



To: JACK ANDREWS, PE, CITY ENGINEER
MIKE REALS, FP PUBLIC WORKS MANAGER
CHIEF HOBLEY-BURNEY, FP POLICE DEPARTMENT
PAUL THOMAS, FP BUILDING OFFICIAL
JAMES CARNES, PE, FPUA ENGINEERING (WATER/WASTEWATER)
PAUL LAGUERRE, PE, FPUA ENGINEERING (ELECTRIC)
ROD REED, PLS, SLC SURVEYING
GRANT CHAMBERS, PE, SLC ENGINEERING
LESLIE OLSON, AICP, SLC PLANNING & DEVELOPMENT DIRECTOR
LIEUTENANT WAYNE BOYER, SLC FIRE DISTRICT
PEGGY ARRAIZ, FP CODE ENFORCEMENT
PETER BUCHWALD, AICP, SLC TRANSPORTATION PLANNING ORGANIZATION
MURRIAH DECKLE, AICP, SLC TRANSIT SERVICES

FROM: BRANDON CREAGAN, LEED GREEN ASSOCIATE, PLANNER

RE: TECHNICAL REVIEW PROJECT# 20- 07000020

DATE: DECEMBER 3, 2020

Development Review – Bobcat of Treasure Coast – 4405 Prosperity Drive

Attached is an Application for Development Review (Major Site Plan) for a property located at 4405 Prosperity Drive. The property is 1.96 acres and currently has a Zoning of Light Industrial (I-1), and a Future Land Use of Heavy Industrial (HI). The applicant would like to construct an addition to the main building on the property that will contain office and sales space. There will also be a front porch attached to the main building, as well as a separate washdown building to clean rental equipment. The total added additions to the property will be approximately 5,400 square feet with the total building area of 11,067 square feet once everything is constructed on site. The parcel ID for the lot is 2431-506-0005-000-8.

Please review and provide comments on the project. Please send all comments to my email Bcreagan@cityoffortpierce.com or through interoffice mail to the Planning Department. If you have comments, please respond by December 15, 2020.

Please do not hesitate to contact me should you require any additional information at 772-467-3742.

Thank you.

Brandon Creagan



DEVELOPMENT REVIEW

Property address or Location 4405 PROSPERITY DRIVE, FORT PIERCE, FL 34981
 Parcel ID #(s) 2431-506-0005-000-8
 Project description BOBCAT TREASURE COAST

SMITH BROS CONTRACTING EQUIPMENT INC.
Property Owner(s)
 5731 N MILITARY TRL
 Street Address
 WEST PALM BEACH FL 33407-1839
 City State Zip
 561-827-9880
 Phone Number
 SIMON@SMITHB.COM
 Email Address

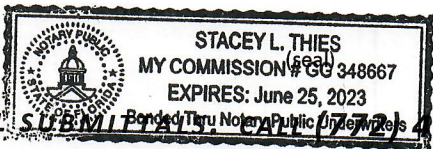
ALEJANDRA MOLINA-JACKSON, AIA, AHRENS COMPANIES INC.
Applicant/Representative, Title, Company
 1461 KINETIC RD
 Street Address
 LAKE PARK FL 33403
 City State Zip
 561-839-2837
 Phone Number
 AMJ@AHRENSCOMPANIES.COM
 Email Address

Property Owner(s) Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.

Simon PRESIDENT
 Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY
 The foregoing instrument was acknowledged before me this 18 day of November, 2020, by
Simon Smith who is personally known to me or has produced
[Signature] as identification.

Signature of Notary



INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation	
				Contributing	Individual
				Non-Contributing	None

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit # _____
 Intake Planner _____
 Planner Assigned _____
 Approved By _____ Date _____
 Comments _____

Intake Date Stamp

DEVELOPMENT REVIEW

General Information

- Incomplete application packets cannot be accepted.
- Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type

- Site Plan
 Conditional Use with New Const.
 Major Amendment
 Conceptual Development Plan
 Minor Amendment

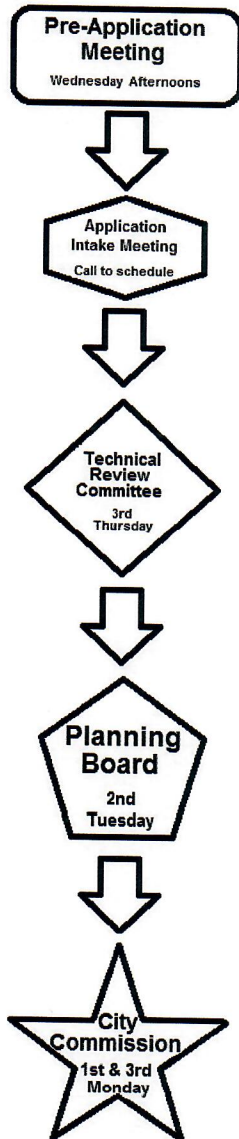
Site Information:

Non-Residential: Proposed Sq. Ft.: 5,400 sf Residential: Proposed Units: n/a

Surrounding Uses: (i.e. single family home, retail, industrial, etc.)

North	South	East	West
light manufacturer		light manufacturer	light manufacturer

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- Complete notarized application
- Warranty Deed
- SLC Property Record Card
- Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- General location map (see Section 22-58.d.2)
- Survey (see Section 22-58.d.3)
- Site Plan (see Section 22-58.d.4)
- Landscaping Plan (see Section 22-187)
- Storm Drainage Plan (see Section 22-58.d.6)
- Environmental Impact Report
- Beach/Dune System protection plan, if applicable (see Section 22-58.d.7)
- Lighting Plan (see Section 22-58.d.8)
- Design Review submittals (see Design Review application)
- Traffic Impact Report
- Concurrency Review submittals (see Concurrency Review application)



Design Review

Property address or Location 4405 PROSPERITY DRIVE, FORT PIERCE, FL 34981
 Parcel ID #(s) 2431-506-0005-000-8
 Project Description BOBCAT TREASURE COAST

SMITH BROS CONTRACTING EQUIPMENT INC.
Property Owner(s)
5731 N MILITARY TRL
Street Address
WEST PALM BEACH FL 33407-1839
City State Zip
561-827-9880
Phone Number
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Email Address

ALEJANDRA MOLINA-JACKSON, AIA, AHRENS COMPANIES INC.
Applicant/Representative, Title, Company
1461 KINETIC RD
Street Address
LAKE PARK FL 33403
City State Zip
561-839-2837
Phone Number
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Property Owner(s) Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Application (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.

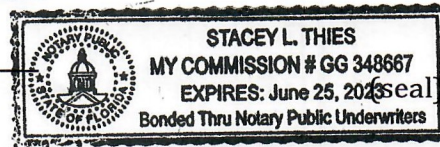
Simon Smith PRESIDENT

Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY
 The foregoing instrument was acknowledged before me this 18 day of November 20, 20, by

Simon Smith who is personally known to me or has produced
 as identification.

Signature of Notary



TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic Districts	Historic Designation

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit _____
 Intake Planner _____
 Planner Assigned _____
 Approved _____ Date _____
 Comments _____

Intake Date Stamp

Design Review Application Checklist

(City Code of Ordinances 22-59)

Submittal for Administrative Approval

- a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 22-194, location of bordering streets and, if applicable, wetlands and beaches.
- b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment and other site features that may influence design elements.
- c. A draft written narrative describing the design intent of the project, its goals and objectives and how it reflects the site analysis study results.
- d. Context photographs of neighboring uses and architectural styles.
- e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
- f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
- g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
- h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
- i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
- j. Exterior elevations showing architectural character, external architectural features and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
- k. Design review concurrent with conceptual development plan procedure according to subsection 22-58(e) is also available.

Submittal for Board Approval

- a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
- b. A final site plan meeting the requirements of section 22-58
- c. A final site lighting plan that meets the requirements of subsection 22-58(d)(8).
- d. A final landscape plan that meets the requirements of Article XII, Landscaping and Trees.
- e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
- f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.



November 24th, 2020

STATEMENT OF OWNERSHIP AND SITE PLAN – BUILDINGS NARRATIVE

Ref: Bobcat – Treasure Coast - 4405 Prosperity Drive- Fort Pierce, FL 34981

1. Statement of Ownership:

The site was acquired by Smith Brothers (refer to warranty deed) to use as a branch of Bobcat in Treasure Coast. The owners have other similar facilities in Florida.

The site has 85,300 square feet (1.95 acres) with an existing pre-engineered metal building covering 5,667 square feet.

South side of the site has a 70 feet drainage easement and ditches running west and east side of property line.

2. Site plan and building character and intents:

Bobcat Company is an American-based manufacturer of construction equipment. This branch will sale, rent and maintain this kind of machinery. Also offers parts related to the mentioned equipment. The company sells skid steer loaders, compact excavators, and other small hydraulic equipment under the Bobcat brand name.

The site land use is Heavy Industrial (HI) and the zoning district is light Industrial (I-1). Per Fort Pierce Code of Ordinance (sec. 125-187 g) the proposed use is allowed under Heavy equipment sales, rentals, and service.

We propose to provide one access to the site aligned with the crossing street neighbor existing entrance. This access will have a gate for security reasons to enclose the property.

Circulation proposed inside the site will work as a rotunda. The core area of the rotunda will be used to display machinery and test them. There will be 17 parking spaces, included one ADA. In addition, two more vehicular spaces in the wash area.

Will be provided 2 loading areas, one for trucks, in front of a mobile dock loading ramp, west side of the property and a 12 feet x 35 feet additional loading area on the west side.

A drainage system and landscaping were coordinated with the easements and ditches to comply with codes.

The existing building will be partially renovated within the 5,667 square feet. Several partitions will be built to provide a breakroom and an office. The existing Parts Department will be reduced in area. The



existing bathrooms will remain as well as the electrical panels area, that will be completed with new panels for the addition.

An additional 1,875 square feet will be added for the sales and rentals room, with 2 more offices, and 1,125 square feet front porch – canopy as space of transition between exterior and interior to provide a seating area for customers and some products display.

Another 2,400 square feet canopy separate from the main building as additional structure will be built to install a wash equipment to clean the machines returned rentals.

This structure is supported by metal frames, with no exterior wall enclosure.

All the existing building area (5,667 sf) and proposed addition (5,400sf), a total of 11,067 sf will be mercantile (M) occupancy as defined by FBC – 2017 and 2020 (309.1):

“Mercantile Group M occupancy includes, among others, the use of a building or structure or a portion thereof for the display and sale of merchandise, and involves stocks of goods, wares or merchandise incidental to such purposes and accessible to the public.”

The occupancy was calculated per FBC Chapter 10, table 1004.5, under mercantile, 60 sf gross area per occupant and 300 sf gross area per occupant for storage, stock, shipping areas.

The building façade was treated to give a commercial-industrial aesthetic and consistent with the existing building. The materials will match the existing metal wall panels, with a different color palette and an accent wainscot stone veneer will be applied in the front to upgrade the image of the building.

Please feel free to contact us to provide additional information of the project. On behalf of the Applicant, Ahrens Companies request approval of the Site Plan, demonstrated we comply with all Fort Pierce City and Port St Lucie County requirements.

Alejandra Molina-Jackson, AIA NCARB LEED AP BD+C

Florida license AR 96626

Ahrens Companies

This Instrument Prepared By / Return To:
Jennifer L. Williamson, Esquire
CRARY BUCHANAN, P.A.
759 SW Federal Hwy., Suite 106
Stuart, FL 34994
(772) 287-2600

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT
SAINT LUCIE COUNTY
FILE # 4524753 01/25/2019 03:19:18 PM
OR BOOK 4226 PAGE 2077 - 2077 Doc Type: DEED
RECORDING: \$10.00
Doc Tax: \$3850.00

WARRANTY DEED (from Corporation)

THIS WARRANTY DEED, Made and executed the 22nd day of January, 2019, by **TB Prosperity, Inc., a Florida corporation**, existing under the laws of Florida, and having its principal place of business at 419 NE Baker Road, Stuart, Florida 34994, hereinafter called the Grantor, to **Smith Bros. Contracting Equipment, Inc., a Florida corporation**, whose address is 5731 North Military Trail, West Palm Beach, Florida 33407, hereinafter called the Grantee:

(Wherever used herein the terms "Grantor" and "Grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the Grantor, for and in consideration of the sum of **\$10.00** and other valuable considerations, receipt whereof is hereby acknowledged, by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto the Grantee, all that certain land situate in St. Lucie County, Florida, to-wit:

Lot 4, FT. PIERCE BUSINESS PARK PHASE II, according to the map or plat thereof, as recorded in Plat Book 28, Page(s) 23, of the Public Records of St. Lucie County, Florida.

Parcel I.D. No.: 2431-506-0005-000/8

Subject to: restrictions, reservations, covenants, conditions, and easements of record; taxes for 2019 and the years subsequent thereto, and all applicable laws, ordinances and governmental regulations, including without limitation, zoning and building codes and ordinances.


Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.


To Have and to Hold, the same in fee simple forever.

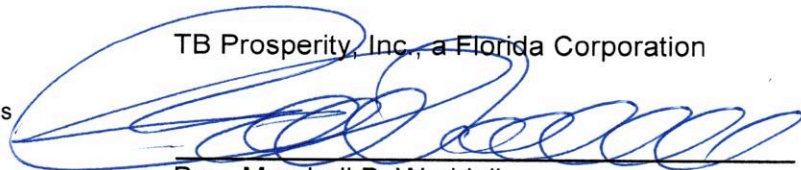
And the Grantor hereby covenants with said Grantee that it is lawfully seized of said land in fee simple; that it has good right and lawful authority to sell and convey said land; that it hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances.

In Witness Whereof the Grantor has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed, by its proper officers thereunto duly authorized, the day and year first above written.

Signed, sealed and delivered in our presence:


_____, Witness
[Print Name of Witness]


_____, Witness
[Print Name of Witness]

TB Prosperity, Inc., a Florida Corporation


By: Marshall B. Waddell
Its: President

Property Identification

Site Address: 4405 PROSPERITY DR
Parcel ID: 2431-506-0005-000-8
Account #: 130877
Map ID: 24/31N
Use Type: 4100
Zoning: Light Indu
City/County: Fort Pierce

Ownership

Smith Bros Contracting Equipment Inc
5731 N Military TRL
West Palm Beach, FL 33407

Legal Description

FT PIERCE BUSINESS PARK PHASE II LOT 4 (1.96 AC)

Current Values

Just/Market Value: \$401,500
Assessed Value: \$401,500
Exemptions: \$0
Taxable Value: \$401,500



Total Areas

Finished/Under Air (SF): 5,625
Gross Sketched Area (SF): 5,625
Land Size (acres): 1.96
Land Size (SF): 85,377.6

Property taxes are subject to change upon change of ownership.

- Past taxes are not a reliable projection of future taxes.
- The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.

Taxes for this parcel: [SLC Tax Collector's Office](#)
Download TRIM for this parcel: [Download PDF](#)

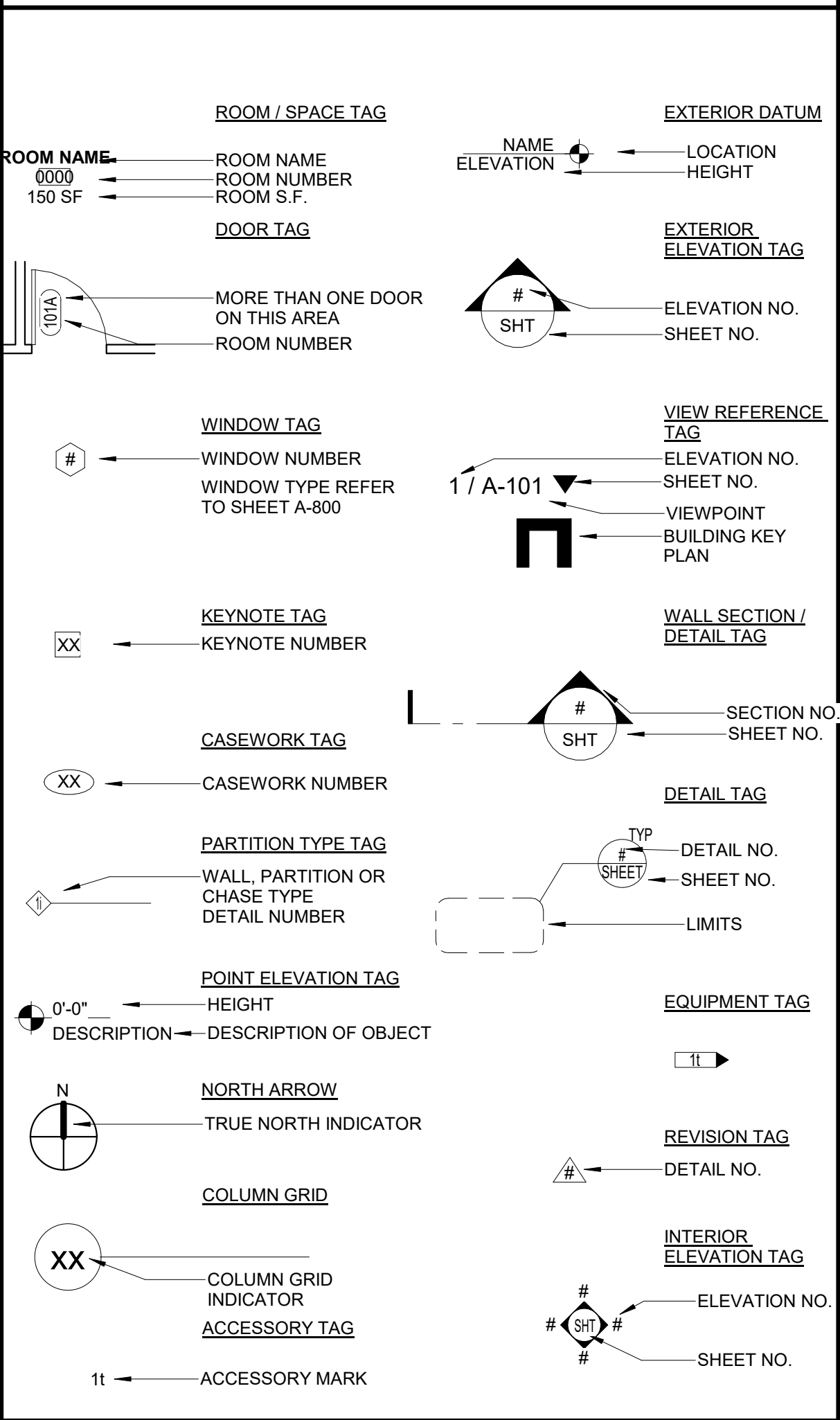
GENERAL NOTES

1. CONSTRUCTION SHALL FOLLOW CURRENT 2020 7th EDITION OF THE "FLORIDA BUILDING CODE" AS ADOPTED BY SAINT LUCIE COUNTY AS APPLICABLE AND ALL APPLICABLE AMENDMENTS, AS APPLIES TO A TYPE II B CONSTRUCTION...

APPLICABLE CODES

1. TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS ARE COMPLETE, AND COMPLY WITH ALL APPLICABLE CODES. 2. THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS...

DRAWING SYMBOLS AND INDICATORS



ARCHITECTURAL ABBREVIATIONS

Table of architectural abbreviations with columns for symbol, description, and alternate symbol. Includes terms like AND, ANGLE, CENTER LINE, DIAMETER OR ROUND, AT, AIR CONDITIONING, ACCESSIBLE, etc.

DRAWING INDEX

Table with columns: SHEET NO., SHEET TITLE, ISSUE DATE, REVISION NO., LATEST REVISION DATE. Lists sheets G-001 to A-201.

DRAWING INDEX

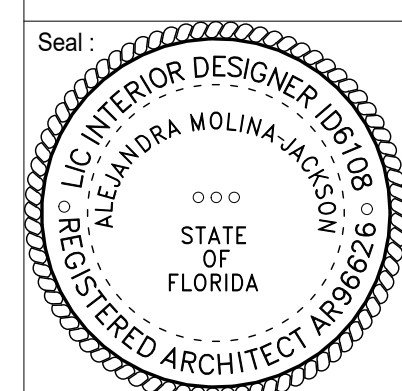
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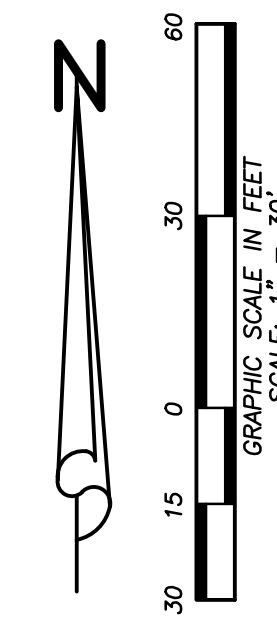
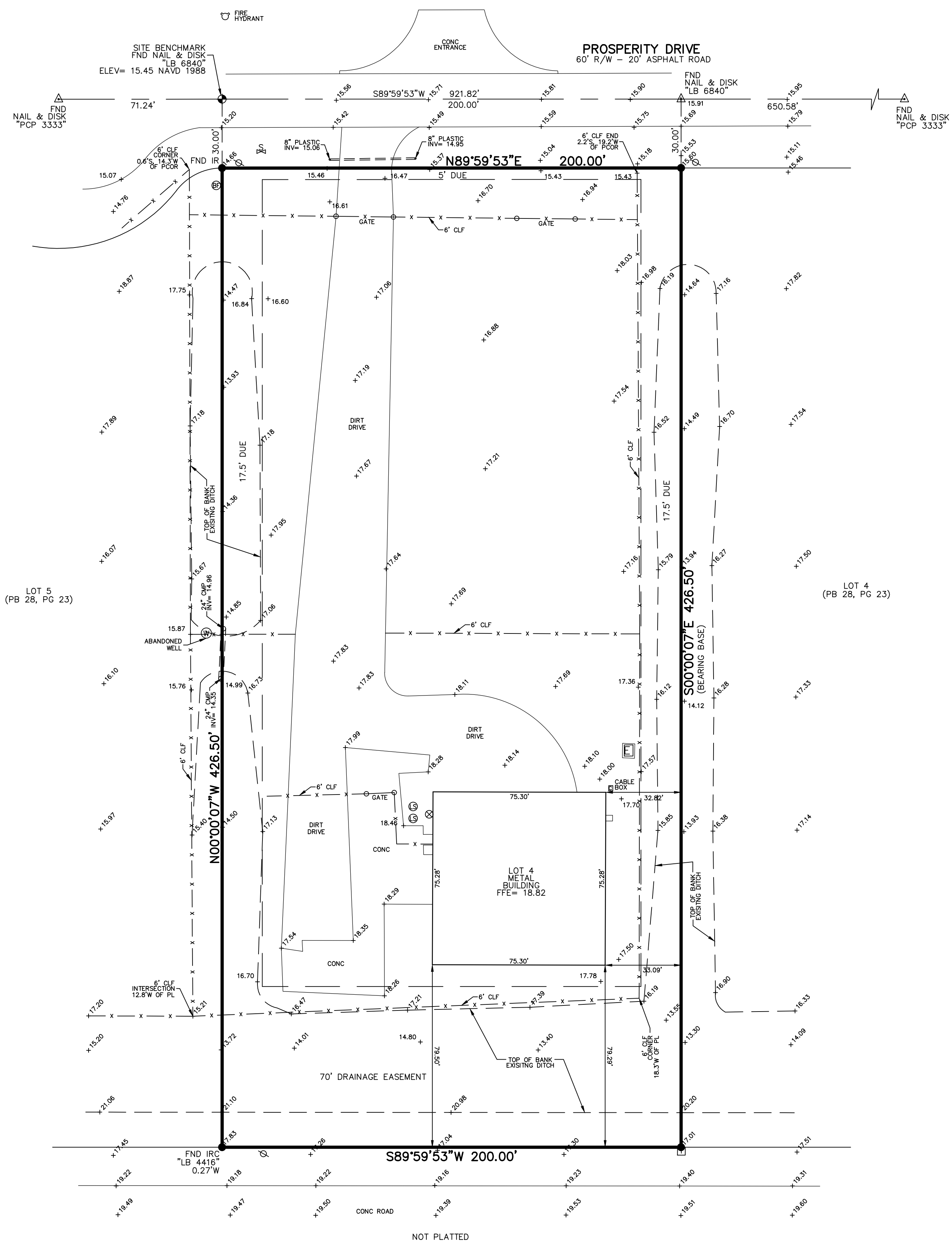
COPYRIGHT © 2020 AHRENS COMPANIES, INC. ALL RIGHTS RESERVED. These drawings and specifications are instruments of service and shall remain the property of Ahrens Companies, Inc.

Table with columns: NO., REVISION, DATE. Revision table for the drawing.

PROPOSED ADDITION AND NEW WASH AREA BOBCAT TREASURE COAST 4405 PROSPERITY DRIVE, FORT PIERCE, FLORIDA 34981



NAME: ALEJANDRA MOLINA-JACKSON LICENSE #: AR96626 DATE: 11/25/2020 SCALE: 1/2" = 1'-0" DRAWN: WA JOB: 20-000035 SHEET TITLE: DRAWING INDEX, APPLICABLE CODES & GENERAL NOTES SHEET #: G-002



SURVEY REPORT:

LOT 4, FT. PIERCE BUSINESS PARK PHASE II, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK 28, PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
CONTAINING: 85,300 SQUARE FEET OR 1.958 ACRES, MORE OR LESS.

SURVEY REPORT:

- THIS IS A BOUNDARY SURVEY AS DEFINED IN CHAPTER 5J-17.050(11), FLORIDA ADMINISTRATIVE CODE.
- SURVEY BASED ON THE PLAT OF FT. PIERCE BUSINESS PARK PHASE II, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK 28, PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
- LEGAL DESCRIPTION WAS FURNISHED BY CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NUMBER: 7357291, COMMITMENT DATE: 11/19/18 AT 11:00 PM.
- BEARING BASIS: A "GRID NORTH" BEARING OF S00°00'07"E ALONG THE EAST PROPERTY LINE.
- NO UNDERGROUND UTILITIES OR IMPROVEMENTS WERE LOCATED UNLESS OTHERWISE SHOWN.
- THIS SITE LIES WITHIN FLOOD ZONE "X", ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 12111C0188 K, EFFECTIVE DATE 2-19-2020.
- FLOOD ZONE SHOWN HEREON IS AN INTERPRETATION BY THE SURVEYOR AND IS PROVIDED AS A COURTESY. THE FLOOD ZONE SHOULD BE VERIFIED BY A DETERMINATION AGENCY.
- THERE MAY BE ADDITIONAL EASEMENTS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY ALEXANDER J. PIAZZA PSM, INC.
- THE EXPECTED USE OF THE SUBJECT PROPERTY IS FOR FUTURE COMMERCIAL DEVELOPMENT AND FALLS WITHIN THE COMMERCIAL HIGH RISK CATEGORY AS CLASSIFIED IN CHAPTER 5J-17.051(2), FLORIDA ADMINISTRATIVE CODE. ALL FIELD-MEASURED CONTROL MEASUREMENTS EXCEEDED 1:10,000 FEET ACCURACY REQUIREMENTS FOR THIS CLASSIFICATION. ALL SURVEY MEASUREMENTS ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD IN FEET.
- ALL MAPPED FEATURES SHOWN HEREON ARE UNDER THE DIRECT SUPERVISION AND RESPONSIBILITY OF ALEXANDER J. PIAZZA PSM, INC.
- SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
- ADDITIONS OR DELETIONS TO THE SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- THE BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM OF THE NORTH AMERICAN DATUM OF 1983 (2007 ADJUSTMENT) AND THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 AND ARE REFERENCED TO THE LENGMANN OF FLORIDA'S L-NET GPS NETWORK DEVELOPED WHICH MEETS OR EXCEEDS THE FEDERAL GEODETIC CONTROL COMMITTEE (FGCC) GUIDELINES FOR "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" AS WELL AS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17.051 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 FLORIDA STATUTES. BENCHMARKS SET OR FOUND FOR THIS SURVEY ARE NOTED ON THE SKETCH.
- THIS SURVEY IS PREPARED ONLY FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE. CERTIFIED TO: SMITH BROS. CONTRACTING EQUIPMENT, INC., A FLORIDA CORPORATION CHICAGO TITLE INSURANCE COMPANY CRARY BUCHANAN, PA
- © COPYRIGHT 2020 BY ALEXANDER J. PIAZZA PSM, INC. THE SKETCH OF SURVEY AND SURVEY REPORT COMPRISE THE COMPLETE SURVEY. THIS SURVEY IS NOT VALID UNLESS THE SKETCH AND REPORT ACCOMPANY EACH OTHER. REPRODUCTIONS OF THIS SURVEY ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY ALEXANDER J. PIAZZA PSM, INC.

DATE OF FIELD SURVEY: 11-05-20
7-21-20
12-17-18
DATE OF SURVEY: 12-18-18

ALEXANDER J. PIAZZA PSM, INC.

Alexander J. Piazza
ALEXANDER J. PIAZZA
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 6330

- SYMBOLS:**
- = GUY WIRE ANCHOR
 - = CABLE TELEVISION BOX
 - = CATCH BASIN
 - = CATCH BASIN INLET
 - = CLEANOUT
 - = ELECTRIC BOX
 - = TELEPHONE BOX
 - = SIGN
 - = SANITARY MANHOLE
 - = STORM MANHOLE
 - = LIFT STATION
 - = FIRE HYDRANT
 - = LIGHT POLE
 - = CONCRETE POWER POLE
 - = BACKFLOW PREVENTOR
 - = MAIL BOX
 - = IRRIGATION VALVE
 - = GAS VALVE
 - = SEWER VALVE
 - = WATER VALVE
 - = WELL
 - = WATER METER
 - = WOOD POWER POLE
 - = SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

- ABBREVIATIONS:**
- (C) = CALCULATED
 - CBS = CONCRETE BLOCK STRUCTURE
 - CMB = COMMISSIONERS' MINUTES BOOK
 - CONC = CONCRETE
 - CLF = CHAIN LINK FENCE
 - (D) = DEED
 - DE = DRAINAGE EASEMENT
 - DEP = DEPARTMENT OF ENVIRONMENTAL PROTECTION
 - DB = DEED BOOK
 - DIP = DUCTILE IRON PIPE
 - FFE = FINISHED FLOOR ELEVATION
 - FND = FOUND
 - FPL = FLORIDA POWER & LIGHT
 - IP = IRON PIPE
 - INV = INVERT
 - IR = IRON ROD
 - IRC = IRON ROD WITH PLASTIC CAP
 - LB = LICENSE BUSINESS
 - LS = LICENSE SURVEY
 - (M) = MEASURED
 - MON = MONUMENT
 - ORB = OFFICIAL RECORD BOOK
 - (P) = PLAT
 - PB = PLAT BOOK
 - PG = PAGE
 - PCOR = PROPERTY CORNER
 - PL = PROPERTY LINE
 - POB = POINT OF BEGINNING
 - POC = POINT OF COMMENCEMENT
 - PRM = PERMANENT REFERENCE MONUMENT
 - R/W = RIGHT-OF-WAY
 - RCP = REINFORCED CONCRETE PIPE
 - RGE = RANGE
 - SEC = SECTION
 - TWP = TOWNSHIP
 - UE = UTILITY EASEMENT
 - PUDE = PUBLIC UTILITY & DRAINAGE EASEMENT
 - R = RADIUS OF CURVE
 - L = LENGTH OF CURVE
 - Δ = DELTA OF CURVE

DATE:	11-10-20	UPDATE SURVEY	AJP
	7-22-20	UPDATE SURVEY	AMP
REVISIONS:			BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
4405 PROSPERITY DRIVE
AS PREPARED FOR
SMITH BROS. CONTRACTING EQUIPMENT, INC.

CAD K:\BUILDERS\DWG2018\18-4332.DWG	REF K:\	FLD CJM / RP	FB. PG.	JOB 18-4332
OFF CJM		CKD AJP	SHEET 1 OF 1	DATE 12-18-18
				DWG D-844

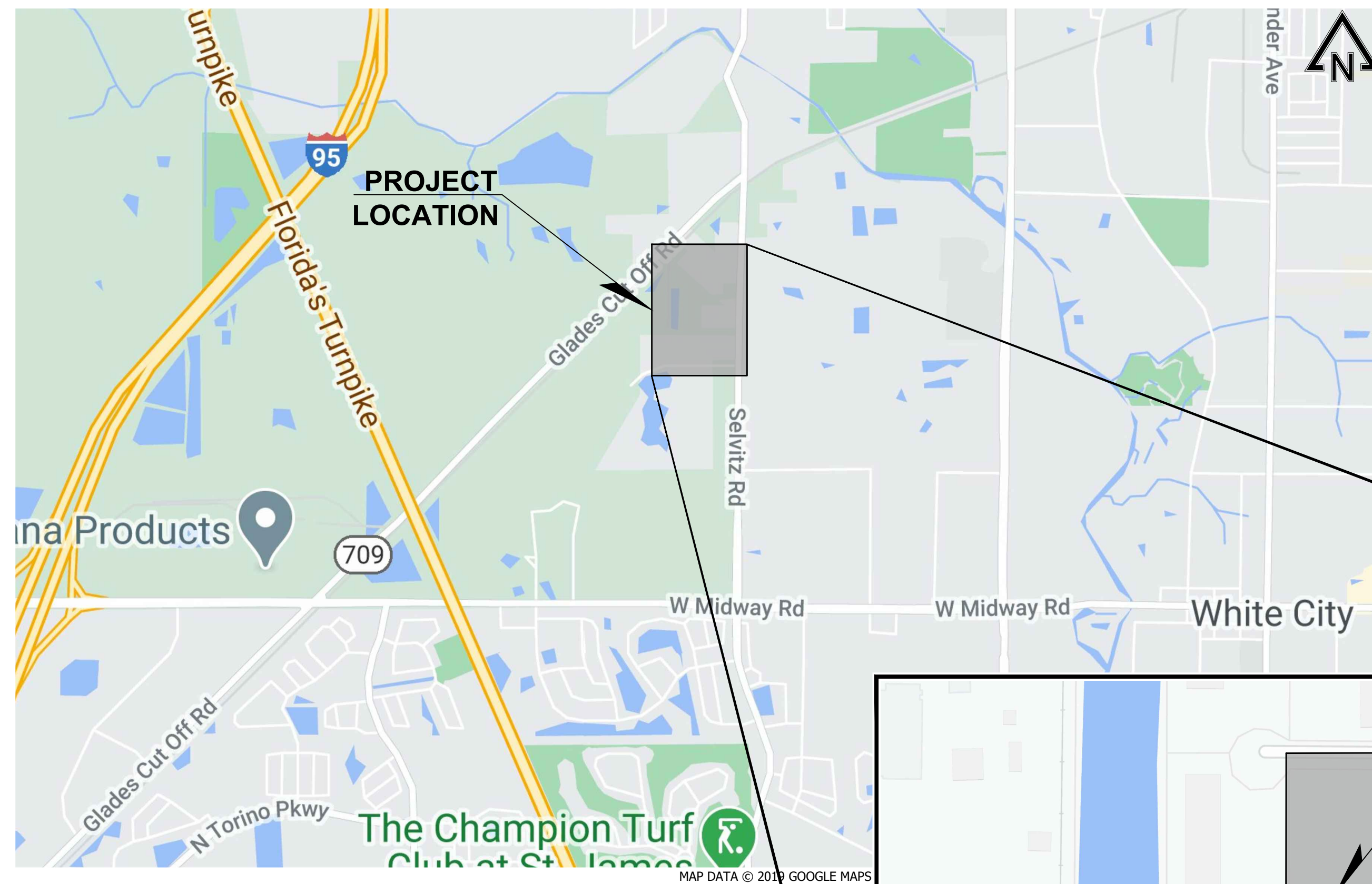
PROPOSED FACILITY FOR BOBCAT TREASURE COAST

4405 PROSPERITY DRIVE, FORT PIERCE, FL 34981

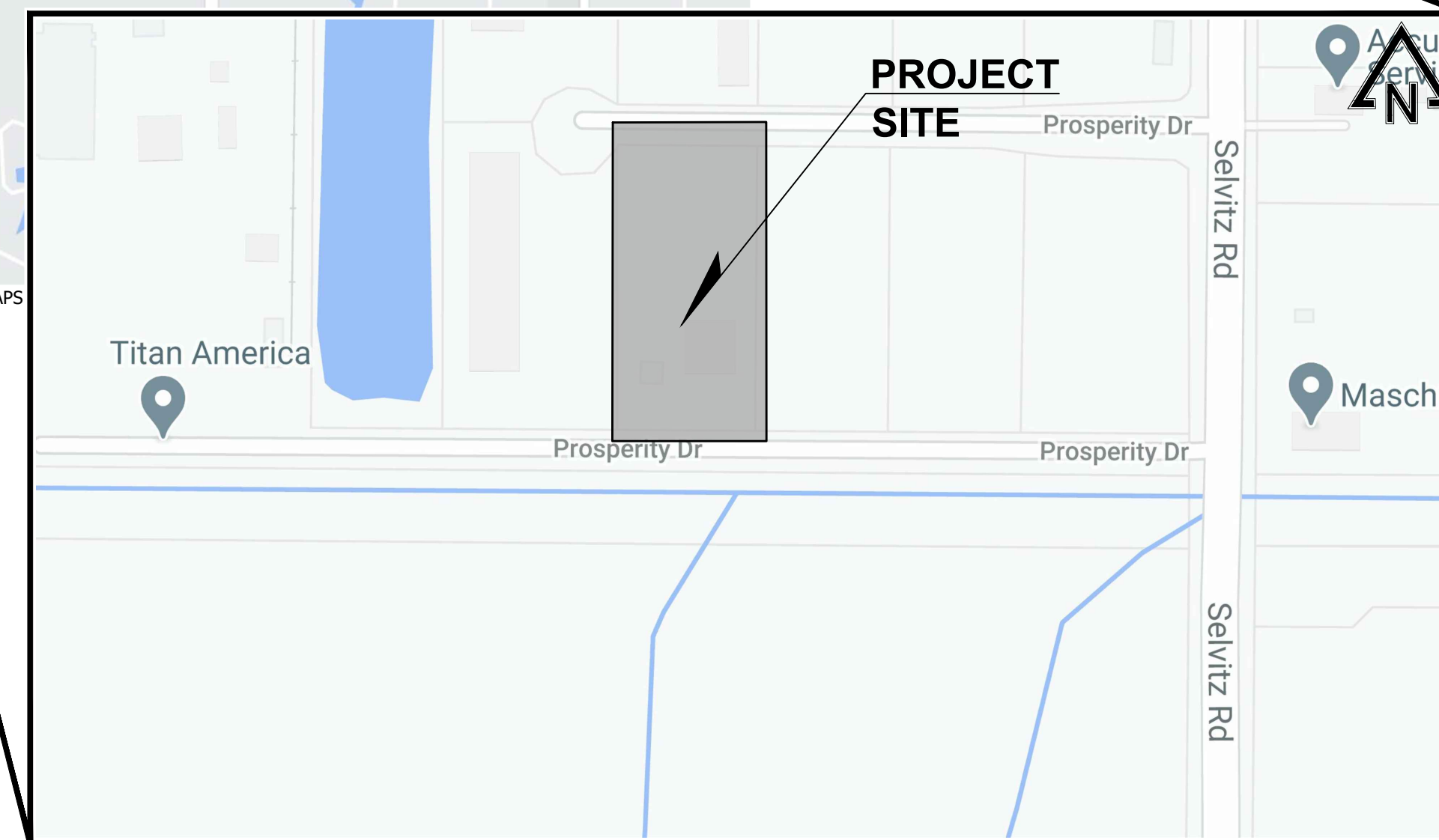
PREPARED FOR

CITY OF FORT PIERCE

NOVEMBER 2020



SECTION 31, TOWNSHIP 35S, RANGE 40E
VICINITY MAP
NTS



SHEET INDEX

SHEET NO SHEET TITLE

- 1 COVER
- 2 DEMOLITION AND EROSION CONTROL PLAN
- 3 PRELIMINARY ENGINEERING PLAN
- 4 DETAILS
- 5 DETAILS
- 6 NOTES

TOTAL NO OF SHEETS - 6

**PRELIMINARY
SUBMITTAL**



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ADAM SWANEY, P.E.
NO. 72235

PROPOSED FACILITY FOR
BOBCAT TREASURE COAST
4405 PROSPERITY DRIVE, FORT PIERCE, FL 34981
COVER

A Higher Standard of Excellence
engenuity
INCORPORATED
1280 N CONGRESS AVE, SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH: (561) 655-1151 • FAX: (561) 832-5390
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

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NOVEMBER 2020	KL	RB	RB	ACS
1 / 6				
JOB NO. 20182.01				



LEGEND:

PROPOSED

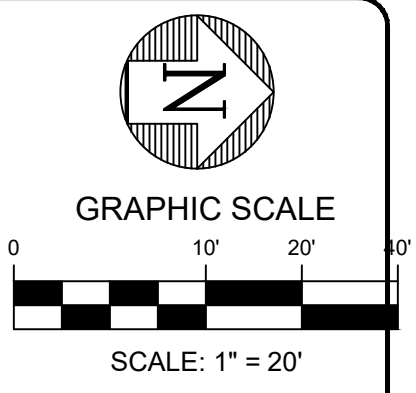


GENERAL NOTES:

- ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE TO SITE BENCHMARK FND NAIL & DISK "LB 6840"
ELEVATION = 15.45 NAVD 1988
- ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
- TOPOGRAPHIC SURVEY PERFORMED BY ALEXANDER J. PIAZZA PSM, INC., DATED 12/17/18 AND 07/21/20 RESPECTIVELY.
- ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.

