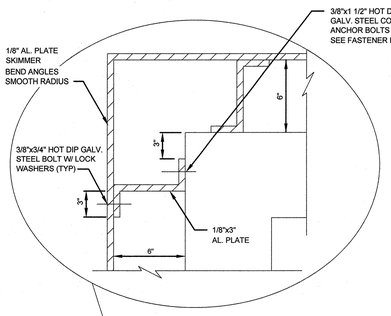
NOT RELEASED FOR CONSTRUCTION

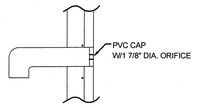
JOSEPH HUGH HOPKINS LICENSE NO. 48059 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH H. HOPKINS, P.E. 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.

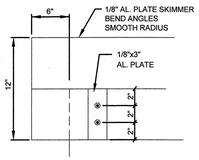
Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OID.0.9.2342.19200300.100.1.1=C00000016D63FDFA8F0001437F, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-08 14:55:17
Foxit PhantomPDF Version: 9.6.0

SCALE:	1"=40'
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	
250	
250-REV SITE PLAN 2019 2B	
SHEET C6 OF 10	

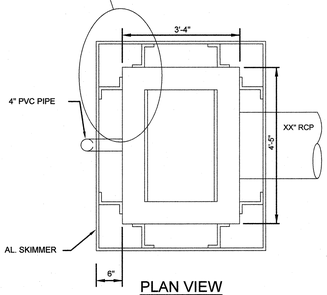




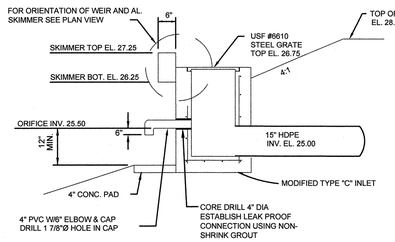
CAP DETAIL



FASTENER DETAIL

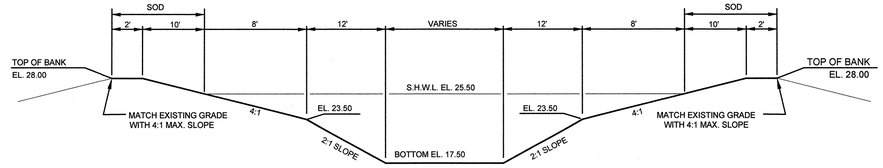


PLAN VIEW

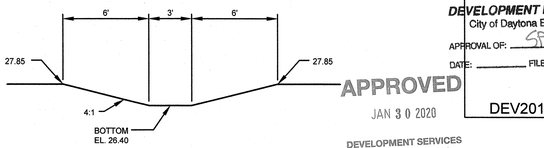


SECTION

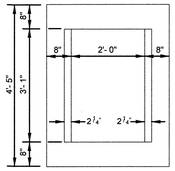
CONTROL STRUCTURE DETAIL
NOT TO SCALE



TYPICAL POND SECTION
NOT TO SCALE

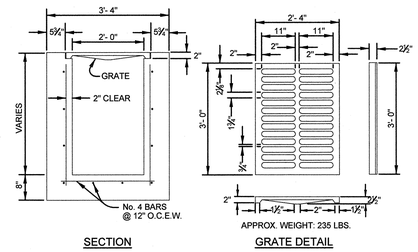


TYPICAL SWALE SECTION
NOT TO SCALE



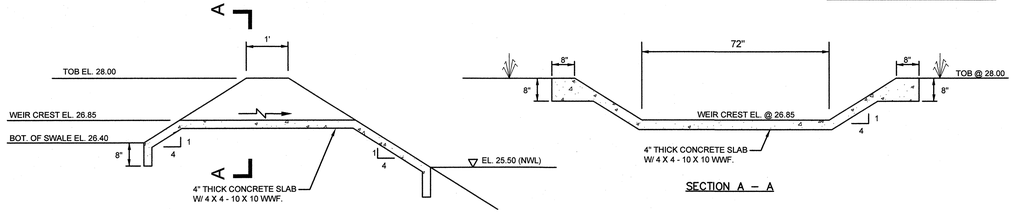
PLAN

RECOMMENDED MAXIMUM PIPE SIZE:
2'-0" WALL - 18" PIPE
3'-1" WALL - 24" PIPE



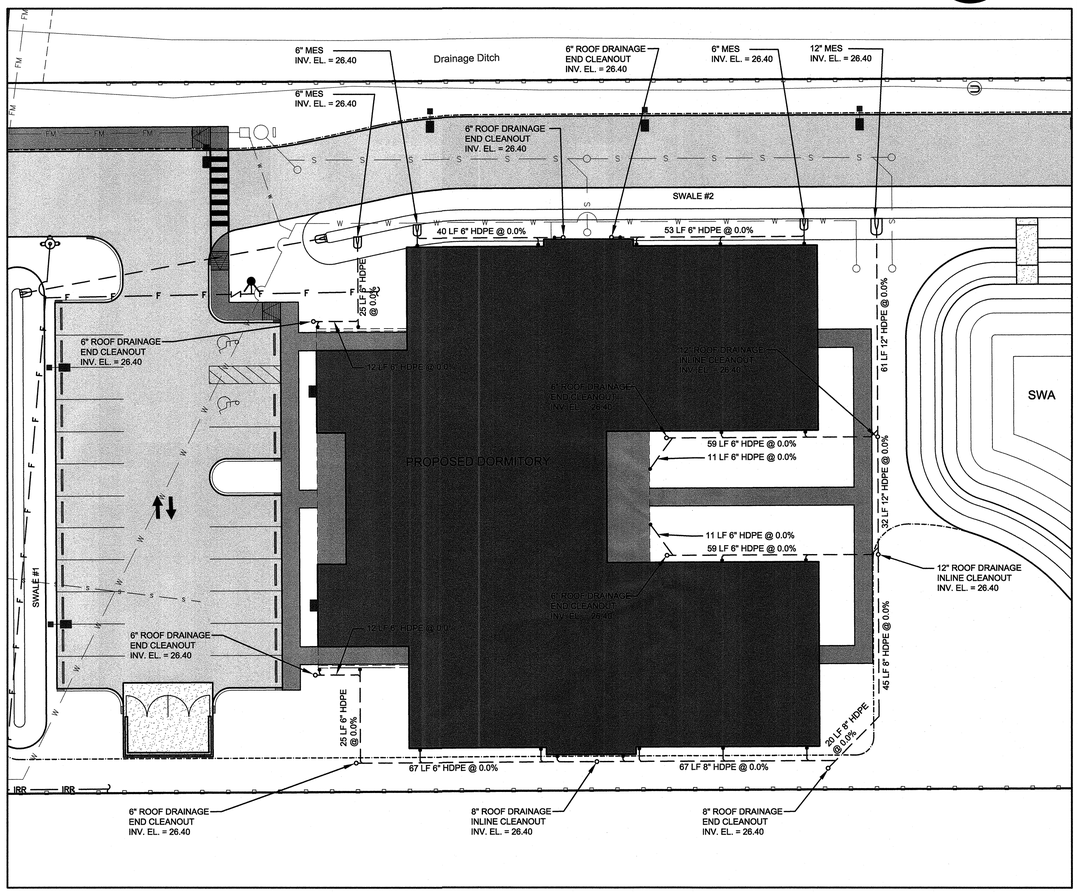
SECTION GRATE DETAIL

TYPE "C" INLET DETAIL



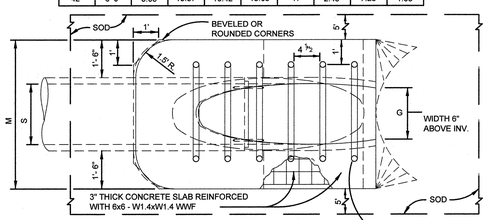
SECTION A – A

CONCRETE SPILLWAY DETAIL
NTS

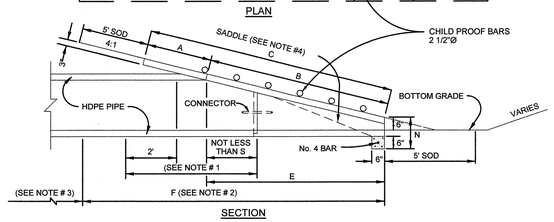


ENLARGED ROOF DRAINAGE PLAN
SCALE: 1"= 20'

D	X	A	B	C	E	F	G	M	N
12"	2'-4"	2.18'	3.06'	5.24'	3.03'	7"	1.03'	4.34'	1.17'
15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8"	1.22'	4.63'	1.19'
18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9"	1.41'	4.92'	1.21'
24"	3'-5"	2.53'	7.18'	9.71'	7.03'	11"	1.73'	5.50'	1.25'
30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13"	2.00'	6.08'	1.29'
36"	5'-1"	2.87"	11.31'	14.18'	11.03'	15'	2.24'	6.67'	1.33'
42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17"	2.45'	7.25'	1.38'



PLAN

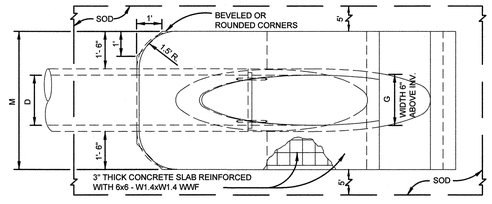


SECTION

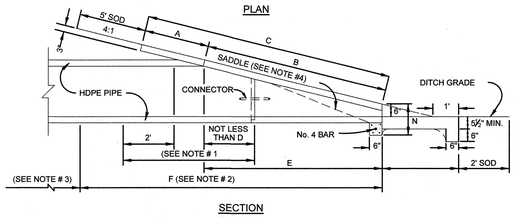
NOTES:
1. NO PIPE JOINT PERMITTED UNLESS APPROVED BY THE ENGINEER.
2. PIPE TO BE INCLUDED UNDER UNIT PRICE FOR MITERED END SECTION.
3. PAID FOR AS CROSS DRAIN PIPE CULVERT.
4. SEE FDOT INDEX NUMBER 430-021.

MITERED END SECTION CROSS DRAIN DETAIL

D	A	B	C	E	F	G	M	N
15"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	1.19'
18"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	1.21'
24"	2.53'	7.18'	9.71'	7.03'	11'	1.73'	5.50'	1.25'
30"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	1.29'
36"	2.87'	11.31'	14.18'	11.03'	15'	2.24'	6.67'	1.33'
42"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	1.38'



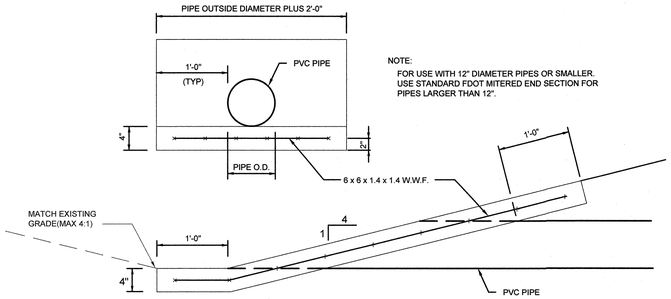
PLAN



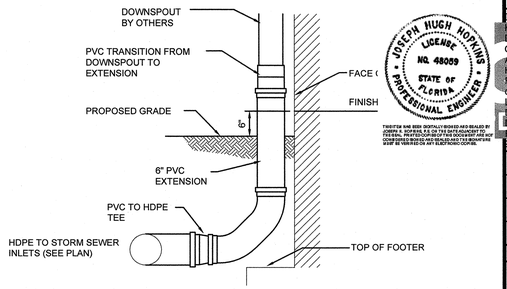
SECTION

NOTES:
1. NO PIPE JOINT PERMITTED UNLESS APPROVED BY THE ENGINEER.
2. PIPE TO BE INCLUDED UNDER UNIT PRICE FOR MITERED END SECTION.
3. PAID FOR AS CROSS DRAIN PIPE CULVERT. SEE FDOT INDEX NO. 430-022.
4. SLOPE 4:1 MITER TO C PIPE FOR PIPES 18" AND SMALLER, 2:1 FOR PIPES 24" AND LARGER.

MITERED END SECTION SIDE DRAIN DETAIL



MITERED END DETAIL



NOTE: ALL CONNECTIONS TO BE WATER TIGHT

DOWNSPOUT CONNECTION

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF:
DATE: FILE:
APPROVED
JAN 30 2020
DEV2019-128

DEVELOPMENT SERVICES
City of Daytona Beach

0 10 20 40
GRAPHIC SCALE: 1"= 20'

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER CODB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT

JOSEPH H. HOPKINS, P.E. NO. 48069
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DRIVE, DAYTONA BEACH, FL 32114
PHONE (386)239-1166 FAX (386)239-7126

STORMWATER DETAILS & SECTIONS

DME SPORTS, LLC

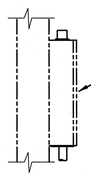
NOT RELEASED FOR CONSTRUCTION

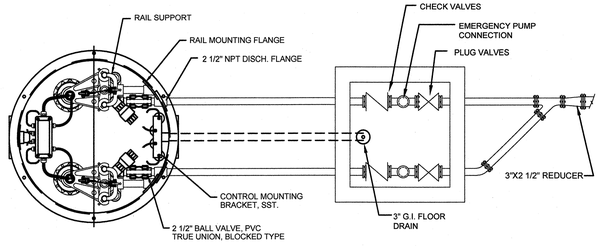
Digitally signed by Joseph H Hopkins
DN: c=US, o=Unaffiliated, ou=401310C0000016D83FDFA8F0000437F, cn=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-08 10:59:52
Foxit PhantomPDF Version: 9.6.0

BUS. CERT. LIC. 7175

SCALE:	AS NOTED
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	
250	
250-REV SITE PLAN 2019 2B	

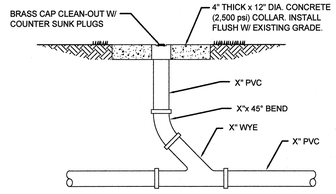
SHEET C7 OF 10





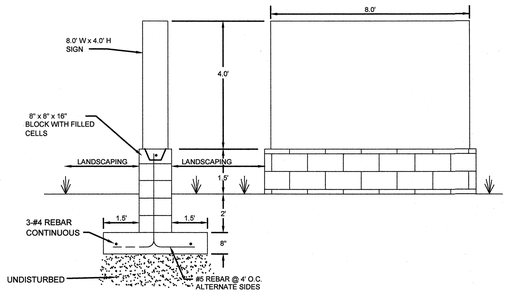
PLAN VIEW

VALVE BOX

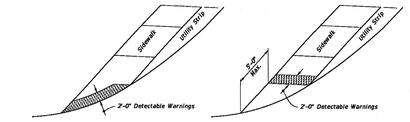


INLINE CLEAN-OUT

NOTE: CLEAN OUT TO BE FLUSH W/ CONCRETE COLLAR



MONUMENT SIGN



DETECTABLE WARNING ON FLUSH SHOULDER SIDEWALKS

CURB RAMPS WITHOUT SIDEWALKS AND FLUSH SHOULDER SIDEWALKS

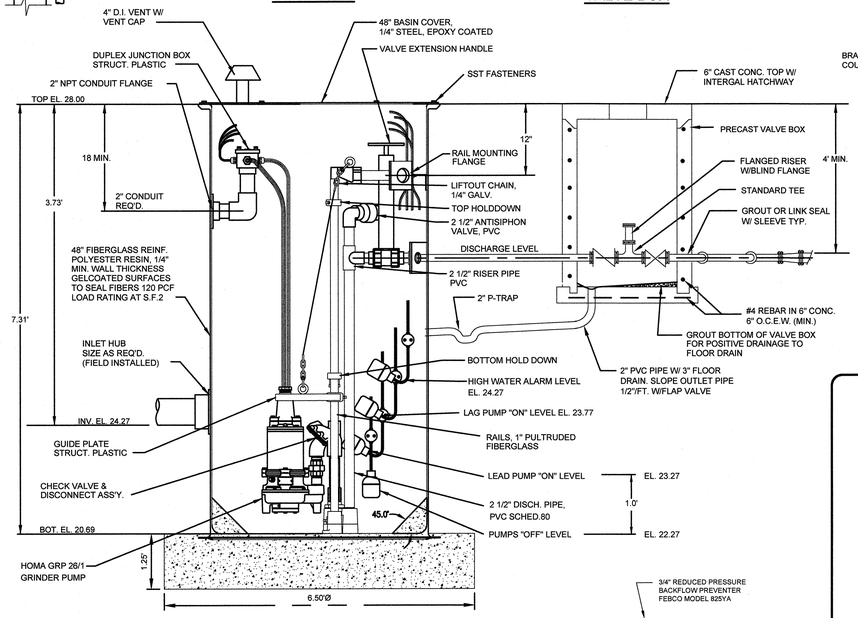
DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS

FDOT FY 2019-20 STANDARD PLANS INDEX 522-002

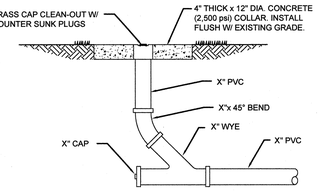
DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE: _____ FILE: _____

DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

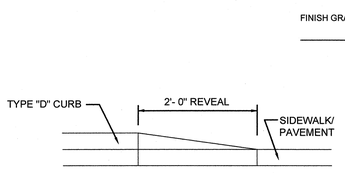


PRIVATE FIBERGLASS GRINDER PUMP STATION

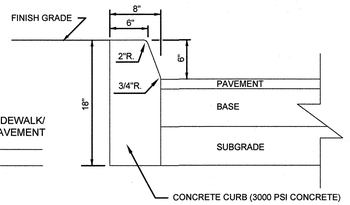


END CLEAN-OUT

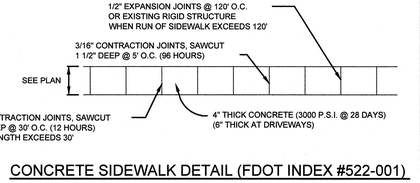
NOTE: CLEAN OUT TO BE FLUSH W/ CONCRETE COLLAR SEE SITE PLAN FOR (X)



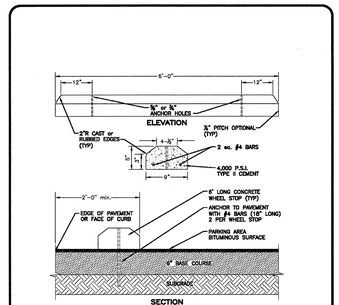
CURB REVEAL DETAIL
NOT TO SCALE



FDOT TYPE "D" CURB DETAIL
NOT TO SCALE

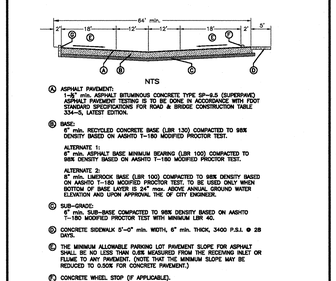


CONCRETE SIDEWALK DETAIL (FDOT INDEX #522-001)
NOT TO SCALE

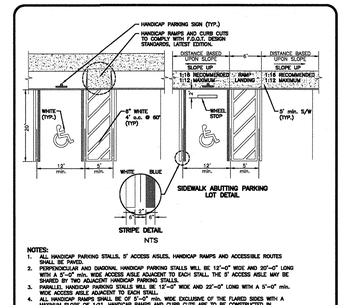


NOTES:
1. CONCRETE WHEEL STOP TO BE PRE-MANUFACTURED REINFORCED 4,000 P.S.I. TYPE II CEMENT CONCRETE.
2. #4 ANCHOR BAR ENDS TO BE INSTALLED FLUSH WITH TOP OF WHEEL STOP.
3. CENTER WHEEL STOP IN EACH STALL, SIDE TO SIDE.

