



City of Belle Isle
 Universal Engineering Sciences 3532 Maggle Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universaleengineering.com

RECEIVED
 JUN 21 2019

APPLICATION FOR ELECTRICAL PERMIT

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

DATE OF APPLICATION: 6/21/19 **PERMIT NUMBER** 2019-06-076
 The undersigned hereby applies for a permit to make electrical installations as indicated below. PLEASE PRINT
Project Address 3116 CULLEN LAKE SHORE DR, Belle Isle FL 32809 X 32812
Property Owner ORANGE COUNTY BCC **Phone** 407-836-7350
Property Owner's Mailing Address PO BOX 1393 **City** ORLANDO
State FL **Zip Code** 32802 **Parcel Id Number:** 17-23-30-4379-01-850
To obtain this information, please visit <http://www.ocpafl.org/Searches/ParcelSearch.aspx>

Class of Building: Old New **Type of Building:** Residential Commercial Other
Type of Work: New Alteration Addition Repair Low Voltage New Existing

INDICATE THE QUANTITY OF ALL EQUIPMENT TO BE INSTALLED

Dishwasher	<u>0</u>	Exhaust Fan	<u>0</u>	Disposal	<u>0</u>	Water Heater	<u>0</u>
Hood Fan	<u>0</u>	Dryer	<u>0</u>	Paddle Fan	<u>0</u>	Outlets	<u>0</u>
Fixtures	<u>0</u>	Spa	<u>0</u>	Pool	<u>0</u>	Switches	<u>2</u>
Electric Signs	<u>0</u>	Meter Reset	<u>1</u>	Low Voltage	<u>6</u>	Stoves	<u>0</u>
Pumps	<u>2</u>	Motors	<u>2</u>	Air Conditioning (tons)	<u>0</u>	Furnace (KW)	<u>0</u>

Temporary Construction Pole 0 **One (1) New Meter Service** 200A/480V/3P Amperage/Voltage/Phase
Meter Service Upgrade from 200A/480V/3P **to** 200A/480V/3P = -
Amperage/Voltage/Phase Amperage/Voltage/Phase Difference in Size

Relocate Existing Meter Service (No Service Size Change) _____
Other: EXISTING UTILITY METER TO BE REPLACED WITH NEW UTILITY METER

Electrical for new pump station

PERMIT FEE BASED ON METER SERVICE SIZE SCHEDULE \$ _____
(IF NO METER SERVICE WORK BEING DONE, USE VALUATION OF JOB FOR PERMIT FEE)
 VALUATION OF JOB (VALUATION OF ALL MATERIALS, LABOR, AND FIXTURES INSTALLED) \$ 558,196.00

Building Official: [Signature] **Date** 6-25-19
 Verified Contractor's Licenses & Insurance are on file _____ Date _____

Permit Fee = \$ _____
Review Fee = \$ _____
1% BCAIB Fee = \$ _____
1.5% DCA Fee = \$ _____
TOTAL Permit = \$ _____

I hereby certify that the above is true and correct to the best of my knowledge.
 I hereby make Application for Permit as outlined above, and if same is granted I agree to conform to all Florida Building Code Regulations and City Ordinances regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable Town and/or State of Florida codes and/or ordinances.
LICENSE HOLDER SIGNATURE [Signature] **LICENSE #** 42017
LICENSE HOLDER NAME WILLIAM NELSON **COMPANY NAME** EDA
Street Address 6965 PIAZZA GRANDE AVE. SUITE 311
City ORLANDO **State** FL **Zip Code** 32835 **Phone Number** 407-745-5604
Email Address WNELSON@GOEDA.COM

NOTE: The Building Permit Number is required if the Electrical installation is associated with any construction or alteration where a Building Permit has been issued.

Building Permit Number _____

148822

no response from Orange County



Letter Of Transmittal

1117 East Robinson Street
Orlando, Florida 32801
Phone: 407.425.0452
Fax: 407.648.1036
www.cphcorp.com

Date: June 21, 2019
To: Ms. Susan Manchester
Permit Administration for the City of Belle Isle
Building Inspections and Code Compliance Department
3532 Maggie Blvd.
Orlando, FL 32811

Re: Pump Station R/R - Package 21 Improvements: (PS 3085 Cullen Lake Shore, PS 3086 Shenandoah School, PS 3241 Gatlin Drive, PS 3705 Pineridge Hollow 1, and PS 3739 Natoma)

CPH Job No. O28541

WE ARE SENDING YOU THE ATTACHED ITEM(S):

NO. OF COPIES	DESCRIPTION
1	Set of 60% plans for Pump Station R/R Package 21 Improvements (Cover, Notes, Plan and Profile for PS 3085, Electrical Plans)
1	COBI Plumbing Permit Application
1	COBI Electrical Permit Application

THESE ITEMS ARE TRANSMITTED AS INDICATED BELOW:

For Your Use For Review and Comment
 As Requested For Bids Due

REMARKS:



Ms. Manchester,

Per our phone conversation on June 11, 2019, please see the attached for your review.

Let me know if you have any questions!

Thanks!

COPY TO: File

SIGNED: Zachary L. Tarifa, E.I.

If enclosures are not as noted, kindly notify us at once.

407-423-0504 X23309 or 407-581-8161 option permits

E-mail: smanchester@universalengineering.com

Website: www.universalengineering.com



UNIVERSAL ENGINEERING SCIENCES, INC.