POLLUTION PREVENTION NOTES:

- ALL POLLUTION PREVENTION MEASURES SHALL BE STRICTLY ENFORCED.
 - PROVISIONS FOR CONTROL OF POLLUTION:
 - SUFFICIENT PRECAUTIONS SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT THE RUN-OFF OF POLLUTING SUBSTANCES SUCH AS SILT, CLAY, FUELS, OILS, BITUMEN'S OR OTHER POLLUTING MATERIALS HARMFUL TO HUMANS, FISH, OR OTHER LIFE, INTO THE SUPPLIES AND SURFACE WATERS OF THE STATE OF FLORIDA. CONTROL MEASURES MUST BE ADEQUATE TO ASSURE THAT TURBIDITY IN THE RECEIVING WATER WILL NOT BE INCREASED MORE THAN 29 NEPHELOMETRIC TURBIDITY UNITS (NTU) ABOVE BACKGROUND UNLESS OTHERWISE PERMITTED. SPECIAL PRECAUTIONS SHALL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT OPERATIONS WHICH PROMOTE EROSION. EROSION EVIDENT WITHIN THE LIMITS OF CONSTRUCTION OR OTHER AREAS AFFECTED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - FILL OUT A NOTICE OF INTENT FORM (FDEP FORM 62-621.300(4)(B)) AND SUBMIT IT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 - EXCAVATION OF WATER MANAGEMENT FACILITIES SHOULD OCCUR IMMEDIATELY AFTER CLEARING AND GRUBBING TO SERVE AS A SEDIMENT TRAP OR CATCHMENT FOR STORMWATER RUNOFF FROM EXPOSED SOILS.
 - CONSTRUCT PERIMETER BERM OR GRADE SITE TO PREVENT OFF-SITE DISCHARGE OF STORMWATER RUNOFF.
 - PLACE SILT FENCES OR HAY BALES TO CONTAIN EROSION IN AREAS PRONE TO STORMWATER RUNOFF ERODIVE VELOCITIES.
 - PROTECT EACH INLET THAT MAY RECEIVE RUNOFF FROM THE CONSTRUCTION SITE WITH SILT FENCE/FILTER FABRIC STAKED IN PLACE.
 - TAKE ALL REASONABLE PRECAUTIONS TO CONTROL DUST AND UNCONFINED PARTICULATE MATTER. THE APPLICATION OF WATER IS AN ACCEPTABLE DUST SUPPRESSANT ON ROADWAYS, STOCKPILES, AND ANY OTHER AREAS WITHIN THE PROJECT BOUNDARIES. DUST SUPPRESSANT WATER SHALL BE APPLIED IN SUCH A MANNER SO AS NOT TO PRODUCE EXCESS RUNOFF AND EROSION.
 - TAKE PRECAUTIONS IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT OPERATIONS WHICH PROMOTE EROSION.
 - OTHER CONTROLS AND MATERIAL MANAGEMENT PRACTICES:
 - HAZARDOUS WASTE - DISPOSE OF IN A MANNER SPECIFIED BY LOCAL OR STATE REGULATIONS.
 - NOISE - MINIMIZE NOISE CAUSED BY THE OPERATION OF EQUIPMENT. ABIDE BY ALL LOCAL REGULATIONS COVERING NOISE CONTROL.
 - ODORS - DO NOT CAUSE OBJECTIONABLE ODORS TO BE GENERATED.
 - OFFSITE VEHICLE TRACKING - PROVIDE A ROCK CONSTRUCTION ENTRANCE TO REDUCE VEHICLE TRACKING OF SEDIMENTS. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE SHALL BE COVERED WITH A TARP/AULIN.
 - OPEN BURNING - NO OPEN FIRES OR BURNING OF MATERIALS.
 - PAINTS - ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM, BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO THE PAINT MANUFACTURER'S INSTRUCTIONS AND STATE OR LOCAL REGULATIONS.
 - PETROLEUM PRODUCTS - MONITOR ONSITE VEHICLES AND TANKS FOR LEAKS. THEY SHALL RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. STORE PETROLEUM PRODUCTS IN TIGHTLY SEALED CONTAINERS, WHICH ARE CLEARLY LABELED. USE ASPHALT SUBSTANCES ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE SECONDARY CONTAINMENT FOR ALL ABOVE GROUND FUEL TANKS.
 - SANITARY WASTE - COLLECT ALL SANITARY WASTE FROM THE PORTABLE UNITS AT LEAST TWICE PER WEEK.
 - WASTE MATERIALS - COLLECT AND STORE ALL WASTE MATERIALS IN A SECURELY COVERED METAL DUMPSTER PROVIDED BY A LICENSED SOLID WASTE MANAGEMENT COMPANY. DEPOSIT ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE IN THE DUMPSTER. THE DUMPSTER IS TO BE EMPTIED AS NEEDED SO THERE IS NO OVERFLOW. HAUL TRASH TO A STATE APPROVED LANDFILL FACILITY.
- MAINTENANCE / INSPECTION PROCEDURES:
 - INSPECT ALL CONTROL MEASURES AT LEAST ONCE PER WEEK AND FOLLOWING ANY STORM EVENT OF 0.5 INCHES OR GREATER.
 - MAINTAIN ALL MEASURES IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT MUST BE INITIATED WITHIN 24 HOURS OF THE ONSITE INSPECTION REPORT.
 - REMOVE BUILT UP SEDIMENT FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
 - INSPECT SILT FENCE FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
 - PREPARE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS FOUND AT THE END OF THIS SECTION.
 - THE CONTRACTOR SHALL DESIGNATE A QUALIFIED PERSON TO BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND COMPLETING THE INSPECTION AND MAINTENANCE REPORTS.
 - NON-STORMWATER DISCHARGES ARE PERMISSIBLE PROVIDED THAT DISCHARGE DOES NOT CAUSE EROSION OR CREATE TURBIDITY WITHIN THE RECEIVING BODY AND ARE IN COMPLIANCE WITH REGULATORY REQUIREMENTS. THESE DISCHARGES MAY INCLUDE WATER LINE FLUSHING, FIRE FIGHTING ACTIVITIES, FIRE HYDRANT FLUSHING, DUST CONTROL, IRRIGATION DRAINAGE, AIR CONDITIONING CONDENSATION, AND WATER USED TO SPRAY OFF LOOSE SOLIDS FROM VEHICLES.
- PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
- AUTHORIZATION FOR INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX, IT'S LOCATION SHOWN ELSEWHERE ON THIS PAGE.
- PRIOR TO SCHEDULING A FINAL ENVIRONMENTAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- SOIL STABILIZATION SHALL BE COMPLETED WITHIN 30 DAYS OF VEGETATION REMOVAL. STABILIZATION TO CONSIST OF PLACEMENT OF SOD OF ALL DISTURBED AREAS.



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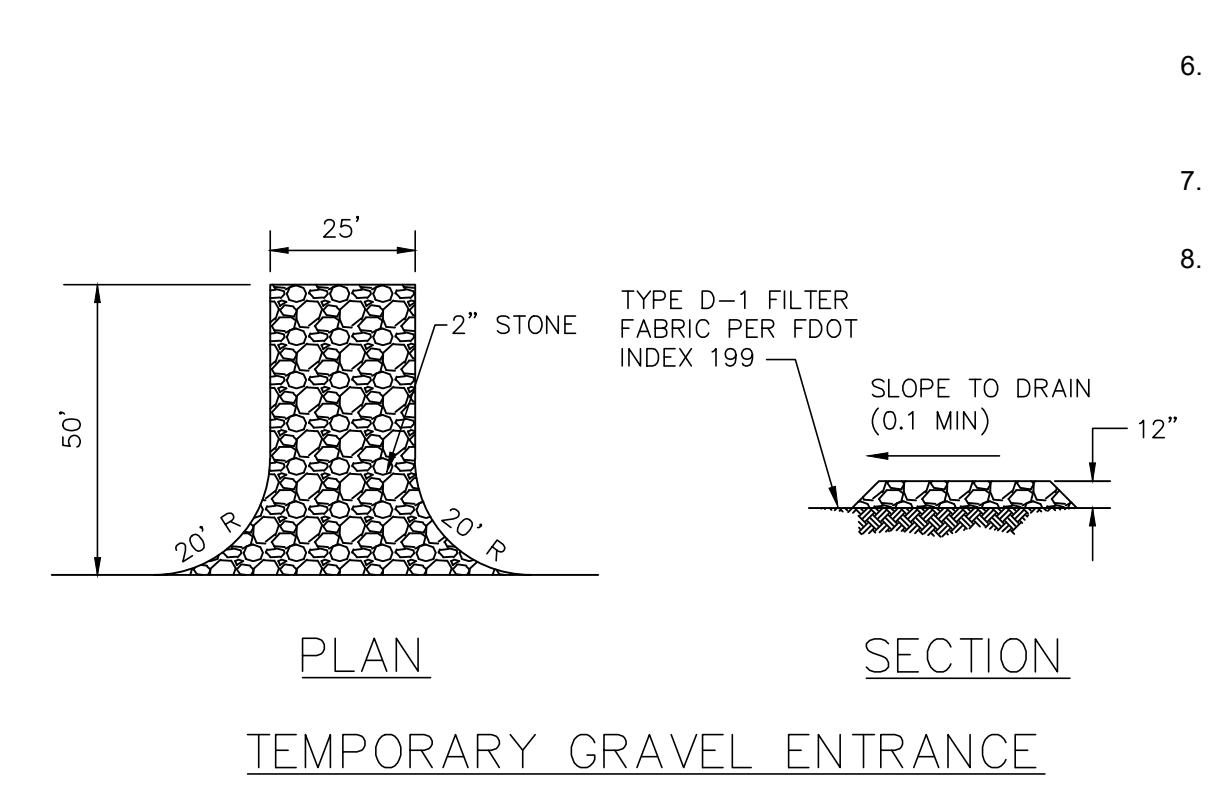
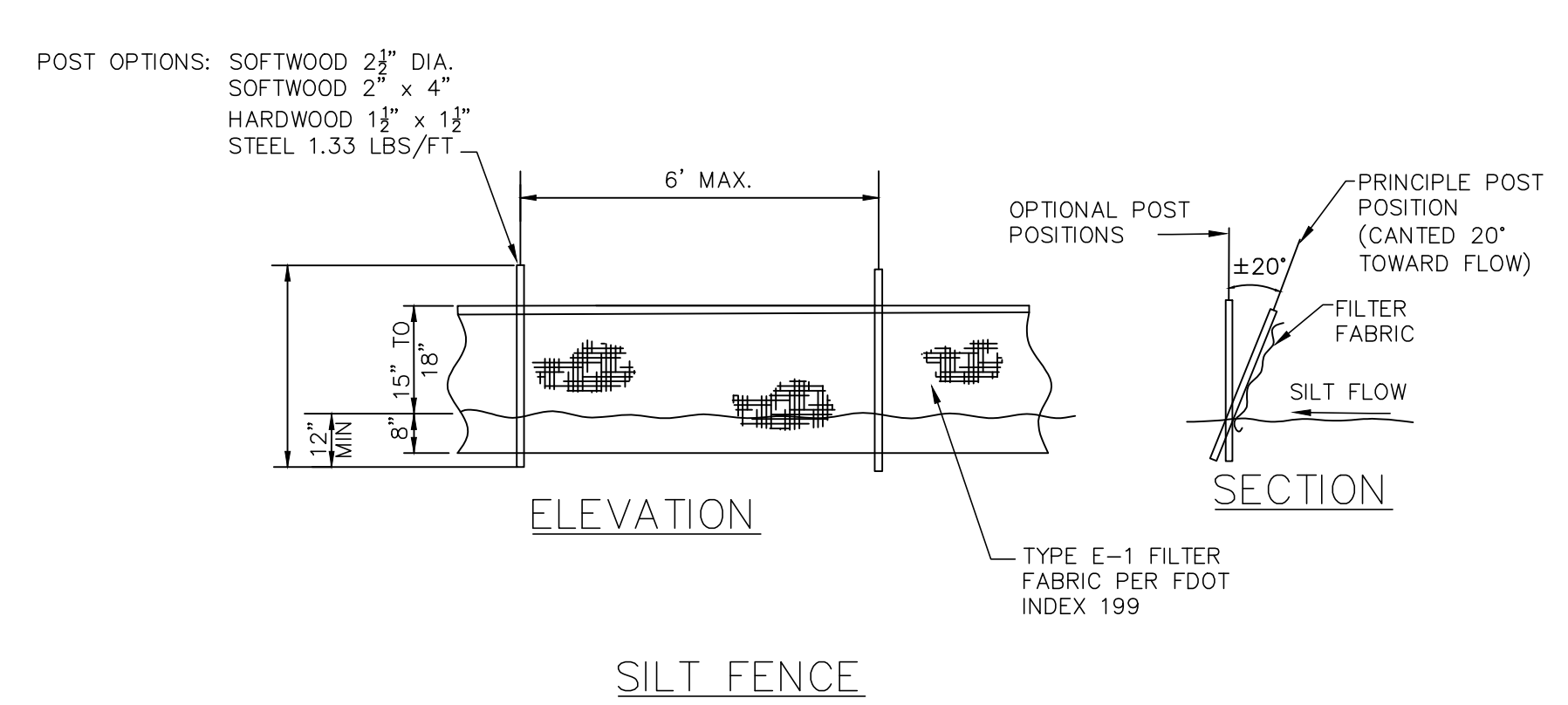
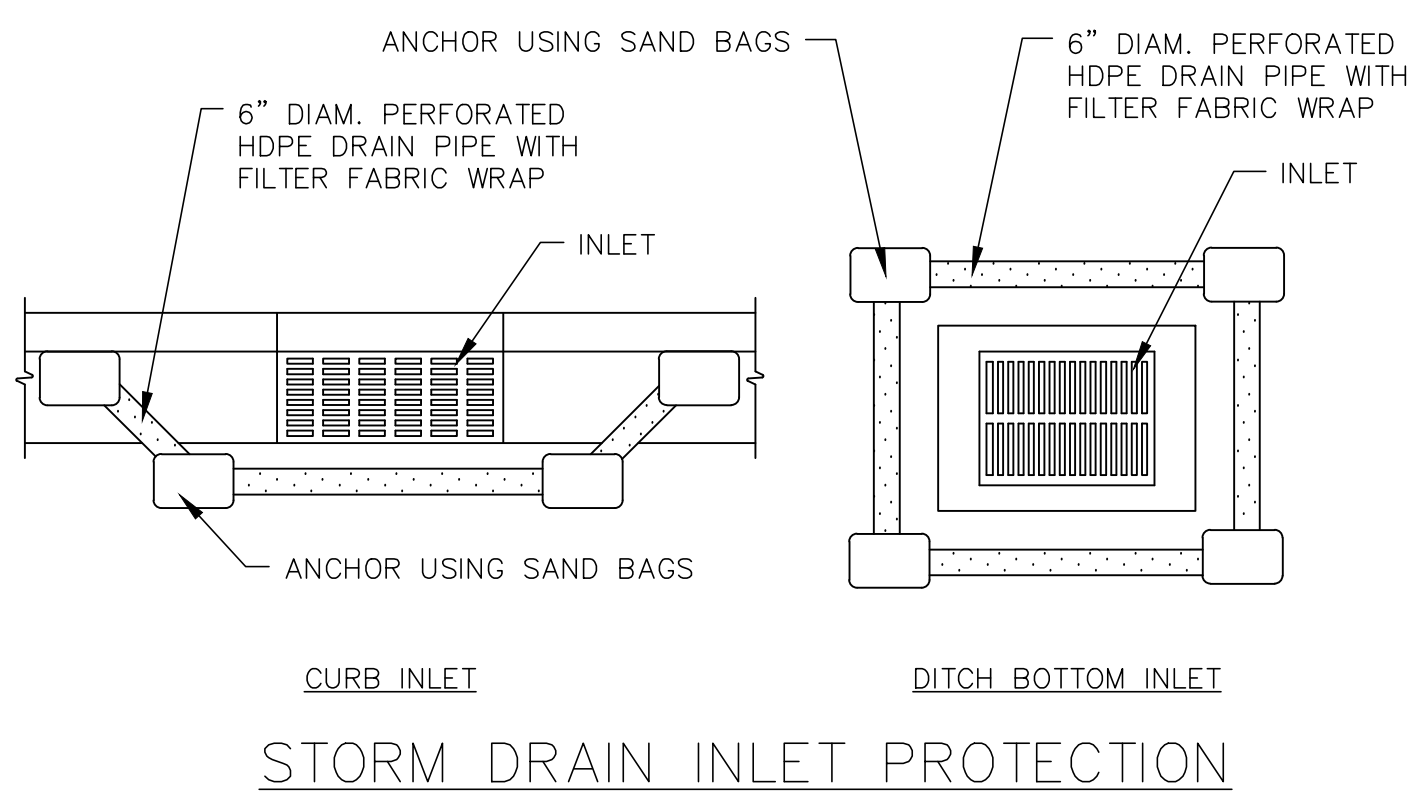
**PROPOSED FACILITY FOR
BOBCAT TREASURE COAST
4405 PROSPERITY DRIVE, FORT PIERCE, FL 34981
DEMOLITION AND EROSION CONTROL PLAN**

A Higher Standard of Excellence
engenuity inc.
enemies + survivors + customers + group inc.
1280 N CONGRESS AVE, SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)632-3390
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	DRAWN	PROJECT	ENGINEER	PROJECT MANAGER	CHECKED
NOVEMBER 2020	KL	RB	RB	RB	ACS

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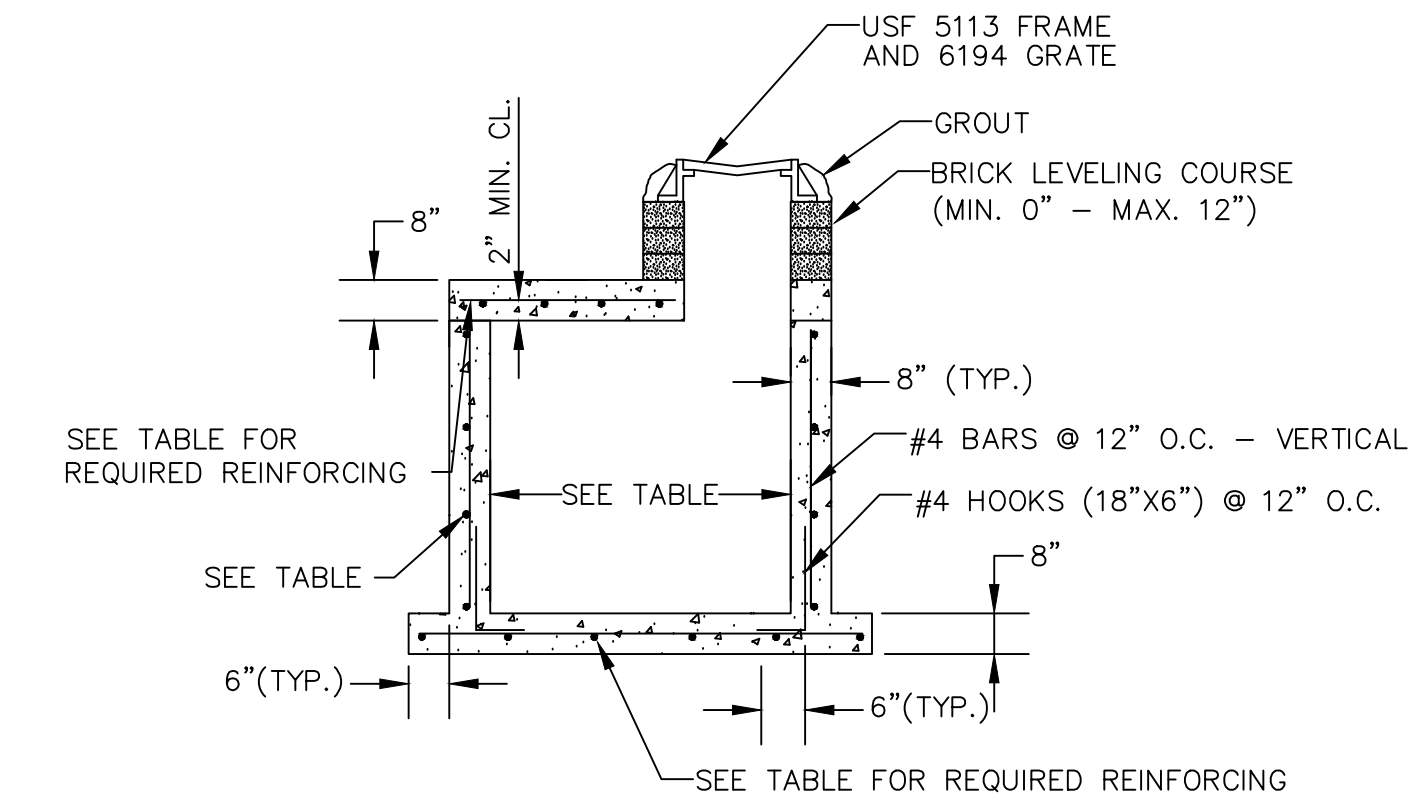
JOB NO. 20182.01



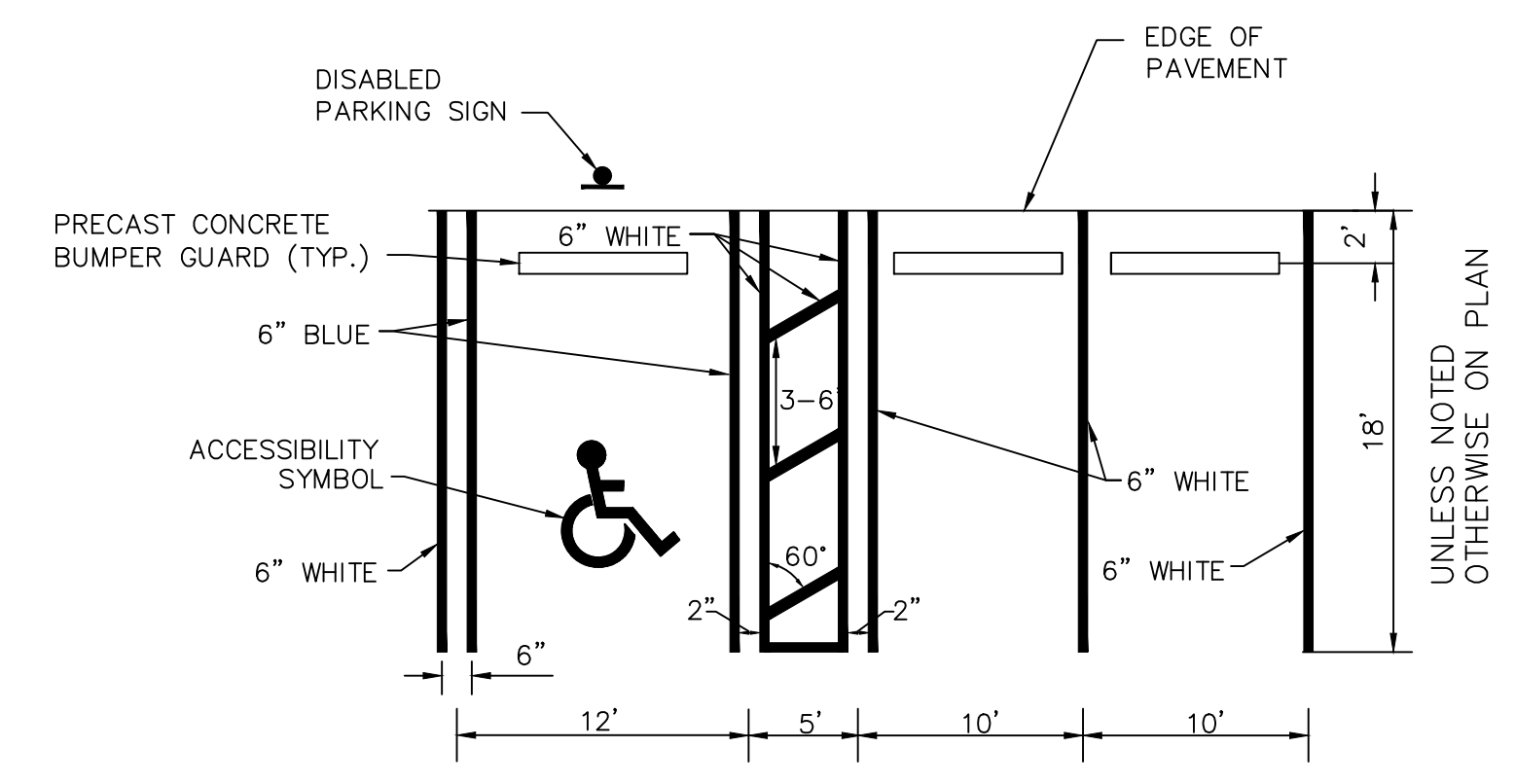
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INLET TYPE	STRUCTURE SIZE	SLAB REINFORCING REQUIRED	HORIZ. REINFORCING REQ.
3	36" X 36"	#4 BARS @ 10" O.C. - EW	#4 BARS @ 10" O.C.
4	48" X 48"	#5 BARS @ 10" O.C. - EW	#5 BARS @ 10" O.C.
5	54" X 54"	#5 BARS @ 10" O.C. - EW	#5 BARS @ 10" O.C.
6	60" X 60"	#6 BARS @ 10" O.C. - EW	#5 BARS @ 10" O.C.
7	66" X 66"	#6 BARS @ 10" O.C. - EW	#6 BARS @ 10" O.C.
8	72" X 72"	#6 BARS @ 10" O.C. - EW	#6 BARS @ 10" O.C.

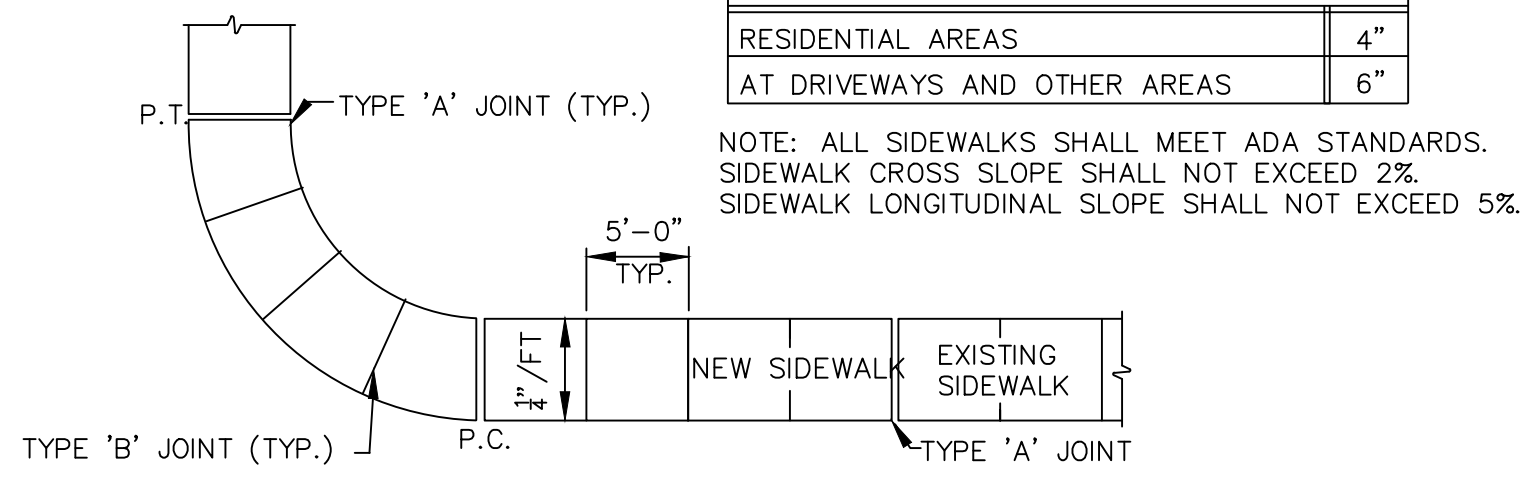


DRAINAGE INLET



PARKING SPACE MARKINGS

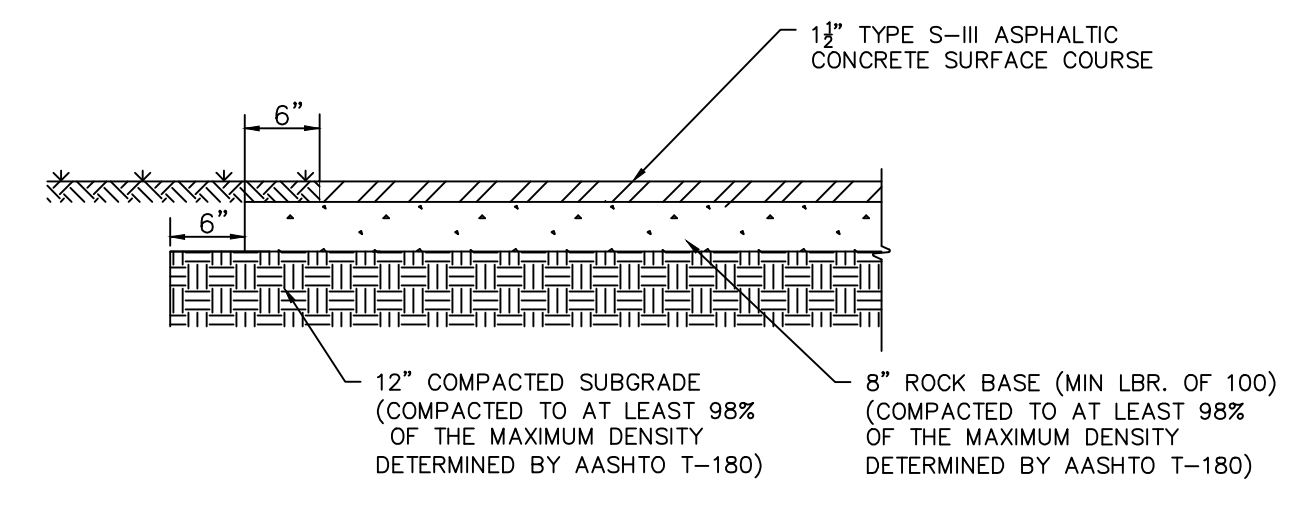
TABLE OF SIDEWALK THICKNESS	
LOCATION	
RESIDENTIAL AREAS	4"
AT DRIVEWAYS AND OTHER AREAS	6"



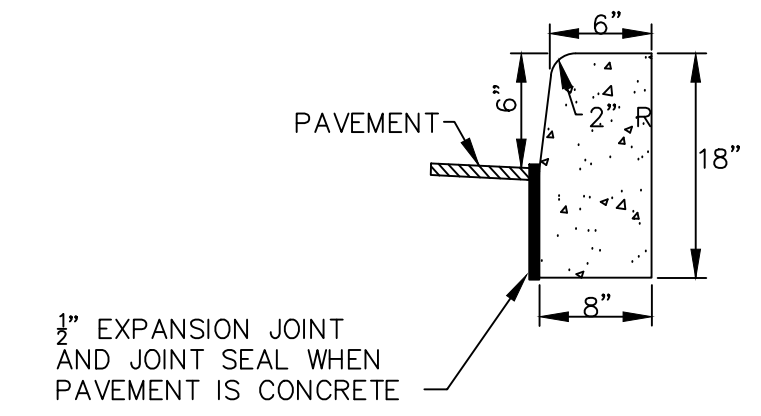
PLAN



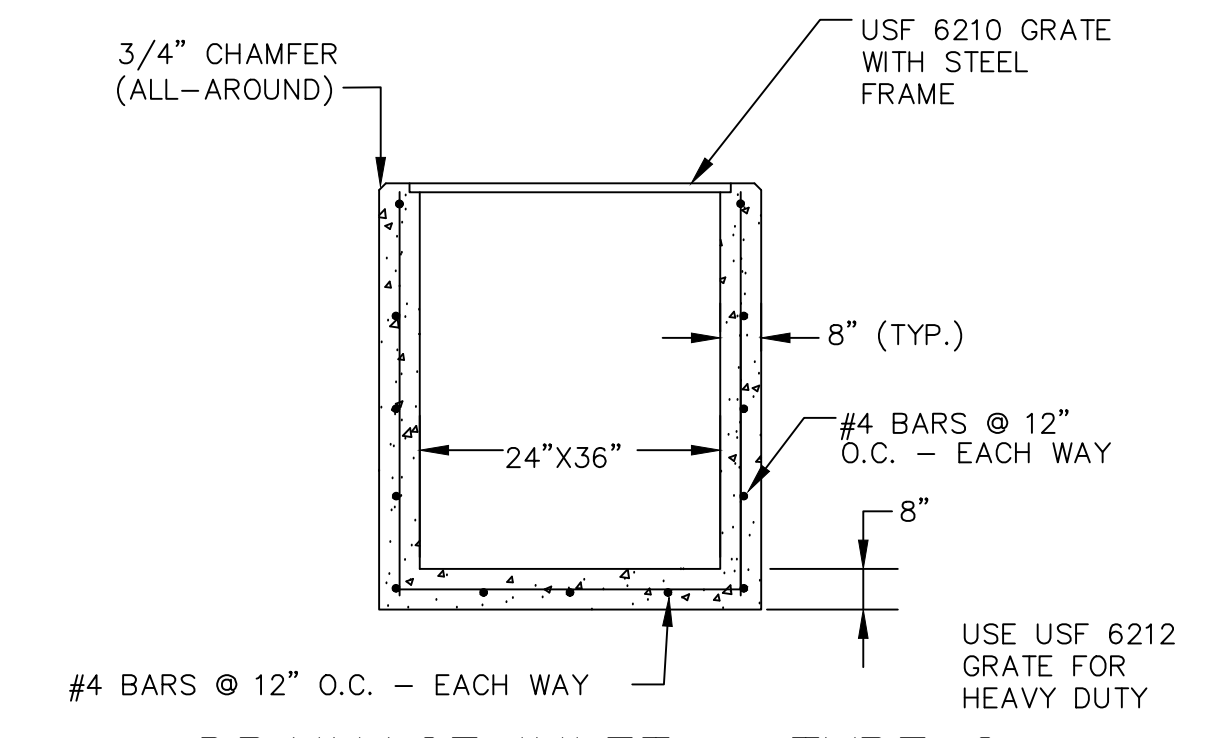
CONCRETE SIDEWALK



ASPHALT PAVEMENT SECTION



TYPE "D" CURB



DRAINAGE INLET - TYPE C

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NO. 72235

PROPOSED FACILITY FOR
BOBCAT TREASURE COAST
4405 PROSPERITY DRIVE, FORT PIERCE, FL 34981
DETAILS

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engenuity group inc.
MEMBERS - SUBMITTALS - GAS INVENTORY

1280 N CONGRESS AVE, SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-5390
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	DRAWN	PROJECT ENGINEER	PROJECT MANAGER	CHECKED
NOVEMBER 2020	KL	RB	RB	ACS

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FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

- ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
- WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-905, STANDARD CODE DESIGNATION PERFOR, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
- WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE, SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
- POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THIN WIRE.
- FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED.
- GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
- WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT, IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
- NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
- THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
- MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
- DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
- EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
- WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

WATER DISTRIBUTION		G-1 NOTES	
DESIGNED BY: JLM	REVISION:	BY:	APPD:
DRAWN BY: JLM	COMPUTER FILE #	WATER/WASTEWATER ENGINEERING	
APPROVED BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY	
	DATE: 2010	SHEET 1 OF 2	

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
 - THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
 - THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
 - WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THIN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITIES AUTHORITY SPECIFICATIONS.
 - SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE, CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
 - MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
 - ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. - 2 HR MINIMUM TEST
- $$L = \frac{SD(P)}{148,000} \cdot \frac{1}{2}$$
- L = LEAKAGE IN GPH
S = LENGTH OF PIPE IN FEET
D = PIPE DIAMETER IN INCHES
P = TESTING PRESSURE IN PSI
- PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45% AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED, WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
 - A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. THE DISTANCE SHALL BE MEASURED FROM THE TOP OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
 - WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
 - CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WATER DISTRIBUTION		G-1 NOTES	
DESIGNED BY: JLM	REVISION:	BY:	APPD:
DRAWN BY: JLM	COMPUTER FILE #	WATER/WASTEWATER ENGINEERING	
APPROVED BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY	
	DATE: 2010	SHEET 2 OF 2	

GENERAL NOTES:

- CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID SURVEY MARKERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF PERMANENT REFERENCE MONUMENTS DISTURBED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.
- ALL UNSUITABLE MATERIAL SUCH AS MUCK, MARL, AND DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED OF WITHIN THE LIMITS OF CONSTRUCTION. CLEAN GRANULAR MATERIAL SHALL BE USED AS BACKFILL AND PLACED IN 12 INCH LIFTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE PLANS. UTILITIES SHOWN ON THE PLANS ARE FOR REFERENCE ONLY AND MAY NOT SHOW ACTUAL LOCATIONS. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR LOCATION AND DEPTH OF THEIR LINES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE DE-ENERGIZING OF POWER LINES AND/OR HOLDING POWER POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE REPLACEMENT OF TRAFFIC LOOPS IF DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS NOTICE PRIOR TO REQUESTING REQUIRED INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.
- ALL ELEVATIONS REFER TO N.A.V.D 88. MINIMUM FINISHED FLOOR ELEVATION(S) SHALL BE N.A.V.D 88, OR 18 INCHES ABOVE MINIMUM ROAD CROWN ELEVATION, WHICHEVER IS GREATER.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OR INSTALLATION AS REQUIRED BY THE ENGINEER OR BY APPROPRIATE GOVERNING AGENCIES.
- CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND PAY FOR, AT NO ADDITIONAL COST TO THE OWNER, ALL NECESSARY PERMITS, FEES AND LICENSES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING THE REQUIRED NOTICES AND COMPLYING WITH ALL PERMIT(S) CONDITIONS.
- CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE HOLDING OF OTHER UTILITY POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- ALL CONCRETE SHALL BE 3,000 p.s.i. UNLESS OTHERWISE SPECIFIED.
- ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL UTILITY.
- ENGENUITY GROUP, INC. SHALL NOT BE RESPONSIBLE FOR THE SAFETY OF THE WORKERS OR THE GENERAL PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFETY TO THE WORKERS IN ACCORDANCE WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATIONS (OSHA) REQUIREMENTS AND FOR THE SAFETY OF THE GENERAL PUBLIC.
- ALL MATERIALS AND WORKMANSHIP MUST BE IN ACCORDANCE WITH THE LOCAL UTILITY STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL ASSURE THAT ALL TRENCHES MORE THAN FIVE FEET DEEP WILL HAVE TRENCH PROTECTION PER THE TRENCH SAFETY ACT. THE METHOD OF TRENCH PROTECTION THE CONTRACTOR SELECTS MUST BE IN COMPLIANCE WITH OSHA REGULATIONS.
- UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR IS TO INCLUDE IN THEIR BID PACKAGE, PER THE TRENCH SAFETY ACT, ONE ITEM OF COST PERTAINING TO TRENCH PROTECTION.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COMPLY WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITTING REQUIREMENTS. COMPLIANCE INCLUDES SUBMITTAL OF A NOTICE OF INTENT (NOI) FOR CONSTRUCTION ACTIVITIES WITH AN ATTACHED STORM WATER POLLUTION PREVENTION (SWPPP). THE NOI AND SWPPP SHALL BE SUBMITTED TO APPLICABLE AGENCIES.