PARKING SPACE
WHEEL STOP
DETAIL
M-1

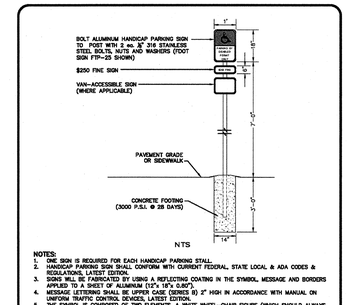


TYPICAL PARKING
LOT SECTION
DETAIL
M-2



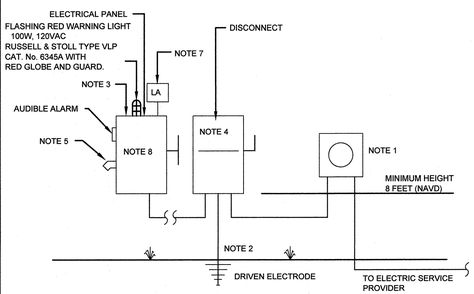
NOTES:
1. ALL HANDICAP PARKING STALLS, 5' ACCESS AISLES, HANDICAP RAMPS AND ACCESSIBLE ROUTES SHALL BE PAVED.
2. PERPENDICULAR AND DIAGONAL HANDICAP PARKING STALLS WILL BE 12'-0" WIDE AND 20'-0" LONG WITH A 5'-0" min. WIDE ACCESS AISLE ADJACENT TO EACH STALL. THE 5' ACCESS AISLE MAY BE SHARED BY TWO ADJACENT HANDICAP PARKING STALLS.
3. PARALLEL HANDICAP PARKING STALLS WILL BE 12'-0" WIDE AND 22'-0" LONG WITH A 5'-0" min. WIDE ACCESS AISLE ADJACENT TO EACH STALL.
4. ALL HANDICAP PARKING STALLS SHALL BE 2% MAX. EXCLUSIVE OF THE FLARED SIDES WITH A MAXIMUM SLOPE OF 5.0%. HANDICAP RAMPS AND CURB CUTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH FDOT DESIGN STANDARDS, LATEST EDITION.
5. BLUE STRIPING SHALL BE BLUE TINT TO MATCH SHADE 15180 OF FEDERAL STANDARD 595a.
6. WHEN FOOT TYPE 'D' CURB IS USED IN LIEU OF WHEEL STOPS, SIDEWALK ABUTTING CURB SHALL BE WIDENED BY 18" min. SO THAT THE TOTAL SIDEWALK WIDTH IS 7'-0" min. ALLOWING FOR 24" min. CLEAR ACCESSIBLE WIDTH.
7. 6" WHEEL STOPS ARE TO BE CENTERED SIDE TO SIDE IN EACH PARKING STALL REFER TO DETAIL (dim-5.dwg).
8. ADDITIONAL PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 (2% IN ALL DIRECTIONS.
9. DIMENSIONS ARE CENTERLINE OF PAVEMENT MARKINGS.
10. FOR COMPLETE DETAIL OF HANDICAP SIGN INSTALLATION, REFER TO CODB STANDARD DETAIL M-6 (dim-5.dwg).

HANDICAP PARKING
SPACE STRIPING
DETAIL
M-4



NOTES:
1. ONE SIGN IS REQUIRED FOR EACH HANDICAP PARKING STALL.
2. HANDICAP PARKING SIGN SHALL CONFORM WITH CURRENT FEDERAL, STATE LOCAL & ADA CODES & REGULATIONS, LATEST EDITION.
3. SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDERS APPLIED TO A SHEET OF ALUMINUM (12"x 18"x 0.080").
4. MESSAGE LETTERING SHALL BE UPPER CASE (SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
5. THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595a, COLOR #15180).
6. BLUE SIGN POSTS TO BE GALVANIZED U-IRON. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE 316 STAINLESS STEEL.
7. CONCRETE FOOTING SHALL BE OF PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I.
8. SIGN POST SHALL BE MINIMUM 2'-0" CLEAR FROM BACK OF CURB OR WHEEL STOP.
9. SIGN POST SHALL BE DESIGNED TO WITHSTAND 120 M.P.H. WIND LOAD.

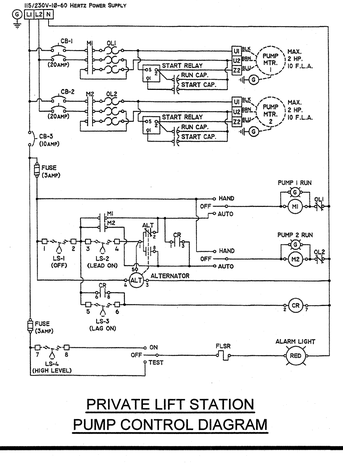
HANDICAP PARKING
SIGN DETAIL
(FDOT TYPE FTP-25)
M-5



NOTES:

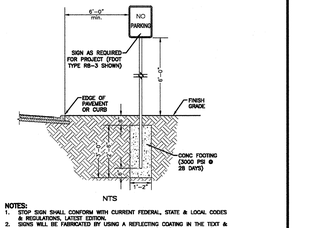
1. ELECTRICAL METER WITH BYPASS
2. SERVICE GROUND TO INCLUDE 3 - 10' ELECTRODES ON 10' CENTERS BOND TO SLAB REBAR. USE #4 BARE COPPER MIN.
3. ELECTRICAL PANEL IN WEATHERPROOF ENCLOSURE NEMA 3R304 STAINLESS STEEL.
4. 3 POLE S-N FUSED 240 VOLT (AMPS MAY CHANGE WITH VARIOUS APPLICATIONS) WEATHERPROOF DISCONNECT.
5. GENERATOR RECEPTACLE INLET WITH WEATHERPROOF CAP.
6. PACKAGE PUMP STATION CONTROL PANEL (INSIDE)
7. LIGHTNING ARRESTOR - SQUARE D No. SDSA 3650 TO BE INSTALLED IN PANEL.
8. P.C. PANEL BY OTHERS. PROVIDE WIRING TO SUBMERSIBLE PUMPS, LEVEL CONTROL DEVICES, & ALARM INDICATOR AS REQUIRED.

PRIVATE LIFT STATION RISER DIAGRAM



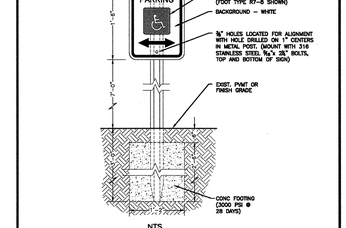
HOSE BIBB DETAIL

PRIVATE LIFT STATION
PUMP CONTROL DIAGRAM



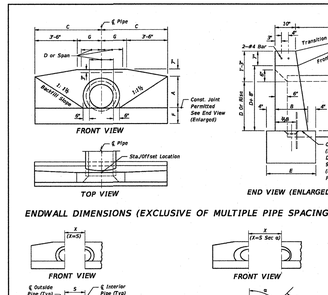
NOTES:
1. STOP SIGN SHALL CONFORM WITH CURRENT FEDERAL, STATE & LOCAL CODES REGULATIONS, LATEST EDITION.
2. SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE TEXT & BORDER APPLIED TO A SHEET ALUMINUM BACKING (0.80" IN THICKNESS).
3. MESSAGE LETTERING SHALL BE UPPER CASE (SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
4. METAL SIGN POSTS TO BE GALVANIZED U-IRON. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE 316 STAINLESS STEEL.
5. CONCRETE FOOTING SHALL BE OF PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I.
6. SIGN POST SHALL BE MINIMUM 2'-0" CLEAR FROM BACK OF CURB OR EDGE OF PAVEMENT.
7. SIGN POST SHALL BE DESIGNED TO WITHSTAND 120 M.P.H. WIND LOAD.

STANDARD SIGN
INSTALLATION DETAIL
(FDOT TYPE R11-1)
7-8

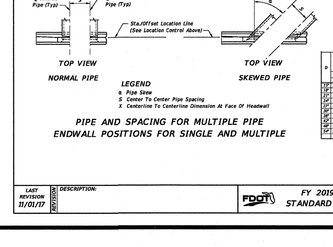


NOTES:
1. HANDICAP PARKING SIGN SHALL CONFORM WITH CURRENT FEDERAL, STATE LOCAL & ADA CODES & REGULATIONS, LATEST EDITION.
2. SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDERS APPLIED TO A SHEET ALUMINUM BACKING (12"x18"x0.80").
3. MESSAGE LETTERING SHALL BE UPPER CASE (SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
4. THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595a, COLOR #15180).
5. BLUE SIGN POSTS TO BE GALVANIZED U-IRON. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE 316 STAINLESS STEEL.
6. CONCRETE FOOTING SHALL BE OF PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I.
7. SIGN POST SHALL BE MINIMUM 2'-0" CLEAR FROM BACK OF CURB OR WHEEL STOP.
8. SIGN POST SHALL BE DESIGNED TO WITHSTAND 120 M.P.H. WIND LOAD.

HANDICAP PARKING
SIGN DETAIL
(FDOT TYPE R7-8)
7-9



ENDWALL DIMENSIONS (EXCLUSIVE OF MULTIPLE PIPE SPACING)



LEGEND
H Pipe Skew
S Center To Center Pipe Spacing
X Centerline To Centerline Dimension At Face Of Headwall

PIPE AND SPACING FOR MULTIPLE PIPE
ENDWALL POSITIONS FOR SINGLE AND MULTIPLE

Opening Area (Dia)	Dimensions																Angle	
Number Of Pipes		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Cant Head	Cant Inlet
14"	1.07	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
18"	1.77	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
24"	3.14	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
30"	4.91	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
36"	7.07	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
42"	9.62	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
48"	12.57	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
54"	15.90	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
60"	19.64	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
66"	23.76	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°
72"	28.27	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	0°	0°

PIPE AND SPACING FOR MULTIPLE PIPE
ENDWALL POSITIONS FOR SINGLE AND MULTIPLE

GENERAL NOTES

1. Endwall dimensions, locations and positions are for round and elliptical concrete pipe and for round and pipe-arch corrugated metal pipe. Round concrete pipe shown.
2. Front slope and ditch transitions shall be in accordance with Index 430-001.
3. Endwalls may be reinforcing steel reinforcement no determined by the reinforcement sh Concrete. Endwal
4. All exposed corne chamfered 3/4".
5. Concrete shall be concrete may be i in plants meeting Specifications.
6. On outfall ditches 20' transitions fr THIS ITEM WAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH A. HOPKINS, P.E. 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. right of way pern
7. For sodding requ
8. Payment for concrete quantities for endwalls skewed to the pipe shall be made on the following basis:
Endwall Skew to Pipe — Use Tabulated Value
0° to 5° — 0°
6° — 15°
10° — 30°
11° or over — 45°
9. Pipe length plan quantities shall be based on the pipe end locations shown in the standard location control end view, or lengths based on special endwall locations called for in the plans.
10. Payment for pipe in pipe culverts shall be based on plan quantities, as joined for endwall locations subsequently established by the Engineer.
11. Endwalls to be paid for under the contract unit price for Class I Concrete (Endwalls), CY.

STANDARD
LOCATION CONTROL

JOSEPH HUGH HOPKINS LICENSE NO. 48059 STATE OF FLORIDA PROFESSIONAL ENGINEER

LAST REVISION	DESCRIPTION:
11/01/17	

FDOT FY 2019-20 STANDARD PLANS

STRAIGHT CONCRETE ENDWALLS
SINGLE AND MULTIPLE PIPE

INDEX 430-030 SHEET 1 of 2

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER CODB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT

JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DRIVE, DAYTONA BEACH, FL 32114
PHONE: (386)239-1186 FAX: (386)239-1126

CONSTRUCTION DETAILS

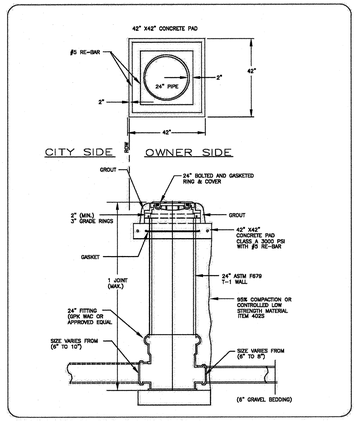
DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION

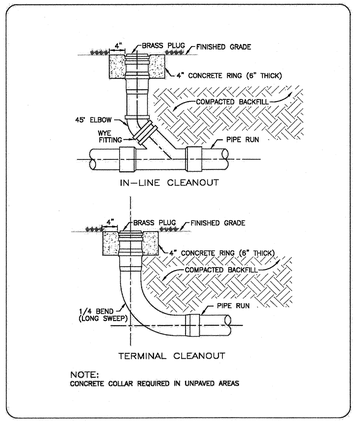
Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OU=A01410C0000016D83FDF A8C3000437F, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-08 11:00:27
Foxit PhantomPDF Version: 9.6.0 BUS. CERT. LIC. 7175

SCALE:	NONE
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	250
250-REV SITE PLAN 2019 2B	
SHEET	C8 OF 10

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: CP
APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach
DATE: _____ FILE: _____
DEV2019-128

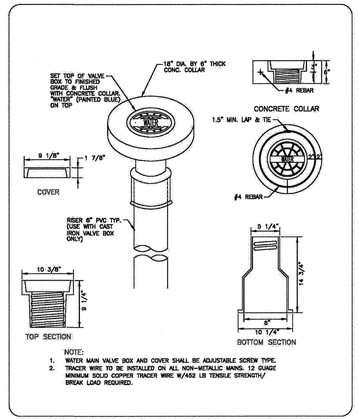


THE CITY OF DAYTONA BEACH UTILITIES DEPARTMENT — ALTERNATE COMMERCIAL SANITARY LATERAL NON-TRAFFIC BEARING DETAIL S-9 B — Fil-19/20



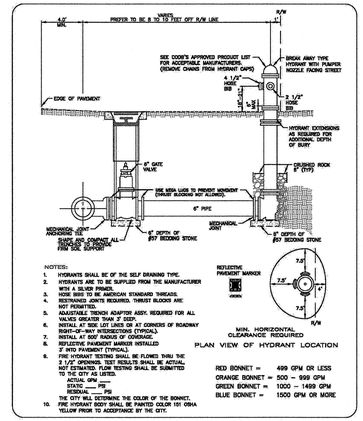
NOTE:
CONCRETE COLLAR REQUIRED IN UNPAVED AREAS

THE CITY OF DAYTONA BEACH UTILITIES DEPARTMENT — SANITARY LATERAL CLEANOUT DETAIL S-10 — Fil-19/20



NOTE:
1. WATER MAIN VALVE BOX AND COVER SHALL BE ADJUSTABLE SCREW TYPE.
2. TRACER WIRE TO BE INSTALLED ON ALL NON-METALLIC MAINS. 12 GUAGE MINIMUM SOLID COPPER TRACER WIRE W/452 LB TENSILE STRENGTH/ BREAK LOAD REQUIRED.

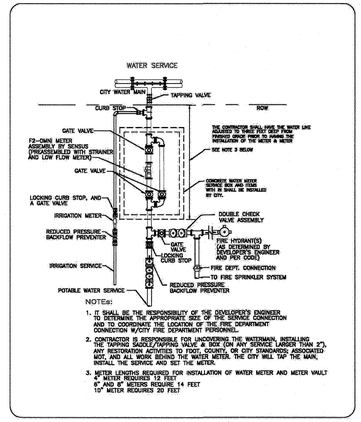
THE CITY OF DAYTONA BEACH UTILITIES DEPARTMENT — MAIN VALVE BOX DETAIL W-15 — Fil-19/20



NOTES:
1. HYDRANTS SHALL BE 6" THE MJF DRAWING TYPE.
2. HYDRANTS ARE TO BE SUPPLIED FROM THE MANUFACTURER WITH A 5½" VALVE.
3. NOZZLES TO BE AMERICAN STANDARD THREADS.
4. RESTRAINED JOINTS REQUIRED. THRUST BLOCKS ARE NOT PERMITTED.
5. ADJUSTABLE TRENCH ADAPTOR ASSY. REQUIRED FOR ALL VALVES GREATER THAN 5' DEEP.
6. INSTALL AT SIDE LOT LINES OR AT CORNERS OF ROADWAY RIGHTS-OF-WAY INTERSECTIONS (TYPICAL).
7. SET TOP OF HYDRANT 6" ABOVE GRADE.
8. REFLECTIVE PAVEMENT MARKER INSTALLED 3' INTO PAVEMENT (TYPICAL).
9. FIRE HYDRANT TESTING SHALL BE FLOWED THRU THE 2 1/2" OPENINGS. TEST RESULTS SHALL BE ACTUAL, NOT ESTIMATED. FLOW TESTING SHALL BE SUBMITTED TO THE CITY AS LISTED.
   STATIC GPM ____
   RESIDUAL ____ PSI
   RESIDUAL ____ PSI
   THE CITY WILL DETERMINE THE COLOR OF THE BONNECT.
10. FIRE HYDRANT BODY SHALL BE PAINTED COLOR 101 OSHA YELLOW PRIOR TO ACCEPTANCE BY THE CITY.