3532 Maggie Blvd. | Orlando, FL 32811

Tel: (407) 423-0504 | Fax: (407-423-3106

From: Susan Manchester

Sent: Thursday, October 17, 2019 8:56 AM

To: Tarifa, Zachary <ztarifa@cphcorp.com>

Cc: CobiPermits <CobiPermits@universalengineering.com>

Subject: RE: 3116 Cullen Lake Shore Dr - Utility Pump Station# 3085 Repairs - plans approved - CPH Inc Engineering

Great – thank you for the update.

Susan Manchester

Permit Administration for the City of Belle Isle

Building Inspections and

Code Compliance Department

407-423-0504 X23309 or 407-581-8161 option permits

E-mail: smanchester@universalengineering.com

Website: www.universalengineering.com



UNIVERSAL ENGINEERING SCIENCES, INC.

3532 Maggie Blvd. | Orlando, FL 32811

Tel: (407) 423-0504 | Fax: (407-423-3106

From: Tarifa, Zachary [<mailto:ztarifa@cphcorp.com>]

Sent: Thursday, October 17, 2019 8:50 AM

To: Susan Manchester <SManchester@universalengineering.com>

Subject: RE: 3116 Cullen Lake Shore Dr - Utility Pump Station# 3085 Repairs - plans approved - CPH Inc Engineering

Good Morning Ms. Manchester,

We are at the 90% drawing level. We still will have to submit 100%, and then bid the project out to a Contractor.

I will keep you updated as we are continuing to progress!

Thanks!

Zachary Tarifa, E.I.

Project Engineer

Phone: (407) 425-0452 x 2095

Cell: (614) 886-1057

Email: ztarifa@cphcorp.com

Susan Manchester

From: Susan Manchester
Sent: Tuesday, October 15, 2019 8:18 AM
To: Tarifa, Zachary
Cc: CobiPermits
Subject: 3116 Cullen Lake Shore Dr - Utility Pump Station# 3085 Repairs - plans approved - CPH Inc Engineering

Hi Zachary,

Can you please give me status on this project? The app is still here incomplete in our office. Is this work moving forward or has it been cancelled or placed on hold at this time?

Thank you,

Susan Manchester

Permit Administration for the City of Belle Isle
Building Inspections and
Code Compliance Department
407-423-0504 X23309 or 407-581-8161 option permits
E-mail: smanchester@universalengineering.com
Website: www.universalengineering.com



UNIVERSAL ENGINEERING SCIENCES, INC.
3532 Maggie Blvd. | Orlando, FL 32811
Tel: (407) 423-0504 | Fax: (407) 423-3106

From: Tarifa, Zachary [mailto:ztarifa@cphcorp.com]
Sent: Thursday, June 27, 2019 3:22 PM
To: Susan Manchester <SManchester@universalengineering.com>
Cc: CobiPermits <CobiPermits@universalengineering.com>
Subject: RE: 3116 Cullen Lake Shore Dr - Utility Pump Station Repairs - plans approved - CPH Inc Engineering

Sounds good, thanks!

From: Susan Manchester [mailto:SManchester@universalengineering.com]
Sent: Thursday, June 27, 2019 3:06 PM
To: Tarifa, Zachary
Cc: CobiPermits
Subject: RE: 3116 Cullen Lake Shore Dr - Utility Pump Station Repairs - plans approved - CPH Inc Engineering

Hi Mr. Tarifa,

Yes – I found the OC Fee Schedule on line – please disregard my previous request for pricing info. The OC fee schedule is right in line with Belle Isle’s. I had a meeting with our Belle Isle Building Official today and he has advised me exactly how the fees need to be assessed.

Once you choose your contractor and send me their credentials I can issue the permit to you. It will be one building permit with fees assessed on the total cost but with the electrical and plumbing inspections outlined.

Thanks so much!!

Susan Manchester

Permit Administration for the City of Belle Isle
Building Inspections and
Code Compliance Department
407-423-0504 X23309 or 407-581-8161 option permits
E-mail: smanchester@universalengineering.com
Website: www.universalengineering.com



UNIVERSAL ENGINEERING SCIENCES, INC.
3532 Maggie Blvd. | Orlando, FL 32811
Tel: (407) 423-0504 | Fax: (407) 423-3106

From: Tarifa, Zachary [<mailto:ztarifa@cphcorp.com>]
Sent: Thursday, June 27, 2019 2:50 PM
To: Susan Manchester <SManchester@universalengineering.com>
Subject: RE: 3116 Cullen Lake Shore Dr - Utility Pump Station Repairs - plans approved - CPH Inc Engineering

Thank you!

I have reached out to Orange County about their fee schedule. It may be online through the building department's website.

Let me know if you need anything else!

Zachary Tarifa, E.I.
Project Engineer

Phone: (407) 425-0452 x 2095
Cell: (614) 886-1057
Email: ztarifa@cphcorp.com



Full Service A&E Firm
[Facebook](#) | [LinkedIn](#)

RICK SINGH, CFA - ORANGE COUNTY PROPERTY APPRAISER

[Searches](#) |
 [Sales Search](#) |
 [Results](#) |
 [Property Record Card](#) |
 [My Favorites](#) |
 [Sign up for e-Notify...](#)

3116 Cullen Lake Shore Dr < 17-23-30-4379-01-850 >

Name(s)
 Orange County BCC
Property Name
 3116 Cullen Lake Shore Dr
N/A. Click information icon to contribute.
 Postal City and Zipcode
 Orlando, FL 32812
Mailing Address On File
 C/O Real Estate Mngt Dept
 Po Box 1393
 Orlando, FL 32802-1393
Incorrect Mailing Address?