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

- ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
- GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
- THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
- WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
- A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
- THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
- MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
- WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
- A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER.
- TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
- CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
- WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
- FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
- WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THIN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
- MINIMUM COVER SHALL BE 36 INCHES. PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITIES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
- EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY JM CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
- ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
- THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS		G-2 CONSTRUCTION NOTES	
DESIGNED BY: JLM	REVISION:	BY:	APPD:
DRAWN BY: JLM	COMPUTER FILE #	WATER/WASTEWATER ENGINEERING	
APPROVED BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY	
	DATE: 2010	SHEET 1 OF 1	

STANDARD SEPARATION STATEMENT FOR
WATER / SEWER CONFLICTS

- SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.
- WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.
- ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.
- A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.
- WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
- ALL DIP SHALL BE PRESSURE CLASS 250 MIN., ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT		G-3 WATER/SEWER CONFLICT	
DESIGNED BY: JLM	REVISION:	BY:	APPD:
DRAWN BY: JLM	COMPUTER FILE #	WATER/WASTEWATER ENGINEERING	
APPROVED BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY	
	DATE: 2010	SHEET 1 OF 1	

NO.	DATE	REVISIONS	REMARKS	BY

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ENGINEER REPRESENTING
ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

PROPOSED FACILITY FOR
BOBCAT TREASURE COAST
4405 PROSPERITY DRIVE, FORT PIERCE, FL 34981
NOTES

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WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	NOVEMBER 2020
DRAWN BY	KL
PROJECT ENGINEER	RB
PROJECT MANAGER	RB
CHECKED	ACS
TITLE	6
NO.	6

JULIAND Projects R2020182.01 Smith Reso/DWG200182.01 Notes.dwg DATE: 11/23/2020 11:09 AM

JOB NO.
20182.01

SUBMITTAL, PRELIMINARY

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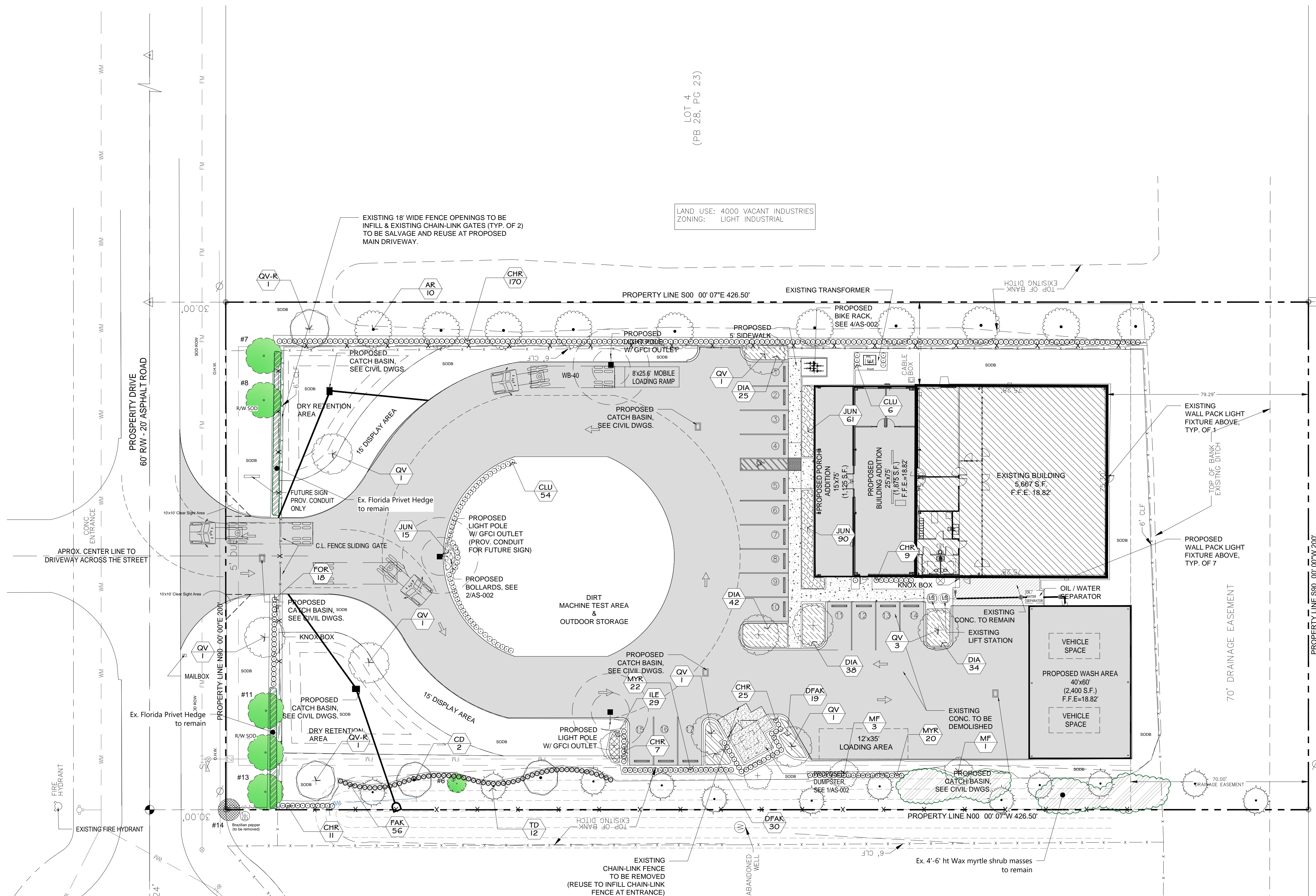


LBLA, Inc.
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Lake Worth, FL 33467
Phone: 561-644-3237
FL-LA6666715
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PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME
	AR	10	Acer rubrum Red Maple
	CD	2	Coccoloba diversifolia Pigeon Plum
	MF	4	Myrcianthes fragrans Simpson's Stopper
	QV	9	Quercus virginiana Southern Live Oak
	QV-R	2	Quercus virginiana Southern Live Oak
	TD	12	Taxodium distichum Bald Cypress
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME
	CHR	222	Chrysobalanus icaco Coco Plum
	CLU	60	Cusia guttifera Small Leaf Clusia
	FOR	18	Forestiera segregata Florida Privet
	MYR	42	Myrica cerifera Wax Myrtle
	FAK	56	Tripsacum dactyloides Fakahatchee Grass
SHRUB AREAS	CODE	QTY	BOTANICAL / COMMON NAME
	DIA	139	Dianella tasmanica 'Variegata' Flax Lily
	DFAK	49	Tripsacum floridanum Florida Gamagrass
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME
	ILE	29	Ilex vomitoria 'Schillings Dwarf' Dwarf Schillings Holly
	JUN	166	Juniperus horizontalis Creeping Juniper
TURF	CODE	QTY	BOTANICAL / COMMON NAME
	SOD-B	21,927 sf	Paspalum notatum Bahia Grass

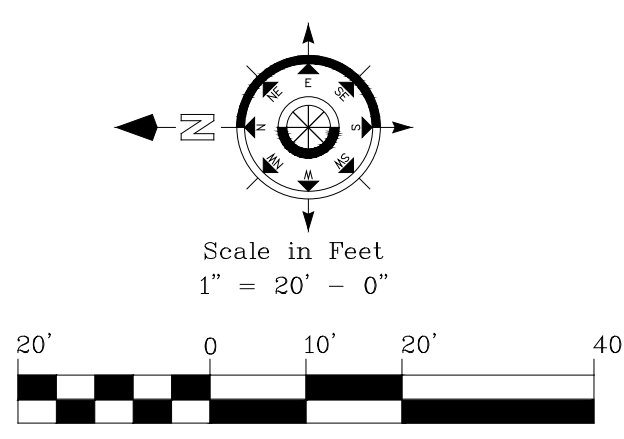
PROPOSED FACILITY FOR
BOBCAT - TREASURE COAST
4405 PROSPERITY DRIVE
FORT PIERCE, FLORIDA 34981
PROPOSED LANDSCAPE PLAN



MINIMUM LANDSCAPE REQUIREMENTS	PER FORT PIERCE CITY LAND DEVELOPMENT CODE Sec. 123-37		
ZONING CATEGORY	I-1 (Light Industrial)		
TOTAL SITE AREA	85,300 S.F. (1.9 AC)		
TOTAL IMPERVIOUS AREA	35,596 S.F.		
OVERALL LANDSCAPE		REQUIRED	PROVIDED
NET SITE AREA - plot area or portion thereof, not utilized for structures and parking. (PERVIOUS)	50,977 total pervious 45,567 S.F. (inc dirt eq. practice area)		
LANDSCAPED AREAS			
Interior VUA	One (1) SF of interior landscaping/30 SF of VUA, one (1) tree/100 SF of required landscape area. 23,387 sf / 30 sf = 780 sf / 100 = 8 trees	8 trees	8 trees
Screening of refuse collection areas	6' masonry wall or fence, one (1) shrub or hedge continuous along perimeter 2' oc		
LANDSCAPE BUFFERS	Adjacent to street ROW &/or VUA		
North	One (1) tree /300 SF required landscape: 6' wide x 300 ft street frontage = 1800 sf / 300 sf = 6 trees.	6 trees	6 trees
South (ex. 70' drainage easment)	n/a - adjacent to land	0 trees	0 trees
West	One (1) tree /200 SF required landscape: 10' wide x 356 ft adj to VUA = 3560 sf / 200 sf = 18 trees.	18 trees	18 trees
East	One (1) tree /200 SF required landscape: 10' wide x 222 ft adj to VUA = 2220 sf / 200 sf = 11 trees.	11 trees	11 trees
		43 trees total (38 proposed & 5 existing)	

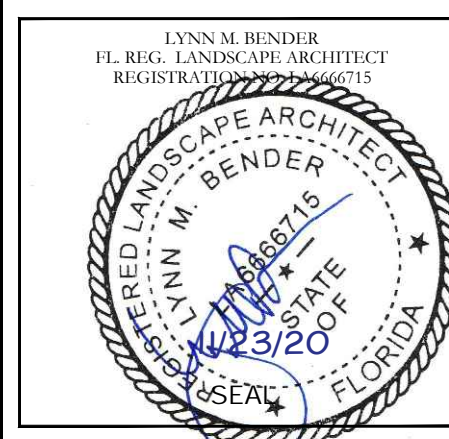
All invasive exotic plants must be removed from the property prior to a Certificate of Occupancy being issued. The site shall be maintained "exotic free" in perpetuity.

Base information provided by Ahrens Companies Site Plan via electronic file. These plans are to be used for proposed planting installation purposes only. Field verification of existing conditions shall be performed prior to material installation. All hardscape and site drainage shall be by others.



Designed: LMB
Drawn: LMB
Date: 10-23-2020
Job No.: #20-538

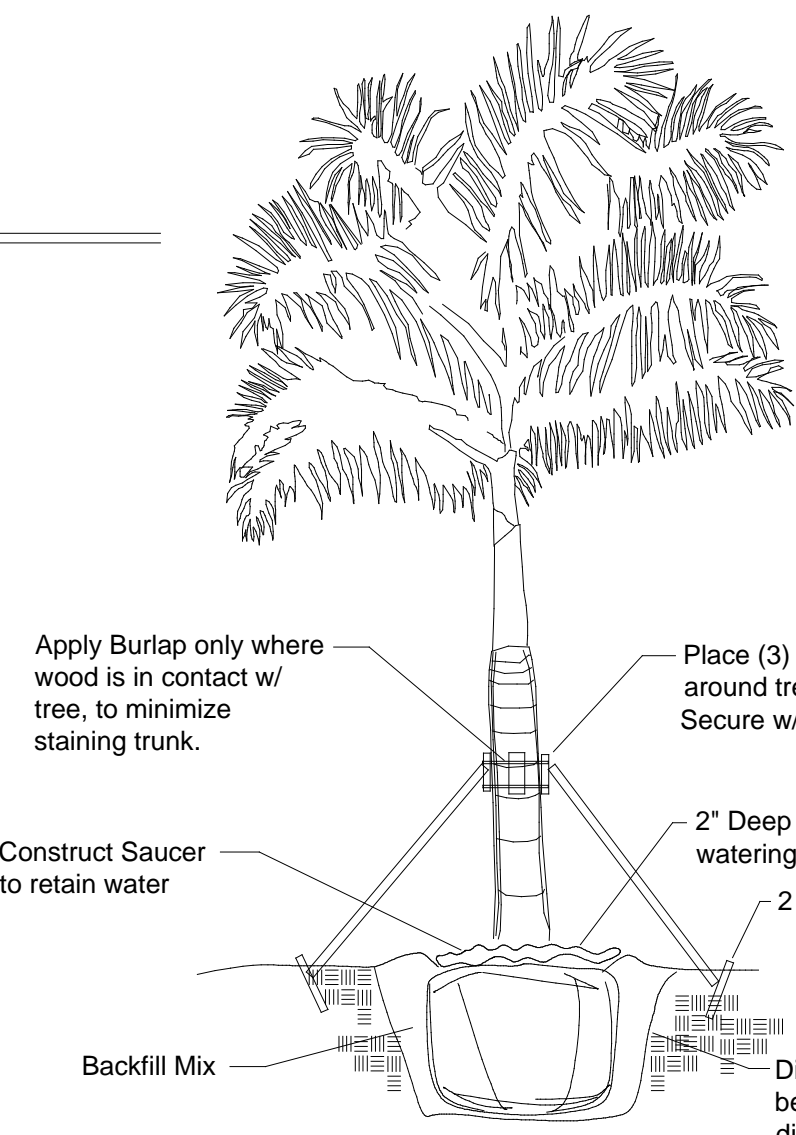
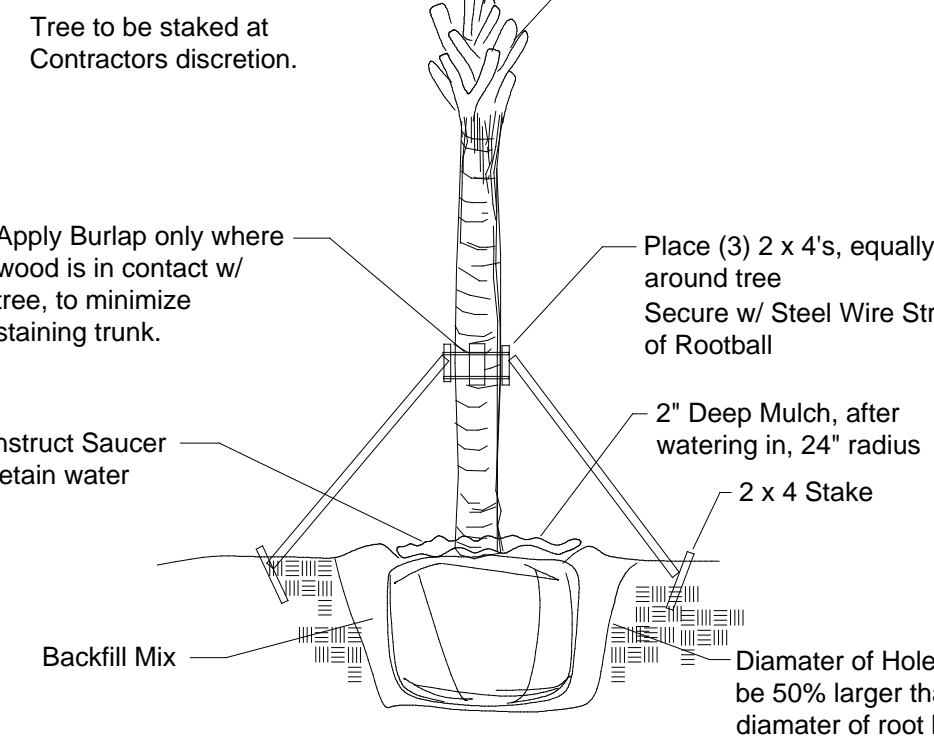
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Sheet No.
LP1
of 2

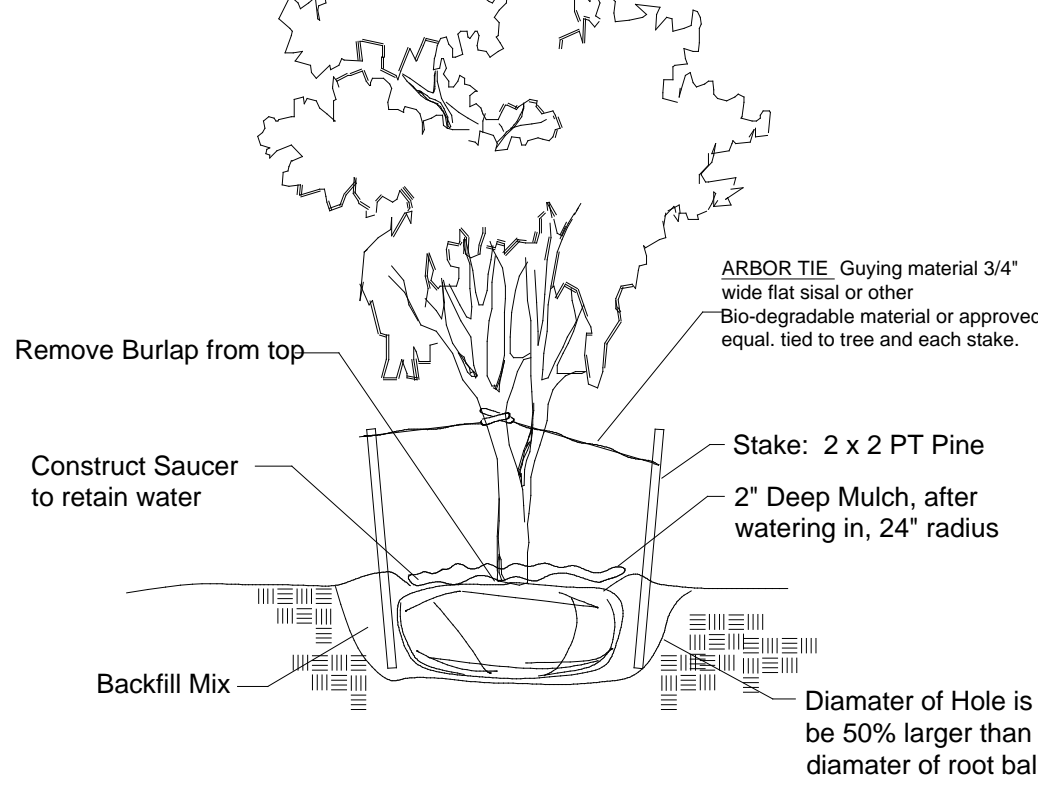
Palm Tree Staking Detail

Tree Stakes are to be removed between 6-12 months by the Owner.



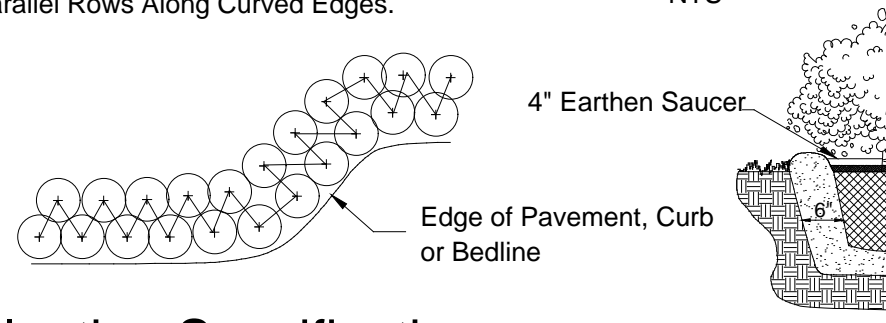
Tree Staking Detail

Tree Stakes are to be removed between 6-12 months by the Owner.



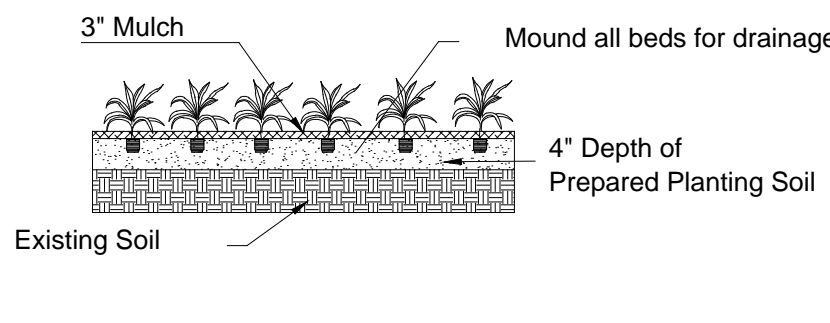
Shrub & Groundcover Planting Detail

NTS Note: All Shrubs and Groundcovers Shall Be Triangular Spaced Along Straight Edges And Will Be Planted in Parallel Rows Along Curved Edges.



Groundcover & Annual Detail

NTS NOTE: Annuals Are To Be Planted As Per Groundcover Detail Excluding Mulch.



Notes

- All Plants shall be Florida No. 1 or better.
- Contractor Shall be familiar w/ the Landscape code and shall comply with all of its applicable requirements.
- Contractor shall verify all quantities indicated at time of bid. Contractor shall provide unit prices at time of bid.
- All contractors working on the project shall be licensed and fully insured as required.
- Tree and palm staking shall be removed between 6 and 12 months after planting.

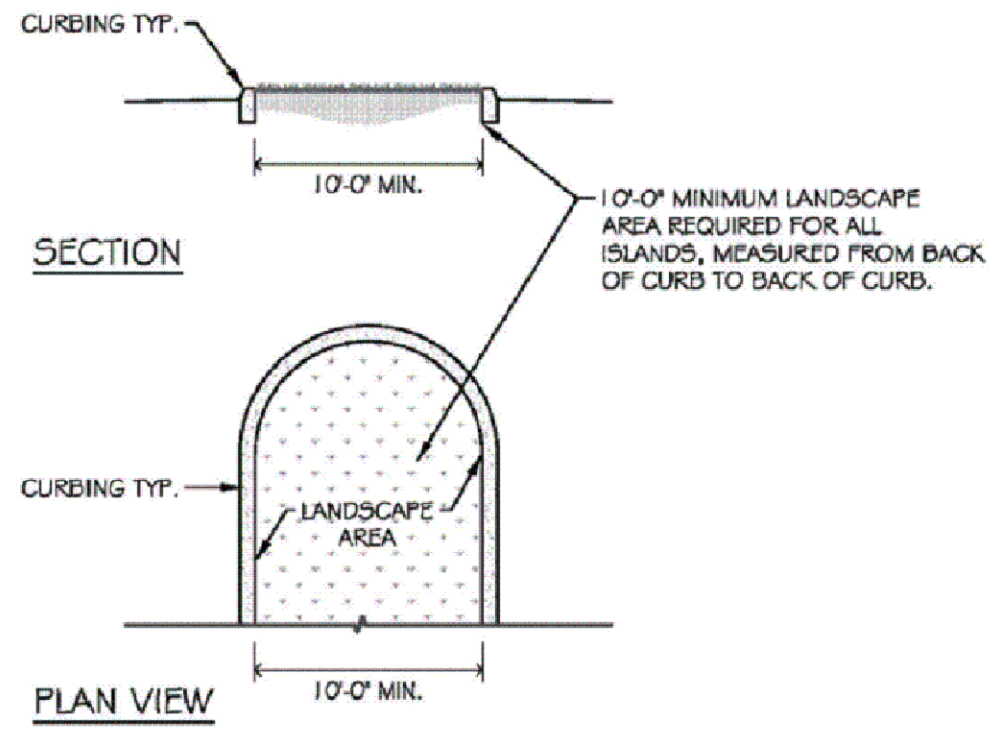


Figure 1. Landscape Island Details

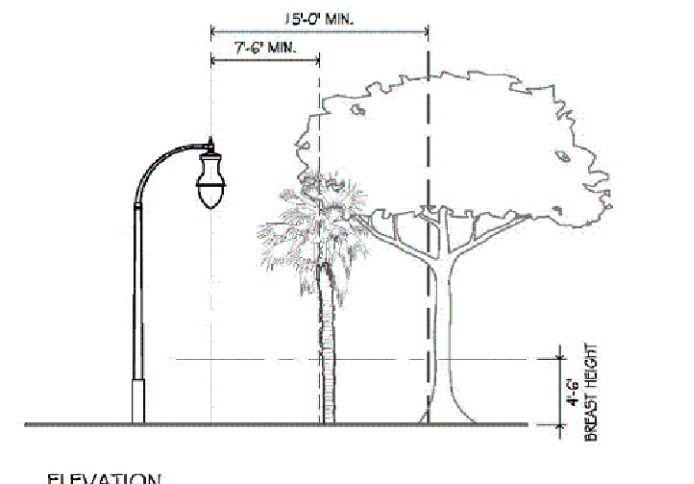


Figure 2. Site Lighting Separation Details

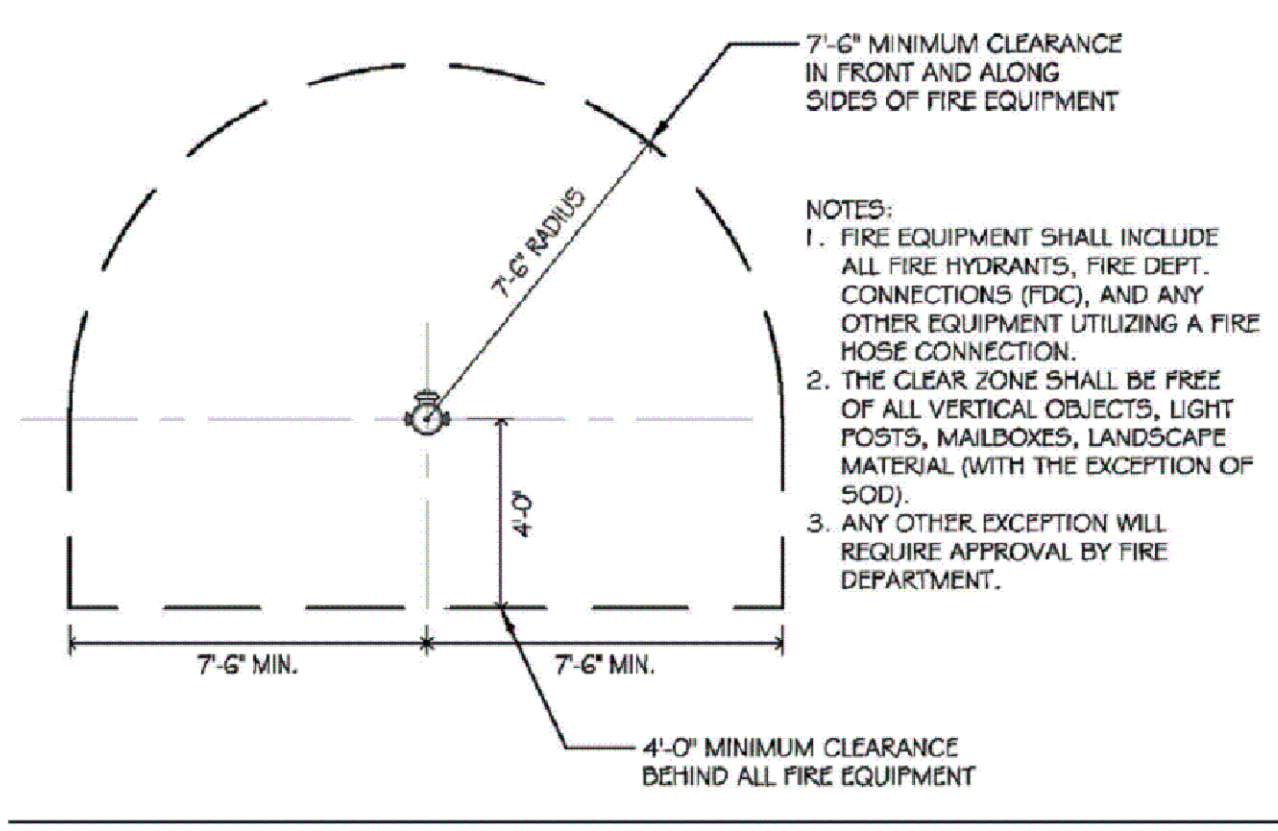


Figure 3. Fire Hydrant Separation Detail

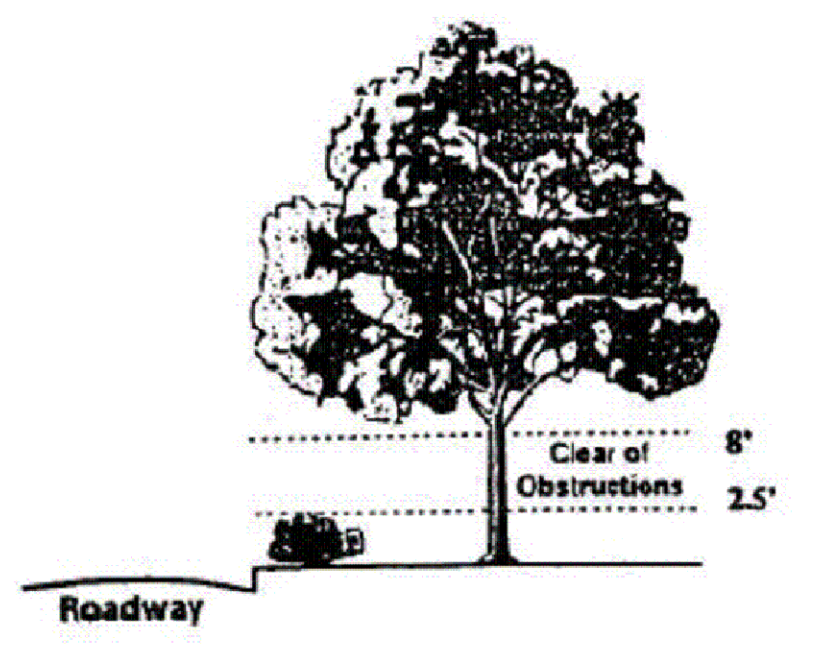


FIGURE 4 CLEAR VISIBILITY REQUIREMENTS

Planting Specifications

QUALITY: All plants shall be Florida No.1 or better as given in Grades & Standards for Nursery Plants, Parts I and II, latest edition published by the Florida Department of Consumer Services.

RESEARCH: Contractor shall research plans and site to determine present location of utilities and obstructions before commencing work. Contractor shall ensure that before he commences work that all necessary permits have been obtained.

The contractor shall personally examine the project site and fully acquaint himself with all of the existing conditions in order that no misunderstanding may occur.

No Additional compensation will be granted, after bid has been let for any hardships the contractor may encounter in the performance of his duty. Any discrepancies or errors not addressed at the time of bid.

DRAWINGS: Drawings are part of this contract. Any discrepancies between the drawings and specifications shall be brought to the attention of the owner at time of bid.

SCOPE: Under this contract, the work consists of furnishing all labor, material, equipment, transportation, etc., to complete all landscaping work as shown on the Drawings, as included in the Plant List and as herein specified. Work shall include all construction and maintenance/watering of all planting areas of this Contract until accepted by the Owner.

The contractor shall be responsible for all planting/ maintenance of plants until acceptance by Owner. Contractor shall protect all existing structure, plants etc., from damage during the construction process.

All damage shall be repaired at the contractors expense

WARRANTY: All trees shall be warranted for a period of 1 year. All shrubs and groundcovers shall be warranted for a period of 90 days, and sod shall be warranted for a period of 30 days. Warranty begins at time of acceptance. All warranties shall be provided to the owner.

REPLACEMENT: All plant replacements shall be done with the same size and species of plant that was specified.

SAMPLES: Samples of any landscape material may be required for approval on the site or as otherwise determined by the Owner. Upon approval of samples (i.e. mulch, planting soil, plant varieties, etc.) by the Owner, delivery of material may begin. Approved samples shall be stored on the site and protected until furnishing of materials is completed. Plant samples be planted in permanent positions, but labeled as samples.

IRRIGATION NOTE: An automatic properly functioning underground irrigation system with a rain sensing cutoff device shall be designed and installed in compliance with the South Florida Building Code and County Building Code requirements. The rain sensing cutoff device shall be located and installed in such a manner that the building eaves, balconies and similar overhangs do not interfere with the operation of the device. The irrigation system shall be properly maintained in good working order and provide a minimum coverage of 100% with 50% overlap.

LANDSCAPE NOTES:

FDOT Type D or F curb shall be provided along the perimeter of all landscaped, open space, drainage and grassed areas adjacent to paved vehicular use areas, except where wheel stops are provided.

Safe sight triangles shall be maintained clear of vegetation to provide unobstructed visibility between 30' and 8' above crown of road.

Light poles, fire hydrants, electrical/mechanical equipment, signs, drainage structures, etc. shall not interfere with landscaping in terminal islands, parking islands, medians, buffers or other landscaped areas.

Landscape shall not be placed around structures in a manner so as to impede accessibility for fire rescue operations.

All new landscape areas shall be provided with 100% automatic irrigation coverage. A Functioning rain sensor/shut-off device shall be required on all irrigation systems.

Mulch all plant beds as specified in details using hardwood, non-cypress to 3" depth.

The soil utilized within the parking island areas MUST be a minimum of 36" in depth of natural soil NOT consisting of road rock, imported fill or other miscellaneous debris.

PLANT LAYOUT: All bed areas shall have planting laid out prior to planting. The Landscape Architect shall review all layout prior to planting. If the bed and shrub layout is not inspected prior to planting, the Landscape Architect reserves the right to relocate the plants.

SOIL: Planting beds shall contain good soil, complete with organic sand mix. There shall be no construction debris, rock larger than 1" within bed areas. Soil shall be dark grey-brown in organic color and shall have good drainage characteristics. Soil within planting beds shall not be compacted. All compacted sub-base/ shell is to be removed from all landscape areas.

BACKFILL/SOIL MIX	ANNUALS
50% decomposed organic matter (muck)	100% Potting Soil
50% existing soil	
ph: 5.5 - 7.0	

FERTILIZER: Two fertilizers shall be used in all types of plantings except palms. Granular fertilizer shall be uniform in composition, dry and free flowing. This fertilizer shall be 6-6-6 Nitrogen-Phosphorus-Potassium. Tablet Fertilizer (Agriform or equal) in 21 gr size, shall meet the following requirements: 20% Nitrogen, 10% Phosphorus, 10% Potassium. The two fertilizers will be applied at the following rates:

1. PLANT SIZE	6-6-6 "AGRIFORM" TABLET (21 GRAM)
1 gal.	1/4 lb.
3 gal.	1/3 lb.
7-15 gal.	1/2 lb.
1"-6" caliper	2 lbs./1" cal.
6" and larger	3 lbs./1" cal.
	2/1" caliper

2. Magnesium sulfate or "Palm Special" will be applied to all palms at installation at a rate of 1/2 lb. per inch of trunk caliper.

PRUNING: Each plant shall be pruned to complement the natural character of the tree. All dead and brown fronds, leaves, branches shall be removed.

TREE GUYING AND BRACING: Firmly stake or guy all trees in accordance with the plans and planting details immediately after planting to prevent wind damage.

WEED CONTROL: All landscape areas shall be free of nut grass, torpedo grass, and other noxious weeds.

PLANT MAINTENANCE: Contractor shall maintain all plants until final acceptance by owner.

CLEAN-UP: Contractor shall clean site area every day. The site shall be devoid of all rubbish, landscape debris, containers.

FOR ALL TREE PLANTINGS: Synthetic butap ball covering materials shall be completely removed. Wire baskets shall be cut off to a depth of 1/2 (half) the depth if the root ball. Burlap coverings shall be removed to a depth of 1/3 (third) of the root ball. Any tree support materials shall be removed from each tree once it is established.

All Canopy trees shall be planted no closer than 10' to any underground utilities UNLESS a root barrier is used.

Root Barrier to be installed shall be a min 36" depth. Install as per Manufacture specs: Root Solutions (800)554-0914 Biobarrier (800)257-6687 Or Equal

If any proposed Trees/Palms are adjacent to existing overhead utility lines, then principles of FPL "Plant the Right Tree in the Right Place" shall be adhered to. Alteration of proposed material shall be reviewed by Project LA for approval & notification to City.

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CALIPER	CT	DROUGHT TOLERANCE	NATIVE	SPECIFICATION
AR	10	Acer rubrum	Red Maple	12' ht x 5' spr	2.5" DBH	NATIVE	High	Native	B and B
CD	2	Coccoloba diversifolia	Pigeon Plum	12' ht x 5' spr	2.5" DBH	5' ct	High	Native	B&B, FULL CANOPY
MF	4	Myrcianthes fragrans	Simpson's Stopper	12' ht x 5' spr	2.5" DBH	5' ct	High	Native	single trunk, B&B
QV	9	Quercus virginiana	Southern Live Oak	12' ht x 5' spr	2.5" DBH	5' ct	High	Native	B&B, FULL CANOPY
QV-R	2	Quercus virginiana	Southern Live Oak	14' oa	3" dbh	5' ct	High	Native	EXISTING RELOCATED
TD	12	Taxodium distichum	Bald Cypress	12'-14' ht. x.5' spr.	2.5" DBH	NATIVE	High	Native	B&B, FULL

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT	SPACING	DROUGHT TOLERANCE	NATIVE	SPEC.
CHR	222	Chrysobalanus icaco	Coco Plum	24" x 18"	fully rooted pot to meet size	18" oc	High	Native	Full to base
CLU	60	Clusia guttifera	Small Leaf Clusia	24" x 24"	fully rooted pot to meet size	24" oc	High	Non Native	Full
FOR	18	Foresteria segregata	Florida Privet	24" min @ install	3 Gallon	24" oc	High	Native	Full to base
MYR	42	Myrica cerifera	Wax Myrtle	24" x 18"	3 Gallon	24" oc	High	Native	Full to base
FAK	56	Tripsacum dactyloides	Fakahatchee Grass	24" x 24"	3 Gallon	30" oc	High	Native	Full

SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT	SPACING	DROUGHT TOLERANCE	NATIVE	SPEC.
DIA	139	Dianella tasmanica 'Variegata'	Flax Lily	18" ht X 18" spr	3 Gallon	24" oc	High	Non Native	Full
DFAK	49	Tripsacum floridanum	Florida Gamagrass	24" X 24"	3 Gallon	24" oc	High	Native	Full

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT	SPACING	DROUGHT TOLERANCE	NATIVE	SPEC.
ILE	29	Ilex vomitoria 'Schillings Dwarf'	Dwarf Schillings Holly	12" x 12"	3 gallon	15" oc	High	Native	Full
JUN	166	Juniperus horizontalis	Creeping Juniper	15"X15"	3 gallon	15" oc	High	Non Native	Fully rooted

TURF	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT	SPACING	DROUGHT TOLERANCE	NATIVE	SPEC.
SOD-B	21,927 sf	Paspalum notatum	Bahia Grass	sod					Laid tight solid

*Estimated sod total based on if all new for overall site. Final qty TBD in field by contractor depending on existing sodded areas to remain & unaffected during construction operations.

NOTE: Finished grades of landscape areas. Finished grade of landscape areas shall be at or below the grade of adjacent VUA or public sidewalks, except for mounding or other surface aesthetics. Grade shall be designed to receive roof and surface runoff and to assist irrigation of plantings and then any overflow routed as necessary underground. Mounding or other surface aesthetics shall not inhibit or defeat intended rainwater capture, retention or percolation from a VUA. Root barriers. A root barrier system shall be installed in situations where a tree or palm is planted within ten (10) feet of a sidewalk or parking area, unless other special provisions have been designed to accommodate tree roots.

IRRIGATION NOTE: (Water source - CITY METER) An automatic properly functioning underground irrigation system with a rain sensing cutoff device shall be in compliance with the South Florida Building Code and city Building Code requirements. The rain sensing cutoff device shall be located and installed in such a manner that the building eaves, balconies and similar overhangs do not interfere with the operation of the device. The irrigation system shall be rust free & properly maintained in good working order and provide a minimum coverage of 100% with 50% overlap.

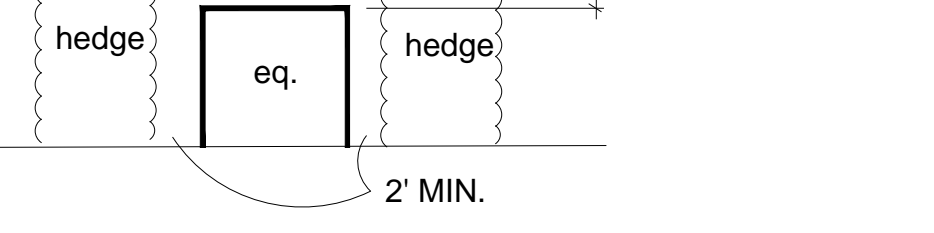
Adequate irrigation of all newly proposed landscaped areas shall be provided for the first full growing season and continue thereafter only as necessary to maintain required vegetation in good and healthy condition. Irrigation systems shall conform to following standards:

- a. Irrigation systems shall be continuously maintained in working order and shall be designed so not to overlap water zones or to water impervious areas.
- b. No irrigation system shall be installed or maintained abutting any public street which causes water from the system to spurt onto the roadway or to strike passing vehicular traffic.

UTILITY SCREENING NOTE: MECHANICAL & SERVICE EQUIPMENT SCREENING DETAIL

All air conditioners, pumps, transformers, back-flow preventers, and other site utilities shall receive a landscape hedge screen of plant material as required by Code. All hedges shall be maintained 6" above equipment.

provide screening on 3 sides as applicable



The Client agrees to indemnify and hold harmless LBLA INC. from any liability arising from acts or omissions in the performance of said services during construction by the Client, and his/her agents, employees, or subcontractors, where LBLA INC. does not provide landscape architectural services during construction (as the term is generally understood), including on-site monitoring, site visits, shop-drawing review, design clarification, etc.