RED BONNET = 499 GPM OR LESS
ORANGE BONNET = 500 – 999 GPM
GREEN BONNET = 1000 – 1499 GPM
BLUE BONNET = 1500 GPM OR MORE

THE CITY OF DAYTONA BEACH UTILITIES DEPARTMENT — FIRE HYDRANT ASSEMBLY DETAIL W-16 — Fil-19/20



NOTES:
1. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S ENGINEER TO DETERMINE THE APPROPRIATE SIZE OF THE SERVICE CONNECTION AND TO COORDINATE THE LOCATION OF THE FIRE DEPARTMENT CONNECTION W/CITY/ FIRE DEPARTMENT PERSONNEL.
2. CONTRACTOR IS RESPONSIBLE FOR UNCOVERING THE WATERMAIN, INSTALLING THE TAPPING SADDLE/TAPPING VALVE & BOX (ON ANY SERVICE LARGER THAN 2"), ANY RESTRAINT ACTIVITIES TO THAT POINT, TESTING AND DISINFECTING ASSOCIATED BOTH, AND ALL WORK BEHIND THE METER. THE CITY WILL TAP THE MAIN, INSTALL THE SERVICE AND SET THE METER.
3. METER LENGTHS REQUIRED FOR INSTALLATION OF WATER METER AND METER VAULT 2" AND 3" METERS REQUIRE 14 FEET
   1" METER REQUIRES 20 FEET

THE CITY OF DAYTONA BEACH UTILITIES DEPARTMENT — FIRE/DOMESTIC/IRRIGATION CONNECTION DETAIL W-17 — Fil-19/20

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

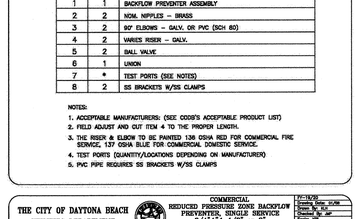
Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main — 3 ft. minimum	Water Main — 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum: Water Main
Vacuum Sanitary Sewer	Water Main — 10 ft. preferred 3 ft. minimum	Water Main — 12 inches is preferred 6 inches minimum	Alternate 3 ft. minimum: Water Main
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, and Water (3)	Water Main — 10 ft. preferred 6 ft. minimum (3)	12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum: Water Main
On-Site Sewage Treatment & Disposal System	10 ft. minimum.	---	---

(1) Water main should cross above other pipe. Where water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer: This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

THE CITY OF DAYTONA BEACH UTILITIES DEPARTMENT — WATER MAIN SEPARATION CHART W-8 — Fil-19/20

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER COBB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851
1852
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266
2267
2268
2269
2270
2271
2272
2273
2274
2275
2276
2277
2278
2279
2280
2281
2282
2283
2284
2285
2286
2287
2288
2289
2290
2291
2292
2293
2294
2295
2296
2297
2298
2299
2300
2301
2302
2303
2304
2305
2306
2307
2308
2309
2310
2311
2312
2313
2314
2315
2316
2317
2318
2319
2320
2321
2322
2323
2324
2325
2326
2327
2328
2329
2330
2331
2332
2333
2334
2335
2336
2337
2338
2339
2340
2341
2342
2343
2344
2345
2346
2347
2348
2349
2350
2351
2352
2353
2354
2355
2356
2357
2358
2359
2360
2361
2362
2363
2364
2365
2366
2367
2368
2369
2370
2371
2372
2373
2374
2375
2376
2377
2378
2379
2380
2381
2382
2383
2384
2385
2386
2387
2388
2389
2390
2391
2392
2393
2394
2395
2396
2397
2398
2399
2400
2401
2402
2403
2404
2405
2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421
2422
2423
2424
2425
2426
2427
2428
2429
2430
2431
2432
2433
2434
2435
2436
2437
2438
2439
2440
2441
2442
2443
2444
2445
2446
2447
2448
2449
2450
2451
2452
2453
2454
2455
2456
2457
2458
2459
2460
2461
2462
2463
2464
2465
2466
2467
2468
2469
2470
2471
2472
2473
2474
2475
2476
2477
2478
2479
2480
2481
2482
2483
2484
2485
2486
2487
2488
2489
2490
2491
2492
2493
2494
2495
2496
2497
2498
2499
2500
2501
2502
2503
2504
2505
2506
2507
2508
2509
2510
2511
2512
2513
2514
2515
2516
2517
2518
2519
2520
2521
2522
2523
2524
2525
2526
2527
2528
2529
2530
2531
2532
2533
2534
2535
2536
2537
2538
2539
2540
2541
2542
2543
2544
2545
2546
2547
2548
2549
2550
2551
2552
2553
2554
2555
2556
2557
2558
2559
2560
2561
2562
2563
2564
2565
2566
2567
2568
2569
2570
2571
2572
2573
2574
2575
2576
2577
2578
2579
2580
2581
2582
2583
2584
2585
2586
2587
2588
2589
2590
2591
2592
2593
2594
2595
2596
2597
2598
2599
2600
2601
2602
2603
2604
2605
2606
2607
2608
2609
2610
2611
2612
2613
2614
2615
2616
2617
2618
2619
2620
2621
2622
2623
2624
2625
2626
2627
2628
2629
2630
2631
2632
2633
2634
2635
2636
2637
2638
2639
2640
2641
2642
2643
2644
2645
2646
2647
2648
2649
2650
2651
2652
2653
2654
2655
2656
2657
2658
2659
2660
2661
2662
2663
2664
2665
2666
2667
2668
2669
2670
2671
2672
2673
2674
2675
2676
2677
2678
2679
2680
2681
2682
2683
2684
2685
2686
2687
2688
2689
2690
2691
2692
2693
2694
2695
2696
2697
2698
2699
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2712
2713
2714
2715
2716
2717
2718
2719
2720
2721
2722
2723
2724
2725
2726
2727
2728
2729
2730
2731
2732
2733
2734
2735
2736
2737
2738
2739
2740
2741
2742
2743
2744
2745
2746
2747
2748
2749
2750
2751
2752
2753
2754
2755
2756
2757
2758
2759
2760
2761
2762
2763
2764
2765
2766
2767
2768
2769
2770
2771
2772
2773
2774
2775
2776
2777
2778
2779
2780
2781
2782
2783
2784
2785
2786
2787
2788
2789
2790
2791
2792
2793
2794
2795
2796
2797
2798
2799
2800
2801
2802
2803
2804
2805
2806
2807
2808
2809
2810
2811
2812
2813
2814
2815
2816
2817
2818
2819
2820
2821
2822
2823
2824
2825
2826
2827
2828
2829
2830
2831
2832
2833
2834
2835
2836
2837
2838
2839
2840
2841
2842
2843
2844
2845
2846
2847
2848
2849
2850
2851
2852
2853
2854
2855
2856
2857
2858
2859
2860
2861
2862
2863
2864
2865
2866
2867
2868
2869
2870
2871
2872
2873
2874
2875
2876
2877
2878
2879
2880
2881
2882
2883
2884
2885
2886
2887
2888
2889
2890
2891
2892
2893
2894
2895
2896
2897
2898
2899
2900
2901
2902
2903
2904
2905
2906
2907
2908
2909
2910
2911
2912
2913
2914
2915
2916
2917
2918
2919
2920
2921
2922
2923
2924
2925
2926
2927
2928
2929
2930
2931
2932
2933
2934
2935
2936
2937
2938
2939
2940
2941
2942
2943
2944
2945
2946
2947
2948
2949
2950
2951
2952
2953
2954
2955
2956
2957
2958
2959
2960
2961
2962
2963
2964
2965
2966
2967
2968
2969
2970
2971
2972
2973
2974
2975
2976
2977
2978
2979
2980
2981
2982
2983
2984
2985
2986
2987
2988
2989
2990
2991
2992
2993
2994
2995
2996
2997
2998
2999
3000
3001
3002
3003
3004
3005
3006
3007
3008
3009
3010
3011
3012
3013
3014
3015
3016
3017
3018
3019
3020
3021
3022
3023
3024
3025
3026
3027
3028
3029
3030
3031
3032
3033
3034
3035
3036
3037
3038
3039
3040
3041
3042
3043
3044
3045
3046
3047
3048
3049
3050
3051
3052
3053
3054
3055
3056
3057
3058
3059
3060
3061
3062
3063
3064
3065
3066
3067
3068
3069
3070
3071
3072
3073
3074
3075
3076
3077
3078
3079
3080
3081
3082
3083
3084
3085
3086
3087
3088
3089
3090
3091
3092
3093
3094
3095
3096
3097
3098
3099
3100
3101
3102
3103
3104
3105
3106
3107
3108
3109
3110
3111
3112
3113
3114
3115
3116
3117
3118
3119
3120
3121
3122
3123
3124
3125
3126
3127
3128
3129
3130
3131
3132
3133
3134
3135
3136
3137
3138
3139
3140
3141
3142
3143
3144
3145
3146
3147
3148
3149
3150
3151
3152
3153
3154
3155
3156
3157
3158
3159
3160
3161
3162
3163
3164
3165
3166
3167
3168
3169
3170
3171
3172
3173
3174
3175
3176
3177
3178
3179
3180
3181
3182
3183
3184
3185
3186
3187
3188
3189
3190
3191
3192
3193
3194
3195
3196
3197
3198
3199
3200
3201
3202
3203
3204
3205
3206
3207
3208
3209
3210
3211
3212
3213
3214
3215
3216
3217
3218
3219
3220
3221
3222
3223
3224
3225
3226
3227
3228
3229
3230
3231
3232
3233
3234
3235
3236
3237
3238
3239
3240
3241
3242
3243
3244
3245
3246
3247
3248
3249
3250
3251
3252
3253
3254
3255
3256
3257
3258
3259
3260
3261
3262
3263
3264
3265
3266
3267
3268
3269
3270
3271
3272
3273
3274
3275
3276
3277
3278
3279
3280
3281
3282
3283
3284
3285
3286
3287
3288
3289
3290
3291
3292
3293
3294
3295
3296
3297
3298
3299
3300
3301
3302
3303
3304
3305
3306
3307
3308
3309
3310
3311
3312
3313
3314
3315
3316
3317
3318
3319
3320
3321
3322
3323
3324
3325
3326
3327
3328
3329
3330
3331
3332
3333
3334
3335
3336
3337
3338
3339
3340
3341
3342
3343
3344
3345
3346
3347
3348
3349
3350
3351
3352
3353
3354
3355
3356
3357
3358
3359
3360
3361
3362
3363
3364
3365
3366
3367
3368
3369
3370
3371
3372
3373
3374
3375
3376
3377
3378
3379
3380
3381
3382
3383
3384
3385
3386
3387
3388
3389
3390
3391
3392
3393
3394
3395
3396
3397
3398
3399
3400
3401
3402
3403
3404
3405
3406
3407
3408
3409
3410
3411
3412
3413
3414
3415
3416
3417
3418
3419
3420
3421
3422
3423
3424
3425
3426
3427
3428
3429
3430
3431
3432
3433
3434
3435
3436
3437
3438
3439
3440
3441
3442
3443
3444
3445
3446
3447
3448
3449
3450
3451
3452
3453
3454
3455
3456
3457
3458
3459
3460
3461
3462
3463
3464
3465
3466
3467
3468
3469
3470
3471
3472
3473
3474
3475
3476
3477
3478
3479
3480
3481
3482
3483
3484
3485
3486
3487
3488
3489
3490
3491
3492
3493
3494
3495
3496
3497
3498
3499
3500
3501
3502
3503
3504
3505
3506
3507
3508
3509
3510
3511
3512
3513
3514
3515
3516
3517
3518
3519
3520
3521
3522
3523
3524
3525
3526
3527
3528
3529
3530
3531
3532
3533
3534
3535
3536
3537
3538
3539
3540
3541
3542
3543
3544
3545
3546
3547
3548
3549
3550
3551
3552
3553
3554
3555
3556
3557
3558
3559
3560
3561
3562
3563
3564
3565
3566
3567
3568
3569
3570
3571
3572
3573
3574
3575
3576
3577
3578
3579
3580
3581
3582
3583
3584
3585
3586
3587
3588
3589
3590
3591
3592
3593
3594
3595
3596
3597
3598
3599
3600
3601
3602
3603
3604
3605
3606
3607
3608
3609
3610
3611
3612
3613
3614
3615
3616
3617
3618
3619
3620
3621
3622
3623
3624
3625
3626
3627
3628
3629
3630
3631
3632
3633
3634
3635
3636
3637
3638
3639
3640
3641
3642
3643
3644
3645
3646
3647
3648
3649
3650
3651
3652
3653
3654
3655
3656
3657
3658
3659
3660
3661
3662
3663
3664
3665
3666
3667
3668
3669
3670
3671
3672
3673
3674
3675
3676
3677
3678
3679
3680
3681
3682
3683
3684
3685
3686
3687
3688
3689
3690
3691
3692
3693
3694
3695
3696
3697
3698
3699
3700
3701
3702
3703
3704
3705
3706
3707
3708
3709
3710
3711
3712
3713
3714
3715
3716
3717
3718
3719
3720
3721
3722
3723
3724
3725
3726
3727
3728
3729
3730
3731
3732
3733
3734
3735
3736
3737
3738
3739
3740
3741
3742
3743
3744
3745
3746
3747
3748
3749
3750
3751
3752
3753
3754
3755
3756
3757
3758
3759
3760
3761
3762
3763
3764
3765
3766
3767
3768
3769
3770
3771
3772
3773
3774
3775
3776
3777
3778
3779
3780
3781
3782
3783
3784
3785
3786
3787
3788
3789
3790
3791
3792
3793
3794
3795
3796
3797
3798
3799
3800
3801
3802
3803
3804
3805
3806
3807
3808
3809
3810
3811
3812
3813
3814
3815
3816
3817
3818
3819
3820
3821
3822
3823
3824
3825
3826
3827
3828
3829
3830
3831
3832
3833
3834
3835
3836
3837
3838
3839
3840
3841
3842
3843
3844
3845
3846
3847
3848
3849
3850
3851
3852
3853
3854
3855
3856
3857
3858
3859
3860
3861
3862
3863
3864
3865
3866
3867
3868
3869
3870
3871
3872
3873
3874
3875
3876
3877
3878
3879
3880
3881
3882
3883
3884
3885
3886
3887
3888
3889
3890
3891
3892
3893
3894
3895
3896
3897
3898
3899
3900
3901
3902
3903
3904
3905
3906
3907
3908
3909
3910
3911
3912
3913
3914
3915
3916
3917
3918
3919
3920
3921
3922
3923
3924
3925
3926
3927
3928
3929
3930
3931
3932
3933
3934
3935
3936
3937
3938
3939
3940
3941
3942
3943
3944
3945
3946
3947
3948
3949
3950
3951
3952
3953
3954
3955
3956
3957
3958
3959
3960
3961
3962
3963
3964
3965
3966
3967
3968
3969
3970
3971
3972
3973
3974
3975
3976
3977
3978
3979
3980
3981
3982
3983
3984
3985
3986
3987
3988
3989
3990
3991
3992
3993
3994
3995
3996
3997
3998
3999
4000
4001
4002
4003
4004
4005
4006
4007
4008
4009
4010
4011
4012
4013
4014
4015
4016
4017
4018
4019
4020
4021
4022
4023
4024
4025
4026
4027
4028
4029
4030
4031
4032
4033
4034
4035
4036
4037
4038
4039
4040
4041
4042
4043
4044
4045
4046
4047
4048
4049
4050
4051
4052
4053
4054
4055

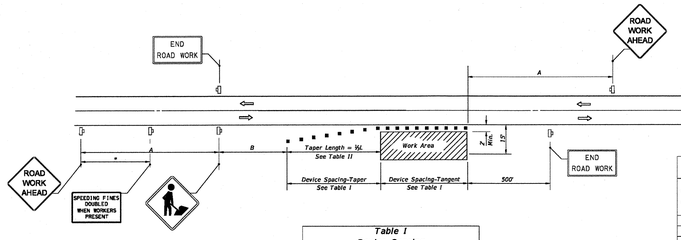


Table I
Device Spacing

Speed (mph)	Max. Distance Between Devices (ft.)			
	Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

Table II
Taper Length - Shoulder

Speed (mph)	½L (ft)			Notes
	8' Shldr.	10' Shldr.	12' Shldr.	
25	28	35	42	L=WS²/60
30	40	50	60	
35	55	68	82	
40	72	90	107	L=WS
45	130	150	180	
50	133	167	200	
55	147	183	220	
60	160	200	240	
65	173	217	260	
70	187	233	280	

8' minimum shoulder width

½L = Length of shoulder taper in feet

W = Width of total shoulder in feet (combined paved and unpaved width)

S = Posted speed limit (mph)

DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350
50 mph or greater	500	500

*Sideway between signs.

SYMBOLS

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification + Direction of Traffic

GENERAL NOTES

1. When four or more work vehicles enter the through traffic lanes in a one hour period or less (excluding establishing and terminating the work area), the advanced FLAGGER sign shall be substituted for the WORKERS sign. For location of Flaggers and FLAGGER signs, see Index 102-603.
2. SHOULDER WORK sign may be used as an alternate to the WORKER symbol sign only on the side where the shoulder work is being performed.
3. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ Indexes.
4. For general TCZ requirements and additional information, refer to Index 102-600.

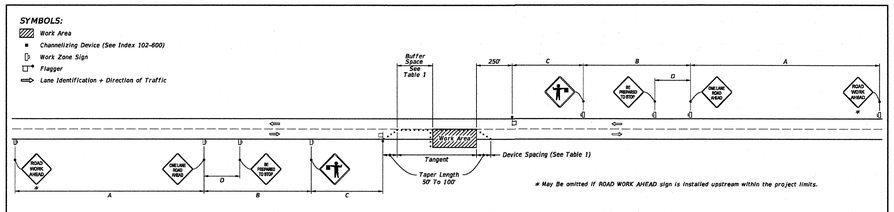
DURATION NOTES

1. Signs and channelizing devices may be omitted if all of the following conditions are met:
   a. Work operations are 60 minutes or less.
   b. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH THE AREA CLOSER THAN 15' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

LAST REVISION 11/01/17	REVISION	DESCRIPTION:	FDOT FY 2019-20 STANDARD PLANS	TWO-LANE, TWO-WAY, WORK ON SHOULDER	INDEX 102-602	SHEET 1 of 1



GENERAL NOTES:

1. Special Conditions may be required in accordance with these notes and the following sheets:
   A. Railroad Crossings:
      a. If an active railroad crossing is located closer to the Work Area than the queue length plus 300 feet, extend the Buffer Space as shown on Sheet 3.
      b. If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniformed traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing, even if automatic train warning devices are in place.
   B. If the Work Area encroaches on the Centerline, use the Layout for Temporary Lane Shift to Shoulder on Sheet 3 only if the Existing Paved Shoulder width is sufficient to provide for an 11' lane between the Work Area and the Edge of Existing Paved Shoulder. Reduce the posted speed when appropriate.
2. Temporary Raised Rumble Strips:
   A. Use when both of the following conditions are met concurrently:
      a. Existing Posted Speed is 55 mph or greater;
      b. Work duration is greater than 60 minutes.
   B. Use a consistent Strip color throughout the work zone.
   C. Place each Rumble Strip Set transversely across the lane at locations shown.
   D. Use Option 1 or Option 2 as shown on Sheet 3. Use only one option throughout work zone.
3. Additional one-way control may be provided by the following means:
   A. Flag-carrying vehicle;
   B. Official vehicle;
   C. Pilot vehicles;
   D. Traffic signals.

   When flaggers are the sole means of one-way control, the flaggers must be in sight of each other or in direct communication at all times.
4. When a side road intersects the highway within the TTC zone, place additional TTC devices in accordance with other applicable TCZ Indexes.
5. The two channelizing devices directly in front of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
6. When Buffer Space cannot be attained due to geometric constraints, use the greatest attainable length, not less than 200 ft, for posted speeds greater than 25 mph.
7. ROAD WORK AHEAD and the BE PREPARED TO STOP signs may be omitted if all of the following conditions are met:
   A. Work operations are 60 minutes or less.
   B. Speed limit is 45 mph or less.
   C. There are no sight obstructions to vehicles approaching the work area for a distance equal to the Buffer Space shown in Table 1.
   D. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
   E. Volume and complexity of the roadway has been constered.
   F. If a railroad crossing is present, vehicles will not queue across rail tracks.
   G. AFADs are not in use.
8. See Index 102-600 for general TCZ requirements and additional information.
9. Automated Flagger Assistance Devices (AFADs) may be used in accordance with Specifications Section 102, 990 and the APL vendor drawings.

TABLE 1
DEVICE SPACING

Posted Speed	Maximum Spacing of Cones or Tubular Markers		Maximum Spacing of Type I or Type II Barricades/Panels/Drums		Distance Between Signs				Buffer Space
	On a Taper	On a Tangent	On a Taper	On a Tangent	A	B	C	D	
25	20'	50'	20'	50'	200'	200'	200'	100'	155'
30	20'	50'	20'	50'	200'	200'	200'	100'	200'
35	20'	50'	20'	50'	200'	200'	200'	100'	250'
40	20'	50'	20'	50'	200'	200'	200'	100'	305'
45	20'	50'	20'	50'	350'	350'	350'	175'	360'
50	20'	50'	20'	100'	500'	500'	500'	250'	425'
55	20'	50'	20'	100'	2640'	1500'	1000'	500'	495'
60	20'	50'	20'	100'	2640'	1500'	1000'	500'	570'
65	20'	50'	20'	100'	2640'	1500'	1000'	500'	645'
70	20'	50'	20'	100'	2640'	1500'	1000'	500'	730'

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH THE AREA BETWEEN THE CENTERLINE AND A LINE 2' OUTSIDE THE EDGE OF TRAVEL WAY.