Contribute An Image For This Parcel

IMAGE UPLOAD

[Property Features](#) |
 [Values, Exemptions and Taxes](#) |
 [Sales Analysis](#) |
 [Location Info](#) |
 [Market Stats](#) |
 [Update Information](#)

Property Description

LAKE CONWAY ESTATES SECTION 3 Y/19 LOT 185

Total Land Area 3,950 sqft (+/-) | 0.09 acres (+/-) GIS Calculated Notice

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
8620 - Utility	R-1-AA	1 UNIT(S)	\$100.00	\$100	\$0.00	\$100

Page 1 of 1 (1 total records)

Buildings

Important Information

There are no buildings associated with this parcel.

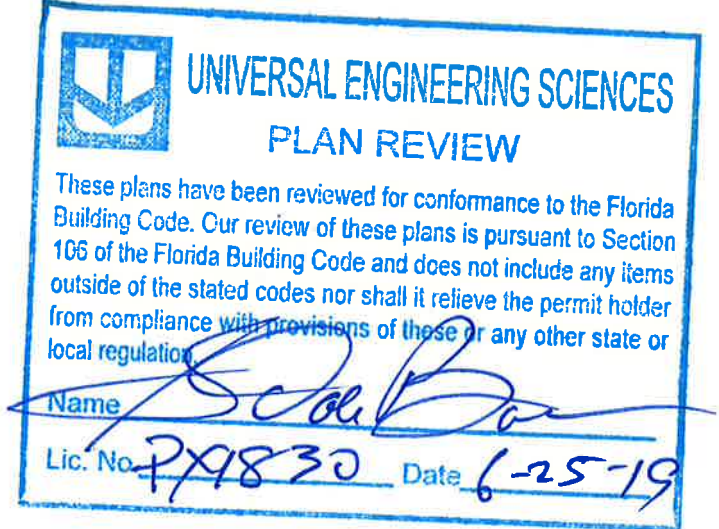
Extra Features

Description	Date Built	Units	XFOB Value
Structure			

PUMP STATION R/R PACKAGE No. 21

Station #, NOT address

- P.S. 3085 Cullen Lake Shore
 - ~~P.S. 3086 Shenandoah School~~
 - ~~P.S. 3241 Gatlin Drive~~
 - ~~P.S. 3705 Pineridge Hollow 1~~
 - ~~P.S. 3739 Natoma~~
- Improvements



BOARD OF COUNTY COMMISSIONERS

TERESA JACOBS
ORANGE COUNTY MAYOR

BETSY VANDERLEY
DISTRICT 1

ROD A. LOVE
DISTRICT 2

PETE CLARKE
DISTRICT 3

JENNIFER THOMPSON
DISTRICT 4

EMILY BONILLA
DISTRICT 5

VICTORIA P. SIPLIN
DISTRICT 6



AJIT LALCHANDANI, P.E.
COUNTY ADMINISTRATOR

RAYMOND E. HANSON, P.E.
DIRECTOR ORANGE COUNTY UTILITIES DEPARTMENT

PLANS PREPARED BY:



ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA. DIMENSION INFORMATION SHOULD NOT BE OBTAINED BY SCALING THE PLANS.