LA CONSULTANT

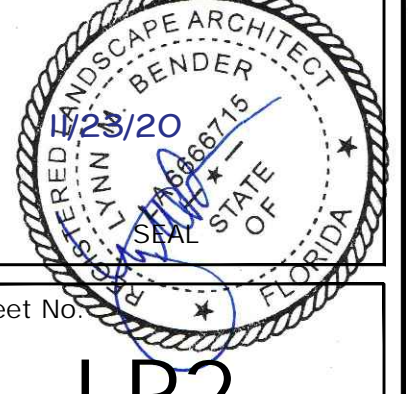
LBLA, Inc.
 Lynn Bender Landscape Architecture
 5610 Adair Way
 Lake Worth, FL 33467
 Phone: 561-644-3237
 FL-LA666715
 lbenderlarch@gmail.com

REVISIONS	

PROPOSED FACILITY FOR
BOBCAT - TREASURE COAST
 4405 PROSPERITY DRIVE
 FORT PIERCE, FLORIDA 34981
LANDSCAPE DETAILS & SPECIFICATIONS

Designed: LMB
 Drawn: LMB
 Date: 10-23-2020
 Job No.: #20-538

LYNN M. BENDER
 FL REG. LANDSCAPE ARCHITECT
 REGISTRATION NO. LA666715



Sheet No. **LP2**
 of 2

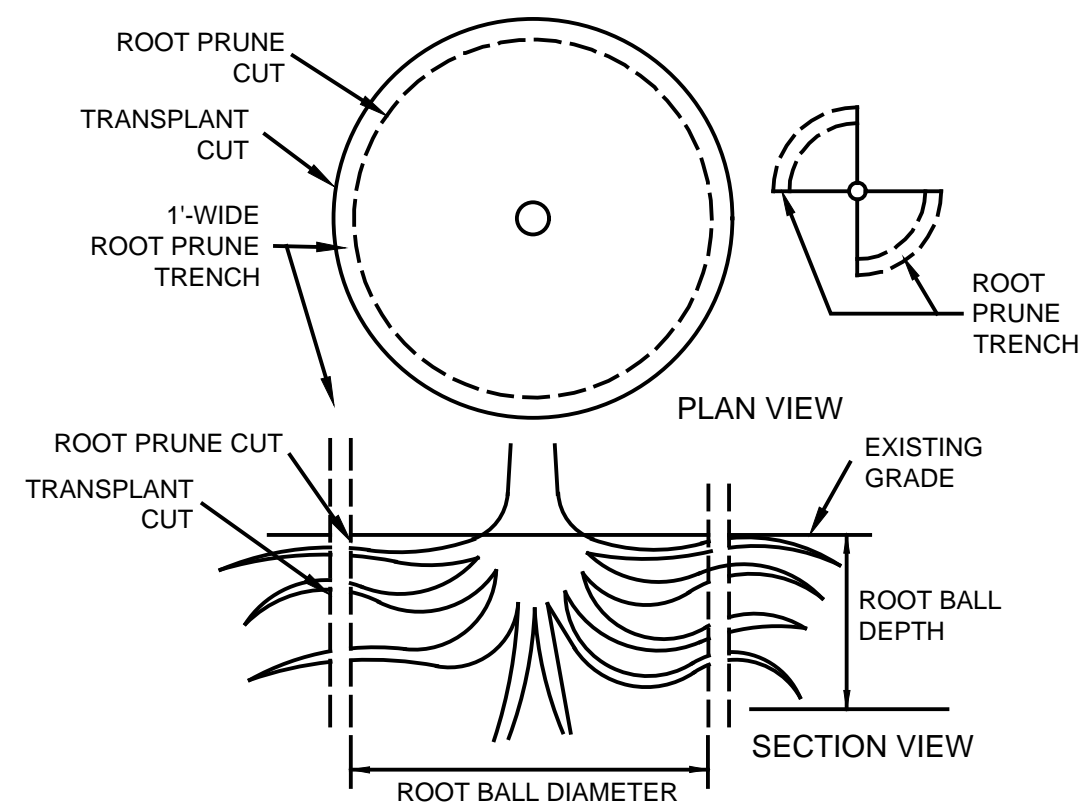
Contractor shall verify that he has the most up to date plans, and that they have been approved and accepted by the Owner before commencing construction.

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All invasive exotic plants must be removed from the property prior to a Certificate of Occupancy being issued. The site shall be maintained "exotic free" in perpetuity.

Project Site Planners / Contractors
AHRENS COMPANIES
 DESIGN/BUILD - GENERAL CONSTRUCTION
 OFFICE (661) 863-9004 LICENSE #080000615 #A028000694
 1481 KINETIC ROAD, LAKE PARK, FL 33403-1011

- NOTES FOR TREE PROTECTION BARRICADES:**
- BARRICADE CIRCLE TO BE CENTERED ON TREE TRUNK(S). FOR GROUPS OF TREES, PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY.
 - NO GRADE CHANGES, TRAFFIC, STORAGE, TRENCHING OR ROOT CUTTING ALLOWED IN "TREE PROTECTION ZONE". CONTRACTOR TO REPLACE OR MITIGATE DAMAGED TREES OR VEGETATION AT CONTRACTOR'S EXPENSE PER LOCAL GOVERNMENT CODE REQUIREMENTS.
 - TREE PROTECTION BARRICADES SHALL BE LOCATED TO PROTECT EXISTING, RELOCATED AND NEW TREES IN CONSTRUCTION AREAS. THE PROTECTIVE BARRIER SHALL BE PLACED AROUND THE TREE AT A DISTANCE 6 FEET FROM THE TREE TRUNK OR AT THE CANOPY DRIP LINE, WHICHEVER IS GREATER OR AS SHOWN ON LANDSCAPE PLAN.



- NOTES:**
- MARK AND CUT A 12"-WIDE 'ROOT PRUNE TRENCH' AROUND THE TREE TO PROVIDE A ROOT BALL SIZE PER THE APPROPRIATE TABLE IN ITEM 3 (REFER TO SHEET LA-3, 'TREE RELOCATION SPEC.') USE SHARPENED SPADES FOR ROOT PRUNING. DO NOT CUT UNDER THE ROOT BALL, NOR REMOVE OLD ROOTS ON TOP OF ROOT BALL.
 - CUT THE 'ROOT PRUNE TRENCH' INITIALLY ON TWO SIDES (QUARTERS) OPPOSITE EACH OTHER. THEN AFTER 1/2 OF TOTAL 'WAIT TIME' HAS PASSED, CUT THE 'ROOT PRUNE TRENCH' FOR THE REMAINING TWO QUARTERS.
 - FILL THE 'ROOT PRUNE TRENCH' WITH A MIXTURE OF 2/3 EXISTING SOIL AND 1/3 PEAT HUMUS. LEAVE A DEPRESSION TO HOLD WATER AND THEN IRRIGATE THE ROOT BALL AREA AND TRENCH TO PROMOTE FEEDER ROOT GROWTH.
 - REFER TO 'TREE RELOCATION SPECIFICATIONS' ON SHEET LA-3 FOR COMPLETE SPECIFICATIONS.

TREE & PALM ROOT PRUNING
 NOT TO SCALE

TREE RELOCATION SPECIFICATIONS (IF APPLICABLE)

- A. DEFINITIONS FOR TERMS USED HEREIN**
- TREE** - THE TERM 'TREE' SHALL MEAN ALL TREE AND PALM SPECIES, EXCEPT WHERE UNIQUE SPECIFICATIONS ARE INDICATED FOR PALM SPECIES.
PALM - THE TERM 'PALM' SHALL APPLY TO ALL PALM SPECIES.
- B. SEASONAL REQUIREMENTS**
- BROADLEAF TREES SHOULD BE TRANSPLANTED DURING WINTER MONTHS (THEIR DORMANT SEASON), NOT IN THE SPRING WHEN ENERGY IS SPENT ON NEW LEAF GROWTH WHICH NEEDS A LARGE ROOT SYSTEM, AND WHEN THERE IS LITTLE RAINFALL TO ENCOURAGE THE PRODUCTION OF NEW FEEDER ROOTS.
- C. ROOT PRUNING AND TRANSPLANTING PROCEDURE (REFER TO GRAPHIC ROOT PRUNING DETAIL)**
- A TREE DESIGNATED TO BE RELOCATED OR TRANSPLANTED SHALL BE ROOT PRUNED WITH ADEQUATE 'WAIT TIME' IN ADVANCE OF TRANSPLANTING TO ALLOW A NEW ROOT SYSTEM TO GROW BEFORE MOVING THE TREE. THE TIME TYPICALLY REQUIRED FOR A ROOT SYSTEM TO DEVELOP BEFORE TRANSPLANTING DEPENDS ON THE SPECIE, SIZE, HEALTH, AND SOIL MOISTURE CONTENT. REFER TO ITEM 7 FOR AN ESTIMATED 'WAIT TIME'.

- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY AND ALL UNDERGROUND UTILITIES OR OBSTRUCTIONS PRIOR TO COMMENCING WORK AND PROTECTING SAME FROM DAMAGE. IN CASE OF CONFLICT WITH PROPOSED WORK, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- REMOVE ALL ROCK AND DEBRIS AROUND THE TREE TO BE ROOT PRUNED.
- DETERMINE THE SIZE OF THE ROOT BALL THAT IS BEING PREPARED BASED ON THE TRUNK CALIPER SIZE OF THE TREE (SEE TABLE BELOW). THE ROOT BALL DEPTH TYPICALLY SHALL BE AT LEAST 2/3 OF THE ROOT BALL DIAMETER SHOWN. TREES GROWN ABOVE A HIGH WATER TABLE CAN HAVE SHALLOWER ROOT BALLS PROVIDED THE ROOT BALL DIAMETER IS INCREASED AT LEAST ONE SIZE LARGER PER THE TABLE BELOW.

TREE CALIPER	MIN. ROOT BALL DIAMETER	MIN. ROOT BALL DEPTH
2'-4" CAL.	36"-42" DIA.	24"-28" DEPTH
4'-6" CAL.	42"-48" DIA.	28"-32" DEPTH
6'-8" CAL.	48"-60" DIA.	32"-40" DEPTH
8'-10" CAL.	60"-72" DIA.	40"-48" DEPTH
10'-12" CAL.	72"-84" DIA.	48"-56" DEPTH
12'-14" CAL.	84"-96" DIA.	56"-64" DEPTH
14'-16" CAL.	96"-108" DIA.	64"-72" DEPTH
16'-18" CAL.	108"-120" DIA.	72"-80" DEPTH
18'-20" CAL.	120"-132" DIA.	80"-88" DEPTH
20'-24" CAL.	132"-144" DIA.	88"-96" DEPTH
28'-32" CAL.	156"-168" DIA.	96"-104" DEPTH
32'-36" CAL.	168"-180" DIA.	104"-112" DEPTH

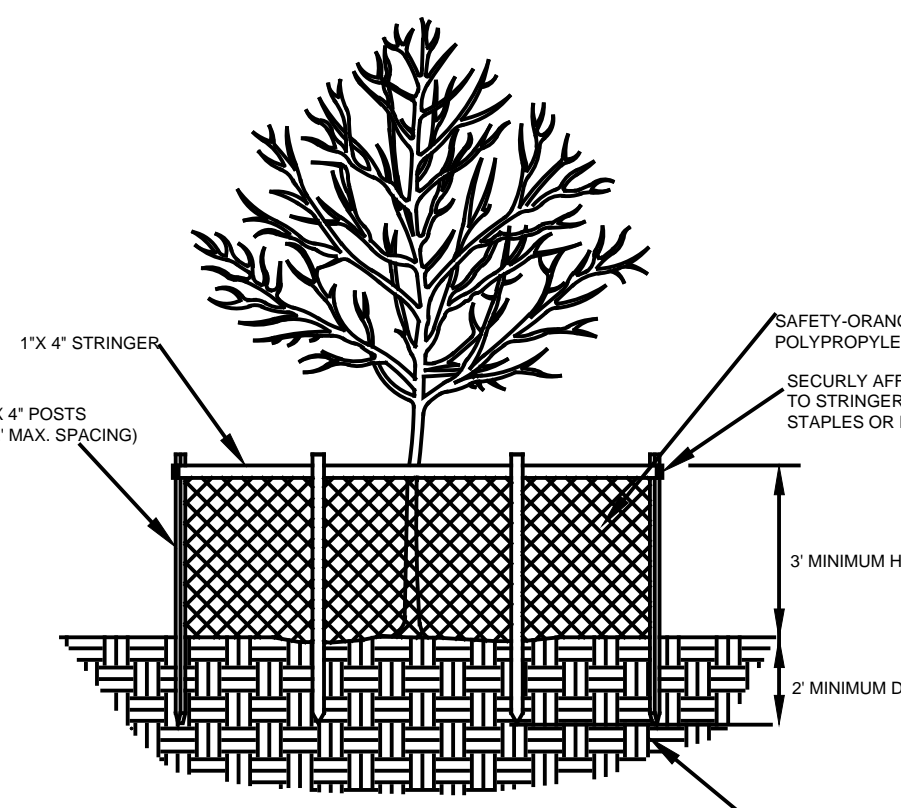
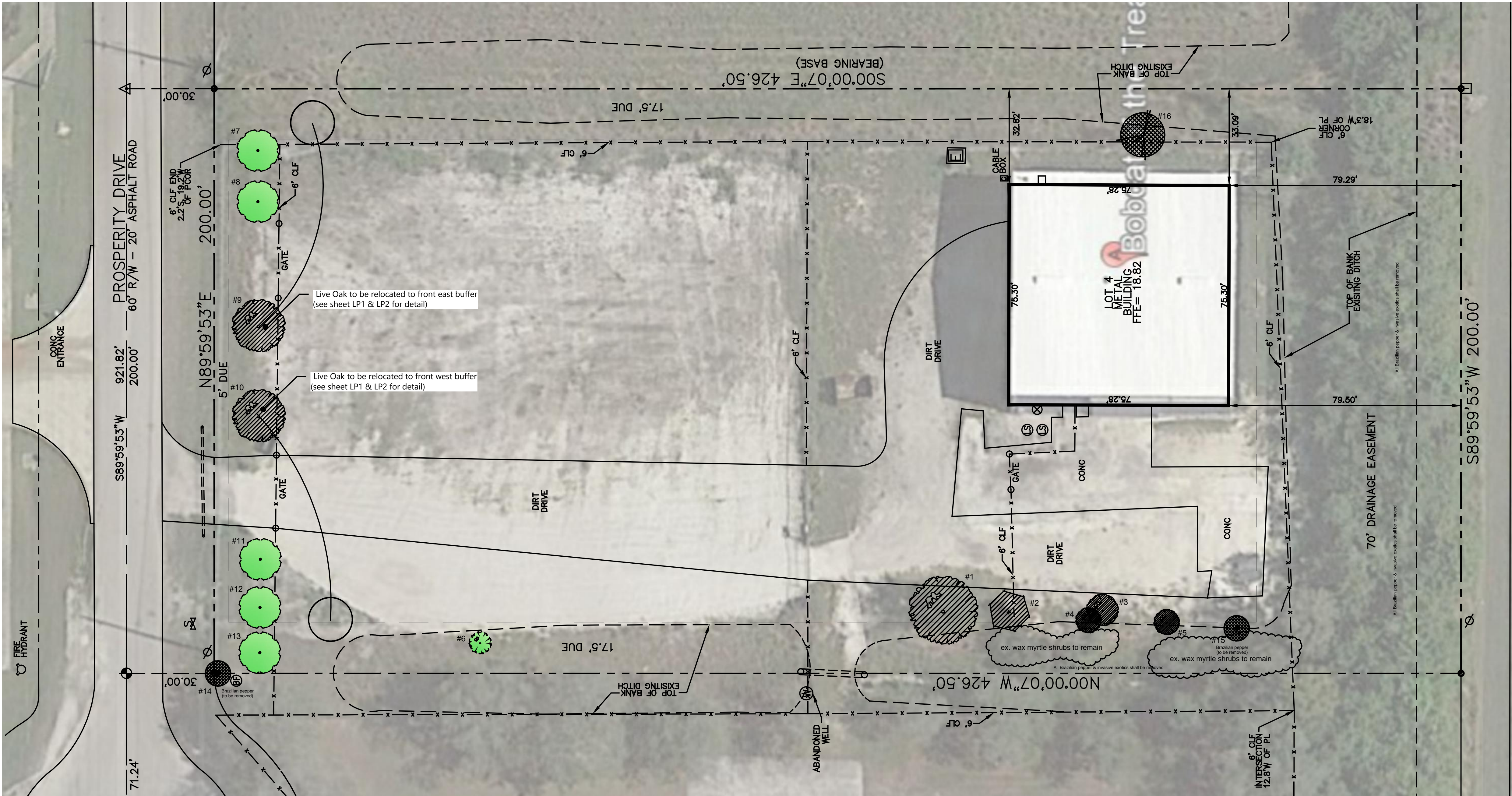
PALM TYPE	MIN. ROOT BALL DIAMETER	GENERAL PALM HEIGHT OVERALL	MIN. ROOT BALL DEPTH
SABAL PALM	48"	< 15 FT. HT.	12" DEPTH
COCONUT PALM	48"	15-25 FT. HT.	18" DEPTH
QUEEN PALM	48"	26-30 FT. HT.	24" DEPTH
SAGO PALM	48"	> 30 FT. HT.	24" DEPTH
DATE PALM	60"		
ROYAL PALM	60"		
RECLINATA PALM	72"		
PAUROTIS PALM	72"		

- MARK AND CUT A 12"-WIDE 'ROOT PRUNE TRENCH' AROUND THE TREE TO PROVIDE A ROOT BALL SIZE PER THE APPROPRIATE TABLE IN ITEM 3. USE SHARPENED SPADES FOR ROOT PRUNING. DO NOT CUT UNDER THE ROOT BALL, NOR REMOVE OLD ROOTS ON TOP OF ROOT BALL.
 - CUT THE 'ROOT PRUNE TRENCH' INITIALLY ON TWO SIDES (QUARTERS) OPPOSITE EACH OTHER. THEN AFTER 1/2 OF TOTAL 'WAIT TIME' HAS PASSED, CUT THE 'ROOT PRUNE TRENCH' FOR THE REMAINING TWO QUARTERS.
- ROOT PRUNING AND TRANSPLANTING PROCEDURE (REFER TO GRAPHIC ROOT PRUNING DETAIL) (CONT.)**
- FILL THE 'ROOT PRUNE TRENCH' WITH A MIXTURE OF 2/3 EXISTING SOIL AND 1/3 PEAT HUMUS. LEAVE A DEPRESSION TO HOLD WATER AND THEN IRRIGATE THE ROOT BALL AREA AND TRENCH TO PROMOTE FEEDER ROOT GROWTH.
 - THE RECOMMENDED 'WAIT TIME' TO TRANSPLANT AFTER ROOT PRUNING IS:
- | CALIPER SIZE | WAIT TIME |
|-----------------------------|--------------|
| TREES: | |
| 6" AND LESS | 45-90 DAYS |
| 6"-12" | 90-180 DAYS |
| 12" AND MORE | 180-360 DAYS |
| PALMS (EXCEPT SABAL PALMS): | |
| 6" AND LESS | 21-45 DAYS |
| 6" AND MORE | 45-90 DAYS |
- BEFORE TRANSPLANTING, PRUNE LIMBS OR FRONDS (AS APPLICABLE) TO FACILITATE RELOCATION AND SURVIVAL. PRUNE TO ENHANCE THE NATURAL SHAPE AND CHARACTER OF THE TREE.
 - RE-GRADE RECIPIENT LOCATION BEFORE TRANSPLANTING THE TREE SO THE TOP OF THE ROOT BALL IS LEVEL WITH THE PROPOSED FINISH GRADE AFTER RELOCATION AND SETTLEMENT.
 - BEFORE MOVING THE TREE, DIG A 'TRANSPLANT TRENCH/CUT' JUST BEYOND THE OUTSIDE PERIMETER OF THE 'ROOT PRUNE TRENCH' TO MINIMIZE DAMAGE TO NEW FEEDER ROOTS DURING TRANSPLANTING.
 - AFTER COMPLETING THE 'TRANSPLANT TRENCH/CUT', LIFT TREE FROM ONE SIDE TO BREAK SUCTION. DIG UNDER THE ROOT BALL TO SEVER ANY REMAINING ROOTS AT A ROOT BALL DEPTH INDICATED IN THE TABLE IN ITEM 3 ABOVE. WRAP THE ROOT BALL WITH SYNTHETIC MATERIAL OR NATURAL BURLAP PRIOR TO MOVING HAND DUG TREES; NOT NECESSARY FOR MOVING BY TREE SPADE TRUCK. REMOVE ALL SYNTHETIC MATERIALS PRIOR TO PLANTING. REMOVE BIODEGRADABLE MATERIALS FROM TOP OF ROOT BALL. CUT BACK WIRE BASKETS BELOW THE TOP HALF OF THE ROOTBALL.
 - THE CONTRACTOR SHALL PROTECT TREES AND ASSOCIATED UNDERSTORY PLANTS FROM BREAKAGE, SCRAPES, AND SCARS BEFORE, DURING, AND AFTER TRANSPLANT OPERATIONS BY METHODS SUCH AS BURLAP WRAPPING, SOFT SLINGS, SUPPORT ARMATURES, TREE BARRICADES, ETC.
 - ALL PLANT MATERIALS SHALL BE RELOCATED TO HOLES EXCAVATED IMMEDIATELY BEFORE TRANSPLANT OPERATIONS. FILL RECIPIENT TREE HOLES 1/3 WITH WATER. INSERT TREE BACK-FILL AND WATER-IN THOROUGHLY, BEING SURE TO REMOVE ALL AIR POCKETS. PROVIDE 6"-HIGH BERM AROUND PERIMETER OF THE ROOT BALL OF THE NEWLY INSTALLED TREE OR PLANT MATERIAL TO RETAIN WATER. APPLY WATER THOROUGHLY AFTER INSTALLATION AND THEREAFTER USING APPLICATIONS RATES THAT MAXIMIZE TREE/PLANT ESTABLISHMENT. TOP OF ROOTBALL TO BE 3" ABOVE EXISTING SOIL AFTER PLANTING.
 - ALL TREES SHALL BE STAKED TO MAXIMIZE STABILITY AFTER ROOT PRUNING AND AFTER TRANSPLANTING. MAINTAIN AND WARRANTY RELOCATED TREE/PLANT MATERIALS FOR THE SAME PERIOD(S) AS APPLICABLE TO NEW LANDSCAPE PLANTINGS (PER RELATED LANDSCAPE SPECIFICATIONS), INCLUDING THE REMOVAL OF EXOTIC VEGETATION AND WEEDS, AND THE APPLICATION OF ADEQUATE WATER, FERTILIZER, INSECTICIDES, AND MULCH TO MAXIMIZE TREE HEALTH AND ESTABLISHMENT.

- TREE PRUNING SPECIFICATIONS**
- THE CONTRACTOR SHALL PROTECT ALL TREE CANOPIES TO PREVENT LIMB BREAKAGE AND OTHER DAMAGE DURING ALL CONSTRUCTION OPERATIONS AT ALL TIMES. THE CONTRACTOR SHALL HIRE AN ISA CERTIFIED ARBORIST TO PERFORM TREE CROWN REDUCTION FOR ANY TREE CANOPY THAT WILL CONFLICT WITH CONSTRUCTION OPERATIONS. THE REQUIRED CLEARANCE PRUNING SHALL BE DONE IN ACCORDANCE WITH ANSI A300 - STANDARD PRACTICES FOR TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE. PART 1 - PRUNING. NO MORE THAN ONE-FOURTH OF A TREE'S LEAF BEARING CANOPY SHALL BE REMOVED. ALL PRUNING CUTS SHALL BE MADE BACK TO STRONG LATERALS OR PARENT LIMBS THAT CAN ASSUME APICAL DOMINANCE. ALL PRUNING SHALL ALSO CLEAN OUT DEAD, DISEASED, BROKEN OR WEAKLY ATTACHED BRANCHES; AND SHALL MAINTAIN THE NATURAL SHAPE AND STRUCTURE OF THE TREE. THE ARBORIST HIRED FOR THIS PROJECT MUST HAVE A LOCAL COUNTY TREE TRIMMER'S LICENSE.
- ALL TREE ROOTS THAT MUST BE CUT TO INSTALL ADJACENT CONCRETE CURBS, UTILITIES, AND FOOTERS, ETC., OR FOR ROOT PRUNING BEFORE RELOCATION, SHALL BE CUT CLEANLY WITH SHARP BLADES TO PREVENT UNNECESSARY ROOT SHREDDING AND DAMAGE.

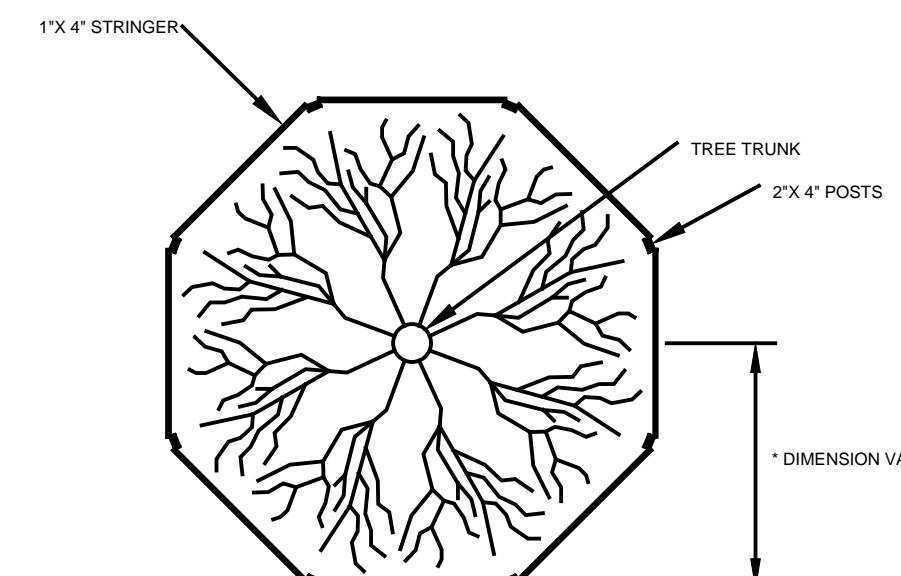
EXISTING TREE DISPOSITION CHART									
TREE #	BOTANICAL NAME	COMMON NAME	DBH (IN)	HT (FT)	CANOPY SPREAD (FT)	CONDITION	DISPOSITION	NOTES	
1	Quercus virginiana	LIVE OAK	14"	26'	17'	FAIR	REMOVE	MULTI-CO-DOMINANT @ 3' POOR STRUCTURE	
2	Acer rubrum	RED MAPLE	6"	20'	8'	FAIR	REMOVE		
3	Acer rubrum	RED MAPLE	7"	15'	8'	POOR	REMOVE	MULTI-CO-DOMINANT, POOR STRUCTURE, SUCKER GROWTH	
4	Quercus virginiana	LIVE OAK	3"	12'	6'	POOR	REMOVE	NO VALUE, FALLEN, THEN GROWTH FROM HORIZ. BRANCH	
5	Quercus spp.	SCRUB OAK	2"	8'	5'	POOR	REMOVE	MULTI @ BASE, SUCKERS	
6	Quercus spp.	SCRUB OAK	2 @ 2"	6'	5'	POOR	REMOVE	NO VALUE, MULTI @ BASE, VOLUNTARY SHRUB LIKE	
7	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14'	6'	GOOD	REMAIN	MULTI	
8	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14'	6'	GOOD	REMAIN	MULTI	
9	Quercus virginiana	LIVE OAK	2.5"	14'	4'	GOOD	RELOCATE		
10	Quercus virginiana	LIVE OAK	2.5"	14'	4'	GOOD	RELOCATE		
11	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14'	6'	GOOD	REMAIN	MULTI	
12	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14'	6'	GOOD	REMAIN	MULTI	
13	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14'	6'	GOOD	REMAIN	MULTI	
14	Schinus molle	BRAZILIAN PEPPER	-	-	-	-	REMOVE	FLEPPC CAT 1 EXOTIC INVASIVE	
15	Schinus molle	BRAZILIAN PEPPER	-	-	-	-	REMOVE	FLEPPC CAT 1 EXOTIC INVASIVE	
16	Schinus molle	BRAZILIAN PEPPER	-	-	-	-	REMOVE	FLEPPC CAT 1 EXOTIC INVASIVE	
		CARROTWOOD	2 @ 2.5"	15'	8'	-	REMOVE	FLEPPC CAT 1 EXOTIC INVASIVE	
			29"					= TOTAL DBH INCHES REMOVED	
								29" of DBH to mitigate for - Refer to LP1 & LP2 for mitigation credits.	

EXISTING TREES WITH AERIAL OVERLAY



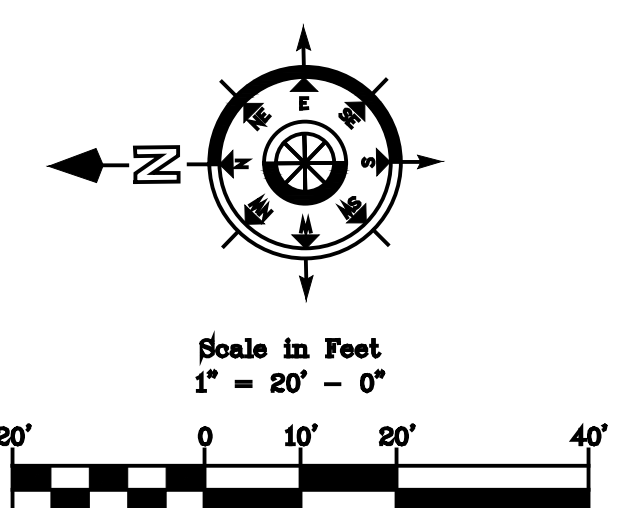
NOTE:
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NOTE:
 FOR GROUPS OF TREES, PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY.

TREE PROTECTION BARRICADE DETAIL



Contractor shall verify that he has the most up to date plans, and that they have been approved and accepted by the Owner before commencing construction.

LA CONSULTANT
LBLA, Inc.
 Lynn Bender Landscape Architecture
 5610 Adair Way
 Lake Worth, FL 33467
 Phone: 561-644-3237
 FL-A666715
 lbenderlarch@gmail.com

REVISIONS	

PROPOSED FACILITY FOR
BOBCAT - TREASURE COAST
 4405 PROSPERITY DRIVE
 FORT PIERCE, FLORIDA 34981

EXISTING TREES WITH AERIAL OVERLAY

Designed: LMB
 Drawn: LMB
 Date: 09-02-2020
 Job No.: #20-126



Sheet No.
TDP1
 of 2

All invasive exotic plants must be removed from the property prior to a Certificate of Occupancy being issued. The site shall be maintained "exotic free" in perpetuity.

Project Site Planners / Contractors

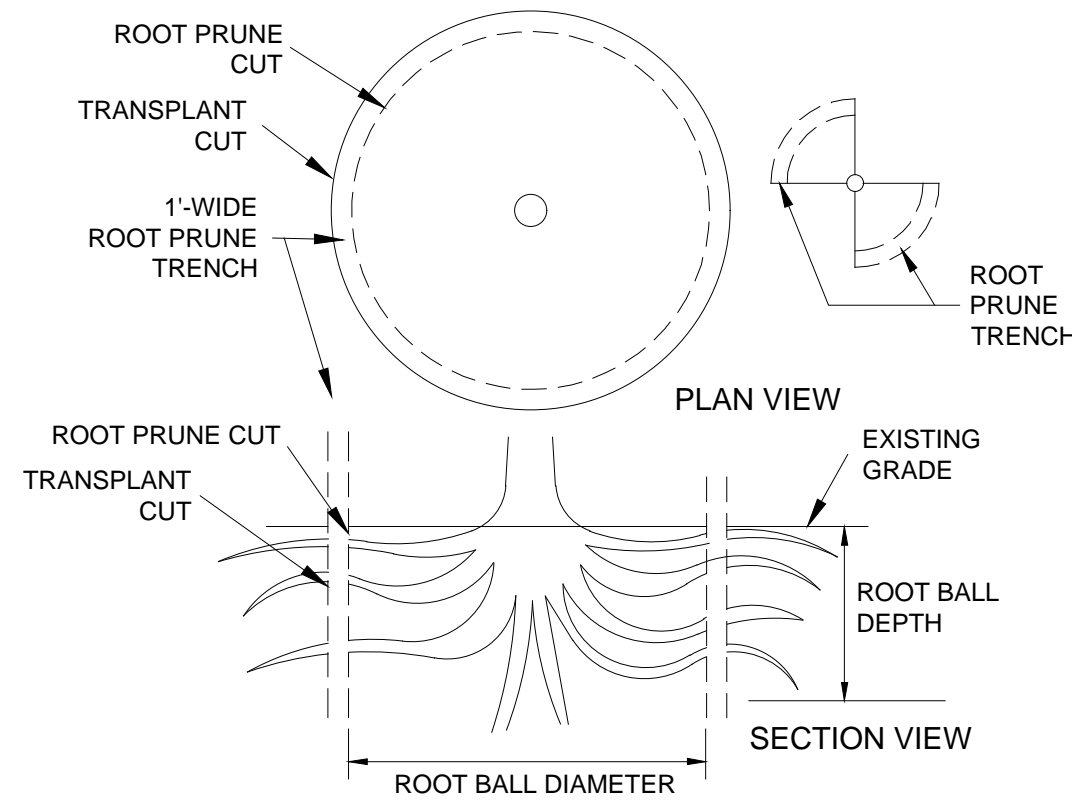


OFFICE: (561) 863-9004 LICENSE: #CB0006151 #AA20000694
1461 KINETIC ROAD, LAKE PARK, FL 33403-1911

NOTES FOR TREE PROTECTION BARRICADES:

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Base information provided by Ahrens Companies Site Plan via electronic file. These plans are to be used for proposed planting installation purposes only. Field verification of existing conditions shall be performed prior to material installation. All hardscape and site drainage shall be by others.



NOTES:

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TREE & PALM ROOT PRUNING
NOT TO SCALE

TREE RELOCATION SPECIFICATIONS (IF APPLICABLE)

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PALM - THE TERM "PALM" SHALL APPLY TO ALL PALM SPECIES.

B. SEASONAL REQUIREMENTS

BROADLEAF TREES SHOULD BE TRANSPLANTED DURING WINTER MONTHS (THEIR DORMANT SEASON), NOT IN THE SPRING WHEN ENERGY IS SPENT ON NEW LEAF GROWTH WHICH NEEDS A LARGE ROOT SYSTEM, AND WHEN THERE IS LITTLE RAINFALL TO ENCOURAGE THE PRODUCTION OF NEW FEEDER ROOTS.

C. ROOT PRUNING AND TRANSPLANTING PROCEDURE (REFER TO GRAPHIC ROOT PRUNING DETAIL)

A TREE DESIGNATED TO BE RELOCATED OR TRANSPLANTED SHALL BE ROOT PRUNED WITH ADEQUATE "WAIT TIME" IN ADVANCE OF TRANSPLANTING TO ALLOW A NEW ROOT SYSTEM TO GROW BEFORE MOVING THE TREE. THE TIME TYPICALLY REQUIRED FOR A ROOT SYSTEM TO DEVELOP BEFORE TRANSPLANTING DEPENDS ON THE SPECIE, SIZE, HEALTH, AND SOIL MOISTURE CONTENT. REFER TO ITEM 7 FOR AN ESTIMATED "WAIT TIME".

- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY AND ALL UNDERGROUND UTILITIES OR OBSTRUCTIONS PRIOR TO COMMENCING WORK AND PROTECTING SAME FROM DAMAGE. IN CASE OF CONFLICT WITH PROPOSED WORK, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- REMOVE ALL ROCK AND DEBRIS AROUND THE TREE TO BE ROOT PRUNED.
- DETERMINE THE SIZE OF THE ROOT BALL THAT IS BEING PREPARED BASED ON THE TREE CALIPER SIZE OF THE TREE (SEE TABLE BELOW). THE ROOT BALL DEPTH TYPICALLY SHALL BE AT LEAST 2/3 OF THE ROOT BALL DIAMETER SHOWN. TREES GROWN ABOVE A HIGH WATER TABLE CAN HAVE SMALLER ROOT BALLS PROVIDED THE ROOT BALL DIAMETER IS INCREASED AT LEAST ONE SIZE LARGER PER THE TABLE BELOW.

TREE CALIPER	MIN. ROOT BALL DIAMETER	MIN. ROOT BALL DEPTH
2"-4" CAL.	36"-42" DIA.	24"-28" DEPTH
4"-6" CAL.	42"-48" DIA.	28"-32" DEPTH
6"-8" CAL.	48"-60" DIA.	32"-40" DEPTH
8"-10" CAL.	60"-72" DIA.	40"-48" DEPTH
10"-12" CAL.	72"-84" DIA.	48"-56" DEPTH
12"-14" CAL.	84"-96" DIA.	56"-64" DEPTH
14"-16" CAL.	96"-108" DIA.	64"-72" DEPTH
16"-18" CAL.	108"-120" DIA.	72"-80" DEPTH
18"-20" CAL.	120"-132" DIA.	80"-88" DEPTH
20"-24" CAL.	132"-144" DIA.	88"-96" DEPTH
28"-32" CAL.	168"-168" DIA.	96"-104" DEPTH
32"-36" CAL.	196"-180" DIA.	104"-112" DEPTH

PALM TYPE	MIN. ROOT BALL DIAMETER	GENERAL PALM HEIGHT OVERALL	MIN. ROOT BALL DEPTH
SABAL PALM	48"	< 16 FT. HT.	12" DEPTH
COCONUT PALM	48"	15-25 FT. HT.	18" DEPTH
QUEEN PALM	48"	26-30 FT. HT.	24" DEPTH
SAGO PALM	48"	> 30 FT. HT.	24" DEPTH
DATE PALM	60"		
ROYAL PALM	60"		
RECLINATA PALM	72"		
PAUROTIS PALM	72"		

- MARK AND CUT A 12"-WIDE "ROOT PRUNE TRENCH" AROUND THE TREE TO PROVIDE A ROOT BALL SIZE PER THE APPROPRIATE TABLE IN ITEM 3. USE SHARPENED SPADES FOR ROOT PRUNING. DO NOT CUT UNDER THE ROOT BALL, NOR REMOVE OLD ROOTS ON TOP OF ROOT BALL.
- CUT THE "ROOT PRUNE TRENCH" INITIALLY ON TWO SIDES (QUARTERS) OPPOSITE EACH OTHER. THEN AFTER 1/3 OF TOTAL "WAIT TIME" HAS PASSED, CUT THE "ROOT PRUNE TRENCH" FOR THE REMAINING TWO QUARTERS.

ROOT PRUNING AND TRANSPLANTING PROCEDURE (REFER TO GRAPHIC ROOT PRUNING DETAIL) (CONT.)

- FILL THE "ROOT PRUNE TRENCH" WITH A MIXTURE OF 2/3 EXISTING SOIL AND 1/3 PEAT HUMUS. LEAVE A DEPRESSION TO HOLD WATER AND THEN IRRIGATE THE ROOT BALL AREA AND TRENCH TO PROMOTE FEEDER ROOT GROWTH.
- THE RECOMMENDED "WAIT TIME" TO TRANSPLANT AFTER ROOT PRUNING IS:

CALIPER SIZE	WAIT TIME
TREES:	
6" AND LESS	45-90 DAYS
6"-12"	90-180 DAYS
12" AND MORE	180-360 DAYS

- BEFORE TRANSPLANTING, PRUNE LIMBS OR FRONDS (AS APPLICABLE) TO FACILITATE RELOCATION AND SURVIVAL. PRUNE TO ENHANCE THE NATURAL SHAPE AND CHARACTER OF THE TREE.
- RE-GRADE RECIPIENT LOCATION BEFORE TRANSPLANTING THE TREE SO THE "TOP" OF THE ROOT BALL IS LEVEL WITH THE PROPOSED FINISH GRADE AFTER RELOCATION AND SETTLEMENT.
- BEFORE MOVING THE TREE, DIG A "TRANSPLANT TRENCH" JUST BEYOND THE OUTSIDE PERIMETER OF THE ROOT PRUNE TRENCH TO MINIMIZE DAMAGE TO NEW FEEDER ROOTS DURING TRANSPLANTING.
- AFTER COMPLETING THE "TRANSPLANT TRENCH", LIFT TREE FROM ONE SIDE TO BREAK SUCTION. DIG UNDER THE ROOT BALL TO SEVER ANY REMAINING ROOTS AT A ROOT BALL DEPTH INDICATED IN THE TABLE IN ITEM 3 ABOVE. WRAP THE ROOT BALL WITH SYNTHETIC MATERIAL OR NATURAL BURLAP PRIOR TO MOVING HAND DUG TREES; NOT NECESSARY FOR TREES MOVED BY TREE SPADE TRUCK. REMOVE ALL SYNTHETIC MATERIALS PRIOR TO PLANTING. REMOVE BIODEGRADABLE MATERIALS FROM TOP OF ROOT BALL. CUT BACK WIRE BASKETS BELOW THE TOP HALF OF THE ROOTBALL.

- THE CONTRACTOR SHALL PROTECT TREES AND ASSOCIATED UNDERSTORY PLANTS FROM BREAKAGE, SCRAPES, AND SCARS BEFORE, DURING, AND AFTER TRANSPLANT OPERATIONS BY METHODS SUCH AS BURLAP WRAPPING, SOFT SLINGS, SUPPORT ARMATURES, TREE BARRICADES, ETC.
- ALL PLANT MATERIALS SHALL BE RELOCATED TO HOLES EXCAVATED IMMEDIATELY BEFORE TRANSPLANT OPERATIONS. FILL RECIPIENT TREE HOLES 1/3 WITH WATER, INSERT TREE, BACK-FILL AND WATER-IN THOROUGHLY, BEING SURE TO REMOVE ALL AIR POCKETS. PROVIDE 6"-HIGH BERM AROUND PERIMETER OF THE ROOT BALL OF THE NEWLY INSTALLED TREE OR PLANT MATERIAL TO RETAIN WATER. APPLY WATER THOROUGHLY AFTER INSTALLATION AND THEREAFTER USING APPLICATIONS RATES THAT MAXIMIZE TREE/PLANT ESTABLISHMENT. TOP OF ROOTBALL TO BE 3" ABOVE EXISTING SOIL AFTER PLANTING.