LAST REVISION 11/01/17	REVISION	DESCRIPTION:	FDOT FY 2019-20 STANDARD PLANS	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY	INDEX 102-603	SHEET 1 of 3

VOLUSIA COUNTY NOTES:

1. NOTIFY VOLUSIA COUNTY DEVELOPMENT ENGINEERING DIVISION AT 386-736-5928 24 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. VOLUSIA COUNTY TRAFFIC ENGINEERING IS NOT A MEMBER OF THE SUNSHINE ONE CALL. CONTACT TRAFFIC ENGINEERING AT 386-736-5968 TWO BUSINESS DAYS PRIOR TO WORK TO LOCATE FIBER THAT RUNS BETWEENSIGNALS AND LOOPS.
3. DRIVING AND/OR STAGIN OF CONSTRUCTION VEHICLES IS NOT PERMITTED ON ANY SIDEWALKS IN THE RIGHT-OF-WAY. ANY DAMAGE TO SIDEWALKS WILL BE REPAIRED AND/OR REPLACED IN LIKE KIND BY THE CONTRACTOR.
4. ANY SIDEWALK, LANE OR ROAD CLOSURE (INCLUDING FLAGGING OPERATIONS) REQUIRES REVIEW AND APPROVAL IN ADVANCE AND A SEVEN (7) DAY MINIMUM NOTICE TO VOLUSIA COUNTY TRAFFIC OPERATIONS (386-239-6535).
5. OFFSITE PAVEMENT SPECIFICATIONS:
   CONCRETE:
   6" FDOT CLASS1 PORTLAND CEMENT CONCRETE (3000 PSI @ 28 DAYS, 5" SLUMP)
   12" CLEAN STABILIZED SAN SUBGRADE (MIN. 98% COMPACTIN, AASHTO T-180)
   EXPANSION AND CONTRACTION JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH PCA RECOMMENDATION.
   ASPHALT:
   1½" TYPE SIII ASPHALTIC CONCRETE STRUCTURE COURSE (MIN.98% COMPACTION, NUCLEAR DENSITY BACK SCATTER METHOD),
   8" LIMEROCK BASE (LBR 100 MIN. 98% COMPACTION, AASHTO T-180)
   10" STABILIZED SUBGRADE (LBR 40 MIN. 98% COMPACTION, AASHTO T-180)

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: JR
DATE _____ FILE: _____
DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

NO.	DATE	APPR.	REVISION
3	10/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 10/21/19
2	10/15/19	JHH	REVISED PER CODB COMMENTS DATED 9/25/19
1	9/23/19	JHH	REVISED PER COUNTY COMMENTS DATED 8/20/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DR. DAYTONA BEACH, FL 32114
PHONE: (386)239-7166 FAX: (386)239-7120

MAINTENANCE OF TRAFFIC

DME SPORTS, LLC

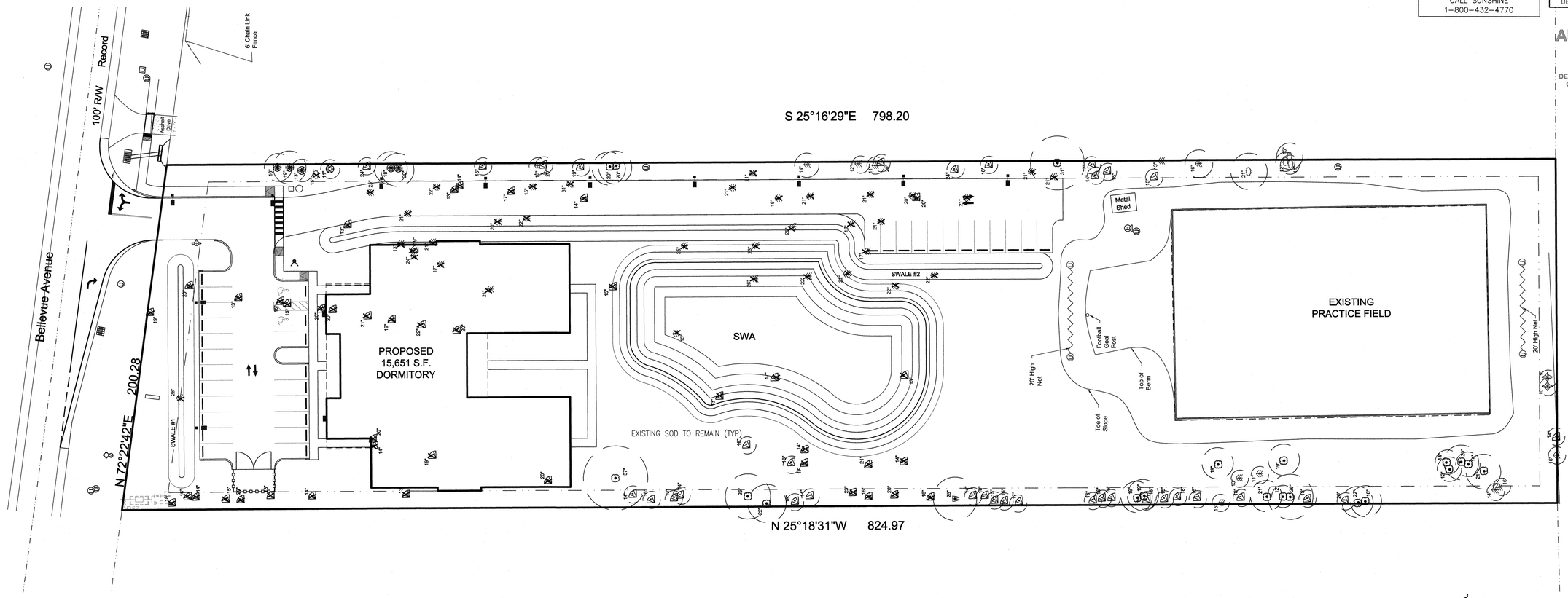
NOT RELEASED FOR CONSTRUCTION

JOSEPH HUGH HOPKINS LICENSE NO. 48059 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSEPH H. HOPKINS, P.E. 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.

Digitally signed by Joseph H Hopkins
DN: C=US, O=Unaffiliated, OU=A01410C0000016D83FDFA8F0000437F, CN=Joseph H Hopkins
Reason: I am the author of this document
Location: 100 Marina Point Dr. Daytona Beach, FL 32114
Date: 2020-01-03 13:09:33
Foxit PhantomPDF Version: 9.6.0

SCALE:	NONE
DESIGNED:	JHH
DRAWN:	KMP
DATE:	1/8/19
PROJECT NO.	
250	
250-REV SITE PLAN 2019 2B	
SHEET	C10 OF 10



48 HOURS
BEFORE YOU DIG
"CALL SUNSHINE"
1-800-432-4770

CITY OF DAYTONA BEACH
DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE: _____ FILE: _____
STAMP OF APPROVAL
DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

NO.	DATE	APPR.	REVISION
1	12/17/2019	J.S.	REV PER HANNAH COMMENTS OF 12/13/2019

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
100 MARINA POINT DR., DAYTONA BEACH, FL 32114
PHONE: (386)239-7160 FAX: (386)236-7120

TREE REMOVAL CALCULATIONS

DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION

TREE REMOVAL

	HACK		OAK		PALM		SWTGM		CHNBRY	
10"	0	0	0	0	0	0	0	0	0	0
11"	0	0	0	0	0	0	0	0	0	0
12"	0	0	0	0	0	0	0	0	0	0
13"	0	0	0	0	6	78"	0	0	0	0
14"	0	0	0	0	7	98"	0	0	0	0
15"	1	15"	0	0	4	60"	0	0	0	0
16"	0	0	0	0	2	32"	0	0	0	0
17"	0	0	0	0	2	34"	0	0	0	0
18"	0	0	0	0	1	18"	0	0	0	0
19"	0	0	0	0	3	57"	0	0	0	0
20"	0	0	0	0	6	120"	0	0	0	0
21"	0	0	0	0	1	21"	0	0	0	0
22"	0	0	0	0	0	0	0	0	0	0
23"	0	0	0	0	1	23"	0	0	0	0
24"	0	0	0	0	0	0	0	0	0	0
25"	0	0	0	0	0	0	0	0	0	0
26"	0	0	0	0	0	0	0	0	0	0
27"	0	0	0	0	0	0	0	0	0	0
28"	0	0	0	0	0	0	0	0	0	0
29"	0	0	0	0	0	0	0	0	0	0
30"	0	0	0	0	0	0	0	0	0	0
31"	0	0	0	0	0	0	0	0	0	0
TOTAL # TREES REMOVED	1		0		33		0		0	
# INCHES REMOVED	15"		0"		541"		0"		0"	

EXISTING TREES TO REMAIN

	HACK		OAK		PALM		SWTGM		CHNBRY	
10"	0	0	0	0	0	0	0	0	1	10"
11"	1	11"	0	0	0	0	1	11"	0	0
12"	1	12"	2	24"	0	0	0	0	0	0
13"	0	0	0	0	1	13"	1	13"	0	0
14"	0	0	2	28"	6	84"	0	0	0	0
15"	1	15"	0	0	8	135"	0	0	0	0
16"	0	0	0	0	6	96"	1	16"	0	0
17"	0	0	0	0	2	34"	0	0	0	0
18"	0	0	1	18"	5	90"	1	18"	0	0
19"	0	0	4	76"	1	19"	1	19"	0	0
20"	0	0	3	60"	3	60"	1	20"	0	0
21"	1	21"	2	42"	0	0	0	0	0	0
22"	0	0	2	44"	0	0	0	0	0	0
23"	0	0	0	0	0	0	0	0	0	0
24"	0	0	0	0	2	48"	0	0	0	0
25"	0	0	0	0	0	0	0	0	0	0
26"	0	0	2	52"	0	0	0	0	0	0
27"	0	0	0	0	0	0	0	0	0	0
28"	0	0	0	0	0	0	0	0	0	0
29"	0	0	0	0	0	0	0	0	0	0
30"	0	0	0	0	0	0	0	0	0	0
31"	0	0	1	31"	0	0	0	0	0	0
37"	0	0	1	37"	0	0	0	0	0	0
TOTAL # TREES REMAIN	4		20		34		6		1	
# INCHES REMAIN	59"		412""		579"		97"		10"	

SITE TREE REQUIREMENTS

PROJECT ACREAGE 159,719.12 SF (3.67 AC)

REQUIRED
FIFTEEN-PERCENT (15%) OF SITE COVERED WITH TREES (23,957.87 SF)

PROVIDED
24,693 sf (15.4%)

SPECIMEN TREE CALCULATIONS (1)

NINETY-FOUR (94) SPECIMEN TREES (12"+ CAL) ON SITE (25.6 TREES / ACRE)

REQUIRED
FOUR (4) TREES / ACRE RETAINED (14 TREES)

PROVIDED
TWENTY-NINE (29) TREES (8 TREES / ACRE RETAINED)

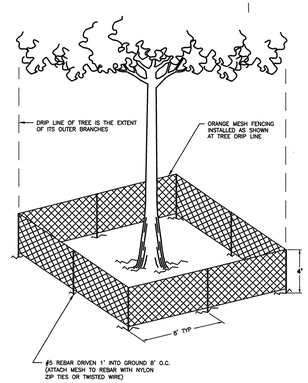
SIX-INCHES (6") PRESERVED TREE DIAMETER REQUIRED PER 2,500 sf
383.33" REQUIRED 578"+ PROVIDED

EXISTING TREE LEGEND:

- OAK
- PINE
- PALM
- HACKBERRY
- SWEETGUM
- CHINABERRY
- CHINESE TALLOW
- AUSTRALIAN PINE

NOTE:
Number beside tree indicates diameter at 4.5' Above Grade.
- Specimen Tree (ALL TREES 12"+)
(Pines and Palms are not considered Specimen Trees)
All trees may not be present.

EXISTING TREE TO BE REMOVED



STANDARD CONSTRUCTION DETAIL
TREE BARRICADE
NTS



GRAPHIC SCALE: 1"= 30'

THE STERN DESIGN GROUP, P.A.
LANDSCAPE ARCHITECTS LAND PLANNERS
1685 Promenade Circle, Port Orange, Florida 32129
(386) 788-3788 CELL (386) 290-6411
SternDesignGroup@att.net
JanStern@SternDesignGroup.com

JAN B. STERN ASLA #1663
FLORIDA REGISTERED LANDSCAPE ARCHITECT
NOT VALID WITHOUT ELECTRONIC SEAL

Digitally signed by Jan B Stern
Date: 2020.01.07 14:56:57 -05'00'

SCALE:	
DESIGNED:	JS
DRAWN:	JS
DATE:	7/30/19
PROJECT NO.	250
SHEET	L-1 OF 4

CITY OF DAYTONA BEACH LAND DEVELOPMENT CODE LANDSCAPE CALCULATIONS			PROPERTY LOCATED IN A RE-DEVELOPMENT AREA			
TREE TYPE ARTICLE 6 SECTION 6.4	MINIMUM STANDARDS	LINEAR FEET	REQUIRED SHADE TREE	REQUIRED SMALL TREE	PROVIDED SHADE TREE	PROVIDED SMALL TREE
NORTH, EAST, AND WEST PERIMETER SHADE TREES	ONE(1) PER FORTY (40) LINEAR FEET (LF)	1,823.45 LF	46		17(33) EXIST PALMS (31) EXIST SHADE	(0) EXIST SMALL
PERIMETER SMALL TREES	ONE(1) PER EIGHTY (80) LINEAR FEET (LF)	1,823.45 LF		23		
SOUTH PERIMETER SHADE TREES	ONE(1) PER FORTY (40) LINEAR FEET (LF)	198 LF	5		(3.5) EXIST SHADE (2) PROVIDED	
SOUTH PERIMETER SMALL TREES	ONE(1) PER EIGHTY (80) LINEAR FEET (LF)	198 LF		3		(3) PROVIDED

MINIMUM SHRUB/GROUND COVER/ VINE AREA
25% OF THE TOTAL LANDSCAPE AREA

VEHICULAR GREENS-SPACE AREA
22,262.51 sf VEHICULAR USE AREA (VUA)
REQUIRED
2,226.2 sf (10%) GREENSPACE
PROVIDED
2,271.6 sf (10.2%) GREENSPACE

TOTAL LANDSCAPE AREA
80,628.92 S.F.
REQUIRED: 20,157.23 S.F. (25%)

TOTAL FLOWERING LANDSCAPING ADJACENT TO RIGHT-OF-WAY (ROW)
176.74 LF 4,418.5 SF
(5) TREES /100 LF (9) TREES PROVIDED
FLOWERING PLANTS ADJACENT TO RIGHT-OF-WAY (ROW), SIGNAGE, DRIVEWAYS, BLDG CORNERS (ETC)
REQUIRED 1,105 SF (25%)
PROVIDED 1,400 SF (31%)

TOTAL SHRUBS/GROUND COVERS VINE AREA
PROVIDED: 20,457 S.F. (25.4%)

3

2

EXISTING TREE LEGEND:

- OAK
- PINE
- PALM
- HACKBERRY
- SWEETGUM
- CHINABERRY
- CHINESE TALLOW
- AUSTRAILIAN PINE
- EXISTING TREE TO BE REMOVED

NOTE:
Number beside tree indicates diameter at 4.5' Above Grade.
* Specimen Tree
All trees may not be present.

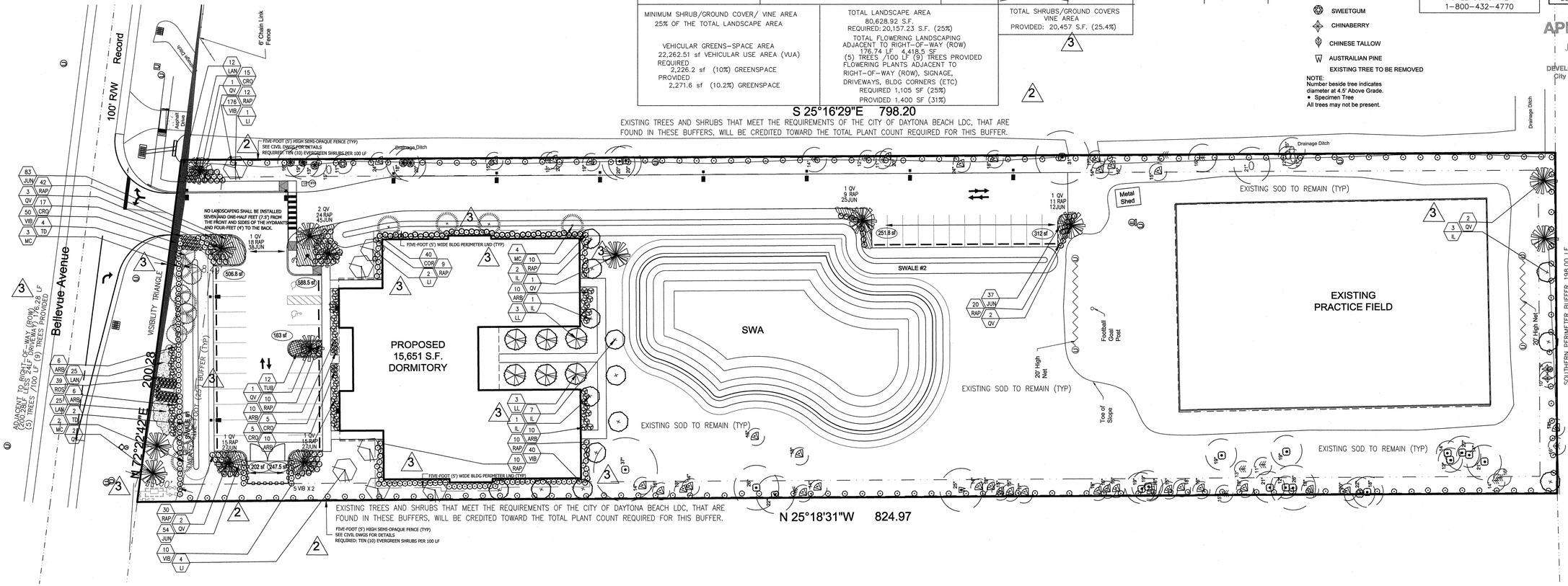
48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

CITY OF DAYTONA BEACH
DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE: _____ FILE: _____
STAMP OF APPROVAL DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

S 25°16'29"E 798.20

EXISTING TREES AND SHRUBS THAT MEET THE REQUIREMENTS OF THE CITY OF DAYTONA BEACH LDC, THAT ARE FOUND IN THESE BUFFERS, WILL BE CREDITED TOWARD THE TOTAL PLANT COUNT REQUIRED FOR THIS BUFFER.



GENERAL NOTES

ALL PLANT MATERIAL THAT IS INSTALLED MUST BE FLORIDA NO.1 GRADE OR BETTER ACCORDING TO THE CURRENT GRADES AND STANDARDS FOR NURSERY PLANTS, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.

ANY VARIATIONS FROM THE APPROVED LANDSCAPE PLAN MUST BE INITIALLY REVIEWED BY THIS LANDSCAPE ARCHITECT PRIOR TO ANY PROPOSED REVISIONS TO THE LANDSCAPE PLANTING PLAN. FAILURE TO COMPLY WITH THIS PROCEDURE MAY RESULT IN REQUIRED MITIGATION AND/OR DELAY OF THIS PROJECT.

ALL FILL DIRT TO BE PLACED IN THE PROPOSED LANDSCAPE AREAS AND/OR BERMS, MUST HAVE A pH RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, AND MATCH NATIVE EXISITNG SOILS.

CURVLINEAR LANDSCAPE BEDS ARE TO BE EDGED WITH SMOOTH FLOWING CURVES. STRAIGHT-LINE LANDSCAPE BEDS ARE TO BE EDGED IN A STRAIGHT LINE AND MUST BE PARRALLEL TO PARKING LOTS, WALKWAYS, AND/OR STRUCTURES UNLESS INTENTIONALLY DESIGNED TO MEANDER.