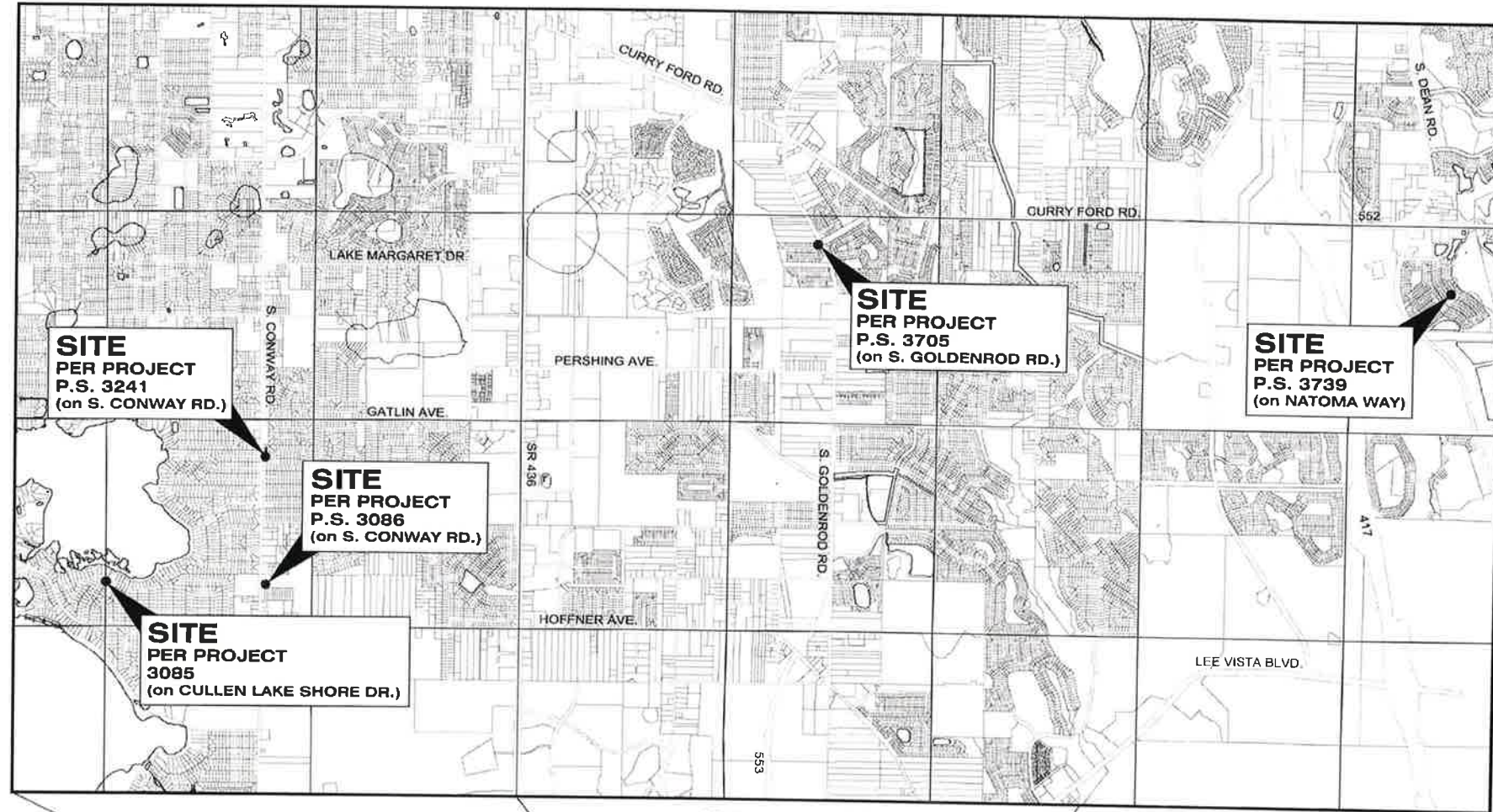
ORANGE COUNTY UTILITIES DEPARTMENT
ENGINEERING DIVISION
ORANGE COUNTY, FLORIDA

May 2019

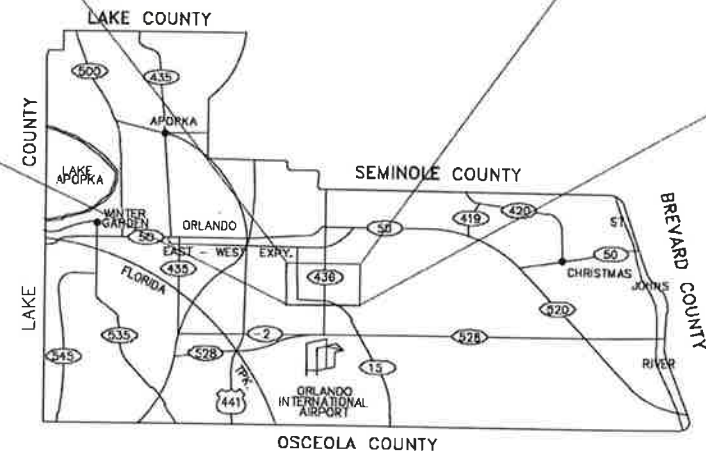
60% SUBMITTAL

- OCU FILE NO.: 93687
- CIP FUNDING CODE:
- (PS 3085) 1559-0113
 - (PS 3086) 1559-0114
 - (PS 3241) 1503-97
 - (PS 3705) 1559-0115
 - (PS 3739) 1559-0129

LOCATION MAP



ORANGE COUNTY, FLORIDA
SCALE: 1" = 2,000'

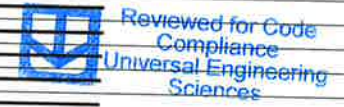


ORANGE COUNTY, FLORIDA
SCALE: 1" = 50,000'