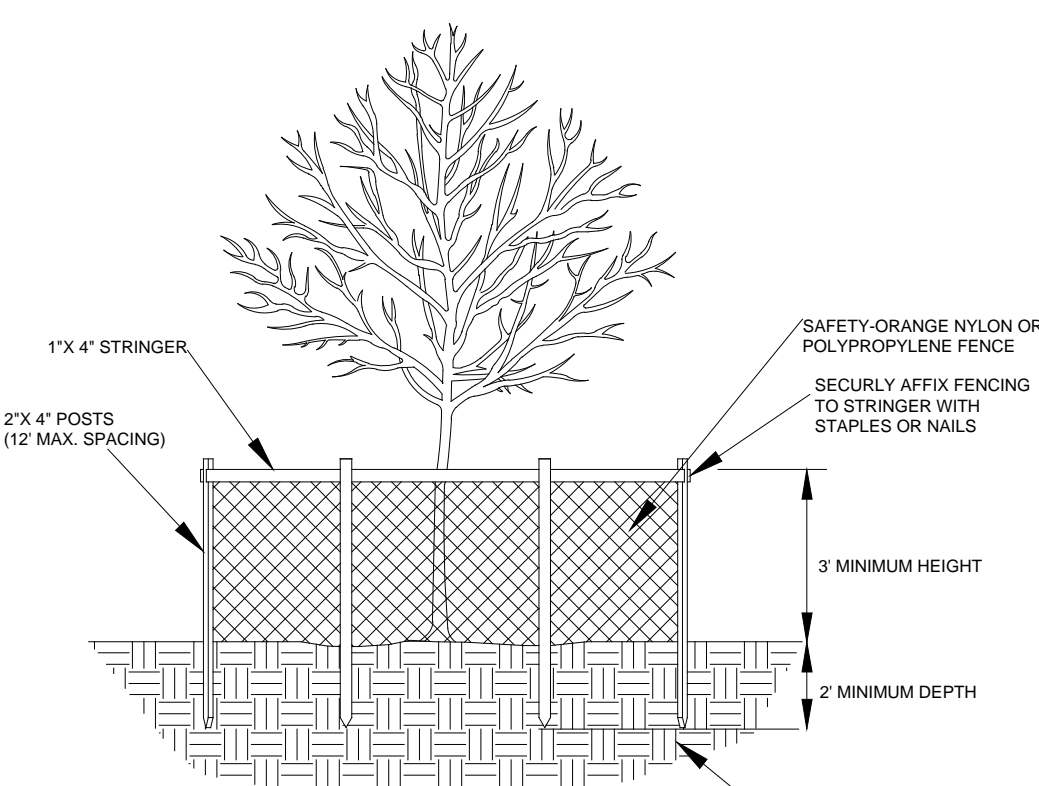
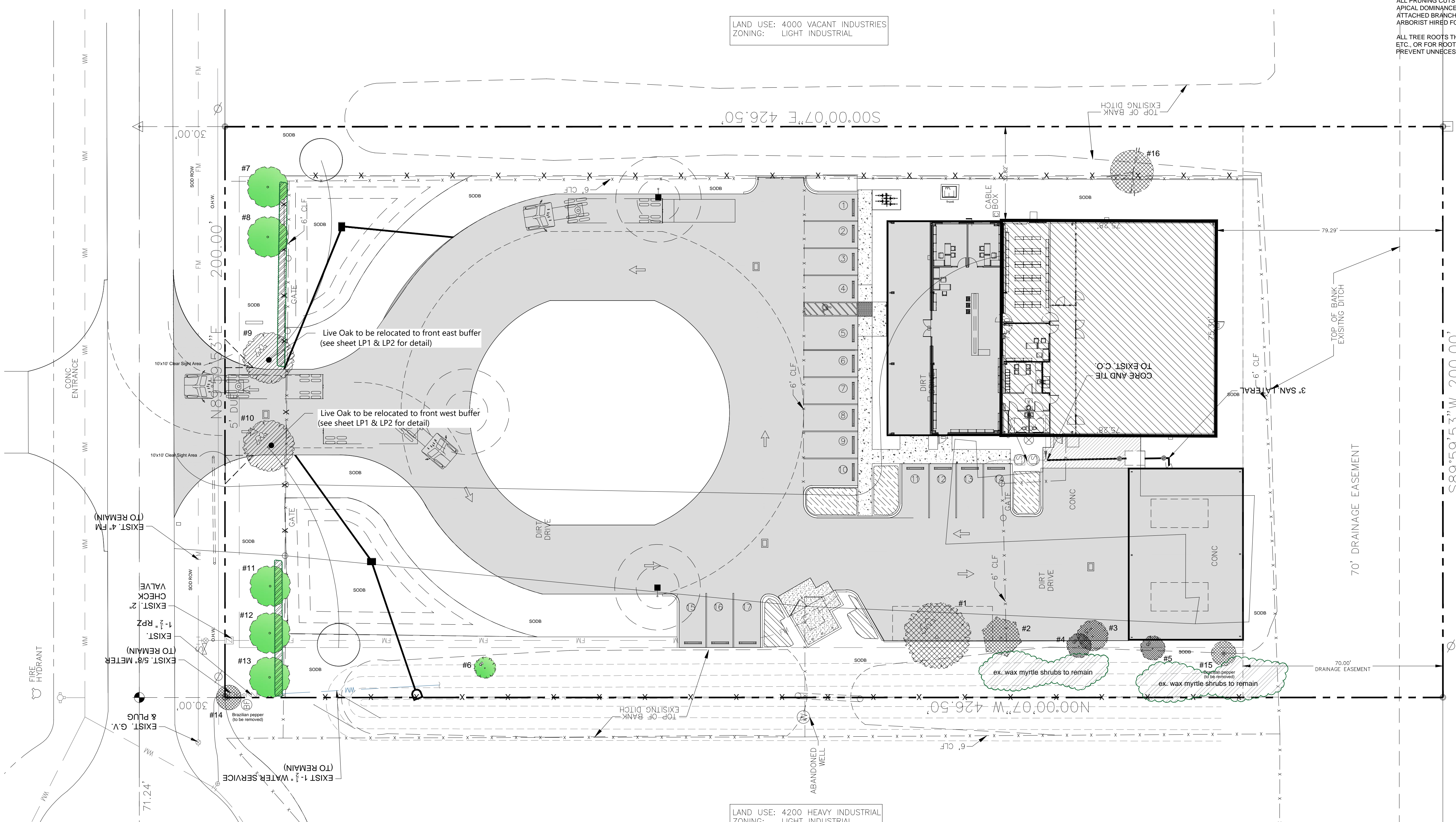
- ALL TREES SHALL BE STAKED TO MAXIMIZE STABILITY AFTER ROOT PRUNING AND AFTER TRANSPLANTING. MAINTAIN AND WARRANTY RELOCATED TREE/PLANT MATERIALS FOR THE SAME PERIOD(S) AS APPLICABLE TO NEW LANDSCAPE PLANTINGS (PER RELATED LANDSCAPE SPECIFICATIONS), INCLUDING THE REMOVAL OF EXOTIC VEGETATION AND WEEDS, AND THE APPLICATION OF ADEQUATE WATER, FERTILIZER, INSECTICIDES, AND MULCH TO MAXIMIZE TREE HEALTH AND ESTABLISHMENT.

TREE PRUNING SPECIFICATIONS

THE CONTRACTOR SHALL PROTECT ALL TREE CANOPIES TO PREVENT LIMB BREAKAGE AND OTHER DAMAGE DURING ALL CONSTRUCTION OPERATIONS AT ALL TIMES. THE CONTRACTOR SHALL HIRE AN ISA CERTIFIED ARBORIST TO PERFORM TREE CROWN REDUCTION FOR ANY TREE CANOPY THAT WILL INTERFERE WITH CONSTRUCTION OPERATIONS. THE REQUIRED CLEARANCE PRUNING SHALL BE DONE IN ACCORDANCE WITH ANSI A300 - STANDARD PRACTICES FOR TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE, PART 1: PRUNING. NO MORE THAN ONE-FOURTH OF A TREE'S LEAF BEARING CANOPY SHALL BE REMOVED. ALL PRUNING CUTS SHALL BE MADE BACK TO STRONG LATERALS OR PARENT LIMBS THAT CAN ASSUME APICAL DOMINANCE. ALL PRUNING SHALL ALSO CLEAN OUT DEAD, DISEASED, BROKEN OR WEAKLY ATTACHED BRANCHES, AND SHALL MAINTAIN THE NATURAL SHAPE AND STRUCTURE OF THE TREE. THE ARBORIST HIRED FOR THIS PROJECT MUST HAVE A LOCAL COUNTY TREE TRIMMER'S LICENSE.

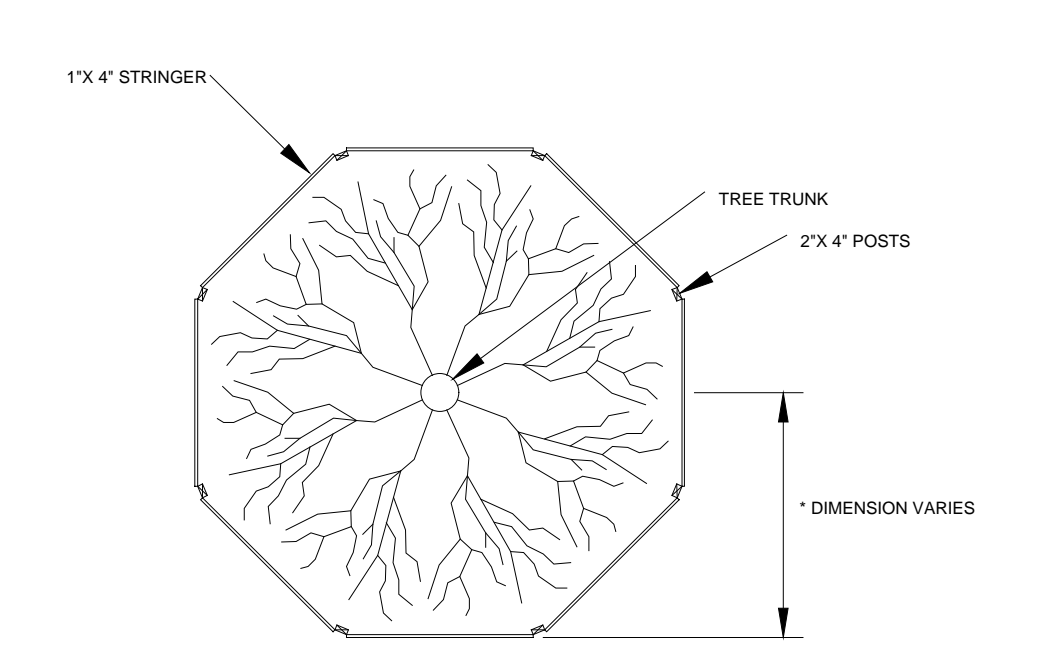
ALL TREE ROOTS THAT MUST BE CUT TO INSTALL ADJACENT CONCRETE CURBS, UTILITIES, AND FOOTERS, ETC., OR FOR ROOT PRUNING BEFORE RELOCATION, SHALL BE CUT CLEANLY WITH SHARP BLADES TO PREVENT UNNECESSARY ROOT SHREDDING AND DAMAGE.

TREE #	BOTANICAL NAME	COMMON NAME	DBH (IN)	HT (FT)	CANOPY SPREAD (FT)	CONDITION	DISPOSITION	NOTES
1	Quercus virginiana	LIVE OAK	14"	26	17	FAIR	REMOVE	MULTI CO-DOMINANT @ 3, POOR STRUCTURE
2	Acer rubrum	RED MAPLE	6"	20	8	FAIR	REMOVE	
3	Acer rubrum	RED MAPLE	7"	15	8	POOR	REMOVE	MULTI CO-DOMINANT, POOR STRUCTURE, SUCKER GROWTH
4	Quercus virginiana	LIVE OAK	3"	12	6	POOR	REMOVE	NO VALUE, FALLEN, THEN GROWTH FROM HORZ. BRANCH
5	Quercus spp.	SCRUB OAK	2"	8	5	POOR	REMOVE	MULTI @ BASE, SUCKERS
6	Quercus spp.	SCRUB OAK	2 @ 2"	8	5	POOR	REMOVE	NO VALUE, MULTI @ BASE, VOLUNTEER, SHRUB LIKE
7	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14	6	GOOD	REMAN	MULTI
8	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14	6	GOOD	REMAN	MULTI
9	Quercus virginiana	LIVE OAK	2.5"	14	4	GOOD	RELOCATE	
10	Quercus virginiana	LIVE OAK	2.5"	14	4	GOOD	RELOCATE	
11	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14	6	GOOD	REMAN	MULTI
12	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14	6	GOOD	REMAN	MULTI
13	Lagerstroemia spp.	CRAPE MYRTLE	3 @ 1.5"	14	6	GOOD	REMAN	MULTI
14	Schinus terebinthifolia	BRAZILIAN PEPPER	-	-	-	-	REMOVE	FLEPPC CAT 1 EXOTIC INVASIVE
15	Schinus terebinthifolia	BRAZILIAN PEPPER	-	-	-	-	REMOVE	FLEPPC CAT 1 EXOTIC INVASIVE
16	Schinus terebinthifolia	CARROTWOOD	2 @ 2.5"	15	8	-	REMOVE	FLEPPC CAT 1 EXOTIC INVASIVE
= TOTAL DBH INCHES REMOVED								

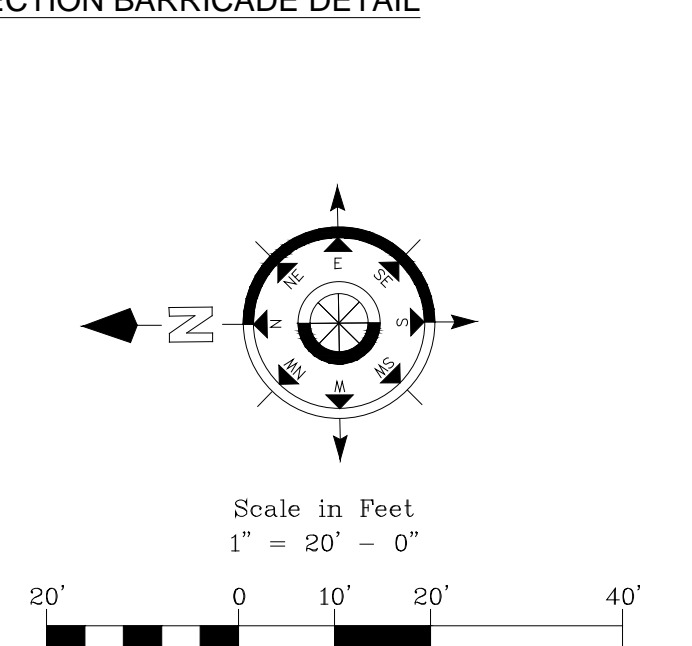


NOTE: BARRICADE CIRCLE TO BE CENTERED ON TREE TRUNK(S). FOR GROUPS OF TREES, PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY.

* TREE PROTECTION BARRICADES SHALL BE LOCATED TO PROTECT EXISTING, RELOCATED AND NEW TREES IN CONSTRUCTION AREAS. THE PROTECTIVE BARRIER SHALL BE PLACED AROUND THE TREE AT A DISTANCE 6 FEET FROM THE TREE TRUNK OR AT THE CANOPY DRIP LINE, WHICHEVER IS GREATER OR AS SHOWN ON LANDSCAPE PLAN.



TREE PROTECTION BARRICADE DETAIL



EXISTING TREES WITH PROPOSED SITE PLAN OVERLAY

LAND USE: 4200 HEAVY INDUSTRIAL
ZONING: LIGHT INDUSTRIAL

Contractor shall verify that he has the most up to date plans, and that they have been approved and accepted by the Owner before commencing construction.

LA CONSULTANT

LBLA, Inc.
Lynn Bender Landscape Architecture

5610 Adair Way
Lake Worth, FL 33467
Phone: 561-644-3237
FL-LA666715
lbenderlarch@gmail.com

REVISIONS	

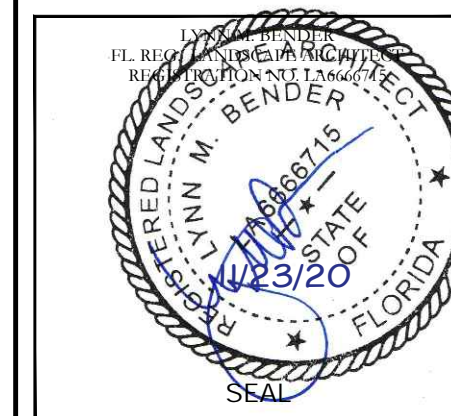
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PROPOSED FACILITY FOR
BOBCAT - TREASURE COAST
4405 PROSPERITY DRIVE
FORT PIERCE, FLORIDA 34981
EXISTING TREES WITH AERIAL OVERLAY

Designed: LMB
Drawn: LMB
Date: 09-02-2020
Job No.: #20-126

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CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS AND NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.



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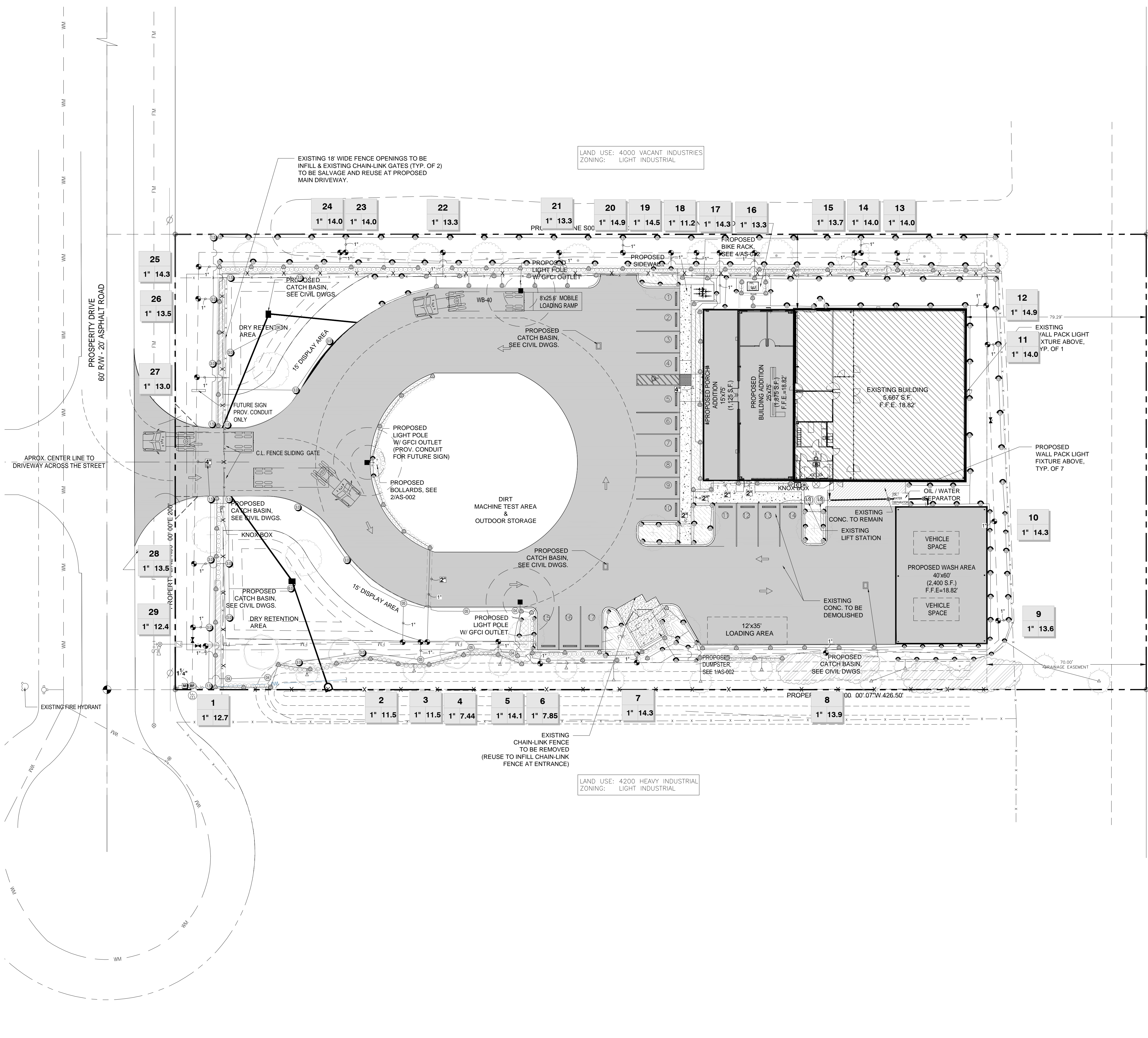


LBLA, Inc.
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REVISIONS

NO.	DATE	DESCRIPTION

PROPOSED FACILITY FOR
BOBCAT - TREASURE COAST
4405 PROSPERITY DRIVE
FORT PIERCE, FLORIDA 34981
PROPOSED IRRIGATION PLAN



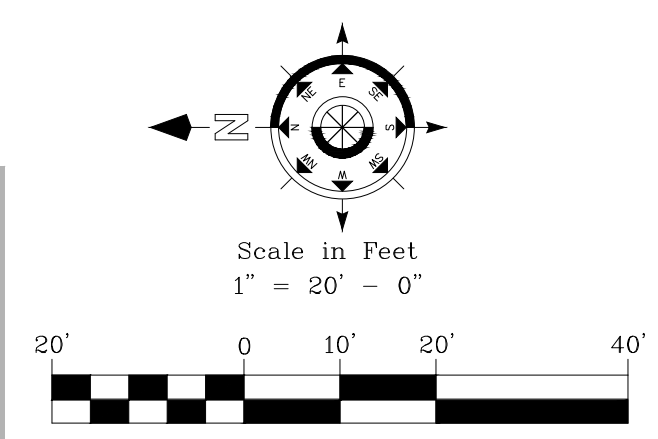
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	RADIUS
⊙	Hunter PROS-04 5' strip spray	3	LCS	30	5x15'
⊙	Hunter PROS-04 5' strip spray	3	RCS	30	5x15'
⊙	Hunter PROS-04 5' strip spray	24	SST	30	5x30'
⊙	Hunter PROS-04 8' radius	24		180	30' 8"
⊙	Hunter PROS-04 8' radius	1		90	30' 8"
⊙	Hunter PROS-04 10' radius	17		180	30' 10"
⊙	Hunter PROS-04 10' radius	3		90	30' 10"
⊙	Hunter PROS-04 12' radius	3		180	30' 12"
⊙	Hunter PROS-04 15' radius	65		180	30' 15"
⊙	Hunter PROS-04 15' radius	7		90	30' 15"
⊙	Hunter PROS-12 5' strip spray	15	LCS	30	5x15'
⊙	Hunter PROS-12 5' strip spray	14	RCS	30	5x15'
⊙	Hunter PROS-12 5' strip spray	48	SST	30	5x30'
⊙	Hunter PROS-12 8' radius	13		180	30' 8"
⊙	Hunter PROS-12 8' radius	6		90	30' 8"
⊙	Hunter PROS-12 10' radius	5		180	30' 10"
⊙	Hunter PROS-12 10' radius	12		90	30' 10"
⊙	Hunter PROS-12 15' radius	2		90	30' 15"
△	Hunter PCB 10	11		360	30' 3"

SYMBOL	MANUFACTURER/MODEL	QTY	PSI	RADIUS
⊙	Hunter GGP-ADJ-B	7	45	31'
⊙	Hunter GGP-ADJ-B	14	45	38'
⊙	Hunter GGP-ADJ-B	1	45	43'
⊙	Hunter GGP-ADJ-LA	4	40	24'
⊙	Hunter GGP-ADJ-LA	4	40	27'
⊙	Hunter GGP-ADJ-LA	1	40	30'

SYMBOL	MANUFACTURER/MODEL	QTY
⊙	Hunter GGP-ADJ-B	29
⊙	Matco-Norca 514TX 1.25"	3
⊙	Febco 860 1-1/2" (Existing)	1
⊙	Hunter IC-0600-PL	1
⊙	Hunter RAIN-CLIK	1
⊙	Water Meter 5/8" (Existing)	1

SYMBOL	DESCRIPTION	QTY
---	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	3,992 Lf.
---	Irrigation Mainline: PVC Class 200 SDR 21 1 1/4"	1,070 Lf.
---	Pipe Sleeve: PVC Schedule 40 2"	49.0 Lf.
---	Pipe Sleeve: PVC Schedule 40 4"	43.6 Lf.



Designed: LMB
Drawn: LMB
Date: 11-23-2020
Job No.: #20-538

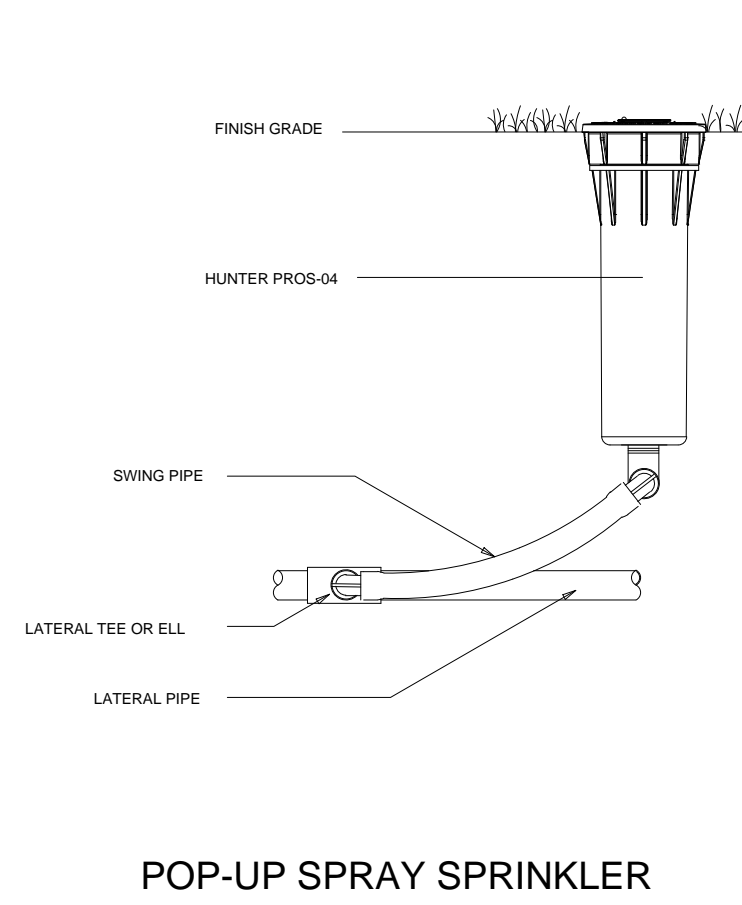
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LYNN M. BENDER
FL REG. LANDSCAPE ARCHITECT
REGISTRATION NO. LA6666715

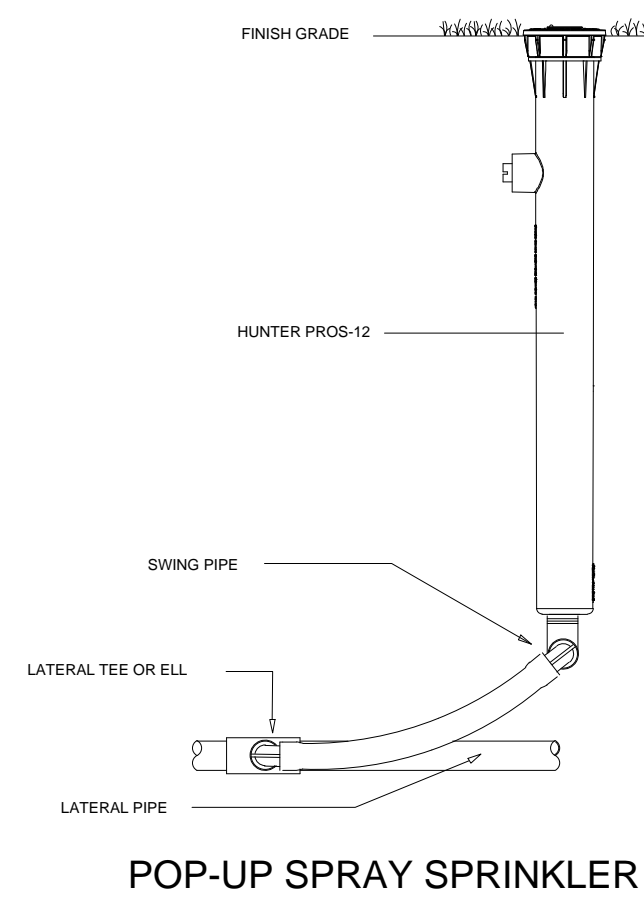
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SEAL

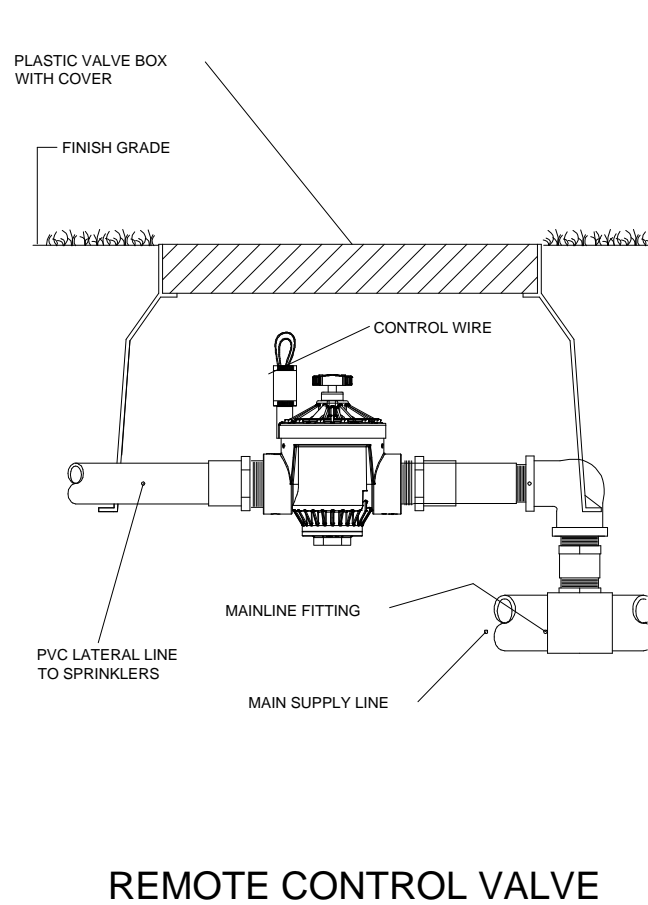
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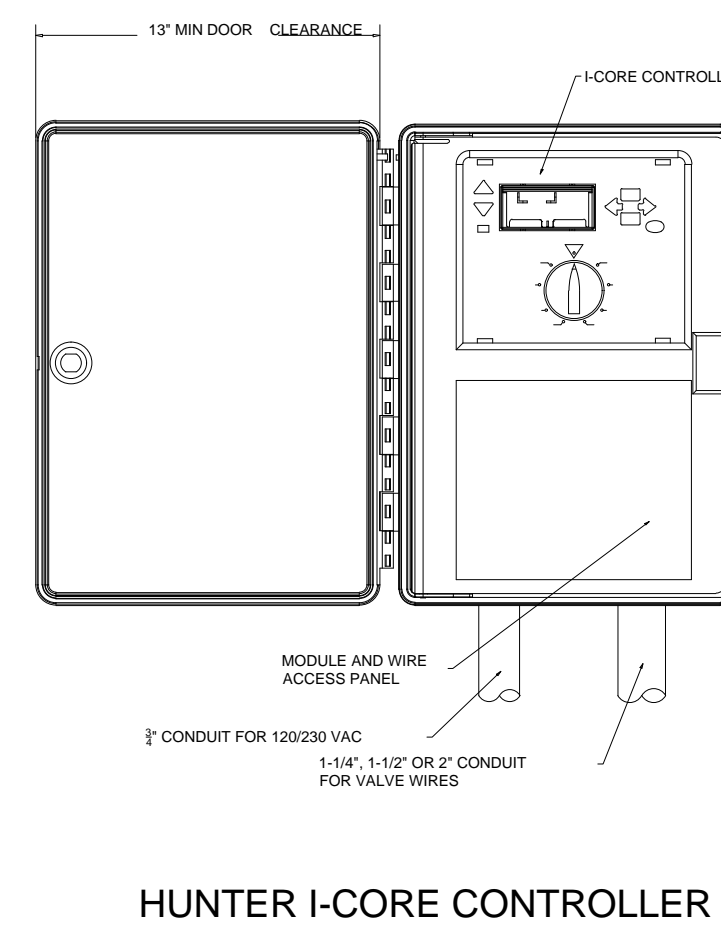
POP-UP SPRAY SPRINKLER



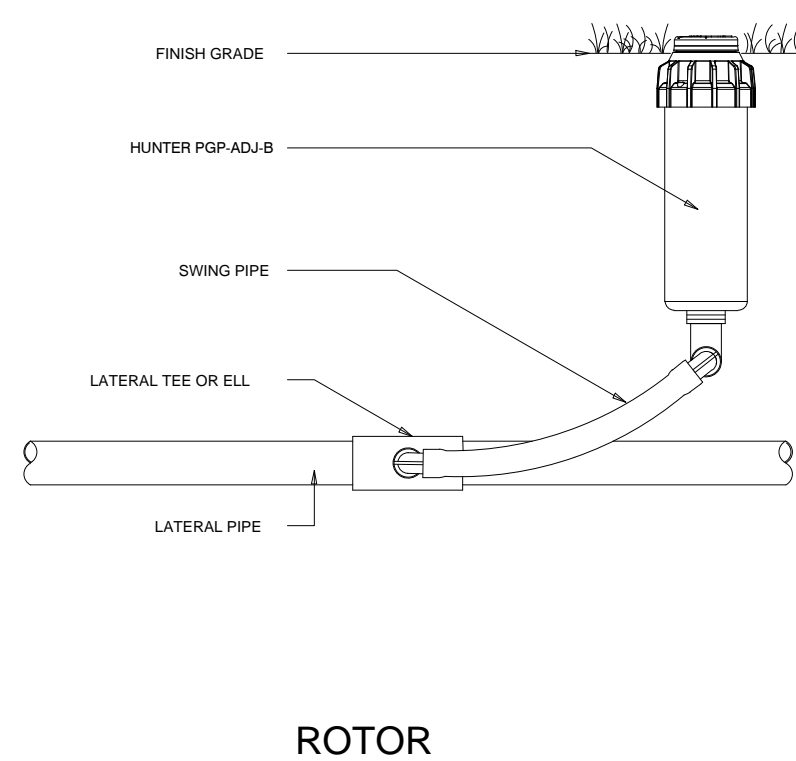
POP-UP SPRAY SPRINKLER



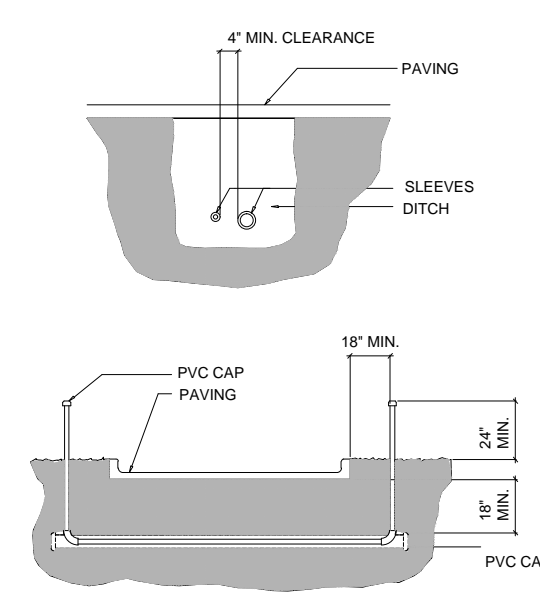
REMOTE CONTROL VALVE



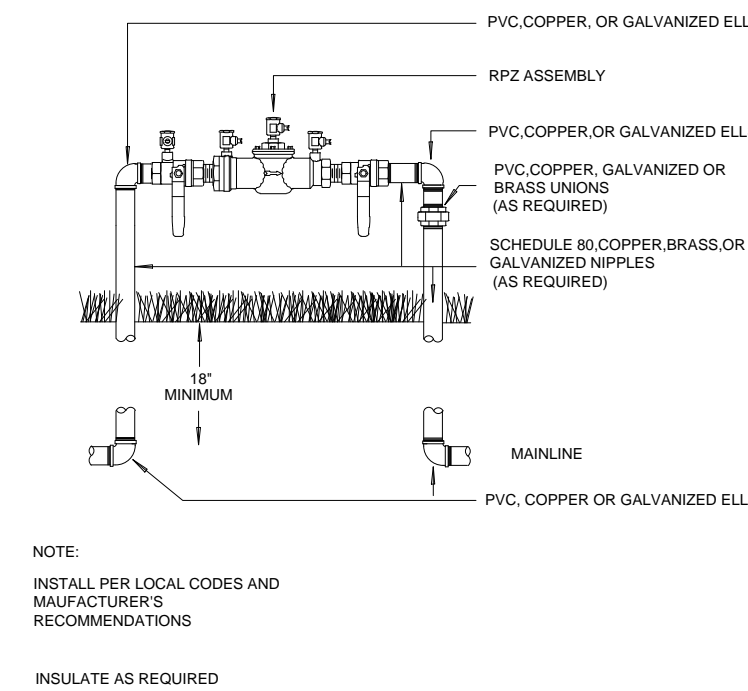
HUNTER I-CORE CONTROLLER



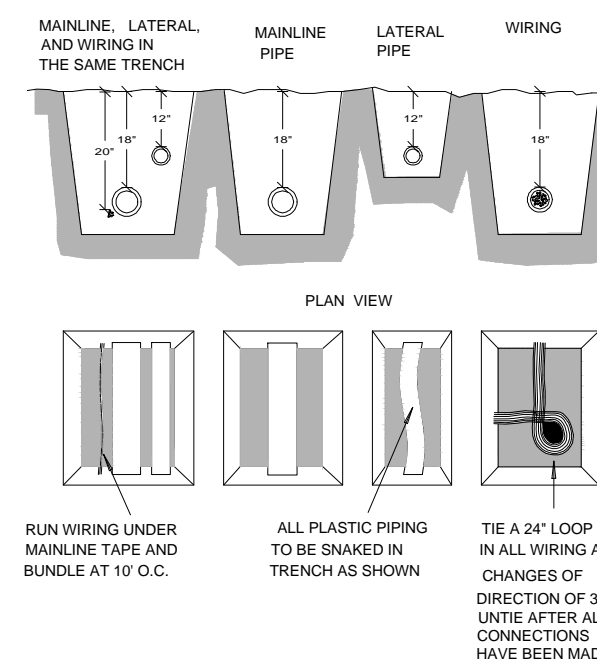
ROTOR



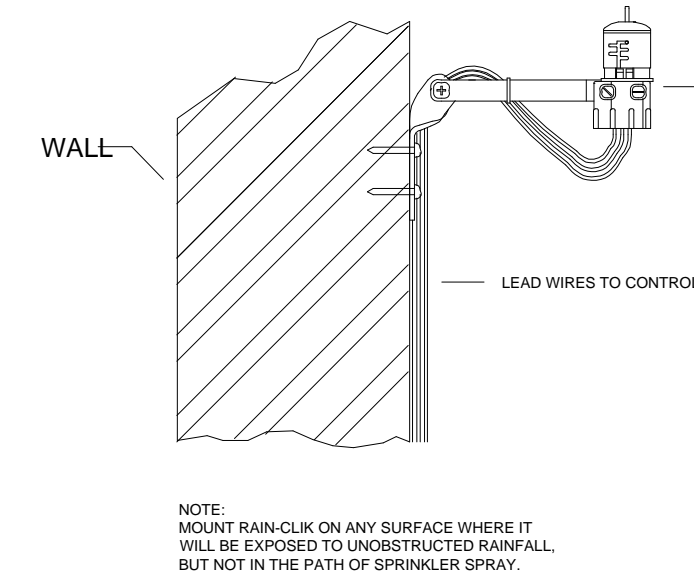
IRRIGATION SLEEVING



RPZ BACKFLOW PREVENTER



PIPE AND WIRE TRENCH



HUNTER RAIN-CLICK RAIN SENSOR

IRRIGATION SPECIFICATIONS

- IRRIGATION POINT OF CONNECTION SHALL BE CAPABLE OF DELIVERING A VARIABLE FLOW RATE OF 15 GPM AT A CONSTANT PRESSURE OF 70 PSI DOWNSTREAM OF BACKFLOW PREVENTION DEVICE. POINT OF CONNECTION SHALL BE ABLE TO MAINTAIN THE MAXIMUM FLOW RATE AND PRESSURE FOR THE DURATION OF AN IRRIGATION CYCLE. CONTRACTOR SHALL VERIFY THESE PARAMETERS PRIOR TO CONSTRUCTION, AND NOTIFY OWNER'S REPRESENTATIVE AND IRRIGATION CONSULTANT IF THEY CANNOT BE MET.
- IF THE POINT OF CONNECTION EXCEEDS THE ABOVE PRESSURE REQUIREMENTS, A PRESSURE REGULATOR SHALL BE INSTALLED AT THE OWNER'S EXPENSE. PRESSURE REGULATOR SHALL BE SET AT THE PRESSURE RECOMMENDED ABOVE.
- AN RPZ TYPE BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED IN A MANNER SATISFYING LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS.
- POWER FOR THE IRRIGATION CONTROLLER, PUMP AND OTHER ELECTRICAL COMPONENTS SHALL BE PROVIDED BY OTHER. CONTRACTOR SHALL VERIFY POWER AVAILABLE MEETS THE REQUIREMENTS OF THE COMPONENT'S MANUFACTURER. IF POWER AVAILABLE IS INADQUATE, CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
- IRRIGATION SYSTEM IS DISPLAYED SCHEMATIC IN NATURE. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY TO ACCOMMODATE FOR LANDSCAPING CHANGES, PLANTING BEDS OR OTHER OBSTRUCTIONS. THESE ADJUSTMENTS MAY BE MADE ONLY AFTER NOTIFYING THE OWNER'S REPRESENTATIVE.
- SOME IRRIGATION COMPONENTS AND PIPING ARE SHOWN IN HARDSCAPE AREAS AND OUTSIDE OF PROPERTY LINES TO IMPROVE ON THE READABILITY OF THE IRRIGATION PLAN. ALL COMPONENTS AND PIPING SHALL BE INSTALLED INSIDE OF THE PROPERTY LINES AND OUTSIDE OF HARDSCAPE AREAS.
- MAINLINE, LATERALS AND CONTROL WIRES SHALL BE INSTALLED INSIDE THE SAME TRENCH WHENEVER POSSIBLE..
- SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- CONTROLLER SHALL BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS.
- ALL CONTROLLER/VALVE WIRE SHALL BE #14 GAUGE. THE COMMON WIRE SHALL BE COLORED WHITE, WHILE THE STATION WIRES SHALL BE OF AT LEAST ONE COLOR OTHER THAN WHITE.
- ALL FIELD WIRE ABOVE GRADE OR WITHIN STRUCTURE TO BE INSTALLED IN CONDUIT PER LOCAL CODE.
- ALL UNDERGROUND SPLICES TO UTILIZE 3M DBY, OR KING WATER PROOF SPLICE KITS, DEPENDING ON NUMBER AND SIZE OF WIRES. ALL SPLICES SHALL BE MADE INSIDE A VALVE BOX.
- DEPTH OF IRRIGATION PIPING; 18" ON MAINLINE; 12" ON LATERALS.
- SLEEVING UNDER PAVED AREAS SHALL BE INSTALLED AT A DEPTH OF 24".