BAHIA 'ARGENTINE' SOLID SOD IS TO BE USED IN ALL NON-IRRIGATED OPEN SODDED AREAS AS SHOWN ON THIS PLAN AND THE LANDSCAPE IRRIGATION PLAN. ALL OPEN SPACE AREAS, INCLUDING BUT NOT LIMITED TO ALL DISTURBED AREAS, RETENTION AREAS, AREAS SUBJECT TO POSSIBLE EROSION, RIGHT-OF WAYS (R.O.W.), ETC, SHALL ALSO BE SODDED WITH BAHIA 'ARGENTINE' SOLID SOD OR SOLID BERMUDA SOD. ALSO, REFERENCE AND SEE CIVIL ENGINEERING DWGS FOR SODDING LIMITATIONS OF SOD AT WET AND/OR DRY RETENTION AREAS, AND THE EDGE OF PAVEMENTS AND R.O.W. ST. AUGUSTINE SOLID SOD IN IRRIGATED AREAS SUCH AS FRONTS OF BUILDINGS AND PARKING ISLANDS.

THERE IS A WORKING EXISTING IRRIGATION SYSTEM FOR THE SITE. IT SHALL BE MODIFIED TO MEET THE NEW LAYOUT AND TO MEET SECTION 808.04 OF THE VOLUSIA CODE.

REMOVE ALL NON-BIODEGRADABLE NYLON TREE BALL STRAPPING AND REMOVE THE BURLAP FROM THE TOPS OF ALL ROOTBALLS THAT ARE B&B (BURLAPPED AND BALLED) IF CONTAINER TREES ARE NOT INSTALLED. ALSO, REMOVE THE TREE BALL HOISTING BASKET HOOKS. SEE TREE PLANTING DETAIL.

ALL IRRIGATION BACK-FLOW DEVICES WILL BE VISUALLY SCREENED WITH LANDSCAPING AND PAINTED BLACK AND/OR NILE GREEN. MODIFY ALL SHRUB PLANTINGS AND IRRIGATION HEAD LAYOUT FOR EXISTING TREE AND PALMS ON SITE DESIGNED TO REMAIN.

A MINIMUM FIVE-FOOT (5') GRASS RING SHALL BE INSTALLED AROUND EACH CATCH BASIN LOCATED WITHIN ANY LANDSCAPE AREA. THE CONTRACTOR IS TO BE SURE THAT NO MULCH CAN FLOW INTO THESE BASINS.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ANY PROPOSED TREES AND SHRUBS TO BE PRESERVED. SEE TREE PROTECTION DETAIL. NO VEHICLES OR MATERIALS SHALL BE PLACED UNDER OR AROUND THESE TREES TO REMAIN.

ALL EXISTING SHRUBS, GROUND COVERS AND TREES NOT SHOWN TO REMAIN ARE TO BE REMOVED ALONG WITH THEIR ROOT SYSTEM. ALL UNDERBRUSH, STUMPS, AND DEAD BRANCHES ARE TO BE REMOVED ON ALL EXISTING REMAINING TREES AND PALMS. ALL WORK AROUND SPECIMEN TREES WILL BE LIMITED TO HAND LABOR AND TOOLS.

ALL EVASIVE EXOTIC PLANTS, AS LISTED ON THE FLORIDA EXOTIC PEST PLANT COUNCIL'S INVASIVE PLANT SPECIES LIST, SHALL BE REMOVED. THIS SHALL INCLUDE ALL BRAZILIAN PEPPER WHICH MAY BE EXISTING. ONE (1) EXISTING CAMPHOR TREE HAVE BEEN REMOVED.

ALL EXISTING HARDSCAPE SURFACES WHICH ARE SHOWN TO BE REMOVED, SHALL HAVE THEIR LIMEROCK AND/OR COMPACTED BASES REMOVED DOWN TO THE NATIVE SOIL BASE.

THE LOCATION OF ALL REQUIRED TREES MUST NOT CONFLICT WITH THE LIGHTING FIXTURES, SIGNS, UNDERGROUND AND OVERHEAD UTILITIES, FIRE HYDRANTS, ETC.

ALL TREES NOT LOCATED WITHIN A MULCHED PLANTING BED SHALL HAVE A MINIMUM FIVE-FOOT (5') MULCH RING INSTALLED AROUND THE TRUNK AREA. TREES SHALL BE PLANTED A MINIMUM OF FIVE-FEET (5') FROM BACK OF CURB OR SIDEWALK (TYP).

SEE ENGINEER'S PLAN FOR ALL EXISTING AND PROPOSED EASEMENTS, COVENANTS, R.O.W., BUFFER DIMENSTIONS, AND ALL SITE LAYOUT DIMENSIONING.

PROJECT MULCH SHALL BE PINE BARK NUGGETS AND BE INSTALLED A MINIMUM OF THREE-INCHES (3") THICK AND A MINIMUM OF TWELVE-INCHES (12") FROM ANY PLANTED TREE TRUNK.

SHADE/UNDERSTORY TREES

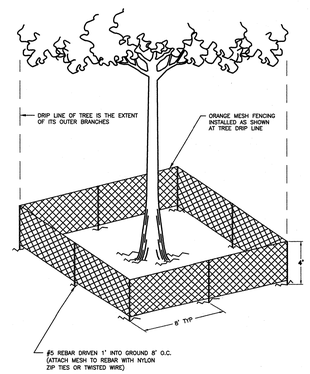
3

KEY	QTY	BOTANICAL/COMMON NAMES	HT.	SPR.	REMARKS
IL	14	Ilex x attenuata 'Eagleston' Eagleston Holly	8'-10'	3'-4'	Min 2" Cal
LI	7	Lagerstromia indica ' Crepe Myrtle Tree	8'-10'	3'-4'	Min 2" Cal
LL	6	Ligustrum lucidum 'STD' Japanese Privet Tree	8'	3'	Min 2" Cal
MC	9	Myrica cerifera 'STD' Wax Myrtle Tree	8'	3'	Min 2" Cal Min Five (5) Trunks
QV	14	Quercus virginiana Live Oak	10'-12' Shape/Full	3'	Min 2 1/2" Cal
TD	6	Taxodium distichum Bald Cypress	10'-12' Shape/Full	3'	Min 2 1/2" Cal

SHRUBS/GROUNDCOVERS

3

KEY	QTY	BOTANICAL/COMMON NAMES	HT.	SPR.	REMARKS
ARB	52	Schefflera arbicola 'Trinette' Var Dwarf Arbicola	18"	12"	3 Gal Cont 30" O.C.
COR	40	Paspalum quadrifarium Evergreen Paspalum Crown Grass	30"	14"	3 Gal Cont 42" O.C.
CRO	42	Codiaeum variegatum 'Curly Boy Curley leaf Croton	18" Min 3 PPP	10"	3 Gal Cont 24" O.C.
JUN	174	Juniperus parsonii 'Squmatta' Parson's Juniper	6"	6"	1 Gal Cont 30" O.C.
LAN	62	Lantana camera 'Dwarf' Lantana camera Yellow	6"	6"	1 Gal Cont 30" O.C.
RAP	151	Raphiolepis indica Indian Hawthorn	18"	10"	3 Gal Cont 36" O.C.
ROS	39	Rosa Knockout@ RED PP11836 Dwrf Red Rose	16"	10"	3 Gal Cont 30" O.C.
TUB	12	Tulbaghia violacia Society Garlic	6"	6"	1 Gal Cont 18" O.C.
VIB	362	Viburnum odoratissimum Sweet Viburnum	30"	12"	3 Gal Cont 36" O.C.& AS SHOWN



STANDARD CONSTRUCTION DETAIL
TREE BARRICADE
NTS.

NOTE:

THE LOCATION OF ALL REQUIRED ELECTRIC TRANSFORMERS, SIGNAGE, HVAC EQUIPMENT, OR ANY OTHER TYPE OF UNITS WILL NOT CONFLICT WITH ANY PROPOSED LANDSCAPE MATERIAL. ADDITIONAL LANDSCAPE PLANTINGS WILL BE ADDED, IF NECESSARY, TO SCREEN THESE ITEMS.

CONTRACTOR IS TO PROVIDE MINIMUM CLEARANCE OF SIX-FEET (6') TO THE SIDES OF ALL FIRE HYDRANTS. PROVIDE A MINIMUM CLEARANCE OF SEVEN AND ONE-HALF FEET (7 1/2') IN FRONT OF AND TO THE SIDES OF THE FIRE DEPARTMENT CONNECTION.

GRAPHIC SCALE: 1"= 30'

THE STERN DESIGN GROUP, P.A.
LANDSCAPE ARCHITECTS LAND PLANNERS
1685 Promenade Circle, Port Orange, Florida 32129
(386) 788-3788 CELL (386) 290-6411
SternDesignGroup@att.net
JanStern@SternDesignGroup.com

NO.	DATE	APPR.	REVISION
1	10/22/2019	J.S.	REV SITE AND ADD TREE CALC SEPERASTE SHT
2	11/08/2019	J.S.	REV PERIMETER REQUIREMENTS ADD FENCE
	11/26/2019	J.S.	VIB QTY
3	01/07/2020	J.S.	PER HANNAH COMMENTS OF 12/13/19

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7175
1101 MAITLAND AVENUE, ALTAMONTE SPRINGS, FL 32714
PHONE: (386)239-7166 FAX: (386)239-7120

LANDSCAPING PLAN

DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION

JAN B. STERN, ASLA, RLA
FLORIDA REGISTRATION NO. 1555
STATE OF FLORIDA
REGISTERED LANDSCAPE ARCHITECT
Jan B. Stern
Digitally signed by Jan B. Stern
Date: 2020.01.07 12:09:26 -05'00'
NOT VALID WITHOUT ELECTRONIC SEAL

SCALE: 1"= 30'

DESIGNED:	JS
DRAWN:	JS
DATE:	7/30/19
PROJECT NO.	250
SHEET	L-2 OF 4

COUNTY OF VOLUSIA LOW-VOLUME IRRIGATION COMPLIANCE

PROJECT AREA 160,786.43 S.F. (3.69 Ac)

PROJECT LANDSCAPE AREA 80,628.29 SF

REQUIRED LANDSCAPE AREA FOR LOW-VOLUME IRRIGATION 20,157.23 SF (25%)

LANDSCAPE AREA PROVIDED (BAHIA SOD-EXISTING NATURAL VEGETATION) 24,994.8 SF (31%)

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

CITY OF DAYTONA BEACH
DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: 38
DATE: _____ FILE: _____
STAMP OF APPROVAL DEV2019-128

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

LEGEND

DESCRIPTION

- W — WATER SOURCE
- NN — FILTER
- ——— SCH 40 MAIN-LINE
- = = = SLEEVE

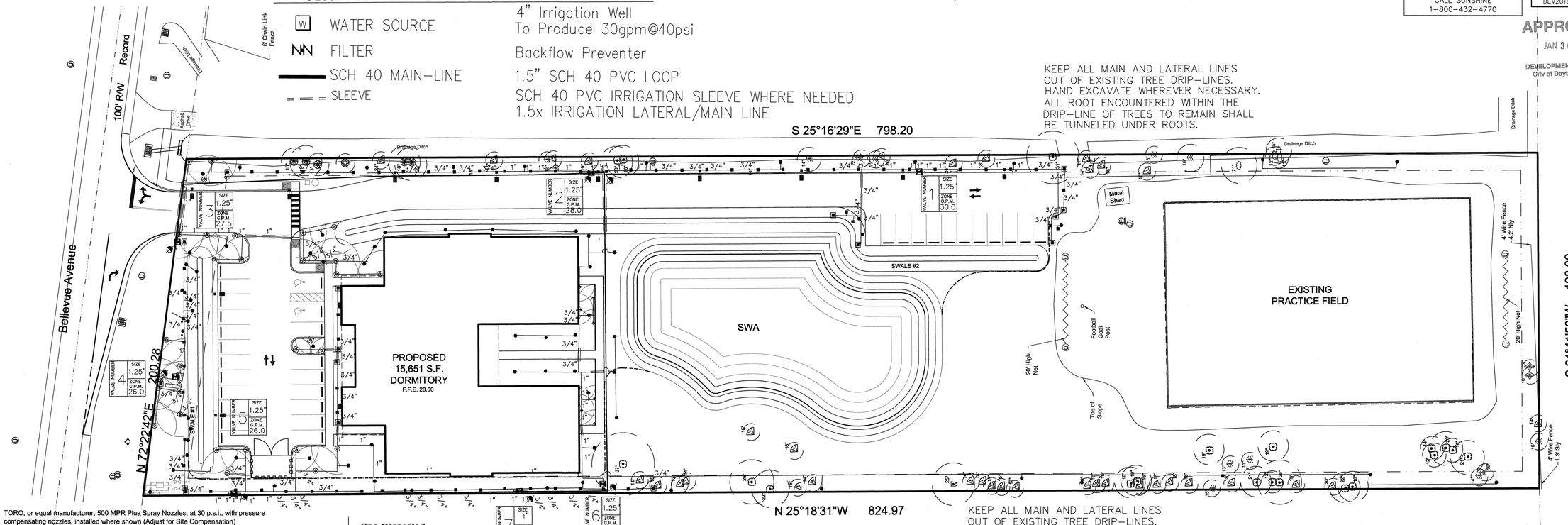
4" Irrigation Well
To Produce 30gpm@40psi

Backflow Preventer

1.5" SCH 40 PVC LOOP

SCH 40 PVC IRRIGATION SLEEVE WHERE NEEDED
1.5x IRRIGATION LATERAL/MAIN LINE

KEEP ALL MAIN AND LATERAL LINES OUT OF EXISTING TREE DRIP-LINES. HAND EXCAVATE WHEREVER NECESSARY. ALL ROOT ENCOUNTERED WITHIN THE DRIP-LINE OF TREES TO REMAIN SHALL BE TUNNELED UNDER ROOTS.



KEEP ALL MAIN AND LATERAL LINES OUT OF EXISTING TREE DRIP-LINES. HAND EXCAVATE WHEREVER NECESSARY. ALL ROOT ENCOUNTERED WITHIN THE DRIP-LINE OF TREES TO REMAIN SHALL BE TUNNELED UNDER ROOTS.

TORO, or equal manufacturer, 500 MPR Plus Spray Nozzles, at 30 p.s.i., with pressure compensating nozzles, installed where shown (Adjust for Site Compensation)

8' Radius Series -	Quarter Head @ 0.25	G.P.M.
	120 Head @ 0.35	G.P.M.
	Half Head @ 0.50	G.P.M.
	240 Head @ 0.75	G.P.M.
	Three-quarter Head @ 0.75	G.P.M.
	Full Head @ 1.00	G.P.M.
10' Radius Series -	Quarter Head @ 0.50	G.P.M.
	120 Head @ 0.50	G.P.M.
	Half Head @ 1.00	G.P.M.
	240 Head @ 1.25	G.P.M.
	Three-quarter Head @ 1.25	G.P.M.
	Full Head @ 1.50	G.P.M.
12' Radius Series -	Quarter Head @ 0.50	G.P.M.
	120 Head @ 0.75	G.P.M.
	Half Head @ 1.25	G.P.M.
	240 Head @ 1.75	G.P.M.
	Three-quarter Head @ 1.75	G.P.M.
	Full Head @ 2.50	G.P.M.
15' Radius Series -	Quarter Head @ 1.00	G.P.M.
	120 Head @ 1.25	G.P.M.
	Half Head @ 1.50	G.P.M.
	240 Head @ 2.25	G.P.M.
	Three-quarter Head @ 3.00	G.P.M.
	Full Head @ 4.00	G.P.M.
End Strip Series, 4' x 15' @ 0.50		G.P.M.
Side Strip Series, 2' x 6' @ 0.25		G.P.M.
Side Strip Series, 4' x 30' @ 1.50		G.P.M.
Flood Bubbler @ 0.50		G.P.M.

"Rainbird", or equal manufacturer, plastic solenoid valves, EP Series, sized as shown on Landscape Irrigation Plans, with flow control and bleed screw installed in a "meter" plastic valve box (green cover for potable water; purple cover for non-potable water), square 8"x12" top installed in ground. Keep all valves a minimum of four-feet (4') from all walkways, driveways, etc. QTY=7

"Rainbird", or equal manufacturer, plastic solenoid valve, EP Series, sized to fit main line as shown with a 24v. Solenoid for master installed at meter (IF METER IS USED) QTY=0

"Rainbird", or equal manufacturer, Electro-Mechanical Station Time Clock, wall mounted inside appropriate building, or where shown on Landscape Irrigation Plans,or as per Owner with 117v./24v. With LPF-K primary and valve lightning surge protection respectively controller master circuit connected to 110v. Master valve solenoid. QTY= One = (1) Eight-Zone (8)

"Rainbird", or equal manufacturer, PVB Series Dual Check Valve and Backflow Preventer, sized as required, mounted above ground as per local City and/or County Codes. QTY= 1

"Hunter", or equal manufacturer, RAIN-CLIK (Rain Shut-Off Device) installed as per manufacturer's instructions where shown on Landscape Irrigation Plans. QTY= 1

- Pipe Connected
- Pipe NOT Connected
- Pipe in Sleeve
- Sleeve Only
- Shows connection point of solenoid valve lateral to project main-line

NOTES

Irrigation Contractor shall be responsible for all applicable fees and permits.

All Pipe and Wire under paving shall be placed in Schedule 40 P.V.C. Sleeves for the full pavement coverage length and shall be at least 24" below grade.

Mainlines shall be buried to provide a minimum cover of 18", while all Lateral lines shall have a minimum of 12".

The Contractor should take care to reroute piping as necessary to avoid plant or tree roots.

All Sprinklers shall be site adjusted to prevent water overthrow onto building surfaces and walkways.

All Piping downstream of Solenoid Valve to be PR-160 P.V.C.

All Control Wiring to be 14/1 U.F. direct burial.

Install a Hunter RainClik, or equal, rain sensor device. Verify location with Owners Representative.

Shrub body sprinklers may be substituted for Hi-Pops against building(s) at owners discretion.

No irrigation heads may be installed closer than twelve-inches (12") to any building.

All pop-up spray heads located in parking lot areas shall be twelve-inches (12") in height.

Contractor is responsible to provide all necessary accessories to provide adequate water volume for this system.

A HIGH VOLUME AREA IS ANY ZONE USING ROTARY HEADS OR REQUIRING 1" OF WATER PER WEEK. THE RUN TIME ON THESE AREAS SHALL BE SET TO NOT APPLY MORE THAN 1" OF WATER PER WEEK. ALL ST. AUGUSTINE SOD ZONES SHALL BE CONSIDERED HIGH VOLUME IRRIGATION.

A MEDIUM VOLUME AREA IS ANY ZONE OF SPRAY HEADS. THE RUN TIME ON THESE AREAS SHALL BE SET TO APPLY 0.5" OF WATER PER WEEK. ALL SHRUB AREAS SHALL BE CONSIDERED MEDIUM VOLUM IRRIGATION.

A LOW VOLUME AREA IS ANY ZONE OF BUBBLER OR DRIP SPRAY HEADS. THE RUN TIME ON THESE AREAS SHALL BE SET TO APPLY 0.25" OF WATER PER WEEK. ALL DRIP OR TREE BUBBLER AREAS SHALL BE CONSIDERED LOW VOLUM IRRIGATION.

ALL HEADS SHALL HAVE CHECK VALVES AND BE PRESSURE COMPENSATING.

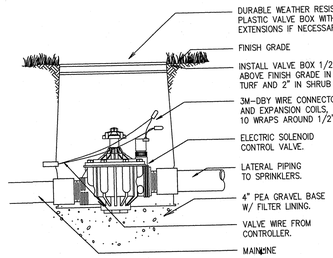
A MAINTENANCE CHECKLIST SHALL BE PROVIDED TO THE OWNER BY THE IRRIGATION CONTRACTOR IT SHALL HAVE A MAINTENANCE SCHEDULE, PROPER IRRIGATION SETTINGS ACCORDING TO SEASON, RECOMMENDATIONS FOR CHECKING THE RAIN SENSOR DEVICE, FILTER CLEANING RECOMMENDATIONS AND INFORMATION ON CURRENT WATER RESTRICTIONS.