NOTE:
SEE SURVEYS FOR SPECIFIC LOCATIONS

DRAWING INDEX

SHEET NO	DWG. NO.	TITLE
1 OF 62	G100	COVER SHEET
2 OF 62	G200	LOCATION MAP AND DRAWING INDEX
3 OF 62	G300	GENERAL NOTES, ABBREVIATIONS AND LEGEND
4 OF 62	G400	OCU ENGINEERING NOTES
5 OF 62	V100	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
6 OF 62	V101	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
7 OF 62	V102	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
8 OF 62	V103	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
9 OF 62	V104	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
10 OF 62	V105	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
11 OF 62	V106	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
12 OF 62	V107	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
13 OF 62	V108	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
14 OF 62	V109	PUMP STATION 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY
15 OF 62	C100	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
16 OF 62	C101	P.S. 3085 CULLEN LAKE SHORE - SITE PLAN
17 OF 62	C102	P.S. 3085 CULLEN LAKE SHORE - SITE GRADING PLAN
18 OF 62	D300	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
19 OF 62	D301	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
20 OF 62	D302	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
21 OF 62	D303	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
22 OF 62	D304	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
23 OF 62	D305	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
24 OF 62	D306	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
25 OF 62	D307	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
26 OF 62	D308	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
27 OF 62	D309	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
28 OF 62	D310	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
29 OF 62	D311	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
30 OF 62	D312	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
31 OF 62	D313	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
32 OF 62	D314	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
33 OF 62	D315	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
34 OF 62	D316	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
35 OF 62	D317	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
36 OF 62	D318	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
37 OF 62	D319	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
38 OF 62	D320	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
39 OF 62	D321	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
40 OF 62	D322	P.S. 3085 CULLEN LAKE SHORE - DEMOLITION SITE PLAN
30 OF 62	P100	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
31 OF 62	P101	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
32 OF 62	P102	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
33 OF 62	P103	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
34 OF 62	P104	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
35 OF 62	P105	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
36 OF 62	P106	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
37 OF 62	P107	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
38 OF 62	P108	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
39 OF 62	P109	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
40 OF 62	P110	P.S. 3085 CULLEN LAKE SHORE - PUMP PLAN, SECTION AND DETAIL
41 OF 62	D400	CONSTRUCTION DETAILS - MANHOLE AND PIPE INSTALLATION
42 OF 62	D401	CONSTRUCTION DETAILS - MANHOLE AND PIPE INSTALLATION
43 OF 62	D402	CONSTRUCTION DETAILS - MANHOLE AND PIPE INSTALLATION
44 OF 62	D403	CONSTRUCTION DETAILS - MANHOLE AND PIPE INSTALLATION
45 OF 62	D404	CONSTRUCTION DETAILS - MANHOLE AND PIPE INSTALLATION
46 OF 62	D405	CONSTRUCTION DETAILS - WET WELL INSTALLATION
47 OF 62	D406	CONSTRUCTION DETAILS - WET WELL INSTALLATION
41 OF 62	E001	ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS
42 OF 62	E100	P.S. 3085 CULLEN LAKE SHORE - DUPLEX PUMP CONTROL PANEL SINGLE LINE DIAGRAM
43 OF 62	E101	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL DEMOLITION PLAN
44 OF 62	E102	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL PLAN
45 OF 62	E103	P.S. 3085 CULLEN LAKE SHORE - DUPLEX PUMP CONTROL PANEL SINGLE LINE DIAGRAM
46 OF 62	E104	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL DEMOLITION PLAN
47 OF 62	E105	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL PLAN
48 OF 62	E106	P.S. 3085 CULLEN LAKE SHORE - DUPLEX PUMP CONTROL PANEL SINGLE LINE DIAGRAM
49 OF 62	E107	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL DEMOLITION PLAN
50 OF 62	E108	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL PLAN
51 OF 62	E109	P.S. 3085 CULLEN LAKE SHORE - DUPLEX PUMP CONTROL PANEL SINGLE LINE DIAGRAM
52 OF 62	E110	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL DEMOLITION PLAN
53 OF 62	E111	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL PLAN
54 OF 62	E112	P.S. 3085 CULLEN LAKE SHORE - DUPLEX PUMP CONTROL PANEL SINGLE LINE DIAGRAM
55 OF 62	E113	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL DEMOLITION PLAN
56 OF 62	E114	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL PLAN
57 OF 62	E115	P.S. 3085 CULLEN LAKE SHORE - DUPLEX PUMP CONTROL PANEL SINGLE LINE DIAGRAM
58 OF 62	E116	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL DEMOLITION PLAN
59 OF 62	E117	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL PLAN
60 OF 62	E118	P.S. 3085 CULLEN LAKE SHORE - DUPLEX PUMP CONTROL PANEL SINGLE LINE DIAGRAM
61 OF 62	E119	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL DEMOLITION PLAN
62 OF 62	E120	P.S. 3085 CULLEN LAKE SHORE - ELECTRICAL PLAN
63 OF 62	V100	P.S. 3085 CULLEN LAKE SHORE - TOPOGRAPHIC SURVEY



REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE
(IF NOT SCALE ACCORDINGLY)

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
 9150 CURRY FORD ROAD ORLANDO, FL. 32825

cph
 www.cphcorp.com
 1117 East Robinson Street - Orlando, FL 32801 - Phone: 407.425.0452

A Full Service A & E Firm
 Architects, Engineers, Environmental, Landscape Architects, Structural, Surveyors, Traffic/Transportation
 M/E/P Planners
 Survey L.B. No. 7143
 Arch. Lic. No. AA2600926
 Lndscp. Lic. No. LC0000298

Licenses:
 Eng. C.O.A. No. 3215
 Survey L.B. No. 7143
 Arch. Lic. No. AA2600926
 Lndscp. Lic. No. LC0000298

LOCATION MAP AND
DRAWING INDEX

SCOTT A BREITENSTEIN
PROFESSIONAL ENGINEER
FLORIDA LICENSE #57402

OCU FILE NO.: 93687
 DESIGNED BY: SAB
 DRAWN BY: RAS
 CHECKED BY: SAB/DEM
 CADD FILE: Location Sheet.dwg

SCALE: AS SHOWN
 DRAWING NO.:
G200
 SHEET: 2 OF 62

60% SUBMITTAL

OUW WATER ENGINEERING NOTES (REV. 05/12/09):

THE DEVELOPER/CUSTOMER SHALL ACCOMPLISH ALL WATER MAIN AND SERVICE WORK THROUGH THE POINT OF SERVICE/CONTROL VALVE AND WATER METERS AND DEED TO OUC. OUC WILL OWN AND OPERATE UP TO AND INCLUDING THE OUC POINT OF SERVICE/CONTROL VALVE AND METERS ONLY. THE REQUIRED WORK SHALL BE PERFORMED PER CURRENT OUC GUIDELINES, OUC WATER DISTRIBUTION STANDARD SPECIFICATIONS AND OUC WATER DISTRIBUTION MATERIAL SPECIFICATIONS AND WATER DETAIL SHEET UNDER OUC INSPECTION. THE DEVELOPER/CUSTOMER MUST CONTACT OUC INSPECTION AT 407-649-4436 TO SCHEDULE A PRE-CONSTRUCTION MEETING PRIOR TO ANY WATER CONSTRUCTION.

A MINIMUM 4' CLEARANCE (INCLUDING LANDSCAPING) MUST BE MAINTAINED AROUND METER ASSEMBLY.

THE DEVELOPER/CUSTOMER SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING OUC WATER FACILITIES BEFORE COMMENCEMENT OF CONSTRUCTION.