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE	DESIGN PSI	FRICITION LOSS	VALVE LOSS	PSI	PSI @ POC	PRECIP
1	Hunter PGV-101G	1"	Shrub Spray	12.70	12	148.8	30	0.34	1.74	32.08	49.36	1.67 in/h
2	Hunter PGV-101G	1"	Turf Rotor	11.50	5	133.1	45	0.57	1.81	47.38	63.84	0.85 in/h
3	Hunter PGV-101G	1"	Turf Rotor	11.50	5	105.0	45	0.35	1.81	47.17	63.66	0.94 in/h
4	Hunter PGV-101G	1"	Shrub Spray	7.44	8	140.7	30	0.61	1.90	32.51	45.84	1.15 in/h
5	Hunter PGV-101G	1"	Shrub Spray	14.06	16	150.5	30	0.41	1.66	32.06	51.78	1.46 in/h
6	Hunter PGV-101G	1"	Turf Spray	7.85	8	87.4	30	0.10	1.90	32.00	45.62	1.52 in/h
7	Hunter PGV-101G	1"	Shrub Spray	14.28	19	169.6	30	0.55	1.64	32.19	52.46	1.54 in/h
8	Hunter PGV-101G	1"	Turf Spray	13.93	17	166.5	30	0.48	1.66	32.15	52.15	1.28 in/h
9	Hunter PGV-101G	1"	Turf Spray	13.61	18	191.6	30	0.35	1.68	32.03	51.67	0.94 in/h
10	Hunter PGV-101G	1"	Turf Spray	14.31	16	155.0	30	0.33	1.64	31.97	52.55	0.92 in/h
11	Hunter PGV-101G	1"	Turf Spray	13.99	8	113.7	30	0.36	1.66	32.02	52.08	0.79 in/h
12	Hunter PGV-101G	1"	Turf Spray	14.87	9	117.9	30	0.48	1.61	32.09	53.32	0.75 in/h
13	Hunter PGV-101G	1"	Turf Spray	13.99	8	100.9	30	0.24	1.66	31.91	51.98	0.74 in/h
14	Hunter PGV-101G	1"	Turf Spray	13.99	8	112.6	30	0.39	1.66	32.05	52.15	0.80 in/h
15	Hunter PGV-101G	1"	Shrub Spray	13.65	13	159.6	30	0.45	1.68	32.14	51.78	1.50 in/h
16	Hunter PGV-101G	1"	Turf Spray	13.30	15	158.4	30	0.36	1.70	32.07	51.27	1.50 in/h
17	Hunter PGV-101G	1"	Shrub Spray	14.28	24	313.6	30	3.27	1.64	34.91	55.45	1.47 in/h
18	Hunter PGV-101G	1"	Turf Spray	11.16	6	80.3	30	0.22	1.83	32.05	48.70	0.75 in/h
19	Hunter PGV-101G	1"	Shrub Spray	14.47	16	209.0	30	0.59	1.63	32.22	53.03	1.39 in/h
20	Hunter PGV-101G	1"	Turf Spray	14.88	8	113.7	30	0.48	1.61	32.09	53.46	0.76 in/h
21	Hunter PGV-101G	1"	Turf Spray	13.29	9	96.9	30	0.20	1.70	31.90	51.09	0.99 in/h
22	Hunter PGV-101G	1"	Turf Spray	13.28	10	107.0	30	0.32	1.70	32.03	51.15	1.59 in/h
23	Hunter PGV-101G	1"	Turf Spray	13.99	8	109.8	30	0.39	1.66	32.05	52.04	0.81 in/h
24	Hunter PGV-101G	1"	Turf Spray	13.99	8	110.2	30	0.30	1.66	31.96	51.95	0.79 in/h
25	Hunter PGV-101G	1"	Shrub Spray	14.30	12	168.1	30	0.57	1.64	32.22	52.39	1.57 in/h
26	Hunter PGV-101G	1"	Turf Rotor	13.50	6	130.3	45	0.32	1.69	47.01	66.08	0.78 in/h
27	Hunter PGV-101G	1"	Turf Rotor	13.00	5	128.7	40	0.58	1.72	42.30	60.58	0.62 in/h
28	Hunter PGV-101G	1"	Turf Rotor	13.50	4	94.0	45	0.63	1.69	47.32	65.76	0.68 in/h
29	Hunter PGV-101G	1"	Turf Rotor	12.40	6	119.6	45	0.30	1.76	47.05	63.99	1.25 in/h

CRITICAL ANALYSIS

P.O.C. NUMBER: 01
Water Source Information:

FLOW AVAILABLE
Water Meter Size: 5/8"
Flow Available: 15.00 gpm

PRESSURE AVAILABLE
Static Pressure at POC: 70.00 psi
Elevation Change: 5.00 ft
Service Line Size: 3"
Length of Service Line: 20.00 ft
Pressure Available: 67.00 psi

DESIGN ANALYSIS
Maximum Station Flow: 14.88 gpm
Flow Available at POC: 15.00 gpm
Residual Flow Available: 0.12 gpm

Pressure Req. at Critical Station: 47.00 psi
Loss for Fittings: 0.10 psi
Loss for Main Line: 0.96 psi
Loss for POC to Valve Elevation: 0.00 psi
Loss for Backflow: 11.32 psi
Loss for Water Meter: 6.70 psi
Critical Station Pressure at POC: 66.08 psi
Pressure Available: 67.00 psi
Residual Pressure Available: 0.92 psi

LA CONSULTANT

LBLA, Inc.
Lynn Bender Landscape Architecture

5610 Adair Way
Lake Worth, FL 33467
Phone: 561-644-3237
FL-LA666715
lbenderlarch@gmail.com

REVISIONS

PROPOSED FACILITY FOR
BOBCAT - TREASURE COAST
4405 PROSPERITY DRIVE
FORT PIERCE, FLORIDA 34981

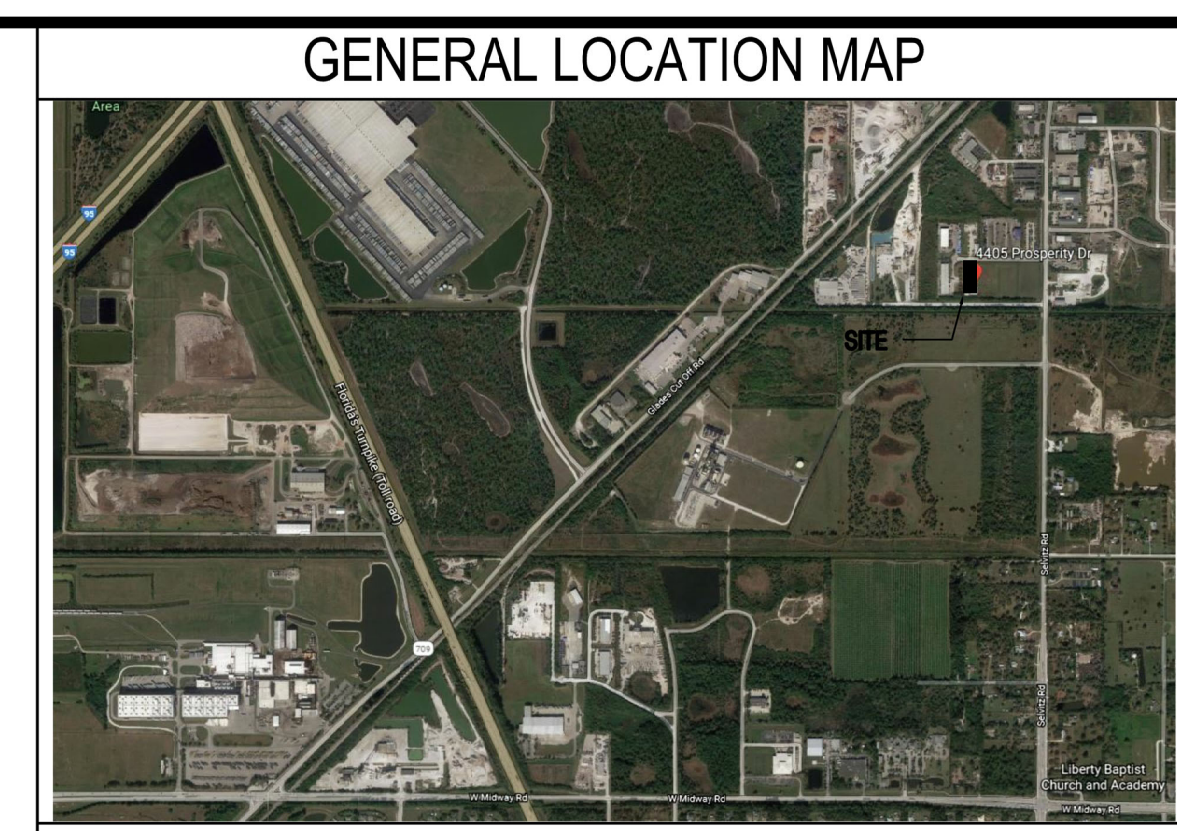
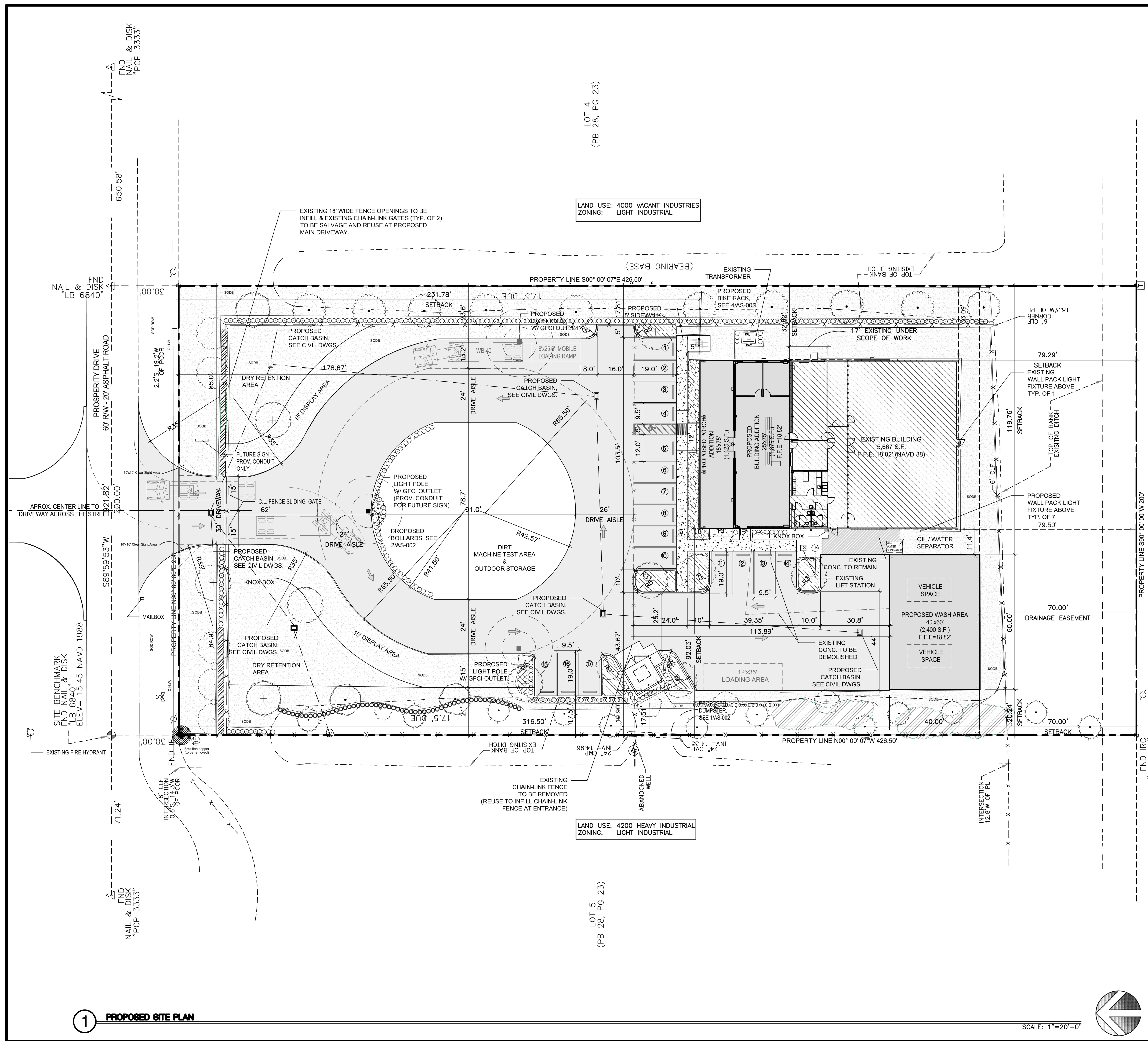
IRRIGATION DETAILS & SPECIFICATIONS

Designed: LMB
Drawn: LMB
Date: 11-23-2020
Job No.: #20-538

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CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS AND NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

Sheet No.
IR-DETAILS
2 of 2



DEVELOPMENT REGULATIONS

SITE ADDRESS:	4405 PROSPERITY DR, FORT PIERCE, FLORIDA
PARCEL ID:	2431-506-0005-000-8
PROPERTY OWNER:	SMITH BROS CONTRACTING EQUIPMENT INC.
LEGAL DESCRIPTION:	FT PIERCE BUSINESS PARK PHASE II LOT 4 (1.96 AC)
ZONING DISTRICT:	LIGHT INDUSTRIAL (I-1)
LAND USE CODE:	4100 LIGHT MANUFACTURING
FUTURE LAND USE:	4200 HEAVY INDUSTRIAL (HI)
JURISDICTION:	CITY OF FORT PIERCE, FLORIDA
SUBDIVISION:	PORT PIERCE BUSINESS PARK PHASE II
BUILDING HEIGHT:	ALLOWED: - PROVIDED: 23'-1 1/2"

SITE DATA BREAKDOWN

	LINEAR FT.	SQ. FT.	ACRES	PERCENT
TOTAL SITE		= 85,300 S.F.	= 1.958 AC	
IMPERVIOUS AREAS:				
BUILDING AREA		= 11,067 S.F.		
TOTAL PAVED AREA		= 23,387 S.F.		
CONC. SIDEWALK		= 866 S.F.		
DUMPSTER/CONCRETE APRON		= 236 S.F.		
A/C PAD		= 40 S.F.		
TYPE "D" CURB				
TYPE "F" CURB				
TOTAL IMPERVIOUS AREA:		= 35,596 S.F.		
PERVIOUS AREAS:				
LANDSCAPE AREA		= 45,567 S.F.		
DIRT OUTDOOR STORAGE AREA		= 5,410 S.F.		
TOTAL PERVIOUS AREA:		= 50,977 S.F.		

BUILDING SETBACKS

BUILDING SETBACKS:	MIN. REQ.	ADDITION TO EXIST. BLDG PROVIDED	PROPOSED WASH AREA PROVIDED
FRONT (NORTH)	0'	231.78'	316.50'
SIDE (WEST)	0'	92.03'	20.24'
SIDE (EAST)	0'	32.82'	119.76'
REAR (SOUTH)	0'	79.29'	70.00'

TOTAL BUILDING AREA

DESCRIPTION	SUBTOTAL	TOTAL
EXISTING BUILDING AREA		5,667 S.F.
PROPOSED BUILDING ADDITION AREA		1,875 S.F.
PROPOSED FRONT CANOPY AREA		1,125 S.F.
PROPOSED WASH AREA		2,400 S.F.
TOTAL AREA		11,067 S.F.

PARKING CALCULATIONS

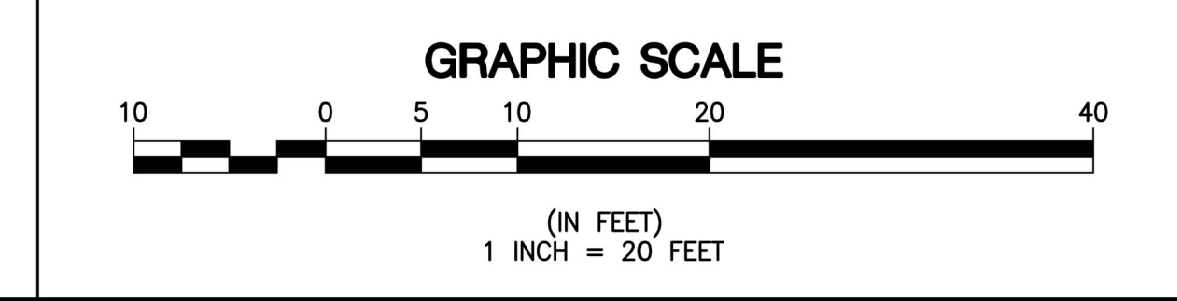
DESCRIPTION	REQUIRED	PROVIDED
PER SEC. 125.315 - OFF-STREET PARKING REQUIRED		
SECTION 125.315 (d)(2)(4) land(d)	19 SPACES	17 SPACES
1875 SF/200 SF. = 9.37		CANOPY, WASH AREA = 2 SPACES
SECTION 125.315 (d) (3) (a)		
5,667 SF/600 SF. = 9.4		
HANDICAP SPACES (1 PER 25 P.SPACES)	1 SPACES	1 SPACES
TOTAL SPACES PROVIDED:		19 SPACES

LOADING REQUIREMENTS

DESCRIPTION	REQUIRED	PROVIDED
PER SEC. 125-315 (a) - OFF-STREET LOADING REQUIRED		
LOADING SPACE = 12' WIDE AND 35' DEEP	1 SPACE	1 SPACE

BICYCLE PARKING

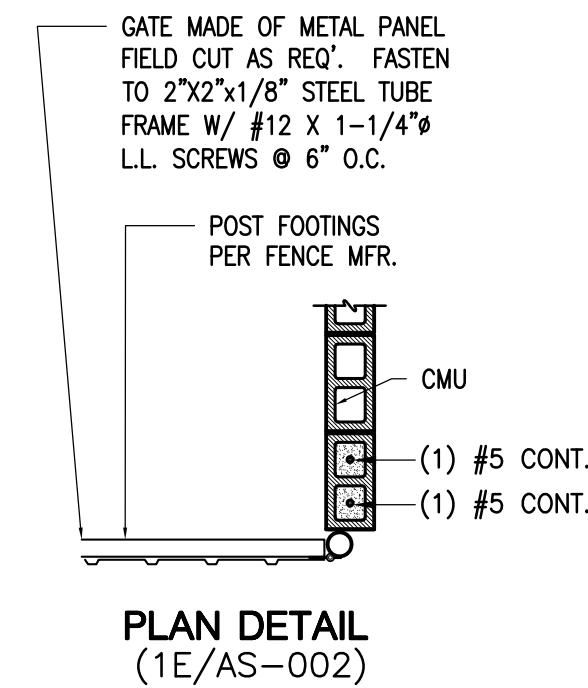
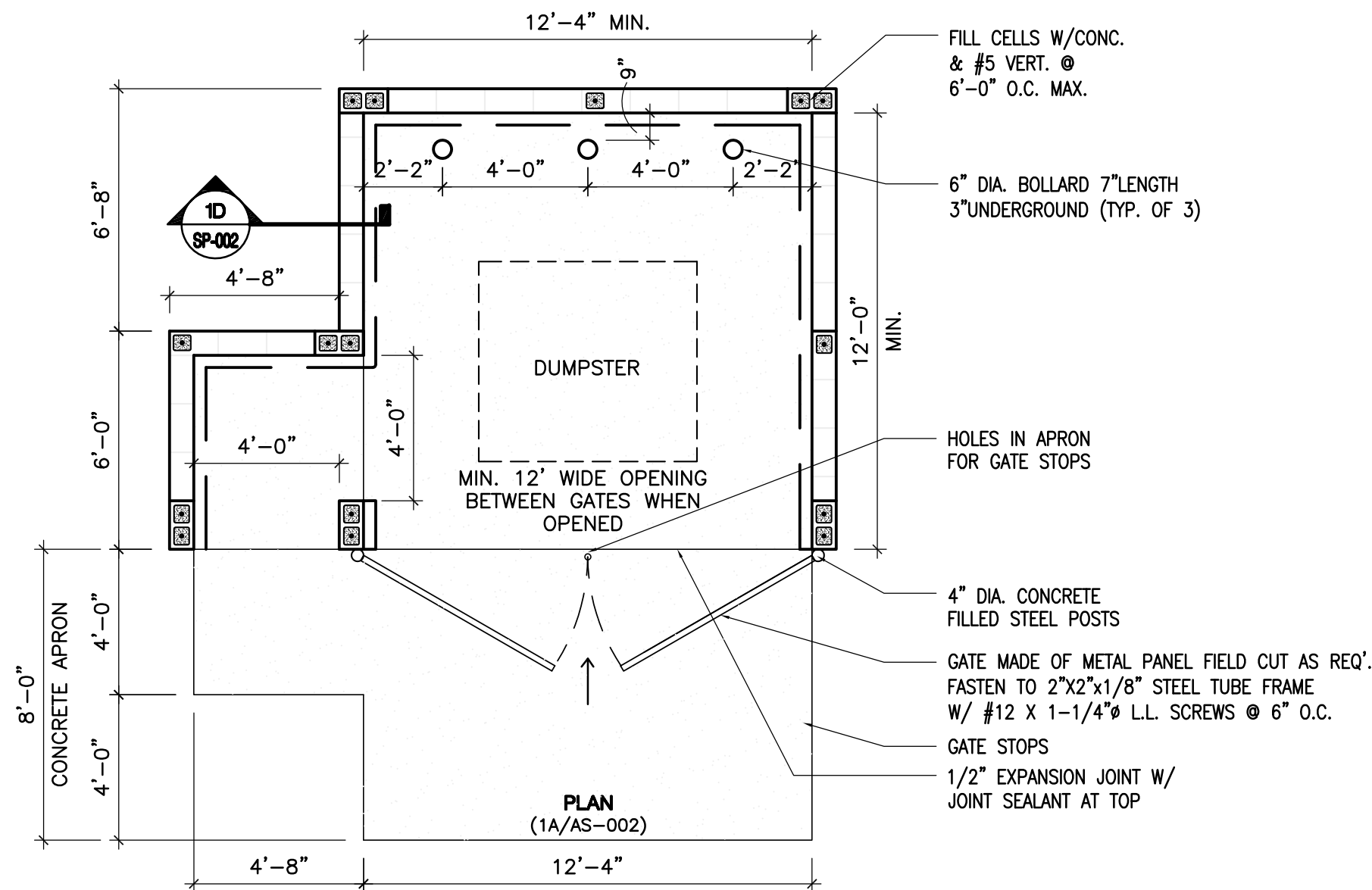
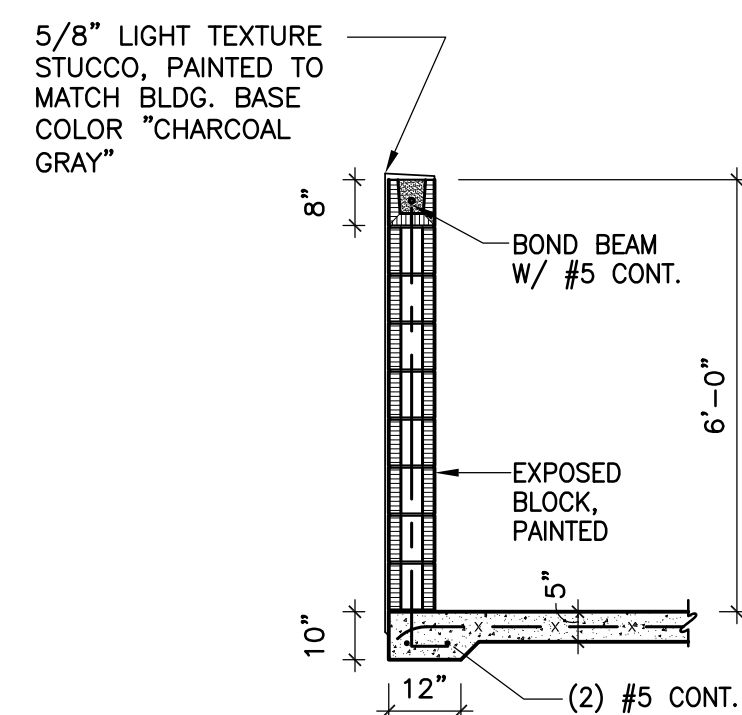
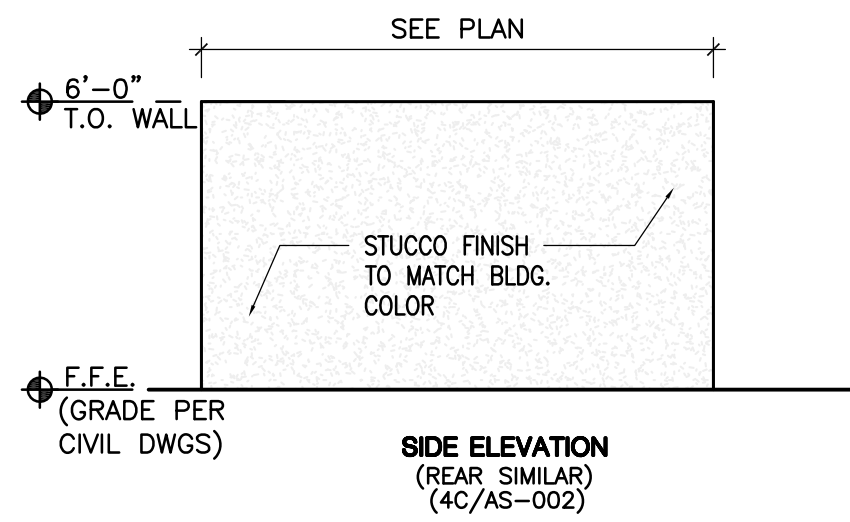
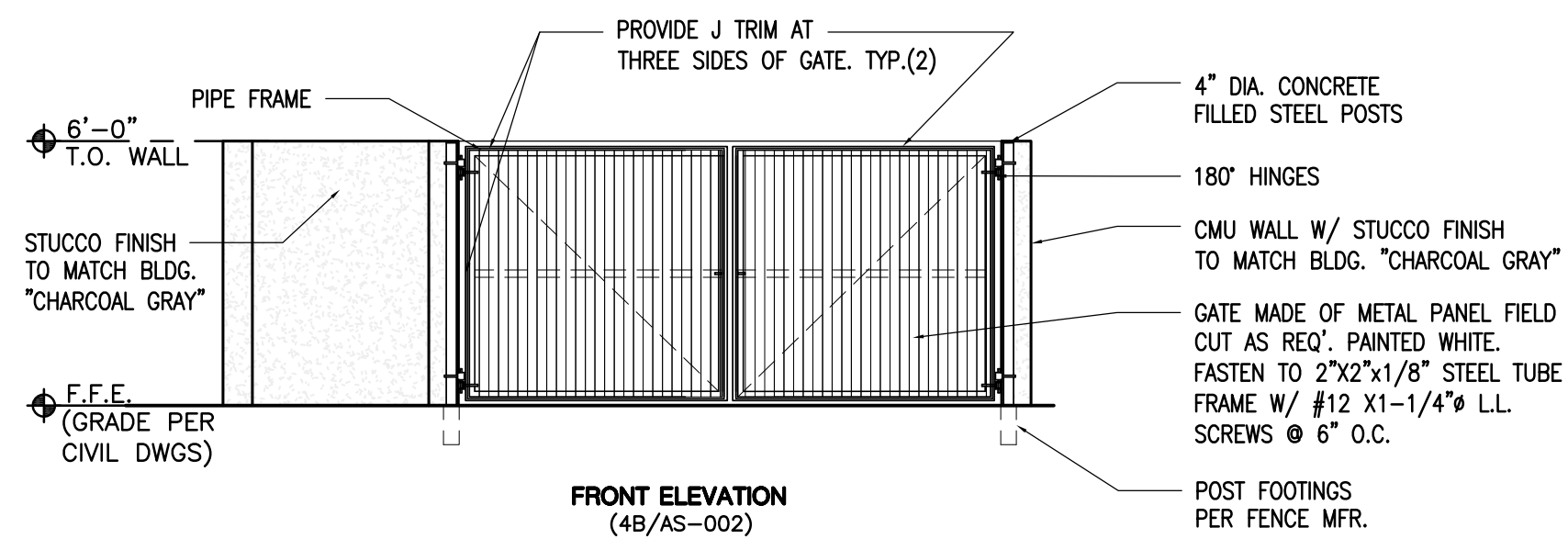
DESCRIPTION	REQUIRED	PROVIDED
PER SEC. 125-315 (f)(a)		
COMMERCIAL REQUIREMENTS: 1 PER 10	2 SPACE	2 SPACE
PARKING SPACES, 2 MINIMUM		



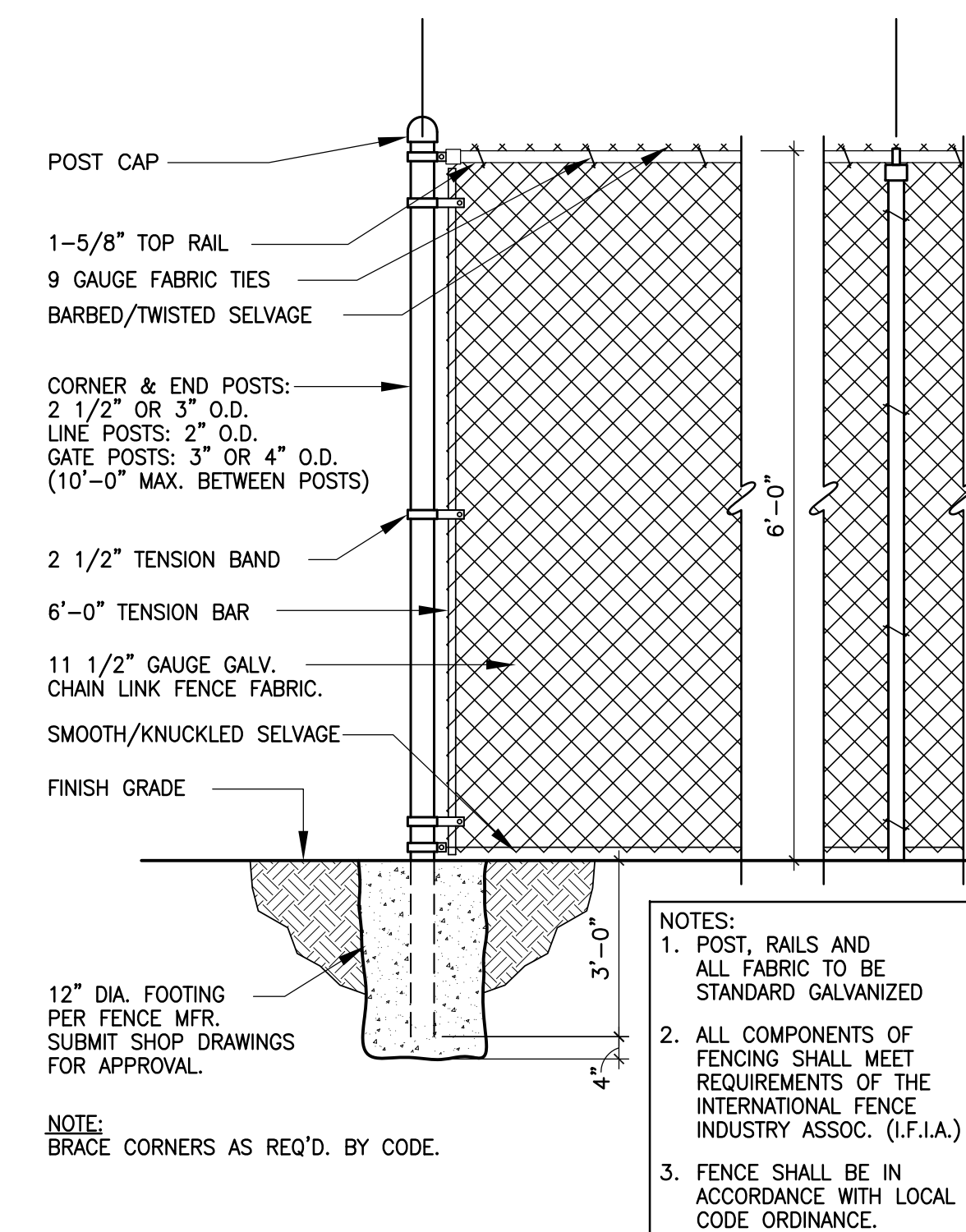
DESIGN/BUILD - GENERAL CONSTRUCTION
 PH: (888) 863-8004 | LIC: ACE0000084 #A43600084
 1461 KINETIC ROAD, LAKE PARK, FL 32903-8911

PROPOSED FACILITY RENOVATION FOR
BOBCAT
 TREASURE COAST
 4405 PROSPERITY DR, FORT PIERCE, FL 34981

ALEJANDRA MOLINA-JACKSON
 LICENSE # AR96626
 DATE 11-25-20
 SCALE AS SHOWN
 DRAWN -
 JOB 20-000035
 SHEET NAME
 PROPOSED SITE PLAN
 SHEET # AS-001



- NOTES:**
1. THE MINIMUM WALL THICKNESS OF THE PIPE SHALL BE 0.188"
 2. ALL POST SHALL HAVE 2 COATS OF PRIMER AND 2 COAT OF YELLOW TOP COAT. U.N.O.
 3. THE PRIMER COAT SHALL MEET THE REQUIREMENTS OF FDOT 971-5.
 4. ALL CONCRETE SHALL BE FDOT CLASS 1.

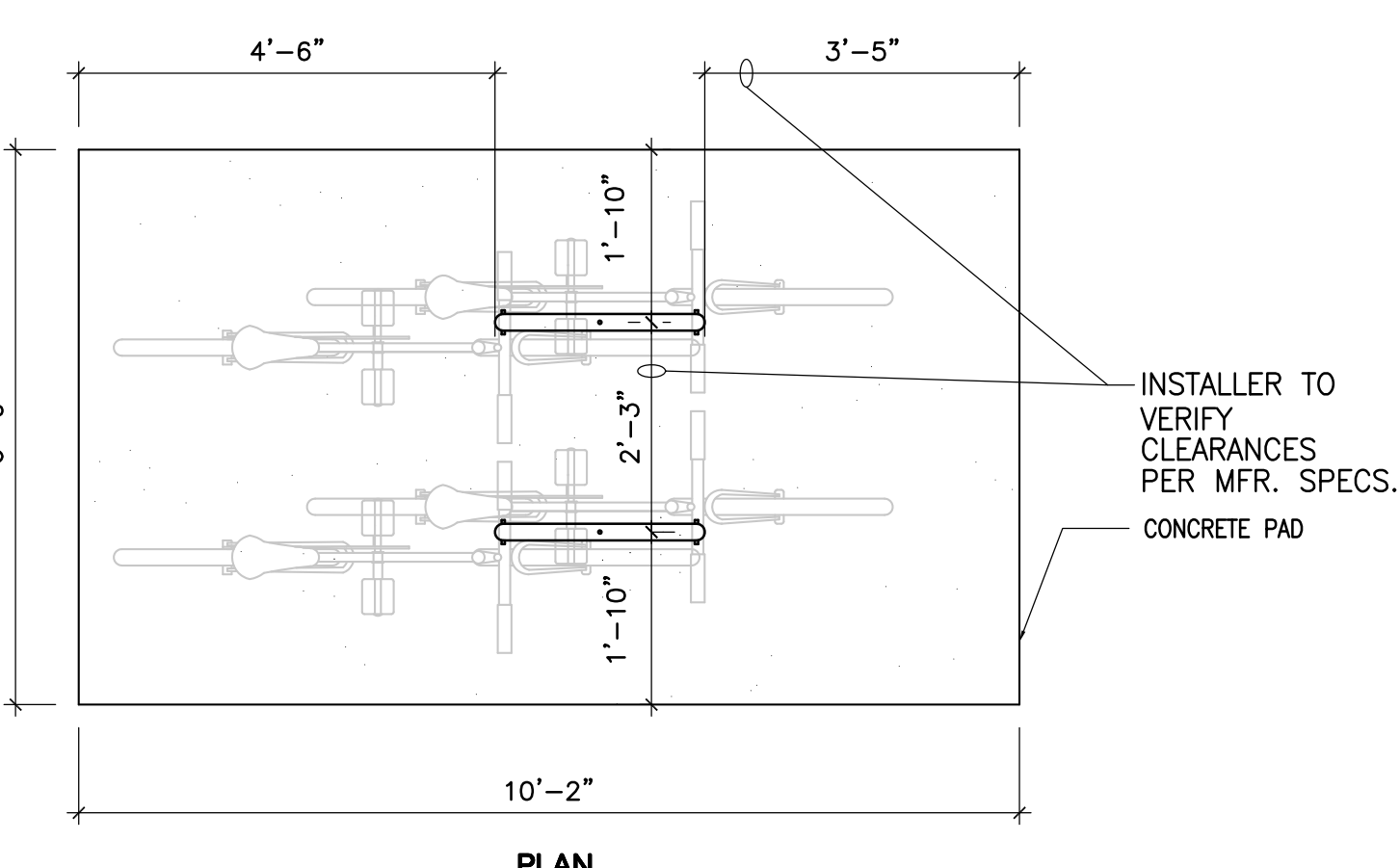
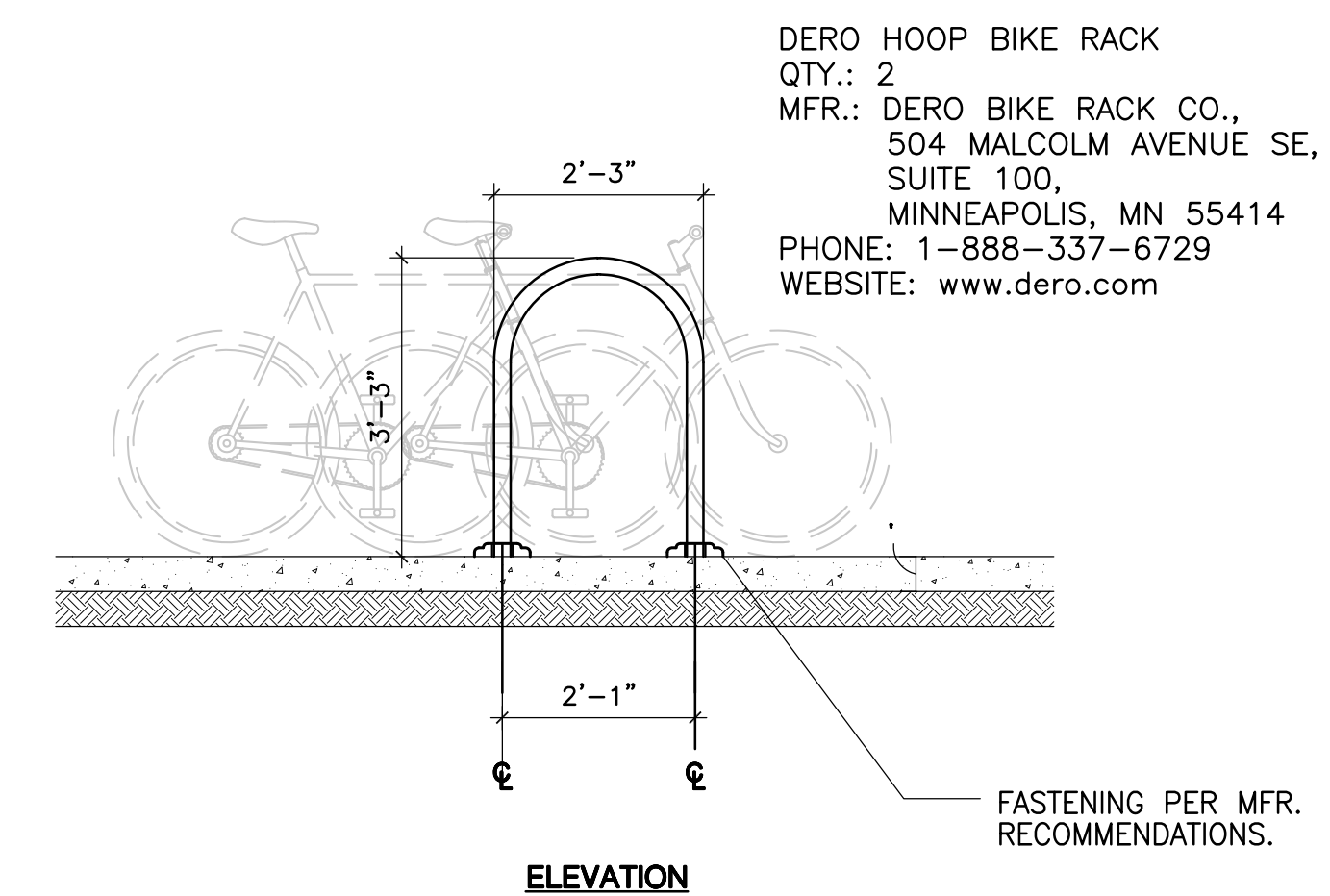


- NOTES:**
1. POST, RAILS AND ALL FABRIC TO BE STANDARD GALVANIZED
 2. ALL COMPONENTS OF FENCING SHALL MEET REQUIREMENTS OF THE INTERNATIONAL FENCE INDUSTRY ASSOC. (I.F.I.A.)
 3. FENCE SHALL BE IN ACCORDANCE WITH LOCAL CODE ORDINANCE.