THE IRRIGATION CONTRACTOR SHALL SUBMIT A COMPLETED AND ENCLOSED CHECKLIST ON A FORM PROVIDED BY THE PERMITTING AUTHORITY. IT SHALL BE ACCOMPANIED BY AN AS-BUILT SKETCH OF THE IRRIGATION SYSTEM. THIS SHALL BE SUPPLIED WITHIN 30 DAYS OF THE COMPLETION OF THE IRRIGATION SYSTEM OR WITH THE REQUEST FOR FINAL INSPECTION.

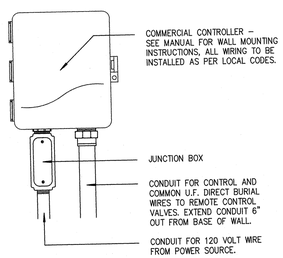
WATERING SCHEDULE -CLOCK A

PROGRAM	ZONE	G.P.M.	MINUTES	DAYS/WEEK	WATER USAGE
A	1	30.00	25	2	M
A	2	28.00	25	2	M
A	3	27.50	25	2	M
A	4	26.00	25	2	M
A	5	26.00	25	2	M
A	6	27.00	25	2	M
A	7	19.00	25	2	M

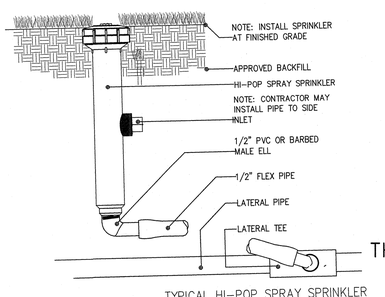
IRRIGATION RUN TIMES WILL VARY MONTHLY DUE TO TEMPERATURE AND RAINFALL. CHECK WEEKLY FOR BREAKS IN PIPES, CLOGGED HEADS, AND DRY/WET SOIL CONDITIONS.



TYPICAL SOLENOID VALVE
NOT TO SCALE



TYPICAL WALL MOUNT CONTROLLER
NOT TO SCALE



TYPICAL HI-POP SPRAY SPRINKLER
NOT TO SCALE

GRAPHIC SCALE: 1"= 30'

THE STERN DESIGN GROUP, P.A.
LANDSCAPE ARCHITECTS LAND PLANNERS
1685 Promenade Circle, Port Orange, Florida 32129
(386) 788-3788 CELL (386) 290-6411
SternDesignGroup@att.net
JanStern@SternDesignGroup.com

NO.	DATE	APPR.	REVISION
1	10/24/2019	JBS	REV. SITE PLAN AND PER COMMENTS

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT
JOSEPH H. HOPKINS, P.E. NO. 48659
LICENSED BUSINESS NO. 27175
100 MARINA POINT DR. DAYTONA BEACH, FL 32114
PHONE: (386)239-7166 FAX: (386)239-7120

IRRIGATION PLAN

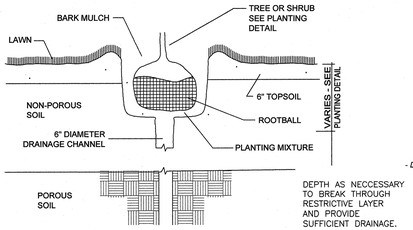
DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION

JAN B. STERN, ASLA, PLA
FLORIDA REGISTERED
LANDSCAPE ARCHITECT
No. 0001175
STATE OF FLORIDA
Digitally signed by Jan B. Stern
Date: 2019.10.24 13:31:29
NOT VALID WITHOUT ELECTRONIC SEAL

SCALE: -04'00'
DESIGNED: JS
DRAWN: JS
DATE: 7/30/19
PROJECT NO. 250

SHEET L-3 OF 4



DEPTH AS NECCESSARY TO BREAK THROUGH RESTRICTIVE LAYER AND PROVIDE SUFFICIENT DRAINAGE.

DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS

PRIOR TO PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER:

A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.

B. FILL PLANTING PIT TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR INCHES (4") OR MORE WITHIN FOUR (4) HOURS, THE DRAINAGE IS SUFFICIENT AND DRAINAGE CHANNEL IS NOT REQUIRED. IF HOWEVER, THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.

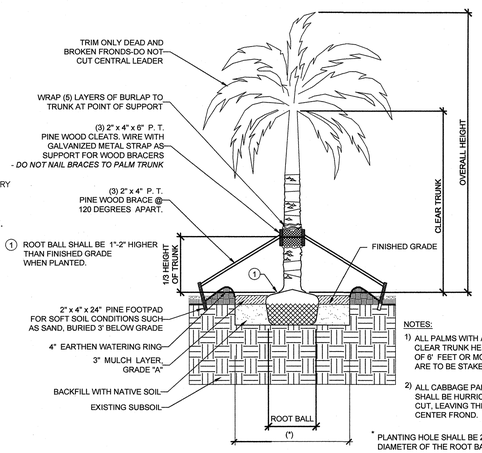
C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON-POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)

D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE DISCARDED.

E. WHEN BACKFILLING PLANTING PITS WITH PLANTING MIXTURE, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.

DRAINAGE CHANNEL DETAIL

NOT TO SCALE

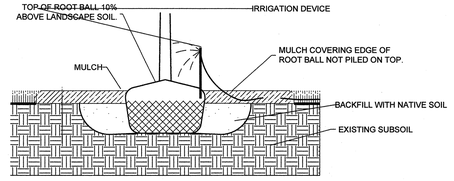


① ROOT BALL SHALL BE 1"-2" HIGHER THAN FINISHED GRADE WHEN PLANTED.

NOTES:
1) ALL PALMS WITH A CLEAR TRUNK HEIGHT OF 6' FEET OR MORE ARE TO BE STAKED.
2) ALL CABBAGE PALMS SHALL BE HURRICANE CUT, LEAVING THE CENTER FROND.

* PLANTING HOLE SHALL BE 2X THE DIAMETER OF THE ROOT BALL.

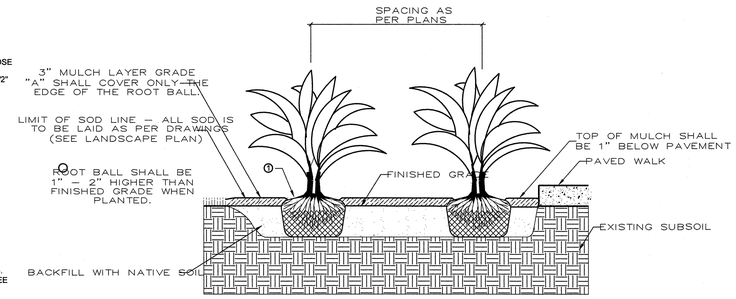
STANDARD CONSTRUCTION DETAIL
STRAIGHT TRUNK PALM PLANTING DETAIL



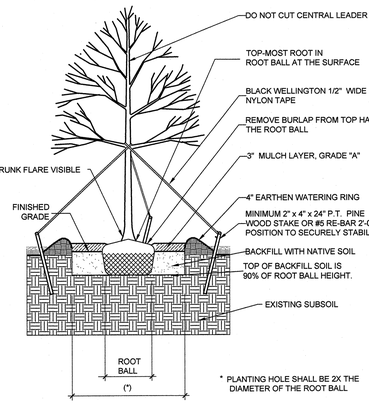
NEVER PLACE ANY SOIL OVER THE ROOT BALL. THE ROOT BALL SHOULD BE POSITIONED IN THE HOLE SHALLOW ENOUGH SO THE FINISHED GRADE OF THE BACKFILL SOIL DOES NOT REACH THE TOP. IN OTHER WORDS, LEAVE THE TOP FEW INCHES OF THE ROOT BALL SIDES EXPOSED TO THE AIR. MULCH WILL COVER THE REMAINING COUPLE INCHES. THE TOP OF THE ROOT BALL SHOULD BE SEVERAL INCHES HIGHER THAN THE SURROUNDING LANDSCAPE SOIL. BE SURE THAT WHEN YOU ARE FINISHED PLANTING, THERE IS NO SOIL OVER THE ROOT BALL. SOIL (AS WELL AS THICK MULCH LAYERS MORE THAN 3 INCHES DEEP) OVER THE ROOT BALL CAN PREVENT WATER AND AIR FROM ENTERING THE ROOT BALL. YOU SHOULD BE ABLE TO SEE THE TOP-MOST ROOT ORIGINATING FROM THE TRUNK AT THE SOIL SURFACE OR WITHIN THE TOP INCH OF SOIL IN THE ROOT BALL. THE TRUNK FLARE SHOULD BE VISIBLE.

MULCH SHOULD COVER ONLY THE EDGE OF THE ROOT BALL, SINCE THICK LAYERS OVER THE ROOT BALL CAN KEEP THE TRUNK TOO MOIST OR TOO DRY AND CAN CAUSE OTHER PROBLEMS. LOCATE THE IRRIGATION DEVICE SO IT DELIVERS WATER DIRECTLY TO THE ROOT BALL. THERE IS USUALLY NO NEED TO WATER AREAS OUTSIDE THE ROOT BALL. NO AMENDMENTS OF ANY KIND ARE NECESSARY IN THE BACKFILL SOIL, BECAUSE EXTENSIVE RESEARCH CLEARLY SHOWS THAT THEY TYPICALLY DO NOT NOT INCREASE THE SURVIVAL, NOR GROWTH AFTER PLANTING. NO SOIL BERM IS NEEDED IF TREES WILL BE IRRIGATED WITH A LOW-VOLUME DEVICE. PLACE THE BERM AT THE EDGE OF THE ROOT BALL IF THE ROOT BALL IS FINER TEXTURE THAN THE BACKFILL SOIL. THIS WILL HELP INSURE THAT WATER PERCOLATES INTO THE ROOT BALL.

STANDARD CONSTRUCTION DETAIL
PLANT LIKE THIS DETAIL
NTS.

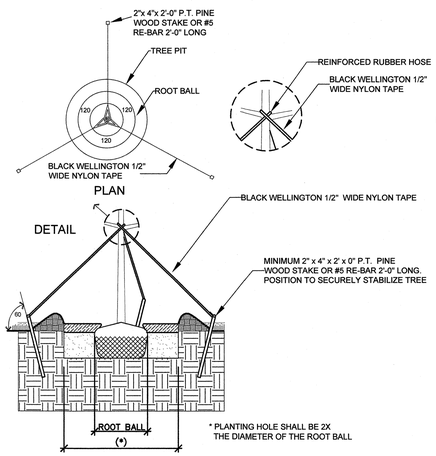


STANDARD CONSTRUCTION DETAIL
TYPICAL GROUND COVER DETAIL



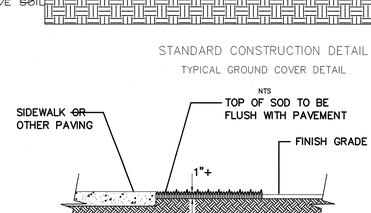
* PLANTING HOLE SHALL BE 2X THE DIAMETER OF THE ROOT BALL

STANDARD CONSTRUCTION DETAIL
LARGE TREE PLANTING DETAILS
NTS.

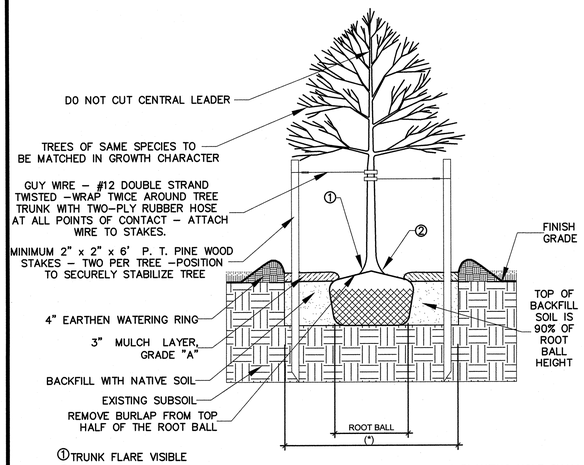


* PLANTING HOLE SHALL BE 2X THE DIAMETER OF THE ROOT BALL

STANDARD CONSTRUCTION DETAIL
TYPICAL TREE GUYING DETAIL
NTS.



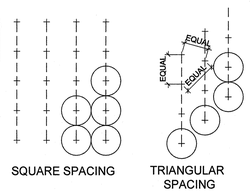
SOD PLACEMENT ADJ. TO PAVEMENT
Scale: N.T.S.

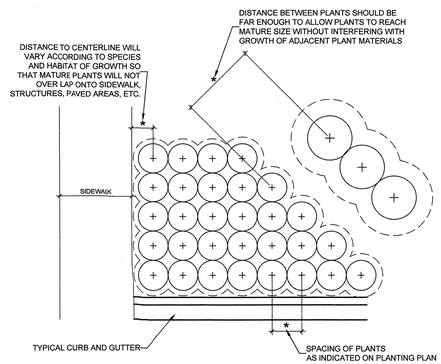


* PLANTING HOLE SHALL BE 2X THE DIAMETER OF THE ROOT BALL.

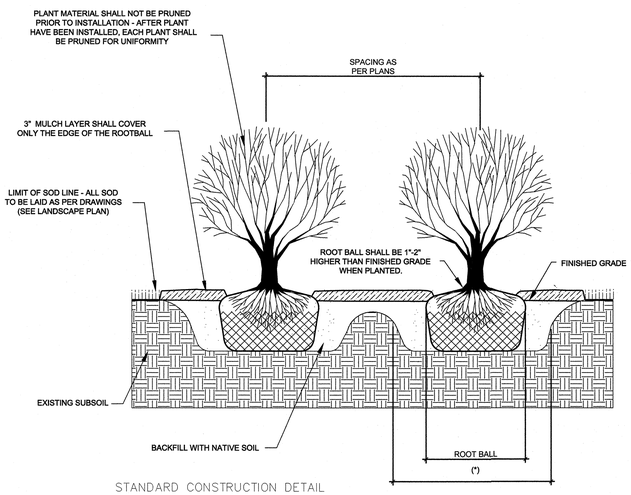
STANDARD CONSTRUCTION DETAIL
SMALL TREE PLANTING DETAIL
NTS.

NOTE: IN MOST CASES, TRIANGULAR SPACING IS PREFERRED. USE SQUARE SPACING ONLY IN SMALL RECTILINEAR AREAS.





STANDARD CONSTRUCTION DETAIL
TYPICAL CONTAINER SPACING
NTS.



STANDARD CONSTRUCTION DETAIL
TYPICAL SHRUB PLANTING DETAIL
NTS

* PLANTING HOLE SHALL BE 2X THE DIAMETER OF THE ROOT BALL.

PLANTING NOTES

1. ALL MATERIALS ARE TO BE FLORIDA #1 OR BETTER, INSTALLED ACCORDING TO THE HIGHEST NURSERY STANDARDS.
2. MULCH IS TO BE 100% SHREDDED CYPRESS, GRADE "A", INSTALLED A MINIMUM OF 2" THICK IN ALL PLANTING AREAS. MULCHED PLANTING BEDS SHALL BE A MINIMUM OF 10' WIDE AND SHALL BE CONTINUOUS WHERE PLANTINGS ARE PROPOSED.
3. ALL AREAS MARKED SOD ON THE PLANS, SHALL BE SODDED WITH 95% WEED-FREE ST. AUGUSTINE "FLORATAM" SOLID SOD. SOD SHALL BE INSTALLED WITH TIGHT JOINTS, ROLLED, AND FERTILIZED. NUTRIENTS SHALL BE ADDED TO THE SOIL AS PER SOIL TESTING RESULTS.
4. BAHIA SOLID SOD SHALL BE USED ON ALL AREAS SO MARKED AS IN SWALES, RIGHT-OF-WAYS, DISTURBED AREAS, OR OTHER AREAS SUBJECT TO EROSION.
5. GRASS SEEDED AREAS SHALL MEET FLORIDA STATE DEPARTMENT OF TRANSPORTATION STANDARDS.
6. LANDSCAPE CONTRACTOR IS TO LOCATE AND VERIFY ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING THE WORK. THE LANDSCAPE ARCHITECT SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO UTILITY OR IRRIGATION
7. LANDSCAPE CONTRACTOR IS TO VERIFY ALL DRAWINGS AND CHECK FOR DISCREPANCIES AND BRING THEM TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO COMMENCING WITH THE WORK.
8. THE PLANT MATERIALS SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE LANDSCAPE CONTRACTOR. SHOULD THERE BE ANY DISCREPANCY, PLANTING PLANS SHALL TAKE PRECEDENCE OVER THE PLANT LIST.
10. NO SUBSTITUTIONS WILL BE MADE AT THE TIME OF BIDDING OR CHANGES OF ANY KIND, SO AS TO PROVIDE FOR FAIR COMPARISONS. NO FURTHER CHANGES ARE TO ME BADE WITHOUT PRIOR CONSENT OF THE LANDSCAPE ARCHITECT.
11. 100% AUTOMATIC IRRIGATION SYSTEM IS TO BE INSTALLED ACCORDING TO THE IRRIGATION PLAN AND SPECIFICATIONS WITH A MINIMUM 50% OVERLAP. ALL IRRIGATION AND ELECTRICAL LINES ARE TO BE LOCATED AT THE PERIMETER OF ALL PLANTERS AND/OR PLANTING AREAS.
12. ALL BUILDING MATERIALS AND LABOR ARE TO CONFORM TO THE SOUTHERN BUILDING CODE AND ALSO TO ALL LOCAL CODES THAT HAVE JURISDICTION.
13. ALL PERMIT AND VARIANCE APPLICATION ARE TO BE MADE BY THE CONTRACTOR.
14. PRIOR TO THE INSTALLATION OF THE IRRIGATION SYSTEM, A WATER TEST IS TO BE CONDUCTED ON THE WATER SOURCE TO DETERMINE PH. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO NOTIFY THE LANDSCAPE ARCHITECT IF THE RESULTING WATER PH. REQUIRES AMENDING PLANT SELECTIONS OR MODIFYING WATER SOURCE.
15. PRIOR TO CONSTRUCTION OF PLANTING BEDS, ALL AREAS ARE TO HAVE SOIL TESTS CONDUCTED TO DETERMINE PH. AND FERTILITY. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO AMEND THE SOIL TO MEET ADEQUATE FERTILITY AND PH. FOR CORRESPONDING PLANT MATERIALS.
16. PRIOR TO THE LAND CLEARING STAGE, THE CONTRATOR SHALL CLEARLY MARK ANY TREE, TREE GROUPS OR SHRUBS TO BE MAINTAINED IN THE PROXIMITY OF ANY AREA WHERE LAND CLEARING EQUIPMENT IS TO BE OPERATED. THE MARKINGS SHALL REMAIN IN PLACE DURING CONSTRUCTION. SAID EQUIPMENT SHALL BE OPERATED IN A MANNER AS OT NOT INJURE OR DESTROY THREE (3) FEET IN HEIGHT SHALL BE FORMED A MINIMUM RADIUS OF SIX (6) FEET FROM THE BASE OF THE TREES OR SHRUBS, AND THE DEVELOPER SHALL NOT CAUSE OR ALLOW THE CLEARING OF EQUIPMENT OR MATERIAL WITHIN THE DRIP LINE OF ANY TREE OR GROUPS OF TREES TO BE MAINTAINED. NEITHER SHALL THE DEVELOPER CAUSE OR ALLOW THE DISPOSAL OF WASTE MATERIAL, SUCH AS PAINT, OIL SOLVENTS, ASPHALT, CONCRETE, MORTAR OR OTHER MATERIALS HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY TREE OR GROUPS OF TREES. NO ATTACHMENT WIRES (OTHER THAN PROTECTION GUY WIRES), SIGNS, OR PERMITS MAY BE FASTENED TO A TREE.
17. REMOVE ALL TAGS FROM INSTALLED PLANT MATERIALS.
18. PLACE TERRA SORB UNDER THE ROOT BALL OF ALL PLANT MATERIALS.
19. ALL TREES ARE TO BE GUYED WITHING "DUCKBILL" ANCHORING SYSTEMS OR AN APPROVED EQUAL.
20. ALL TREE CALIPERS ARE TO BE MEASURED ACCORDING TO LOCAL CODES AND ORDINANCES.
21. ALL QUESTIONS CONCERNING THE PLAN AND/OR SPECIFICATIONS ARE TO BE DIRECTED TO THE LANDSCAPE ARCHITECT. (904-677-4486)
22. ALL PLANT MATERIAL TO BE GUARANTEED FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM THE TIME OF FINAL ACCEPTANCE. ALL REPLACEMENTS TO BE MADE WITHING TWO (2) WEEKS OF CONTRACTOR NOTIFICATION.