FOR WATER WET TAPS, USE ONLY OUC APPROVED TAPPING CONTRACTORS:

ACTION INDUSTRIES, INC. 352-732-6941 OR 800-216-4464
 CENTRAL FLORIDA TAPPING AND CONSTRUCTION SERVICES, INC. 407-834-8271
 MAC TAPPING, INC. 407-468-0557
 RANGLINE TAPPING SERVICES, INC. 800-346-5971
 TDW SERVICES, INC. 407-843-2800
 T & R TAPPING SERVICE, INC. 407-339-3685

EASEMENTS:

ALL ON-SITE OUC WATER FACILITIES (MAINS, SERVICES, METERS, AND FIRE HYDRANTS) SHALL BE LOCATED WITHIN A UTILITY EASEMENT IN ACCORDANCE WITH CURRENT OUC PRIVATE PROPERTY GUIDELINES. THE DEVELOPER IS TO FURNISH ALL NECESSARY INFORMATION, INCLUDING LEGAL DESCRIPTION(S) TO PREPARE AND DOCUMENT THIS EASEMENT. ANY QUESTIONS OR COMMENTS PLEASE CONTACT OUC PROPERTY AND RIGHT OF WAY DEPARTMENT AT 407-423-9190.

CONNECTION TO EXISTING VALVE

CONTRACTOR TO VERIFY CONDITION AND PRESSURE TEST EXISTING VALVE PRIOR TO CONNECTION. IF VALVE DOES NOT HOLD REQUIRED PRESSURE TEST ADDITIONAL VALVE WILL BE REQUIRED AT DEVELOPER/CONTRACTOR'S EXPENSE.

OUW BACKFLOW PREVENTION REQUIREMENTS:

BACKFLOW DEVICES WILL BE OWNED AND MAINTAINED BY CUSTOMER UNLESS OTHERWISE NOTED. ANY QUESTIONS CONTACT OUC BACKFLOW PREVENTION DEPARTMENT AT 407-649-4436.

DOMESTIC AND IRRIGATION

THE DEVELOPER/CUSTOMER IS RESPONSIBLE FOR THE REQUIRED REDUCED PRESSURE BACKFLOW PREVENTER. RESIDENTIAL DOMESTIC BACKFLOW PREVENTERS ARE REQUIRED IN AREAS WHERE RECLAIMED OR OTHER WATER SUPPLY, I.E. WELL, IS PROVIDED TO THE SITE.

AS - BUILT DRAWINGS

THE CUSTOMER/DEVELOPER SHALL PROVIDE VERTICAL AND HORIZONTAL AS-BUILT INFORMATION RELATIVE TO ALL CONSTRUCTED UTILITIES AND STRUCTURES. THE SUBMITTAL WILL INCLUDE A SIGNED AND SEALED DRAWING AND A CD WITH THE AS BUILT INFORMATION IN AUTOCAD 2004 FORMAT.

STATE PLANES COORDINATES, EAST FLORIDA, NAD 1983-90 IS THE PREFERRED COORDINATE SYSTEM. IF A PROJECT COORDINATE SYSTEM IS USED, ALL DRAWINGS WILL BE BASED ON THIS SYSTEM AND EXISTING FEATURES I.E. EDGE OF PAVEMENT, ROAD INTERSECTIONS, BUILDINGS MUST BE REFERENCED TO AID IN THE LOCATING OF PROJECT INFRASTRUCTURE IN OUC'S GEOGRAPHIC INFORMATION SYSTEM. IF NO EXISTING FEATURES ARE SHOWN AT LEAST 2 STATE PLANE COORDINATE POINTS MUST BE SURVEYED AND BENCH MARKED.

AS-BUILT INFORMATION FOR THE WATER SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. LOCATION OF ALL VALVES, FITTINGS, HYDRANTS, AND SERVICES.
2. LOCATION OF THE WATER MAIN TIED HORIZONTALLY TO THE BACK OF CURB OR EDGE OF PAVEMENT.
3. CERTIFICATION AS TO THE SYSTEM MEETING THE MINIMUM COVER REQUIREMENTS.
4. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION WHICH DEVIATES FROM THE APPROVED ENGINEERING PLANS.

THE CONTRACTOR SHALL CUT "W" IN THE TOP CURB OF EACH WATER SERVICE AND A "V" AT ALL VALVE LOCATIONS. CUT WS AND VS SHALL BE HIGHLIGHTED WITH BLUE PAINT.

M.O.T. PLAN PROCESSING PROCEDURE FOR NON-EMERGENCY ROAD CLOSURES:

1. M.O.T. PLANS ARE TO BE SUBMITTED TO THE ORANGE COUNTY ENGINEERING FOR APPROVAL.
2. THE DETOUR PLAN WILL BE REVIEWED BY THE SUPERVISOR OF THE PERMITS SECTION, ORANGE COUNTY ENGINEERING DEPARTMENT AND SUBMITTED AS SHOP DRAWINGS AT PRE-CONSTRUCTION.
3. THE DETOUR PLAN WILL THEN BE REVIEWED BY THE ORANGE COUNTY TRAFFIC ENGINEER FOR COMPLETENESS.
4. A COVER LETTER FOR THE TRAFFIC DETOUR PLAN SHALL BE SUBMITTED AND SHALL INCLUDE:
 - A. DATES AND ANTICIPATED DURATION OF ROAD CLOSURE.
 - B. DATE AND TIME THE ROAD CLOSURE WILL BEGIN.
 - C. LOCATION OF ROAD CLOSURE.
 - D. REASON FOR ROAD CLOSURE.
 - E. COMPLETE ALTERNATE AND DETOUR ROUTES.
 - F. ALL SIGNAGE SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, AND THE STATE OF FLORIDA'S "MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS."
 - G. ALL SIGNS SHALL BE SHOWN ON A SCALED DETOUR PLAN SHEET WITH THE APPROPRIATE REFERENCE NUMBERS AS NOTED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - H. THE PLACEMENT OF EACH SIGN SHALL BE DIMENSIONED FROM REFERENCE POINTS THAT CAN BE IDENTIFIED IN THE FIELD.
 - I. FLASHERS SHALL BE PLACED ON ALL BARRICADES AND CONSTRUCTION WARNING SIGNAGE IF THE DETOUR PLAN IS TO EXTEND INTO THE EVENING HOURS.
 - J. THE PLANS SHALL BE SIGNED AND SEALED BY A REGISTERED ENGINEER IN THE STATE OF FLORIDA WHO IS EXPERIENCED IN TRANSPORTATION ENGINEERING.
5. ONCE THE ORANGE COUNTY TRAFFIC ENGINEER APPROVES THE PLAN, THE PLAN WILL BE RECOMMENDED FOR APPROVAL TO THE ORANGE COUNTY COMMISSION BY THE TRAFFIC ENGINEER. COMPLETE BACK-UP INFORMATION COPIES WILL BE TRANSMITTED TO THE PERMITS SECTION.
6. THE PERMITS SECTION SHALL BE RESPONSIBLE TO NOTIFY THE APPLICANT OF THE ORANGE COUNTY COMMISSION'S DECISION.
7. ONCE THE DETOUR PLAN IS PROCESSED, THE APPLICANT SHALL BE RESPONSIBLE TO NOTIFY THE MEDIA, I.E., RADIO, TELEVISION, AND THE NEWSPAPER(S) AT LEAST 7 DAYS IN ADVANCE OF THE CLOSURE. APPLICANT SHALL PLACE IN THE LOCAL NEWSPAPER, A NOTICE OF CONSIDERABLE SIZE, NOTIFYING THE PUBLIC OF THE LOCATION AND DURATION OF CLOSURE. ALL EMERGENCY RESPONSE AGENCIES, AMBULANCE SERVICES, FIRE DEPARTMENT, POLICE AUTHORITIES (SPECIFICALLY THE FLORIDA HIGHWAY PATROL AND THE ORANGE COUNTY SHERIFF'S DEPARTMENT) AND THE COUNTY SCHOOL BOARD'S TRANSPORTATION DEPARTMENT SHALL BE NOTIFIED BY TELEPHONE, FOLLOWED BY A LETTER.
8. QUESTIONS PERTAINING TO THE DETOUR PLAN SHALL BE ADDRESSED TO THE ENGINEERING DEPARTMENT'S PERMITS SECTION.
9. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN INGRESS/ EGRESS TO EXISTING RESIDENCES AT ALL TIMES.



60% SUBMITTAL

REV	DATE	DESCRIPTION	 ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION 9150 CURRY FORD ROAD ORLANDO, FL 32825		 A Full Service A & E Firm Architects Engineers Environmental Landscape Architects Traffic/Transportation M/E/P Pipelines Structural Surveyors 1117 East Robinson Street - Orlando, FL 32801 - Phone: 407.425.0452		Licenses: Eng. C.O.A. No. 3215 Survey L.B. No. 7143 Arch. Lic. No. AA2600926 Landscp. Lic. No. LC0000298		OUC ENGINEERING NOTES		OCU FILE NO.: 93687 DESIGNED BY: SAB DRAWN BY: RAS CHECKED BY: SAB/DEM CADD FILE: General Notes		SCALE: AS SHOWN DRAWING NO.: G400 SHEET: 4 OF 62	
			LINE IS 2 INCHES AT FULL SIZE (IF NOT SCALE ACCORDINGLY)											