1 DUMPSTER ENCLOSURE DETAIL
SCALE: 3/4"=1'-0"

2 BOLLARD PROFILE DETAIL
SCALE: 3/4"=1'-0"

3 CHAIN LINK FENCE DETAIL
SCALE: 3/4"=1'-0"



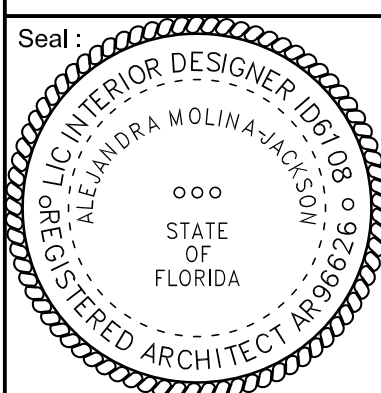
4 BIKE RACK DETAIL
SCALE: 1/2"=1'-0"

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REVISIONS

NO.	DESCRIPTION

PROPOSED FACILITY RENOVATION FOR BOBCAT TREASURE COAST
4405 PROSPERITY DR, FORT PIERCE, FL 34981



ALEJANDRA MOLINA-JACKSON
LICENSE #: AR96626
DATE: 11-25-20
SCALE: AS SHOWN
DRAWN: -
JOB: 20-000035
SHEET NAME: SITE DETAILS

SHEET #: AS-002

PLUMBING FIXTURES SCHEDULE REQUIRED PER PLUMBING CODE TABLE 403.1

LEVEL	OCC. TYPE	OCCUPANTS	WC REQUIRED	WC/URINAL PROVIDED	LAVATORIES REQUIRED	LAVATORIES PROVIDED	D.F. REQUIRED/PROVIDED	S. SINK REQUIRED/PROVIDED
1ST	MERCANTILE M	51	1 PER 500 = 1 MEN:1 WOMEN:1	WOMEN: 1 MEN: 1URINAL 1	1 PER 750 = 1MEN:1 WOMEN:1	MEN:1 WOMEN:1	1 PER 1000=1 / PROV=1	REQUIRED=1 PROV=1

CODE INFORMATION TABLE

KEY NAME	FBC	REQUIRED/ALLOWED	NFPA101	PROVIDED/CLASSIFICATION	COMMENTS
1. OCCUPANCY CLASSIFICATION	FBC TABLE 602	M = 0HR		PROVIDED 0HR	
2. HEIGHT AND AREA	FBC TABLE 1020.1	NON-SPRINKLERED: 0 HR		PROVIDED 0HR	
3. ALLOWABLE AREA	CHAPTER 3 SEC 309	MERCANTILE		MERCANTILE	
4. SEPARATION OF OCCUPANCIES	TABLE 604.3	NON-SPRINKLERED TYPE IIB - M. MAX HEIGHT 55'-0"		23'-1 1/2"	
5. CONSTRUCTION TYPE	SEC 504.4	NON-SPRINKLERED -TYPE IIB. M. 2 STORY		1 STORIES	
6. EGRESS WIDTH PER OCCUPANT	SEC 506	NON-SPRINKLERED TYPE IIB M. 12,500 SF		6,640 SF	
7. EXIT ACCESS TRAVEL DISTANCE	508.4	M = 0HR		0HR	
8. COMMON PATH OF EGRESS	TABLE 601	II B		II B	
9. DEAD ENDS CORRIDORS	SEC 1005.1	51X0.2= 10.2"	32" MIN.	33"(X4) + 66"	
10. NUMBER OF EXITS AND EXIT ACCESS DOORWAYS	TABLE 1017.2	NON-SPRINKLERED M:200 FEET	200 FEET	<200"	
	FBC 1006.2.1	M: 75 FEET	75 FEET	<75"	
	FBC 1020.4	NON-SPRINKLERED M=20 FEET	20 FEET	<20"	
	FBC TABLE 1006.3.2	2 EXIT	2 EXIT	4 EXIT	

PER FBC TABLE 601 FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:

BUILDING ELEMENT	TYPE IIB
STRUCTURAL FRAME	0HR
BEARING WALLS	0HR
EXTERIOR PARTITIONS	0HR
NONBEARING WALLS AND PARTITIONS EXTERIOR	0HR
NONBEARING WALLS AND PARTITIONS INTERIOR	0HR
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0HR
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0HR

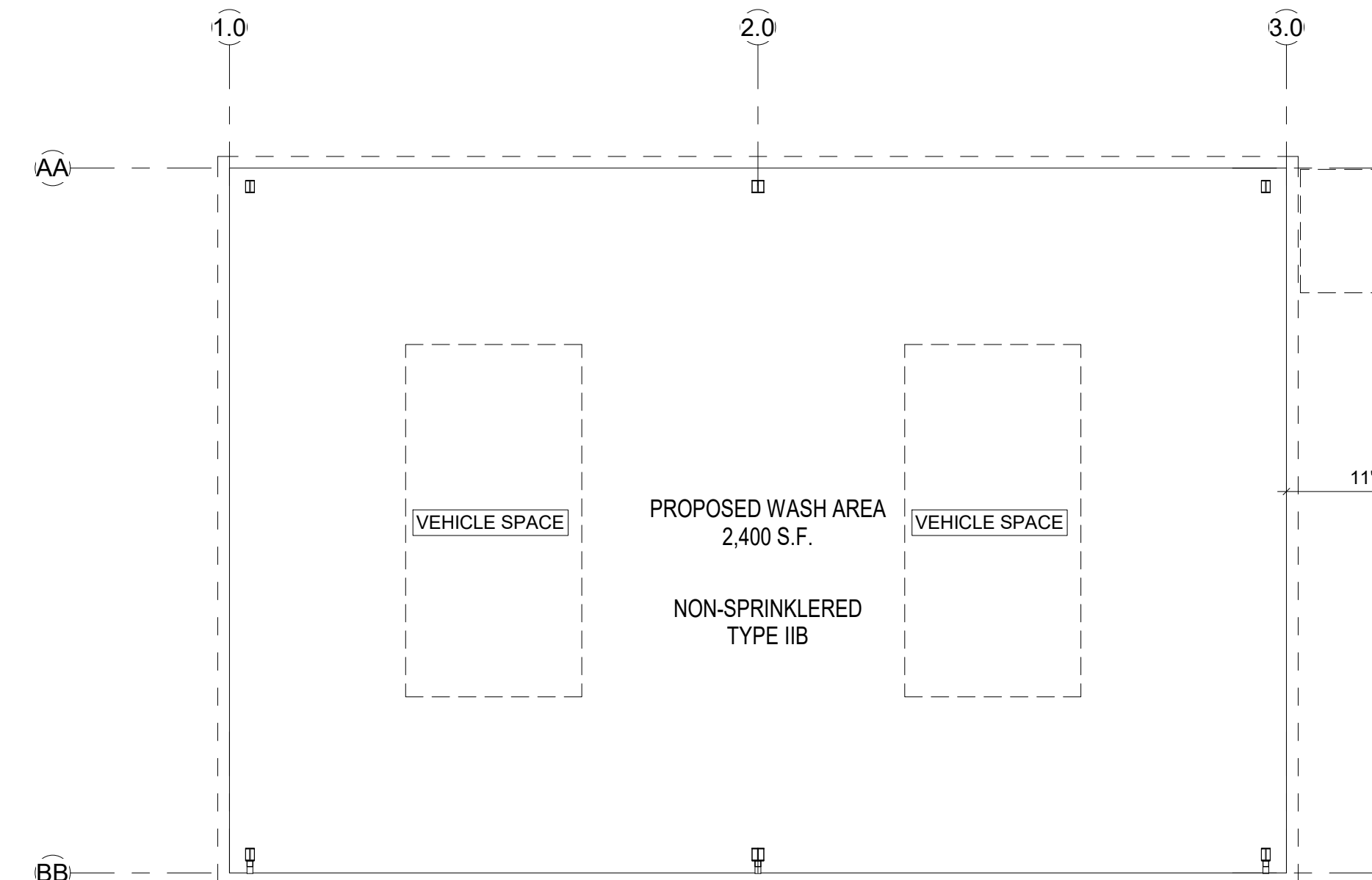
REQUIRED EXTINGUISHERS:

75' MAXIMUM DISTANCE
NOTE: SEE FLOOR PLANS FOR LOCATIONS.
GROSS 1ST FLOOR AREA 1 PER
F. E. SHALL COMPLY WITH N.F.P.A.-10
F. E. MOUNTING HEIGHT @48" A.F.F. (TYP)

GENERAL LIFE SAFETY NOTES:

- FLOOR SURFACE: WALKING SURFACES SHALL BE SLIP RESISTANT UNDER FORESEEABLE CONDITIONS. THE WALKING SURFACE OF EACH ELEMENT IN THE MEANS OF EGRESS SHALL BE UNIFORMLY SLIP RESISTANT ALONG THE NATURAL PATH OF TRAVEL.
- REQUIRED MEANS OF EGRESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, DEMOLITION, REMODELING OR ALTERATION.
- ALL DOORS IN THE MEANS OF EGRESS SHALL BE SINGLE ACTION RELEASE AND SHALL NOT REQUIRE THE USE OF A KEY, TOOL, OR SPECIAL KNOWLEDGE.
- ALL INTERIOR FINISHES SHALL COMPLY WITH THE APPLICABLE CHAPTER(S) AND SECTIONS OF NFPA 101, AND FBC CHAPTER 8.

2 CODE INFORMATION
1 1/2" = 1'-0"



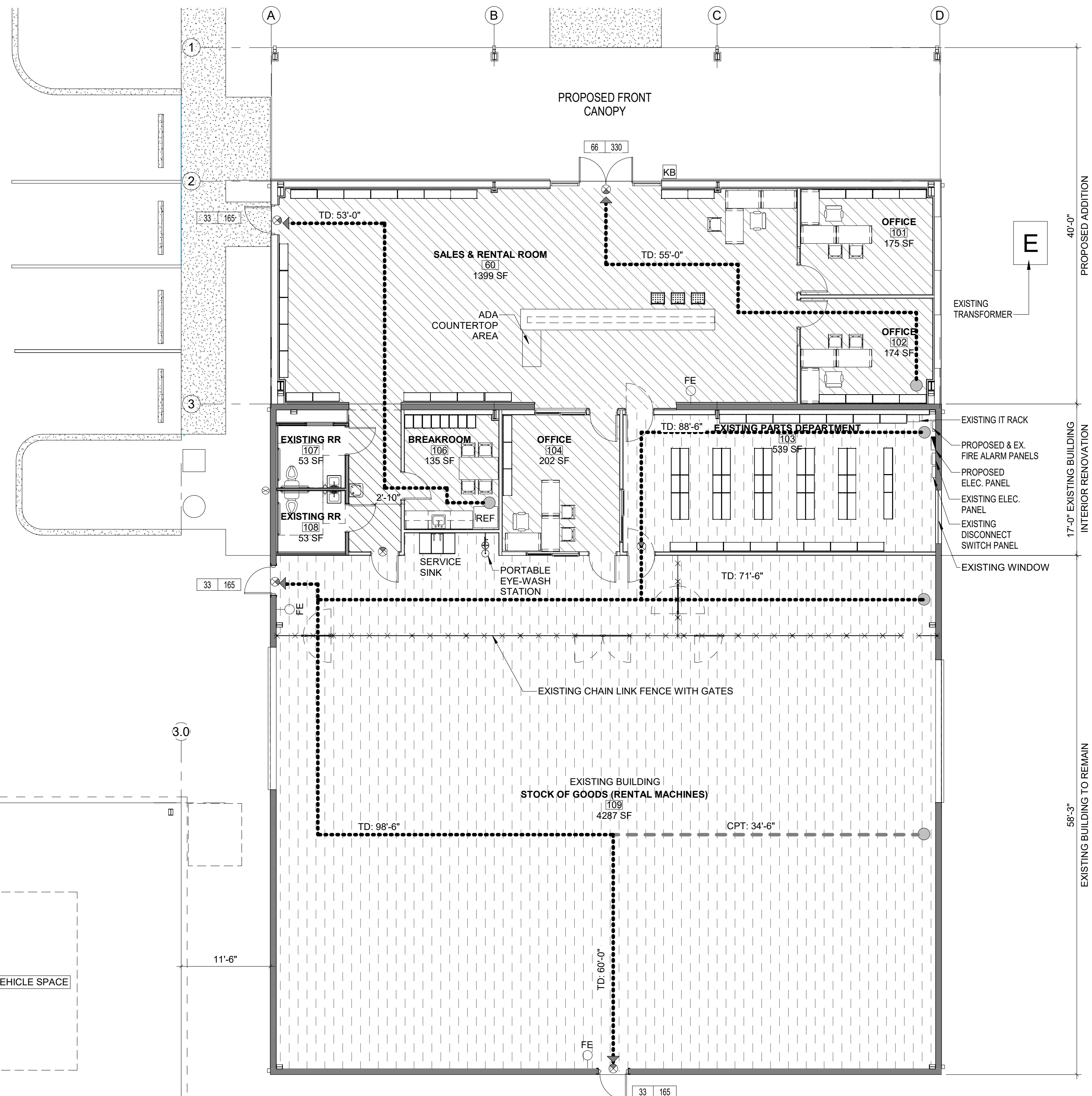
1 LIFE SAFETY FIRST FLOOR PLAN
1/8" = 1'-0"

OCCUPANCY CALCULATION

NAME	NUMBER	DEPARTMENT	AREA	OCCUPANT - LS CODE	OCCUPANCY
MERCANTILE					
SALES & RENTAL ROOM	60	MERCANTILE	1399 SF	60	23
OFFICE	101	MERCANTILE	175 SF	60	3
OFFICE	102	MERCANTILE	174 SF	60	3
OFFICE	104	MERCANTILE	202 SF	60	3
BREAKROOM	106	MERCANTILE	135 SF	60	2
MERCANTILE:STOCK OF GOODS					
EXISTING PARTS DEPARTMENT	103	MERCANTILE:STOCK OF GOODS	539 SF	300	2
STOCK OF GOODS (RENTAL MACHINES)	109	MERCANTILE:STOCK OF GOODS	4287 SF	300	14
OCCUPANCY BY CODE					
TOTAL MERCANTILE OCCUPANCY:	34				
TOTAL MERCANTILE: STOCK OF GOODS OCCUPANCY:	16				
TOTAL : 50 OCCUPANTS					
OCCUPANCY BY CURRENT EMPLOYEES					
OFFICE: 3					
STOCK OF GOODS: 2					
BUILDING AREAS:					
- EXISTING BUILDING AREA					5,667 SF
- PROPOSED BUILDING ADDITION AREA					1,875 SF
- PROPOSED FRONT CANOPY					1,125 SF
- PROPOSED WASH AREA (NOT INCLUDED IN CALS)					2,400 SF
TOTAL NEW BUILDING AREA:					5,400 SF
TOTAL BUILDING AREA:					11,067 SF

OCCUPANCY

- MERCANTILE
- MERCANTILE:STOCK OF GOODS



GENERAL NOTES

- SEAL ALL OPENINGS AND PENETRATIONS TO RESIST THE MIGRATION OR PASSAGE OF SMOKE AND GASES.
- SPECIFIC EXCEPTIONS TO THE LISTED RATINGS MAY BE PERMITTED WHERE INDICATED.
- FIRE RESISTANT ASSEMBLIES, MATERIALS, PROPERTIES AND THICKNESS REQUIRED, SHALL COMPLY WITH THOSE WHICH HAVE SUCCESSFULLY BEEN PERFORMED UNDER TESTS MADE BY A RECOGNIZED LABORATORY PER ASTM E119 OR BASED ON CALCULATIONS PERMITTED BY THE FBC AND BUILDING OFFICIAL.
- SEE REFLECTED CEILING PLANS FOR REMAINDER OF LIGHTING
- INSULATION DESIGN VALUES:
- EXTERIOR WALL ASSEMBLY R14.
- ROOF PANEL INSULATION: R-30 AT OFFICE AREA

LIFE SAFETY LEGEND

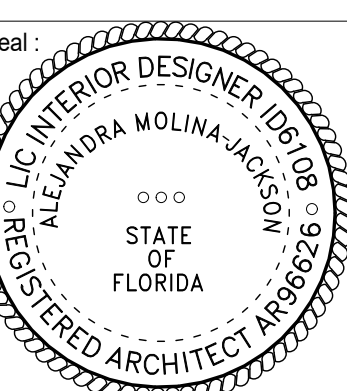
- ROOM NAME:**
0000 ROOM NAME
150 SF ROOM NUMBER
150 SF ROOM S.F.
- DOOR TAG:**
FR DOOR FIRE RATING IN MINUTES
- FIRE EXTINGUISHERS:**
FEC FIRE EXTINGUISHER CABINET WITH CLASS 2-A-10B-C EXTINGUISHER UNLESS OTHERWISE INDICATED OR SPECIFIED. LOCATE SUCH THAT ANY TRAVEL DISTANCE TO THE CLOSEST UNIT DOES NOT EXCEED 75' UNLESS OTHERWISE INDICATED.
FEC/B FIRE EXTINGUISHER CABINET WITH CLASS 2-A-10B-C EXTINGUISHER AND FIRE BLANKET. LOCATE SUCH THAT ANY TRAVEL DISTANCE TO THE CLOSEST UNIT DOES NOT EXCEED 50' UNLESS OTHERWISE INDICATED.
FEC/K FIRE EXTINGUISHER CABINET WITH CLASS K FIRE EXTINGUISHER AND FIRE BLANKET. LOCATE SUCH THAT ANY TRAVEL DISTANCE TO THE CLOSEST UNIT DOES NOT EXCEED 75' UNLESS OTHERWISE INDICATED.
FE FIRE EXTINGUISHER ON WALL-MOUNTED BRACKET CLASS 2-A-10-B-C UNLESS OTHERWISE INDICATED OR SPECIFIED AS A, B, C OR K. LOCATE SUCH THAT ANY TRAVEL DISTANCE TO THE CLOSEST UNIT DOES NOT EXCEED 75' UNLESS OTHERWISE INDICATED.
- FIRE ALARM CONTROL PANEL:**
FACP FIRE ALARM CONTROL PANEL
FAAP FIRE ALARM ANNUNCIATOR PANEL
GMP GENERATOR MONITORING PANEL
FD FIRE DEPARTMENT ACCESS
- EGRESS:**
OPNG/ROCC CLEAR DOOR & EXIT OPENING PROVIDED
PROVIDED EGRESS CAPACITY OF DOORS & EXIT (# OF OCCUPANTS)
TD: # DISTANCE IN FEET FROM AN OCCUPIABLE POINT 12" FROM WALL TO THE NEAREST EXIST
- MEANS OF EGRESS:**
P PRIMARY MEANS OF EGRESS (NOT SHOWN FOR SPACES WITH ONLY A PRIMARY EGRESS REQUIREMENT)
S SECONDARY MEANS OF EGRESS, IF REQUIRED
L LIGHTED EXIT SIGN - SINGLE FACED DARKEND AREA INDICATES FACE OF SIGN VIEWED.
D LIGHTED EXIT SIGN - DOUBLE FACED DARKEND AREA INDICATES FACE OF SIGN VIEWED
LD LIGHTED DIRECTIONAL EXIT SIGN - SINGLE FACED ARROW INDICATES DIRECTION(S) TO EXIT
LD LIGHTED DIRECTIONAL EXIT SIGN - DOUBLE FACED ARROW INDICATES DIRECTION(S) TO EXIT
LW LIGHTED WALL MOUNTED EXIT SIGN - SINGLE FACED DARKENED AREA INDICATES FACE OF SIGN VIEWED
- EMERGENCY DUAL HEAD LIGHTING UNIT WITH BATTERY PACK**
- 2'X4' LAY-IN EMERGENCY FIXTURE - SEE ELECTRICAL PLANS FOR EXACT LOCATIONS**
- NO EXIT SIGN - WALL MOUNTED - SEE ELECTRICAL PLANS FOR EXACT LOCATIONS**
- EMERGENCY FIXTURE - SEE ELECTRICAL PLANS FOR EXACT LOCATIONS**
- SURFACE MOUNTED EMERGENCY FIXTURE - SEE ELECTRICAL PLANS FOR EXACT LOCATIONS**
- SUSPENDED EMERGENCY FIXTURE - SEE ELECTRICAL PLANS FOR EXACT LOCATIONS**
- SUSPENDED PENDANT EMERGENCY FIXTURE - SEE ELECTRICAL PLANS FOR EXACT LOCATIONS**
- FIRE ALARM & PROTECTION DEVICES (VERIFY LOCATIONS WITH ELECTRICAL DRAWINGS)**
H FIRE ALARM HORN
L FIRE ALARM STROBE
F FIRE ALARM PULL STATION
A ANSUL FIRE PROTECTION SYSTEM PULL STATION
P MASTER CONTROL SWITCH
HD HEAT DETECTOR
SD SMOKE DETECTOR
KB KNOX BOX
- GRAPHIC LEGEND:**
NON-FIRE RATED
1 HR FIRE RATED HAZARD SEPARATION ALL DOORS AND PENETRATIONS HORIZONTALLY THRU SEPARATION SHALL HAVE A 45-MINUTE FIRE RESISTANCE RATING EXCEPT AT STAIRS& SHAFTS. ALL DOORS AND PENETRATIONS INTO STAIRS AND SHAFTS SHALL HAVE A 60-MINUTE FIRE RESISTANCE RATING. ADDITIONAL PENETRATION OF STAIR SHAFTS IS NOT PERMITTED EXCEPT AS SPECIFICALLY EXCEPTED
T.D. - TRAVEL DISTANCE FROM MOST REMOTE POINT
C.P. - COMMON PATH OF TRAVEL



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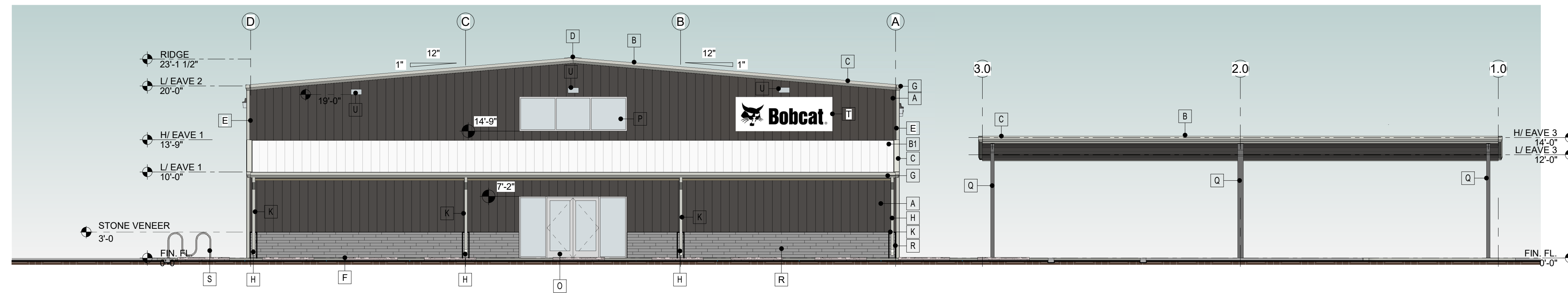
NO.	REVISION	DATE

PROPOSED ADDITION AND NEW WASH AREA
BOBCAT
TREASURE COAST
4405 PROSPERITY DRIVE, FORT PIERCE, FLORIDA 34981

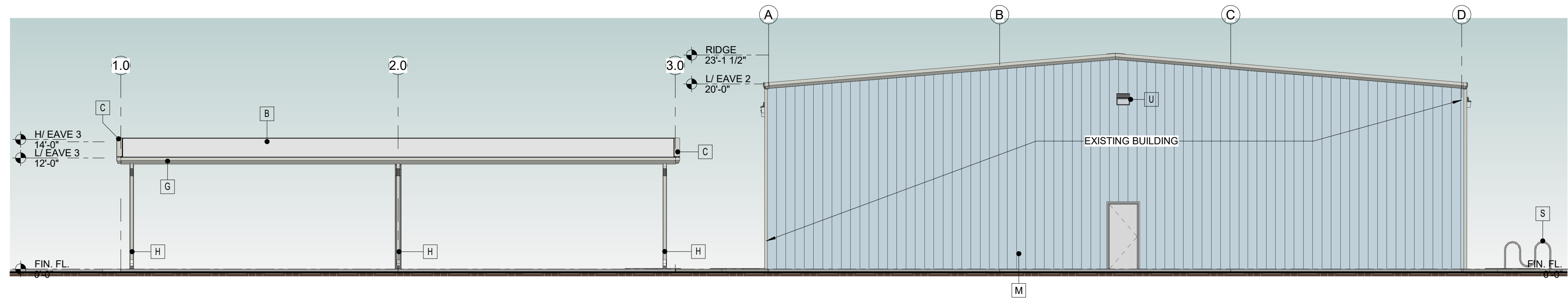


NAME: ALEJANDRA MOLINA-JACKSON
LICENSE #: AR96626
DATE: 11/25/2020
SCALE: As indicated
DRAWN: AMJ
JOB: 20-000035
SHEET TITLE: LIFE SAFETY PLAN - CODE INFORMATION
SHEET #:

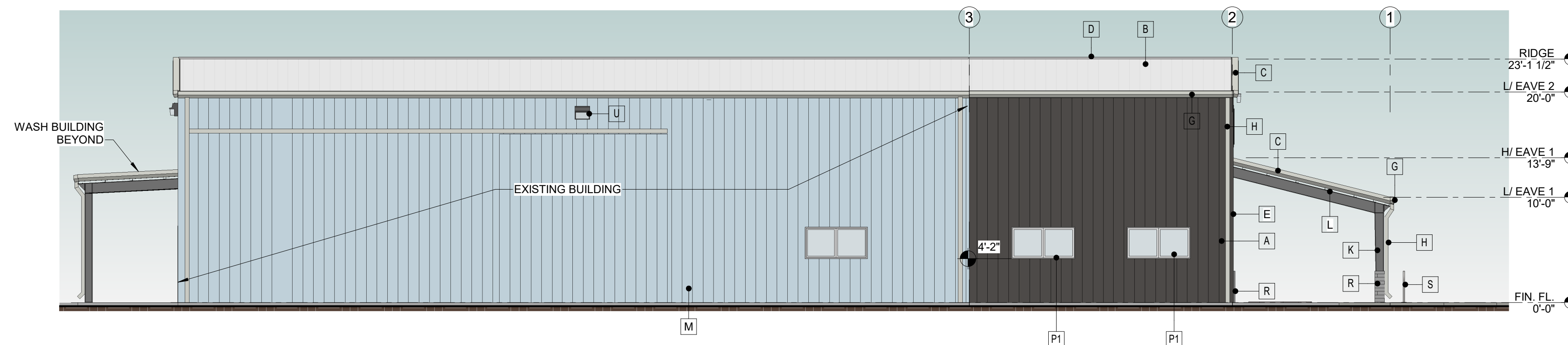
A-001



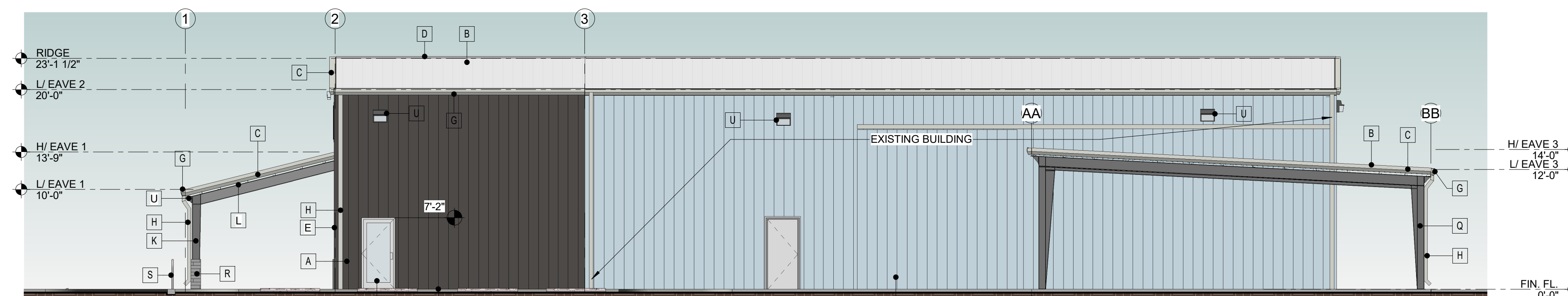
1 NORTH BUILDING ELEVATION
1/8" = 1'-0"



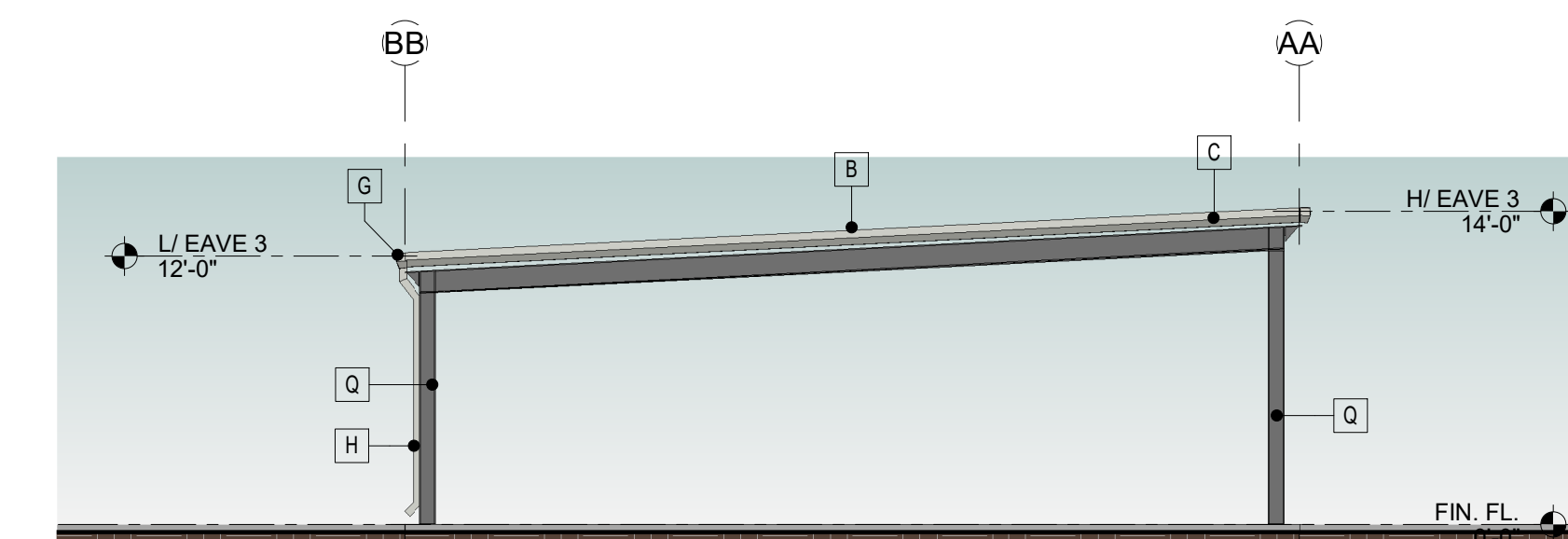
2 SOUTH BUILDING ELEVATION
1/8" = 1'-0"



3 EAST BUILDING ELEVATION
1/8" = 1'-0"



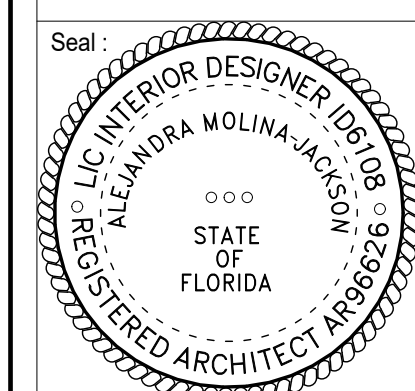
4 WEST BUILDING ELEVATION
1/8" = 1'-0"



5 EAST WASH AREA ELEVATION
1/8" = 1'-0"

MATERIAL AND COLOR LEGEND			
MARK	DESCRIPTION	MATERIAL	COLOR
A	PBR WALL PANEL	METAL - 26 GA.	"CHARCOAL GRAY" MFR. SIG-200 FINISH
B	PBR ROOF PANEL	METAL - 26 GA.	"SOLAR WHITE" MFR. SIG-200 FINISH
B1	PBR ROOF PANEL	METAL - 26 GA.	GALVALUME PLUS
C	RAKE TRIM	METAL	"POLAR WHITE" MFR. SIG-200 FINISH
D	RIDGE FLASHING	METAL - 26 GA.	"SOLAR WHITE" MFR. SIG-200 FINISH
E	CORNER TRIM	METAL	"CHARCOAL GRAY" MFR. SIG-200 FINISH
F	BASE TRIM	ALUMINUM	"POLAR WHITE" MFR. SIG-200 FINISH
G	GUTTERS	METAL	"POLAR WHITE" MFR. SIG-200 FINISH
H	DOWNSPOUTS	METAL	"POLAR WHITE" MFR. SIG-200 FINISH
I	METAL WALK DOOR	METAL	MFR. STANDARD WHITE
J	CLERESTORY WINDOWS 4x12'-6"	STEEL	MFR. STANDARD WHITE
K	EXPOSED STEEL STRUCTURE	STEEL	MFR. GRAY PRIMER, PAINTED BY G.C. CHARCOAL GRAY
L	PBR SOFFIT PANEL	METAL	"POLAR WHITE" MFR. SIG-200 FINISH
M	EXISTING WALL PANELS	-	"LIGHT BLUE" EXISTING TO REMAIN
N	-	-	-
O	STOREFRONT FRAME / DOOR	GLASS/ALUM.	MFR. STD. GRAY TINT GLASS / CLEAR ANODIZED FRAME
P	CLERESTORY WINDOW 4x12'-6"	GLASS/ALUM.	MFR. STD. GRAY TINT GLASS / CLEAR ANODIZED FRAME
P1	IMPACT RATED WINDOWS	GLASS/ALUM.	MFR. STD. GRAY TINT GLASS / CLEAR ANODIZED FRAME
Q	EXPOSED STEEL STRUCTURE: PRIMARY STRUCTURE IS GALVANIZED & SECONDARY IS PRE-GALVANIZED	STEEL	PRIMARY STRUCTURE IS GALVANIZED & SECONDARY IS PRE-GALVANIZED
R	STONE VENEER	STONE	LIGHT GRAY
S	BIKE RACK	GALV.	GALVANIZED
T	SIGNAGE N.I.C.	-	-
U	WALLPACK LIGHTING	-	PER SITE PHOTOMETRICS, SEE PH-001

PROPOSED ADDITION AND NEW WASH AREA
BOBCAT
TREASURE COAST
4405 PROSPERITY DRIVE, FORT PIERCE, FLORIDA 34981



NAME: ALEJANDRA MOLINA-JACKSON
LICENSE #: AR96626
DATE: 11/25/2020
SCALE: As Indicated
DRAWN:
JOB: 20-000035
SHEET TITLE: EXTERIOR ELEVATIONS
SHEET #:

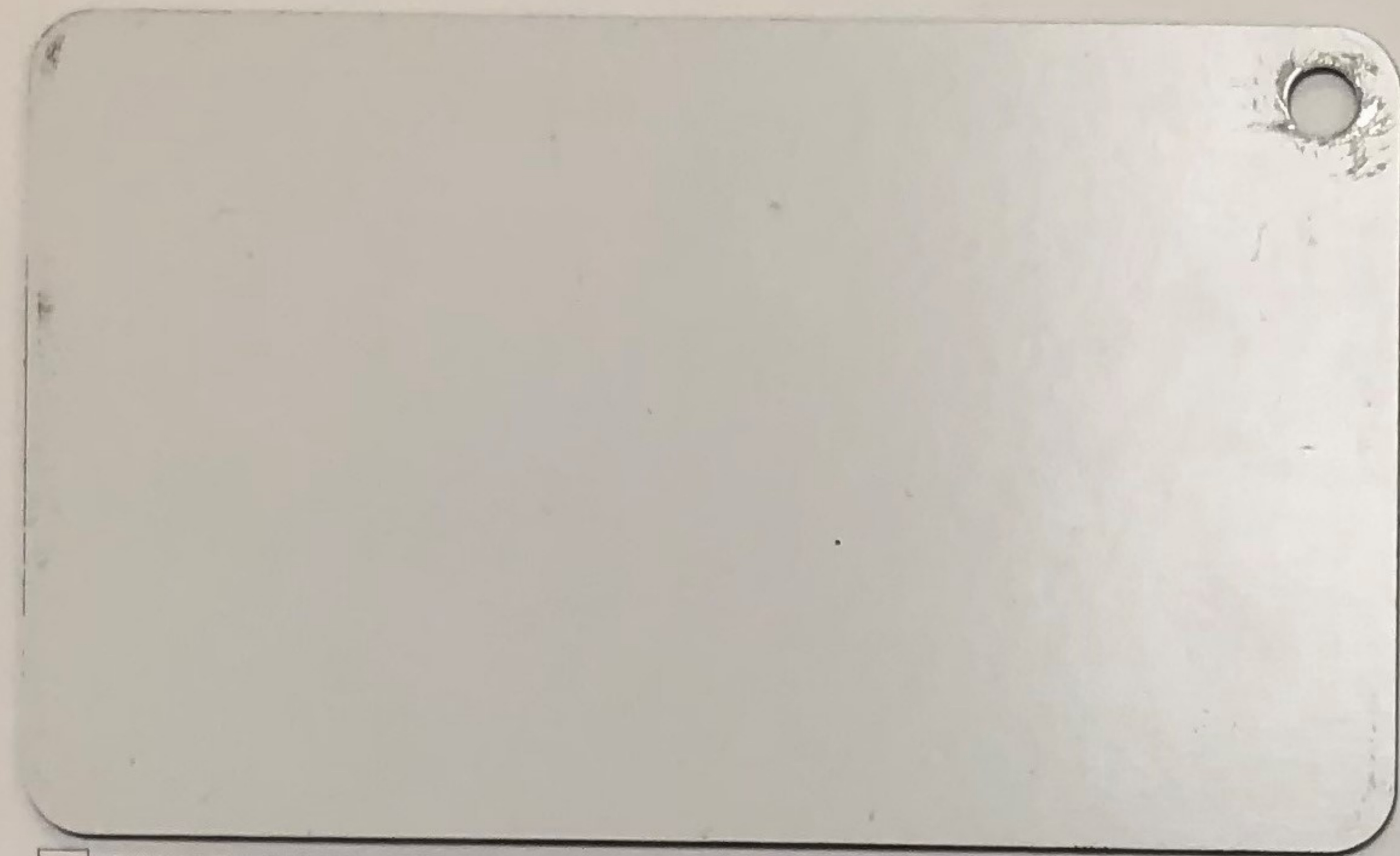
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AHRENS
DESIGNBUILD • GENERAL CONSTRUCTION
PH: (888) 983-9004 LIC: #BC000615 #A22000694
1461 KINETIC ROAD, LAKE PARK, FL 33403-1911