CITY OF DAYTONA BEACH
DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: 48
DATE: _____ FILE: _____
STAMP OF APPROVAL

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

THE STERN DESIGN GROUP, P.A.
LANDSCAPE ARCHITECTS LAND PLANNERS
1685 Promenade Circle, Port Orange, Florida 32129
(386) 788-3788 CELL (386) 290-6411
SternDesignGroup@att.net
JanStern@SternDesignGroup.com

REVISION	NO.	DATE	APPR.

THE PERFORMANCE GROUP
CIVIL ENGINEERING / PLANNING / DEVELOPMENT

JOSEPH H. HOPKINS, P.E. NO. 48059
LICENSED BUSINESS CERTIFICATION NO. 7129
1004 BELLEVUE AVENUE, DAYTONA BEACH, FL 32114
PHONE: (386)239-7166 FAX: (386)239-7120

LANDSCAPING PLANTING DETAILS

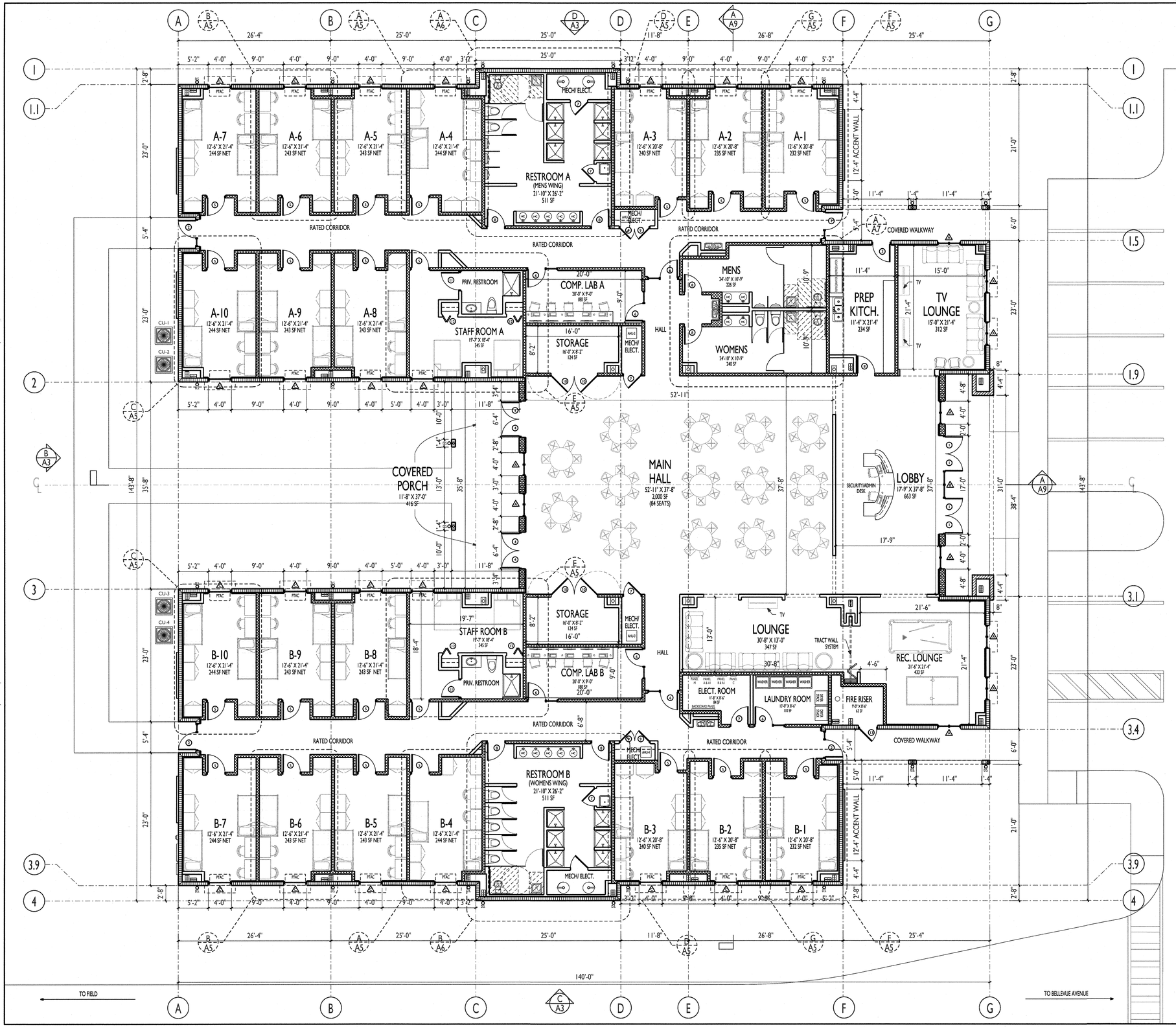
DME SPORTS, LLC

NOT RELEASED FOR CONSTRUCTION

JAN B. STERN
FLORIDA REGISTERED LANDSCAPE ARCHITECT
LICENSE NO. LA0001114
STATE OF FLORIDA
NOT VALID WITHOUT ELECTRONIC SIGNATURE

Digitally signed by Jan B Stern
Date: 2019.10.23 09:00:28 -04'00'

SCALE:	1"=30'
DESIGNED:	JS
DRAWN:	JS
DATE:	7/30/19
PROJECT NO.	250
SHEET	L-4 OF 4



WALL TYPE LEGEND

- 8" CMU EXT WALL W/ 5/8" GYP. BOARD OVER 3/4" P.T. FURRING & SUPER R PLUS RADIANT BARRIER (R-VALUE 5.1)
- 12" CMU EXT WALL W/ 5/8" GYP. BOARD OVER 3/4" P.T. FURRING & SUPER R PLUS RADIANT BARRIER (R-VALUE 5.1)
- UL U419 INTERIOR 1 HR RATED WALL 3 5/8" 25 G MTL STUDS @ 16" O.C. W/ 5/8" GYP BOARD EACH SIDE
- INTERIOR NON-RATED WALL 3 5/8" 20 G MTL STUDS @ 24" O.C. W/ 5/8" GYP BOARD EACH SIDE
- EXTERIOR NON-RATED WALL 3 5/8" 20 G MTL STUDS @ 24" O.C. W/ DENZ GLASS FINISH

SYMBOL LEGEND

- (1) DOOR TAG (REFER TO SCHEDULE SHEET A12)
- (A) WINDOW TAG (REFER TO SCHEDULE SHEET A12)
- METAL BUILDING COLUMNS (REFER TO STRUCT. & MTL BLDG PKG)
- D.S. 6" DIA DOWNSPOUT (TO BE TIED TO CIVIL STORMWATER)

PROPOSED PLUMBING FIXTURE SCHEDULE

FIXTURE	MEN	WOMEN	UNISEX
WATER CLOSET	4	9	2
LAV.	9	9	2
URINAL	5	0	0
SHOWERS	6	6	2
3 BASIN SINK	0	0	1
MOP SINK	0	0	2
WATER FOUNTAIN (HI-LOW)	0	0	3
HAND SINK	0	0	0

GROSS AREA CALCULATION (80 BED UNIT)

A/C SPACE	
STUDENT RESIDENCES (20) @ +/- 240-290 SF EA. =	5,530 SF
STAFF RESIDENCES (2) @ +/- 390 SF EA. =	780 SF
GANG BATHROOMS (2) @ +/- 628 SF EA. =	1,256 SF
MAIN HALL RESTROOMS (2) @ +/- 256 SF EA. =	514 SF
COMPUTER LABS (2) @ +/- 195 SF EA. =	390 SF
RATED CORRIDORS (2) @ +/- 1,079 SF EA. =	2,155 SF
STORAGE, MECH/ELECT., FIRE RISER	576 SF
PREP KITCHEN	274 SF
LAUNDRY	122 SF
MAIN HALL/OFFICES	4,054 SF
	15,651 SF
NON-AC SPACE	
COVERED PORCHES/WALKWAYS	1,062 SF
TOTAL UNDER ROOF =	16,713 SF

A2 PROPOSED FLOOR PLAN

DORM BLDG. SCALE: 1/8" = 1'-0"

GENERAL NOTES:

ALL DIMENSIONS ARE TO FINISH FACE UNLESS NOTED OTHERWISE
ALL GENERAL & SUB-CONTRACTORS TO FIELD VERIFY ALL DIMENSIONS, ELECTRICAL, WATER, SEWER AND GAS SERVICE LOCATIONS.
ALL WORK MUST COMPLY WITH THE 2017 EDITION (EXPOSURE "D") OF THE FLORIDA BUILDING CODE SECT. 1609/ 140 MPH WIND LOAD AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION
ALL DOOR & WINDOW OPENINGS TO MEET OR EXCEED DESIGN PRESSURE RANGE THE BUILDING RISK CATEGORY IS "II"
INTERNAL PRESSURE COEFFICIENT IS .18 IN ACCORDANCE WITH ASCE 7-10
ALL GLAZING IS TO BE NON-IMPACT RESISTANT

© COPYRIGHT 2019 BPF DESIGN INCORPORATED

REVISIONS

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE: _____ FILE: _____

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

DME SPORTS HOUSING COMPLEX

OWNER/REP.: MIKE PANAGGIO, DIRECT MAIL EXPRESS, 2441 BELLEVUE AVENUE, DAYTONA BEACH, FL. 32114 (386)271-3924
PROJECT LOCATION: 2501 BELLEVUE AVENUE, DAYTONA BEACH, FL. 32114
GENERAL CONTRACTOR: TO BE DETERMINED

BPF DESIGN INCORPORATED
Building Design and Architecture
AA 26001108
BRIAN P. FREDLEY, ASSOC. AIA, PROJECT MANAGER
DALLAS B. PEACOCK, AIA, ARCHITECT
AR 0009706
207 FAIRVIEW AVENUE, DAYTONA BEACH, FL 32114
PH: (386) 257-0502 FX: (386) 257-1050
E-MAIL: bfredley@bpfdesign.com WEBSITE: bpfdesign.com

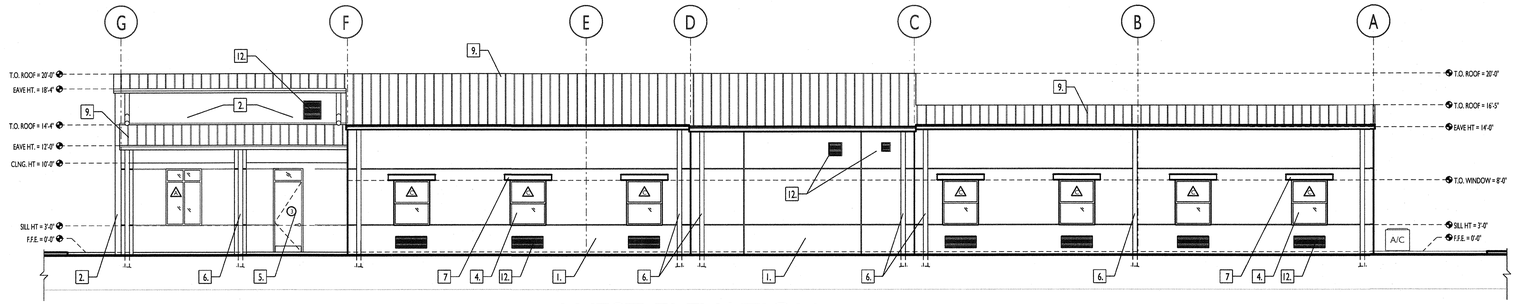
PROPOSED FLOOR PLAN

DRAWN BY: TBM	CHECKED BY: DBP & BPF
DATE: OCTOBER 18, 2019	SHT NO. A2
SCALE: 1/8"=1'-0"	

0 2' 6 14' 20'

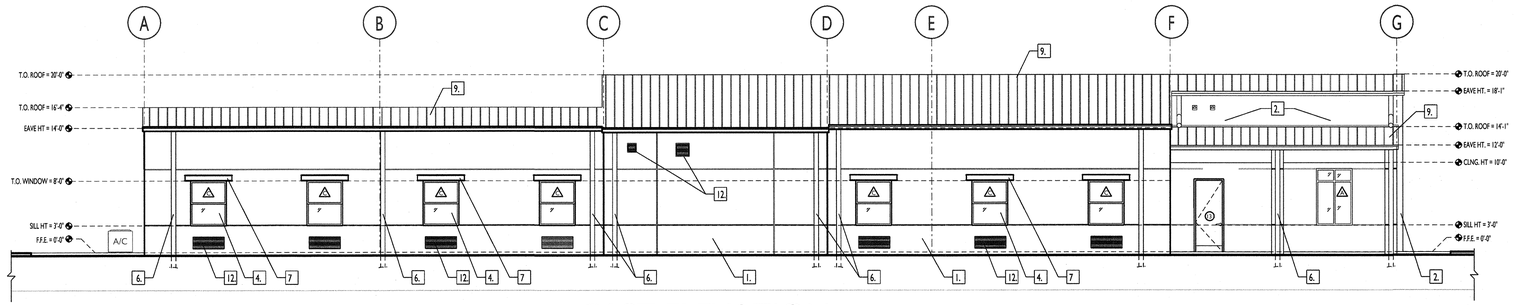
ARCHITECT'S / ENGINEER'S SEAL

Digitally signed by Dallas B. Peacock
Date: 2020.01.23 12:36:45 -05'00'



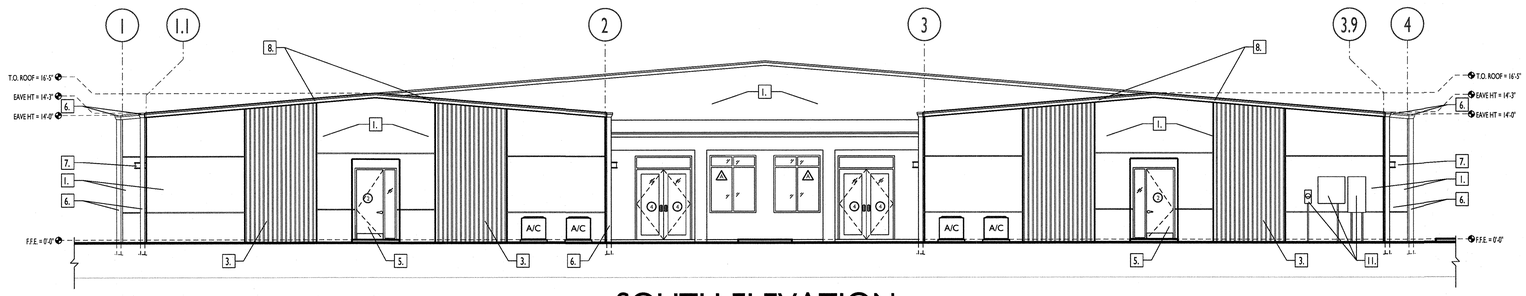
D / A3 WEST ELEVATION

SIDE FACADE SCALE: 1/8" = 1'-0"



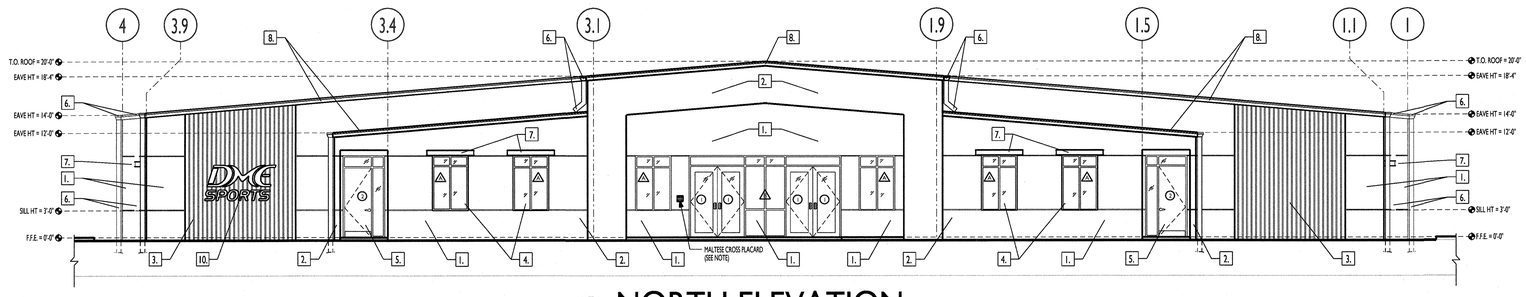
C / A3 EAST ELEVATION

SIDE FACADE SCALE: 1/8" = 1'-0"



B / A3 SOUTH ELEVATION

REAR FACADE SCALE: 1/8" = 1'-0"



A / A3 NORTH ELEVATION

FRONT FACADE SCALE: 1/8" = 1'-0"

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE: _____ FILE: _____

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach

MALTESE CROSS PLACARD NOTE:

8"
8"

FLORIDA STATE STATUTE 633.222 REQUIRES THE INSTALLATION OF ONE 8" X 8" LIGHTWEIGHT RED ROOF TRUSS SIGN MALTESE CROSS WITH THE INSET OF "R" MOUNTED APPROXIMATELY 24 INCHES TO THE LEFT OF MAIN ENTRANCE AND 4 - 6 FEET ABOVE GRADE, WALKING SURFACE, OR FINISHED FLOOR.

BUILDING / MATERIAL COLOR SCHEDULE

	BUILDING ELEMENT	MATERIAL	SPECIFIED COLOR
1.	MAIN WALL	CMU BLOCK W/ STUCCO FINISH	SW 7551- GREEK VILLA
2.	ACCENT WALL	CMU BLOCK W/ STUCCO FINISH	SW 6966- BLUEBLOOD
3.	ACCENT WALL	CORRUGATED MTL. SIDING	BERRIDGE- AWARD BLUE
4.	GLAZING (WINDOWS & DOORS)	LOW E, TINTED GLASS	BY MANUF.
5.	MAN DOORS	HOLLOW MTL. EXT. DOOR	SW 7551- GREEK VILLA
6.	GUTTERS & DOWNSPOUTS	PVC.	SW 6966- BLUEBLOOD
7.	WINDOW CANOPIES	PREFAB. MTL. AWNING	SW 6966- BLUEBLOOD
8.	ROOF FLASHING	CONC. TILTWALL W/ TEXTURE FINISH	MANUF. WHITE
9.	ROOF	STANDING SEAM MTL. ROOF	BERRIDGE- SHASTA WHITE
10.	BUILDING SIGNAGE	T.B.D.	WHITE
11.	FPL METER, WALL EQUIP.	MATCH TO WALL	SW 7551- GREEK VILLA
12.	MECH. LOUVERS/GRILLES	MATCH TO WALL	REF. TO ELEVS.

GENERAL NOTES:

ALL DIMENSIONS ARE TO FINISH FACE UNLESS NOTED OTHERWISE
ALL GENERAL & SUB-CONTRACTORS TO FIELD VERIFY ALL DIMENSIONS, ELECTRICAL, WATER, SEWER AND GAS SERVICE LOCATIONS.
ALL WORK MUST COMPLY WITH THE 2017 EDITION (EXPOSURE "D") OF THE FLORIDA BUILDING CODE SECT. 1609/ 140 MPH WIND LOAD AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION
ALL DOOR & WINDOW OPENINGS TO MEET OR EXCEED DESIGN PRESSURE RANGE
THE BUILDING RISK CATEGORY IS "II"
INTERNAL PRESSURE COEFFICIENT IS .18 IN ACCORDANCE WITH ASCE 7-10
ALL GLAZING IS TO BE NON-IMPACT RESISTANT

© COPYRIGHT 2019 BPF DESIGN INCORPORATED

REVISIONS

1	

DME SPORTS HOUSING COMPLEX

OWNER/REP.: MIKE PANAGGIO, DIRECT MAIL EXPRESS, 2441 BELLEVUE AVENUE, DAYTONA BEACH, FL 32114 (386)271-3924
PROJECT LOCATION: 2501 BELLEVUE AVENUE, DAYTONA BEACH, FL 32114
GENERAL CONTRACTOR: TO BE DETERMINED

BPF DESIGN INCORPORATED
Building Design and Architecture
AA 26001108
BRIAN P. FREDLEY, ASSOC. AIA, PROJECT MANAGER
DALLAS B. PEACOCK, AIA, ARCHITECT
AR 0009706
207 FAIRVIEW AVENUE, DAYTONA BEACH, FL 32114
PH: (386) 257-0502 FX: (386) 257-1050
E-MAIL: bfredley@bpfdesign.com WEBSITE: bpfdesign.com

BUILDING ELEVATIONS

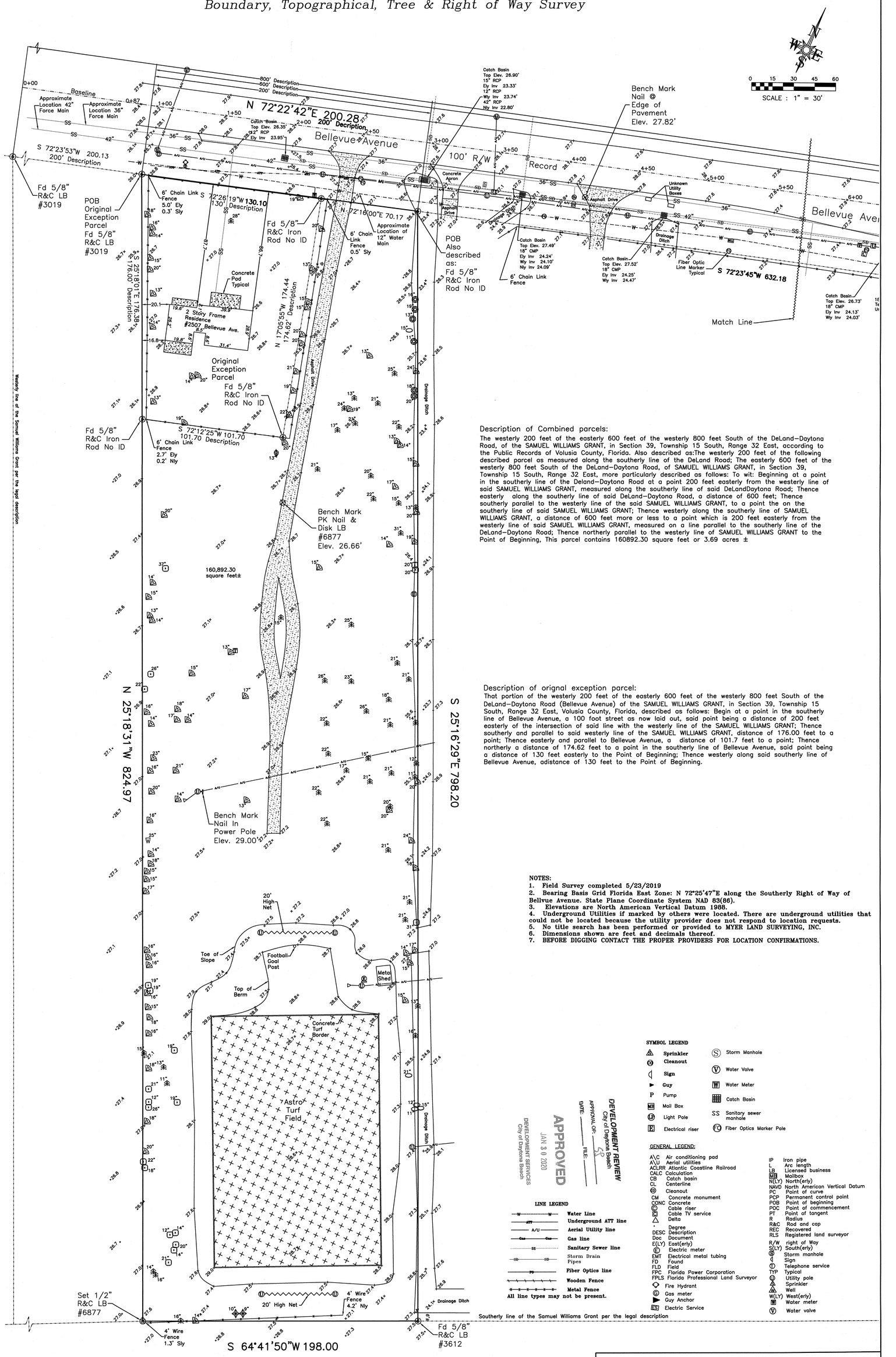
DRAWN BY: TBM	CHECKED BY: DBP & BPF
DATE: OCTOBER 18, 2019	SHT NO. A3
SCALE: 3/16"=1'-0"	

0 1' 4' 10' 12'

ARCHITECT'S / ENGINEER'S SEAL

Digitally signed by Dallas B. Peacock
Date: 2020.01.23 12:37:38 -05'00'

Boundary, Topographical, Tree & Right of Way Survey



Description of Combined parcels:

The westerly 200 feet of the easterly 600 feet of the westerly 800 feet South of the DeLand–Daytona Road, of the SAMUEL WILLIAMS GRANT, in Section 39, Township 15 South, Range 32 East, according to the Public Records of Volusia County, Florida. Also described as:The westerly 200 feet of the following described parcel as measured along the southerly line of the DeLand Road; The easterly 600 feet of the westerly 800 feet South of the DeLand–Daytona Road, of SAMUEL WILLIAMS GRANT, in Section 39, Township 15 South, Range 32 East, more particularly described as follows: To wit: Beginning at a point in the southerly line of the Deland–Daytona Road at a point 200 feet easterly from the westerly line of said SAMUEL WILLIAMS GRANT, measured along the southerly line of said DeLandDaytona Road; Thence easterly along the southerly line of said DeLand–Daytona Road, a distance of 600 feet; Thence southerly parallel to the westerly line of the said SAMUEL WILLIAMS GRANT, to a point the on the southerly line of said SAMUEL WILLIAMS GRANT; Thence westerly along the southerly line of SAMUEL WILLIAMS GRANT, a distance of 600 feet more or less to a point which is 200 feet easterly from the westerly line of said SAMUEL WILLIAMS GRANT, measured on a line parallel to the southerly line of the DeLand–Daytona Road; Thence northerly parallel to the westerly line of SAMUEL WILLIAMS GRANT to the Point of Beginning, This parcel contains 160892.30 square feet or 3.69 acres ±

Description of orignal exception parcel:

That portion of the westerly 200 feet of the easterly 600 feet of the westerly 800 feet South of the DeLand–Daytona Road (Bellevue Avenue) of the SAMUEL WILLIAMS GRANT, in Section 39, Township 15 South, Range 32 East, Volusia County, Florida, described as follows: Begin at a point in the southerly line of Bellevue Avenue, a 100 foot street as now laid out, said point being a distance of 200 feet easterly of the intersection of said line with the westerly line of the SAMUEL WILLIAMS GRANT; Thence southerly and parallel to said westerly line of the SAMUEL WILLIAMS GRANT, distance of 176.00 feet to a point; Thence easterly and parallel to Bellevue Avenue, a distance of 101.7 feet to a point; Thence northerly a distance of 174.62 feet to a point in the southerly line of Bellevue Avenue, said point being a distance of 130 feet easterly to the Point of Beginning; Thence westerly along said southerly line of Bellevue Avenue, adistance of 130 feet to the Point of Beginning.

NOTES:

1. **Field Survey completed 5/23/2019**
2. **Bearing Basis Grid Florida East Zone: N 72°25'47"E along the Southerly Right of Way of Bellvue Avenue. State Plane Coordinate System NAD 83(86).**
3. **Elevations are North American Vertical Datum 1988.**
4. **Underground Utilities if marked by others were located. There are underground utilities that could not be located because the utility provider does not respond to location requests.**
5. **No title search has been performed or provided to MYER LAND SURVEYING, INC.**
6. **Dimensions shown are feet and decimals thereof.**
7. **BEFORE DIGGING CONTACT THE PROPER PROVIDERS FOR LOCATION CONFIRMATIONS.**

TREE LEGEND:

- OAK
- PINE
- PALM
- HACKBERRY
- SWEETGUM
- CHINABERRY
- CHINESE TALLOW
- AUSTRALIAN PINE

NOTE: Number beside tree indicates diameter at 4.5' Above Grade.

All trees may not be present.

SYMBOL LEGEND

Sprinkler	Storm Manhole
Cleanout	Water Valve
Sign	Water Meter
Guy	Catch Basin
Pump	Sanitary sewer manhole
Mail Box	Fiber Optics Marker Pole
Light Pole	
Electrical riser	

GENERAL LEGEND:

A\C Air conditioning pad	IP Iron pipe
A\U Aerial utilities	L Arc length
ACLRR Atlantic Coastline Railroad	LB Licensed business
CALC Calculation	MB Mailbox
CB Catch basin	N(LY) North(erly)
CL Centerline	NAVD North American Vertical Datum
Cleanout	PC Point of curve
CM Concrete monument	PCP Permanent control point
CONC Concrete	POB Point of beginning
Cable riser	POC Point of commencement
Cable TV service	PT Point of tangent
Delta	R Radius
° Degree	R&C Rod and cap
DESC Description	REC Recovered
Doc Document	RLS Registered land surveyor
E(LY) East(erly)	R/W right of Way
Electric meter	S(LY) South(erly)
EMT Electrical metal tubing	Storm manhole
FD Found	Sign
FLD Field	Telephone service
FPC Florida Power Corporation	TYP Typical
FPLS Florida Professional Land Surveyor	Utility pole
Fire Hydrant	Sprinkler
Gas meter	Well
Guy Anchor	W(LY) West(erly)
Electric Service	Water meter
	Water valve

LINE LEGEND

- Water Line
- Underground ATT line
- Aerial Utility line
- Gas line
- Sanitary Sewer line
- Storm Drain Pipes
- Fiber Optics line
- Wooden Fence
- Metal Fence

All line types may not be present.

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SK
DATE: FILE:

APPROVED
JAN 9 0 2020
DEVELOPMENT SERVICES
City of Daytona Beach

Digitally signed by Michael M. Myer
Date: 2019.10.31 09:46:21 -04'00'

MICHAEL M. MYER LICENSE No. 4006 STATE OF FLORIDA PROFESSIONAL SURVEYOR & MAPPER

MICHAEL M. MYER (Not valid without the signature and original raised seal of a Florida licensed surveyor and mapper) 4006 LICENSED embossed with surveyor's seal and

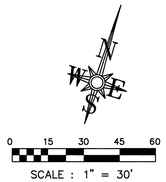
Survey Exclusively Prepared for:
Mike Panaggio
DME Holdings, LLC

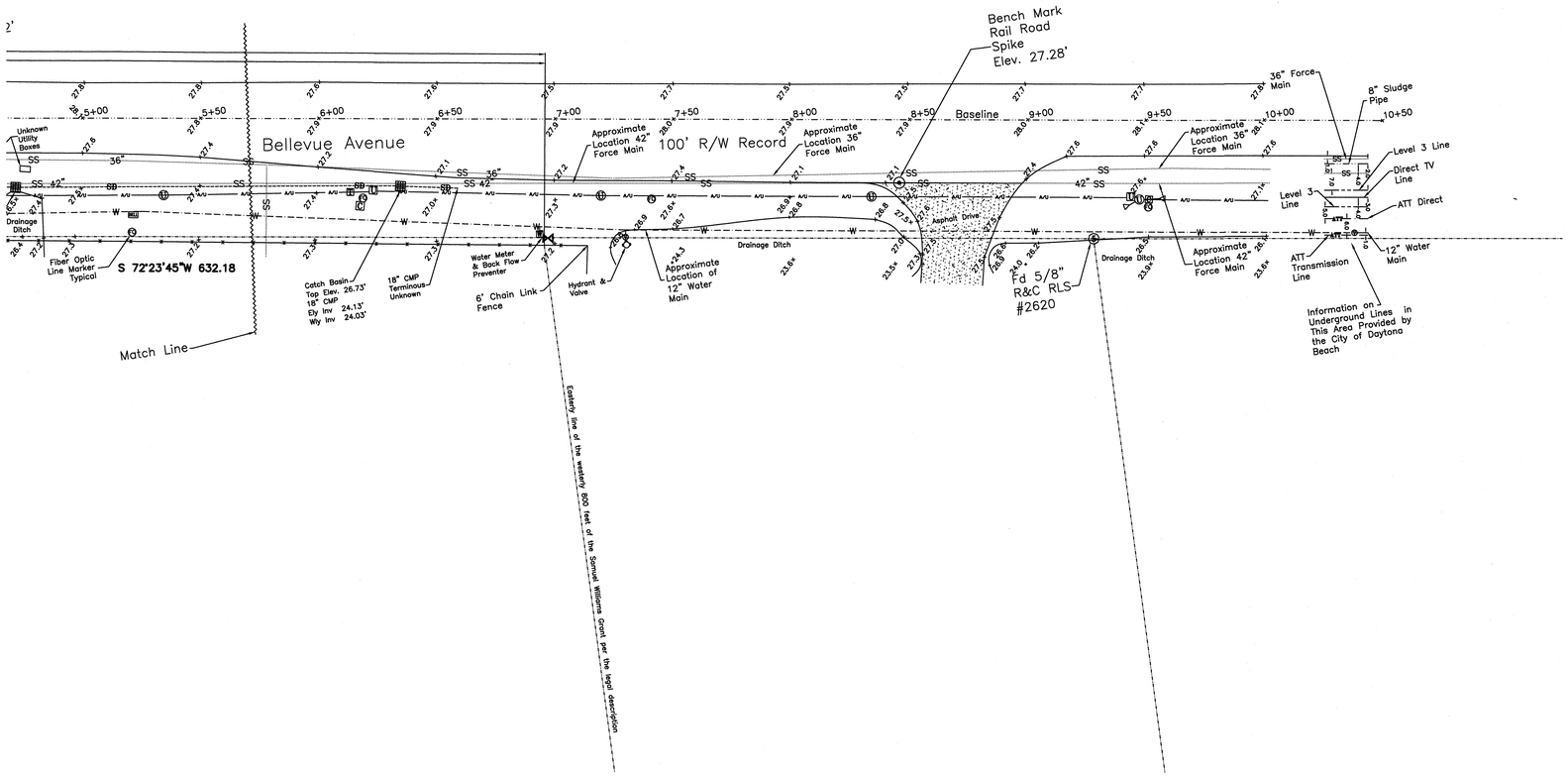
MYER LAND SURVEYING, INC.
LICENSED BUSINESS #6877
MICHAEL M. MYER #LS 4006
PROFESSIONAL LAND SURVEYOR
316 RIDGEWOOD AVENUE HOLLY HILL, FLORIDA 32117
386 255-6304 Phone MyerLandSurveying@Gmail.com

Job Number 19177 Crd #97367
FB 331 @ 41-48,
267 @ 17-22

DATE: 6/10/19 | SCALE: 1"=100' | SHEET 1 of 2

Boundary, Topographical, Tree & Right of Way Survey
Sheet 2 of 2





TREE LEGEND:

- OAK
- PINE
- PALM
- HACKBERRY
- SWEETGUM
- CHINABERRY
- CHINESE TALLOW
- AUSTRAILIAN PINE

NOTE:

Number beside tree indicates diameter at 4.5' Above Grade.

All trees may not be present.

LINE LEGEND

- Water Line
- Underground ATT line
- Aerial Utility line
- Gas line
- Sanitary Sewer line
- Storm Drain Pipes
- Fiber Optics line
- Wooden Fence
- Metal Fence

All line types may not be present.

GENERAL LEGEND:

A\C Air conditioning pad	IP Iron pipe
A\U Aerial utilities	L Arc length
ACLRR Atlantic Coastline Railroad	LB Licensed business
CALC Calculation	MB Mailbox
CB Catch basin	N(LY) North(erly)
CL Centerline	NAVD North American Vertical Datum
CO Cleanout	PC Point of curve
CM Concrete monument	PCP Permanent control point
CONC Concrete	POB Point of beginning
CR Cable riser	POC Point of commencement
CTV Cable TV service	PT Point of tangent
Δ Delta	R Radius
° Degree	R&C Rod and cap
DESC Description	REC Recovered
Doc Document	RLS Registered land surveyor
E(LY) East(erly)	R/W right of Way
EM Electric meter	S(LY) South(erly)
EMT Electrical metal tubing	SD Storm manhole
FD Found	Sign
FLD Field	T Telephone service
FPC Florida Power Corporation	TYP Typical
FPLS Florida Professional Land Surveyor	UP Utility pole
Fire Hydrant	Sprinkler
G Gas meter	Well
Guy Anchor	W(LY) West(erly)
ES Electric Service	WM Water meter
	V Water valve

SYMBOL LEGEND

Sprinkler	S Storm Manhole
CO Cleanout	V Water Valve
Sign	WM Water Meter
Guy	Catch Basin
P Pump	SS Sanitary sewer manhole
MB Mail Box	FO Fiber Optics Marker Pole
Light Pole	
E Electrical riser	

NOTES:

1. **Field Survey completed 5/23/2019**
2. **Bearing Basis Grid Florida East Zone: N 72°25'47"E along the Southerly Right of Way of Bellvue Avenue. State Plane Coordinate System NAD 83(86).**
3. **Elevations are North American Vertical Datum 1988.**
4. **Underground Utilities if marked by others were located. There are underground utilities that were not located because the utility provider will not respond to Surveyor's location request.**
5. **No title search has been performed or provided to MYER LAND SURVEYING, INC.**
6. **Dimensions shown are feet and decimals thereof.**
7. **BEFORE DIGGING CONTACT THE PROPER PROVIDERS FOR LOCATION CONFIRMATIONS.**

Job Number 19177 Crd #97367
FB 331 @ 41–48,
267 @ 17–22

MICHAEL M. MYER, FL PSM LS4006
MYER LAND SURVEYING, INC., LICENSED BUSINESS #6877
(Not valid unless signed and embossed with surveyor's seal and accompanied by sheet 1.)

Survey Exclusively Prepared for:
Mike Panaggio
DME Holdings, LLC

MYER LAND SURVEYING, INC.
LICENSED BUSINESS #6877
MICHAEL M. MYER #LS 4006
PROFESSIONAL LAND SURVEYOR
316 RIDGEWOOD AVENUE HOLLY HILL, FLORIDA 32117
386 255–6304 Phone MyerLandSurveying@Gmail.Com

DATE: 6/10/19	SCALE: 1"=30'	SHEET 2 of 2

DEVELOPMENT REVIEW
City of Daytona Beach
APPROVAL OF: SP
DATE: _____ FILE: _____

APPROVED
JAN 30 2020
DEVELOPMENT SERVICES
City of Daytona Beach