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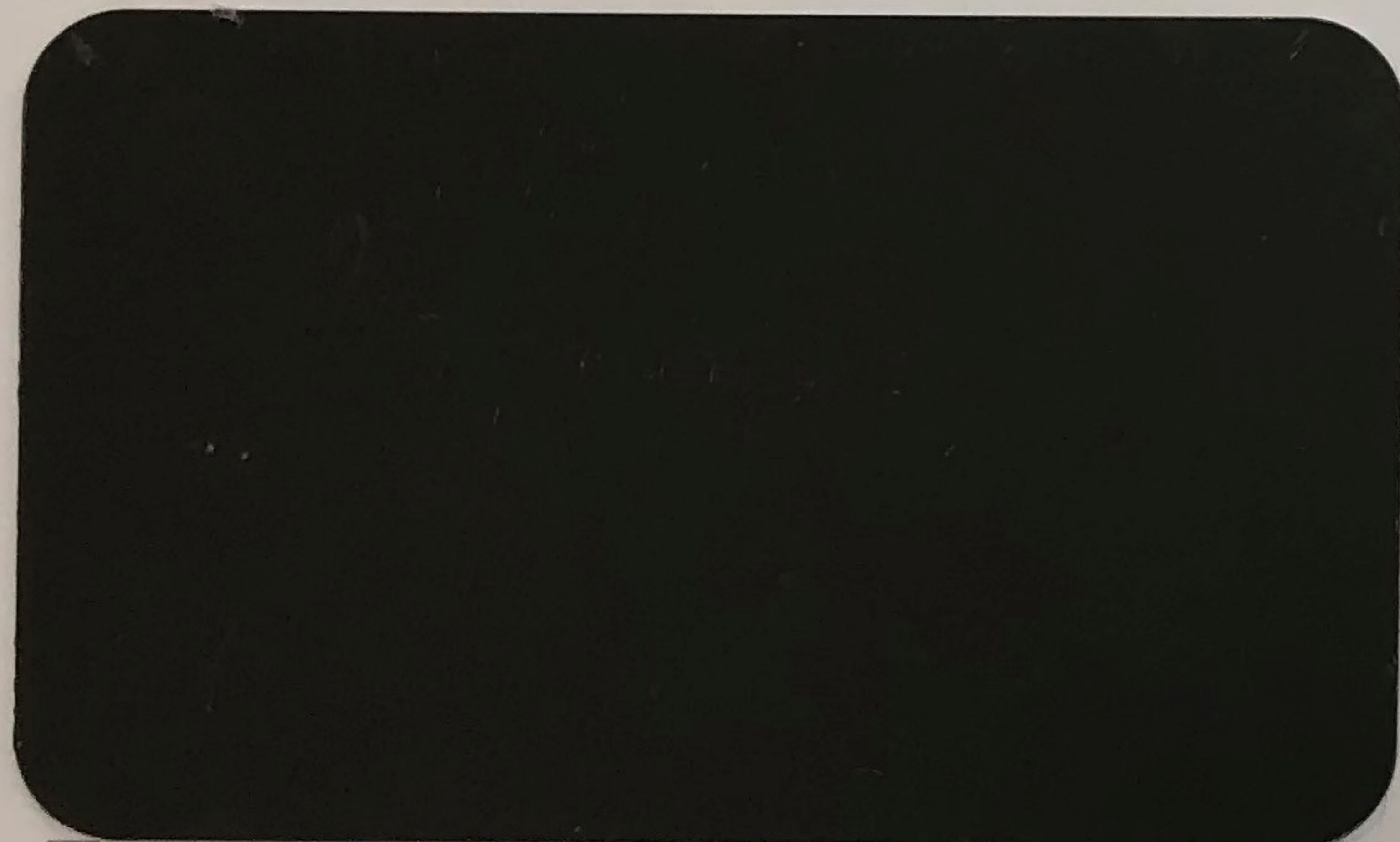
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B ROOF PANELS - SOLAR WHITE

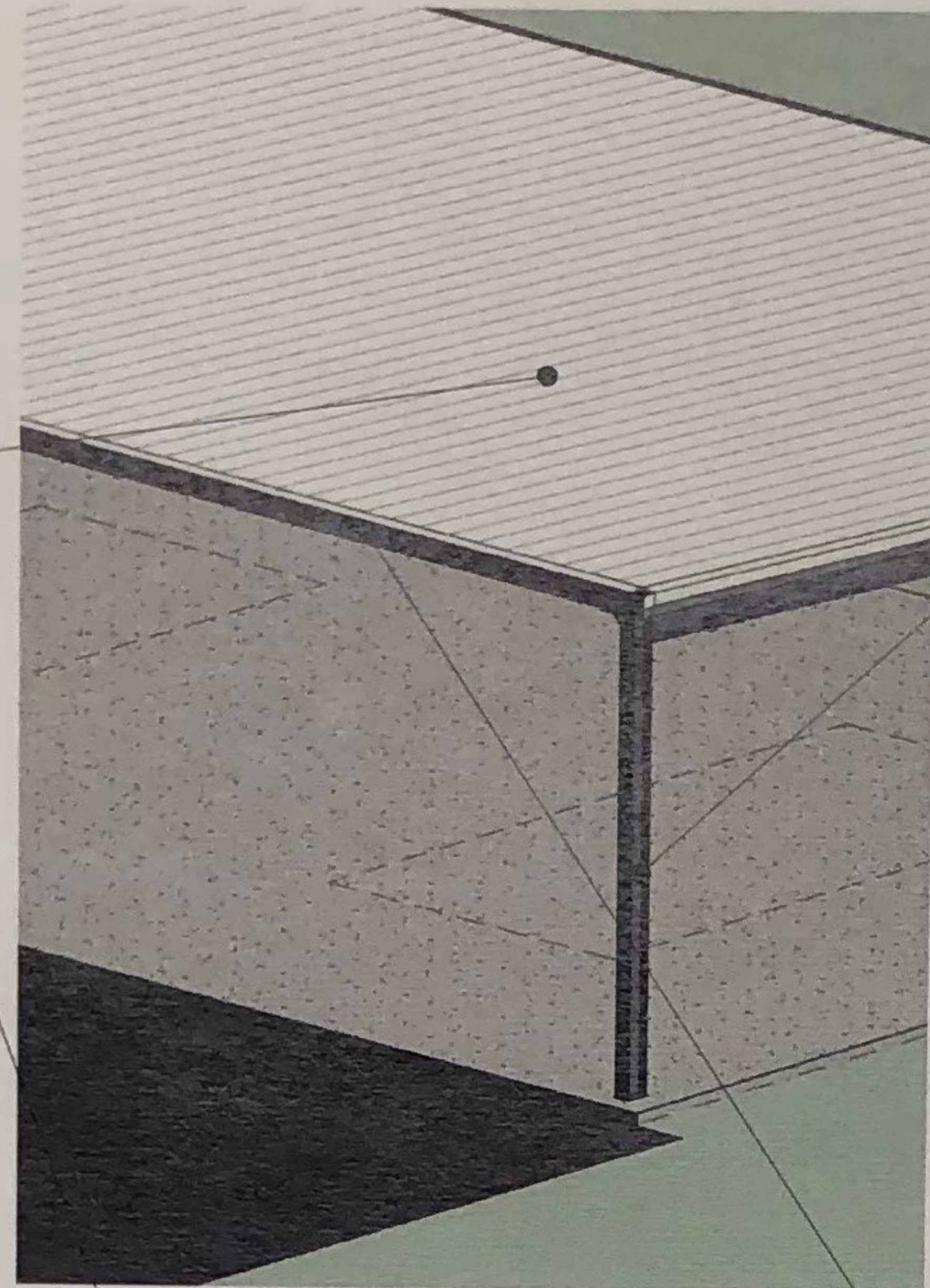


B1 ROOF PANELS FRONT CANOPY- GALVALUME PLUS

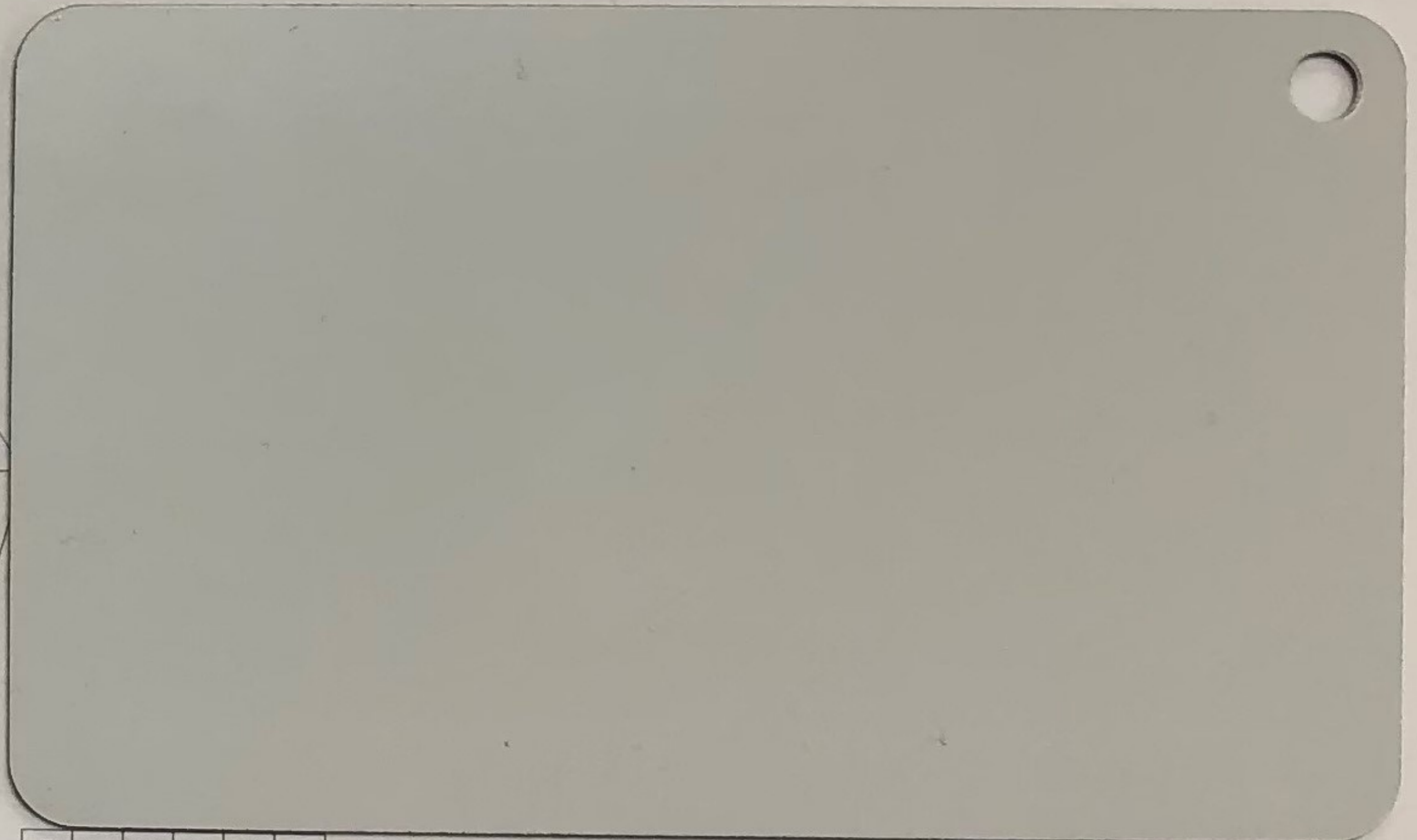


A WALL PANELS - CHARCOAL GRAY

K EXPOSED STRUCTURE - CHARCOAL GRAY



Q WASH AREA - EXPOSED STRUCTURE - PRE-GALVANIZED & GALVANIZED



C E F G H L TRIMS - POLAR WHITE



R LIGHT GRAY STONE VENEER



M EXISTING WALL PANELS - LIGHT BLUE

**TREASURE COAST
BOBCAT**

4405 PROSPERITY DRIVE, FORT PIERCE, FLORIDA 34981

NAME: AJEJANDRA
MOLINA-JACKSON
LICENSE #: AR96626

DATE: 11/25/2020

DRAWN:

JOB: 20-000035

SHEET TITLE:

COLOR BOARD

SHEET #:

11X17

Bobcat Treasure Coast

4405 Prosperity Drive
Fort Pierce, Florida

TRAFFIC STATEMENT

prepared for:
Ahrens Companies

KBP CONSULTING, INC.

December 2020

Bobcat Treasure Coast

4405 Prosperity Drive

Fort Pierce, Florida

Traffic Statement

December 2020

Prepared for:
Ahrens Companies

Prepared by:
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8400 N. University Drive, Suite 309
Tamarac, Florida 33321
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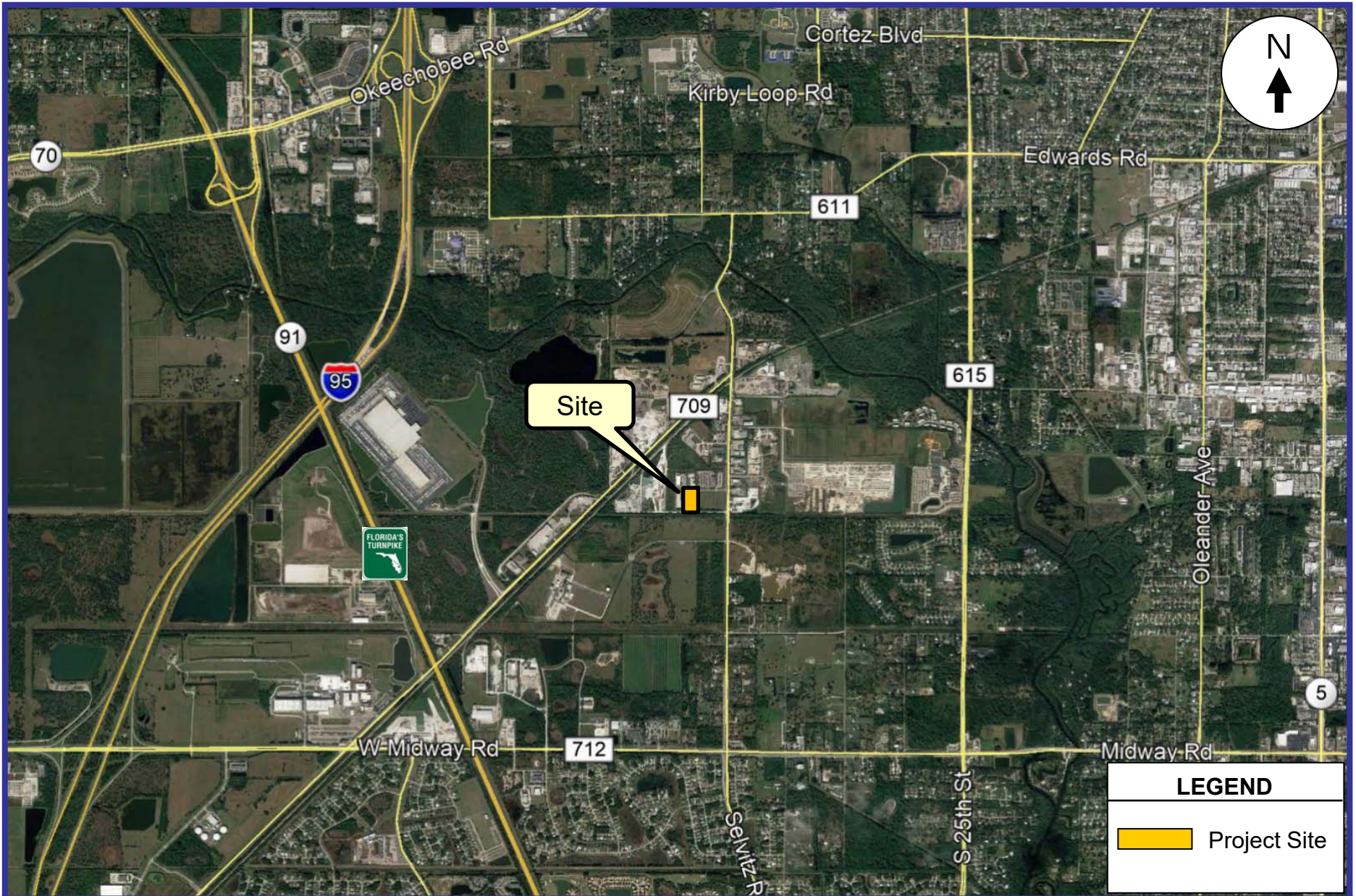
INTRODUCTION

There is a parcel of land located on the south side of Prosperity Drive approximately 700 feet to the west of Selvitz Road in Fort Pierce, St. Lucie County, Florida. More specifically the subject parcel is located at 4405 Prosperity Drive and the St. Lucie County Parcel ID Number is 2431-506-0005-000-8. This site and the existing industrial building are currently occupied by Bobcat Treasure Coast (Smith Brothers Contracting Equipment, Inc.). The location of this project site is illustrated in Figure 1 on the following page.

KBP Consulting, Inc. has been retained by the Ahrens Companies to prepare a traffic statement in connection with the proposed expansion the existing Bobcat Treasure Coast facilities and operations at this location. This study addresses the trip generation characteristics of the existing and proposed facilities and the projected turning movement volumes at the project driveway on Prosperity Drive.

This traffic statement is divided into four (4) sections, as listed below:

1. Inventory
2. Trip Generation
3. Trip Distribution and Driveway Assignment
4. Summary & Conclusions



KBP
CONSULTING, INC.

Project Location Map

FIGURE 1
Bobcat Treasure Coast
Fort Pierce, Florida

INVENTORY

Existing Land Use and Access

The land area of the subject site is approximately 1.958 acres (+/- 83,500 square feet) and the current zoning is Light Industrial (I-1). There is one (1) existing metal building on site with a floor area of approximately 5,667 square feet and vehicular access is provided by one (1) full access driveway on Prosperity Drive. As stated previously, the site is occupied by Bobcat Treasure Coast and the activities conducted at this site include sales, service, parts and rentals related to construction equipment.

Proposed Land Use and Access

The subject site will continue to be occupied by Bobcat Treasure Coast. The proposed plan for this site involves the expansion of the existing facilities to better serve the needs of their existing customers. The existing building will be expanded to the north to include an additional 1,875 square feet of indoor space. This area will accommodate the relocated customer service counter as well as new office and display areas. The proposed plan also includes a porch / canopy area (1,125 square feet) and an equipment wash area. The 40-foot by 60-foot equipment wash area (2,400 square feet) will be covered but not enclosed. The total resulting building area will be 11,067 square feet.

Vehicular access to the site will be improved by aligning their driveway with the existing driveway on the north side of Prosperity Drive. The width of the driveway serving Bobcat Treasure Coast will also be widened to 30 feet to better accommodate vehicles entering and exiting the site. The site will include 19 parking spaces, one (1) of which will be a handicap parking space, and a 12-foot by 35-foot loading area. A bicycle rack will also be located on the east side of the proposed porch / canopy area. Appendix A contains the preliminary site plan for the proposed development. Appendix B contains the proposed floor plan. And Appendix C contains the proposed exterior elevations.

Roadway System

Prosperity Drive provides direct access to the subject Bobcat Treasure Coast site. This roadway is a two-lane local facility that dead ends immediately west of the subject site. To the east, this roadway intersects with Selvitz Road. This roadway is a two-lane County roadway oriented generally in the north-south direction and extends from NW Floresta Drive to the south to Edwards Road to the north. In the area of Prosperity Drive, Selvitz Road is a three-lane section with one (1) northbound lane, one (1) southbound lane and a center two-way left-turn lane. The posted speed limit in this area is 40 miles per hour (mph).

TRIP GENERATION

A trip generation analysis has been conducted for the proposed development. The analysis was performed utilizing the trip generation rates and equations published in the Institute of Transportation Engineer’s (ITE) *Trip Generation Manual (10th Edition)*. The trip generation analysis was undertaken for daily, AM peak hour and PM peak hour conditions. According to the referenced ITE manual, the most appropriate land use category and corresponding trip generation equations for the existing and proposed development are as follows:

ITE Land Use #110 – General Light Industrial

- Weekday: $T = 3.79 (X) + 57.96$
where T = number of trips and X = 1,000 square feet of gross floor area
- AM Peak Hour: $Ln (T) = 0.74 Ln (X) + 0.39$ (88% in / 12% out)
- PM Peak Hour: $Ln (T) = 0.69 Ln (X) + 0.43$ (13% in / 87% out)

Utilizing the trip generation equations from the referenced ITE manual, a trip generation analysis was undertaken for the existing and proposed development on the subject site. The results of this effort are documented in Table 1 below. Relevant excerpts from the ITE manual are presented in Appendix D.

Table 1								
Trip Generation Summary								
Bobcat Treasure Coast - Fort Pierce, Florida								
Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
<i>Existing</i>								
General Light Industrial	5,667 SF	79	4	1	5	1	4	5
<i>Proposed</i>								
General Light Industrial	11,067 SF	100	8	1	9	1	7	8
Difference (Proposed - Existing)		21	4	0	4	0	3	3

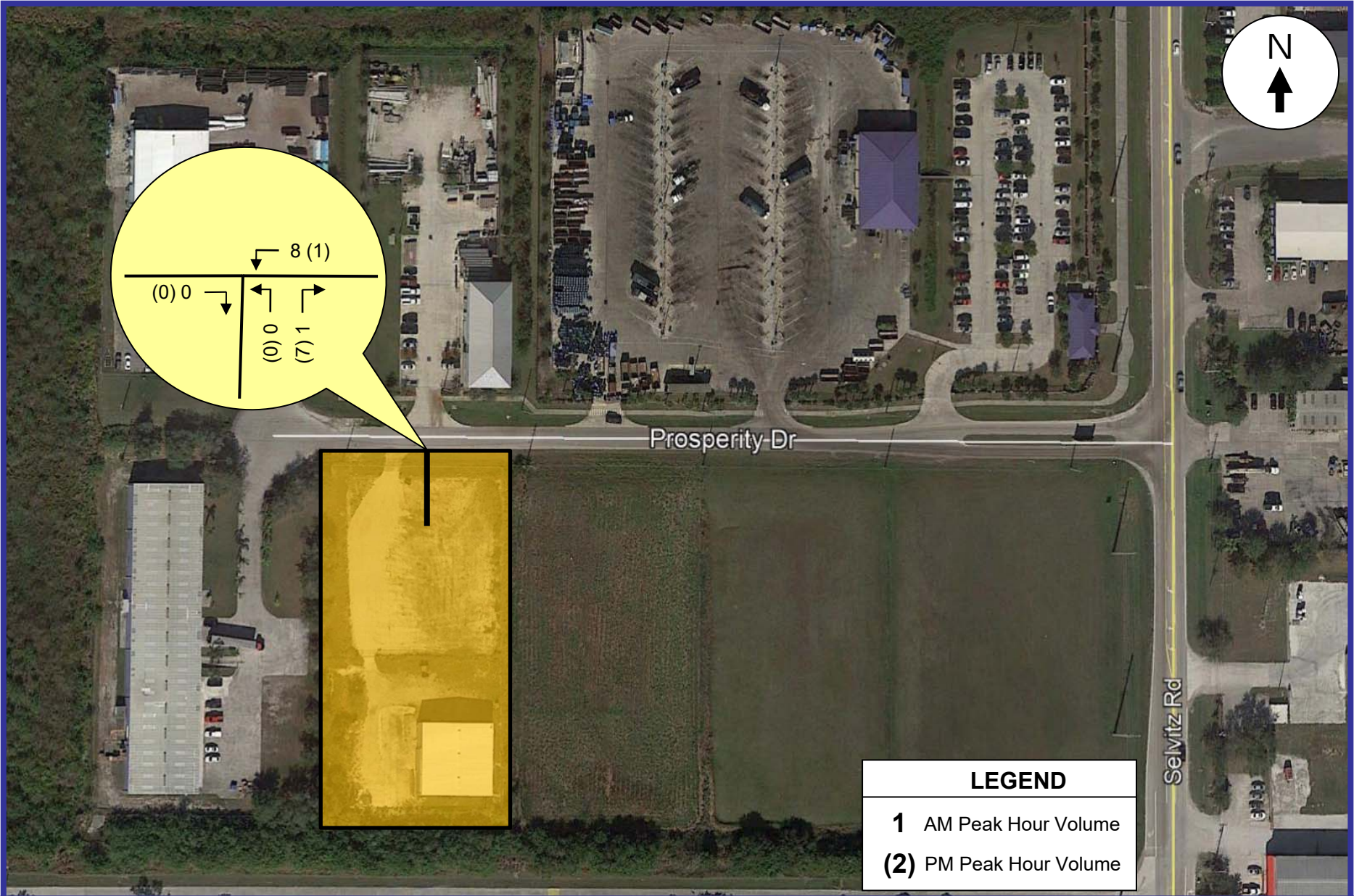
*Compiled by: KBP Consulting, Inc. (December 2020).
 Source: Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition).*

As indicated in Table 1, the proposed project is anticipated to generate 100 daily vehicle trips, nine (9) AM peak hour vehicle trips (8 inbound and 1 outbound) and eight (8) vehicle trips (1 inbound and 7 outbound) during the typical afternoon peak hour.

When considering the existing light industrial development on the site being operated by Bobcat Treasure Coast, the represents an increase of 21 daily vehicle trips, an increase of four (4) AM peak hour vehicle trips, and an increase of three (3) PM peak hour vehicle trips. As a result of the minor increase in traffic associated with the proposed building expansion, the additional vehicle trips are considered to be “de minimis”.

TRIP DISTRIBUTION AND DRIVEWAY ASSIGNMENT

Based upon the proposed site plan, driveway location and the configuration of Prosperity Drive (i.e. a dead-end roadway to the west), all of the project traffic will enter the site from the east and will exit the site to the east (i.e. toward Selvitz Road). Figure 2 on the following page presents the AM and PM peak hour driveway volumes at project buildout.



SUMMARY & CONCLUSIONS

There is a parcel of land located on the south side of Prosperity Drive approximately 700 feet west of Selvitz Road in Fort Pierce, St. Lucie County, Florida. More specifically the subject parcel is located at 4405 Prosperity Drive. This site and the existing industrial building are currently occupied by Bobcat Treasure Coast.

The land area of the subject site is approximately 1.958 acres (+/- 83,500 square feet) and the zoning is Light Industrial (I-1). There is one (1) existing metal building on site with a floor area of 5,667 square feet and vehicular access is provided by one (1) full access driveway on Prosperity Drive. The proposed plan involves the expansion of the existing facilities to better serve the needs of the existing customers of Bobcat Treasure Coast. The total resulting building area will be 11,067 square feet.

The trip generation analysis indicates that the proposed project is anticipated to generate 100 daily vehicle trips, nine (9) AM peak hour vehicle trips (8 inbound and 1 outbound) and eight (8) vehicle trips (1 inbound and 7 outbound) during the typical afternoon peak hour. When considering the existing light industrial development on the site being operated by Bobcat Treasure Coast, the represents an increase of 21 daily vehicle trips, an increase of four (4) AM peak hour vehicle trips, and an increase of three (3) PM peak hour vehicle trips. As a result of the minor increase in traffic associated with the proposed building expansion, the additional vehicle trips are considered to be “de minimis”.

Appendix A

Bobcat Treasure Coast – Fort Pierce

Site Plan

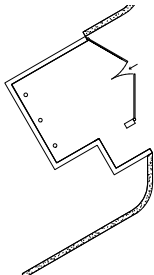
Appendix B

Bobcat Treasure Coast – Fort Pierce

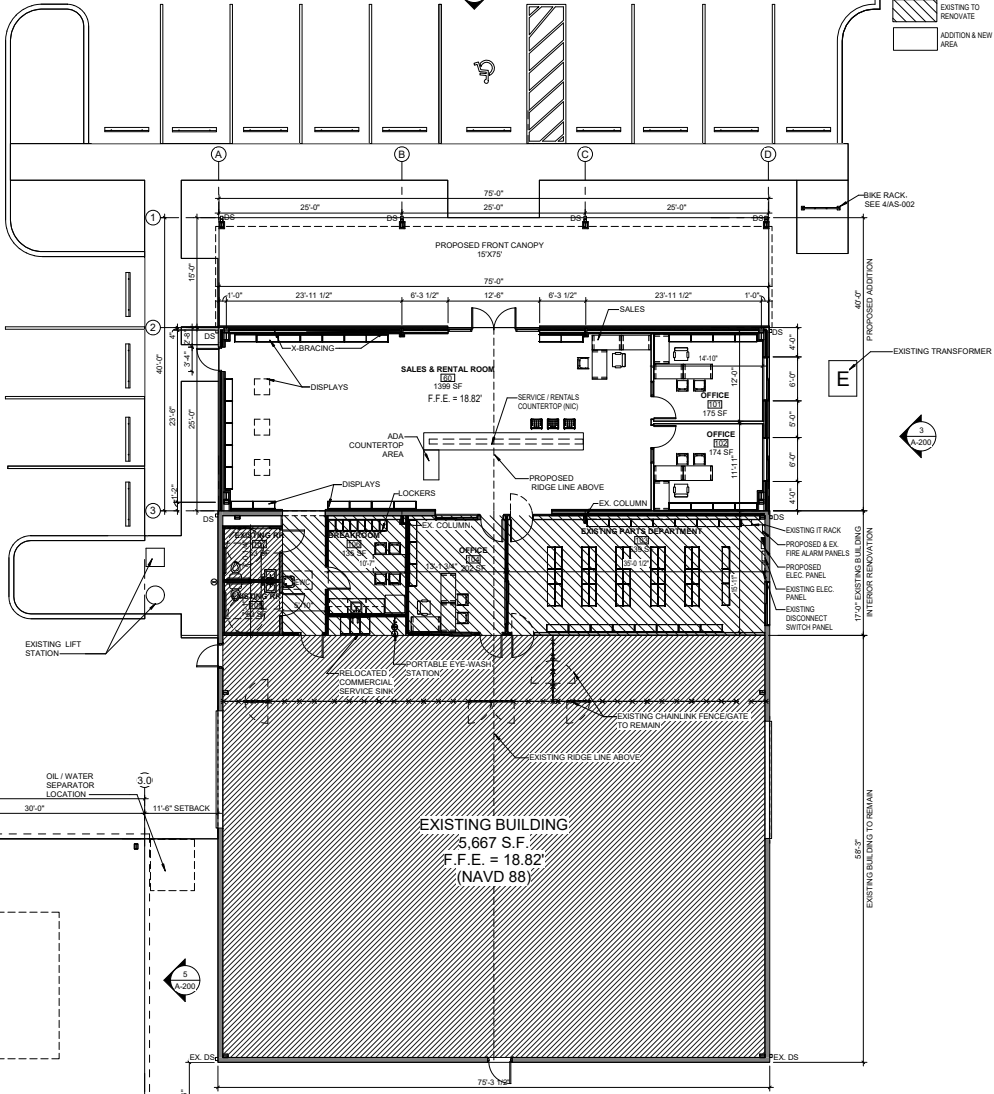
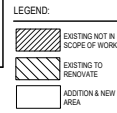
Floor Plan

PROPERTY LINE N00° 00' 07"W 426.50'

1 FIRST FLOOR PLAN
1/8" = 1'-0"



REFER TO AS-001 SHEET FOR ALL SITE PLAN DIMENSIONS



70' DRAINAGE EASEMENT

PROPERTY LINE S00° 00' 07"E 426.50'



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PROPOSED ADDITION AND NEW WASH AREA
BOBCAT
TREASURE COAST
4404 PROSPERITY DRIVE, FORT PIERCE, FLORIDA 34981



DATE: 11/25/2020
SCALE: 1/8" = 1'-0"
DRAWN:
JOB: 20-000035
SHEET TITLE: FIRST FLOOR PLAN

SHEET#: **A-101**

Appendix C

Bobcat Treasure Coast – Fort Pierce

Exterior Elevations

Appendix D

Bobcat Treasure Coast – Fort Pierce

Relevant Excerpts from the

ITE Trip Generation Manual (10th Edition)

Land Use: 110

General Light Industrial

Description

A light industrial facility is a free-standing facility devoted to a single use. The facility has an emphasis on activities other than manufacturing and typically has minimal office space. Typical light industrial activities include printing, material testing, and assembly of data processing equipment. Industrial park (Land Use 130) and manufacturing (Land Use 140) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the 30 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:30 and 8:30 a.m. and 4:30 and 5:30 p.m., respectively.

The sites were surveyed in the 1980s, the 2000s, and the 2010s in Colorado, Connecticut, Indiana, New Jersey, New York, Oregon, Pennsylvania, and Texas.

Source Numbers

106, 157, 174, 177, 179, 184, 191, 251, 253, 286, 300, 611, 874, 875, 912

General Light Industrial (110)

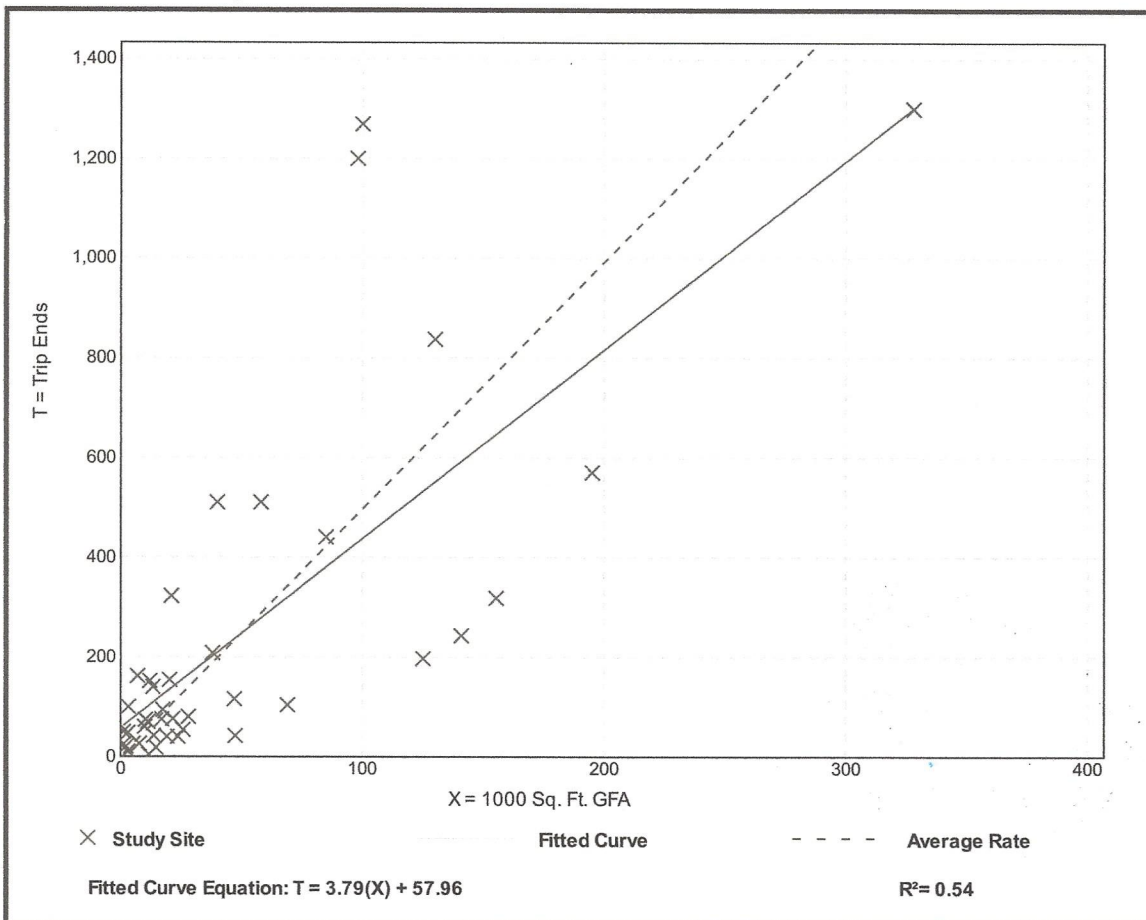
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 40
1000 Sq. Ft. GFA: 49
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.96	0.34 - 43.86	4.20

Data Plot and Equation



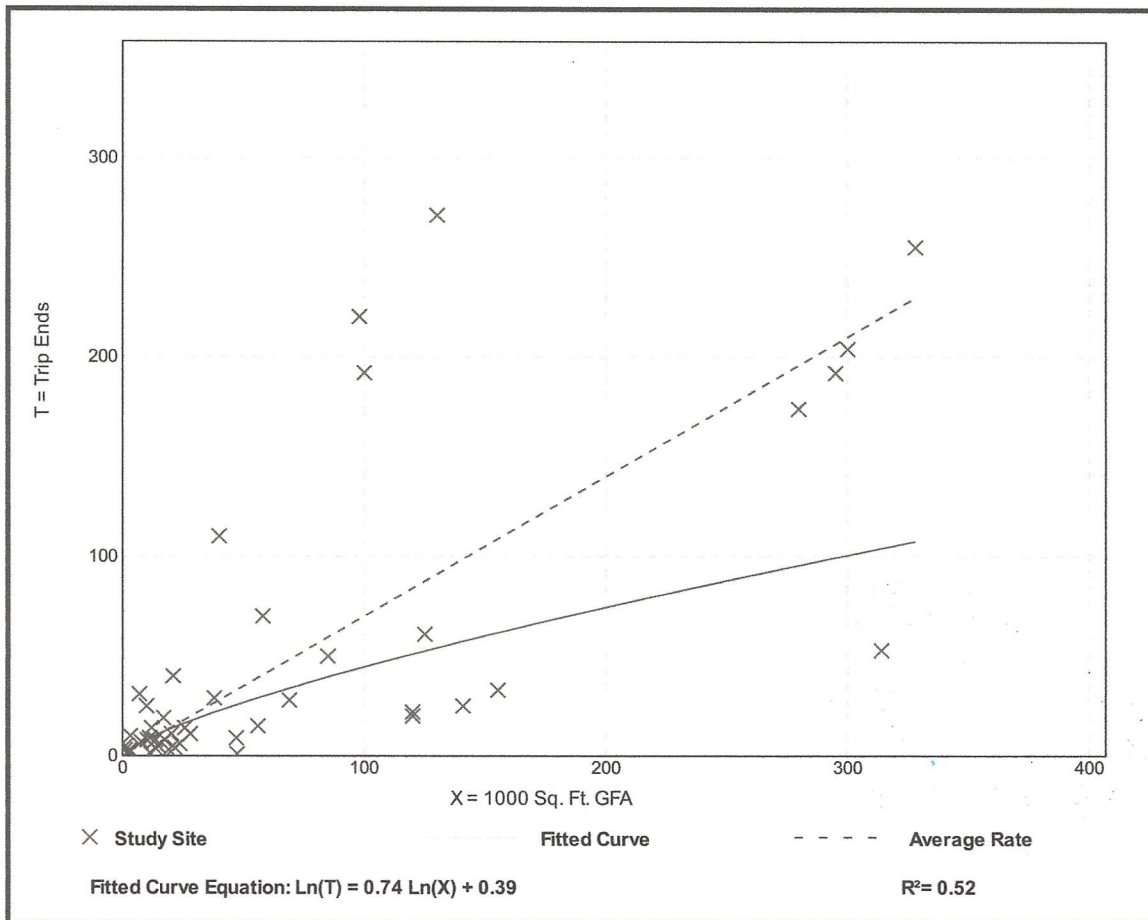
General Light Industrial (110)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 45
 1000 Sq. Ft. GFA: 73
 Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.70	0.02 - 4.46	0.65

Data Plot and Equation



General Light Industrial (110)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 44
 1000 Sq. Ft. GFA: 67
 Directional Distribution: 13% entering, 87% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.63	0.07 - 7.02	0.68

Data Plot and Equation