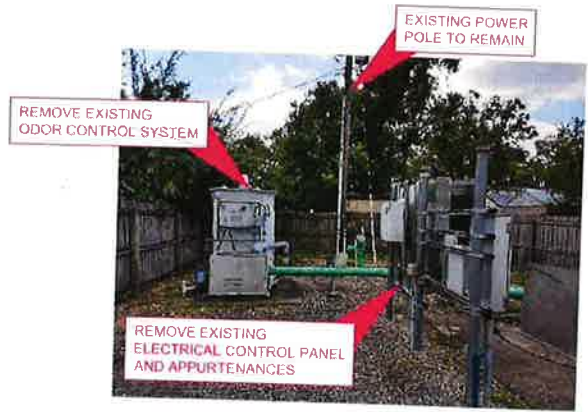


REMOVE EXISTING VALVE VAULT AND CONCRETE TOP SLAB

REMOVE EXISTING WOOD POST FENCE

REMOVE EXISTING WET WELL TOP SLAB

WET WELL, VALVE VAULT, AND FENCING



REMOVE EXISTING ODOR CONTROL SYSTEM

EXISTING POWER POLE TO REMAIN

REMOVE EXISTING ELECTRICAL CONTROL PANEL AND APPURTENANCES

ELECTRICAL AND ODOR CONTROL SYSTEM



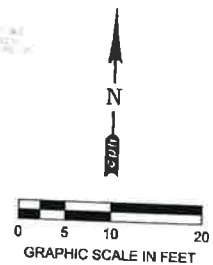
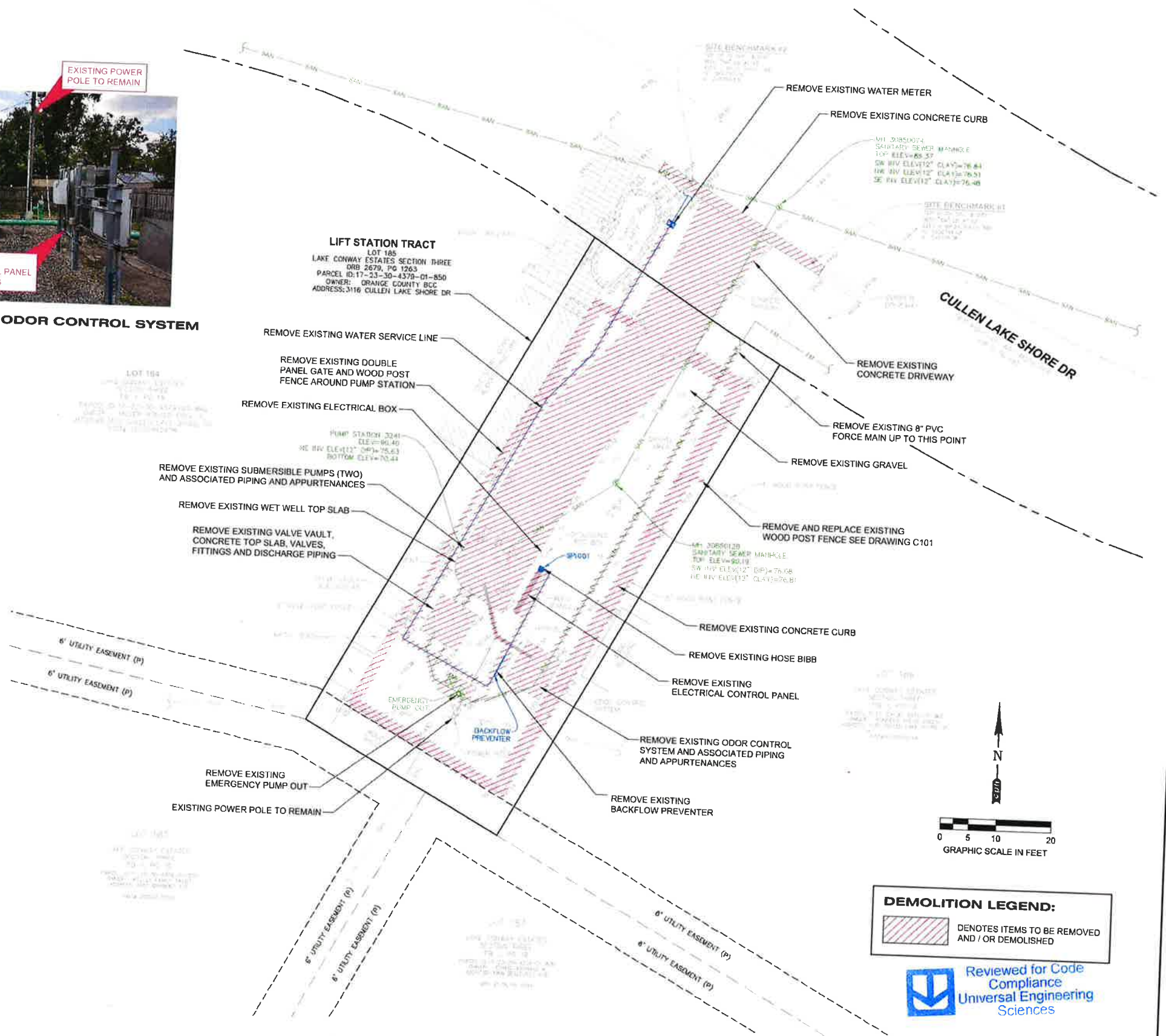
REMOVE EXISTING PUMPS, FITTINGS, PIPING, AND ASSOCIATED APPURTENANCES

WET WELL PUMPS AND PIPING



REMOVE EXISTING VALVE VAULT, VALVES, FITTINGS, AND DISCHARGE PIPING

VALVE VAULT AND DISCHARGE PIPING



DEMOLITION LEGEND:

DENOTES ITEMS TO BE REMOVED AND / OR DEMOLISHED

Reviewed for Code Compliance
Universal Engineering Sciences

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE (IF NOT SCALE ACCORDINGLY)



ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
 9150 CURRY FORD ROAD ORLANDO, FL. 32825



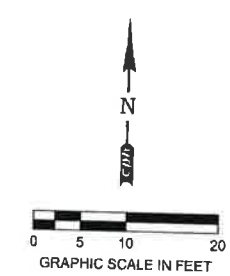
A Full Service A & E Firm
 Licenses:
 Eng. C.O.A. No. 3215
 Survey L.B. No. 7143
 Arch. Lic. No. AA2600926
 Landscp. Lic. No. LC0000268

P.S. 3085 CULLEN LAKE SHORE DEMOLITION SITE PLAN

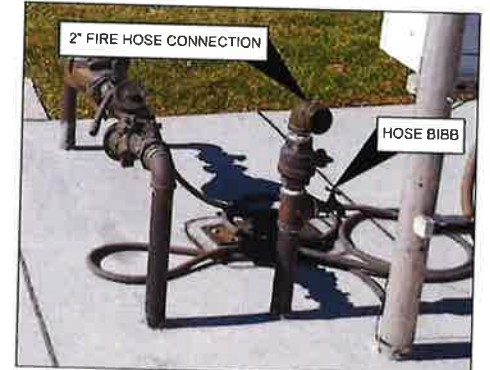
SCOTT A. BREITENSTEIN
 PROFESSIONAL ENGINEER
 FLORIDA LICENSE #57402

OCU FILE NO.: 93887
 DESIGNED BY: SAB
 DRAWN BY: RAS
 CHECKED BY: SAB/DEM
 CADD FILE: Site Plans

60% SUBMITTAL
 SCALE: AS SHOWN
 DRAWING NO.: **C100**
 SHEET: 15 OF 62



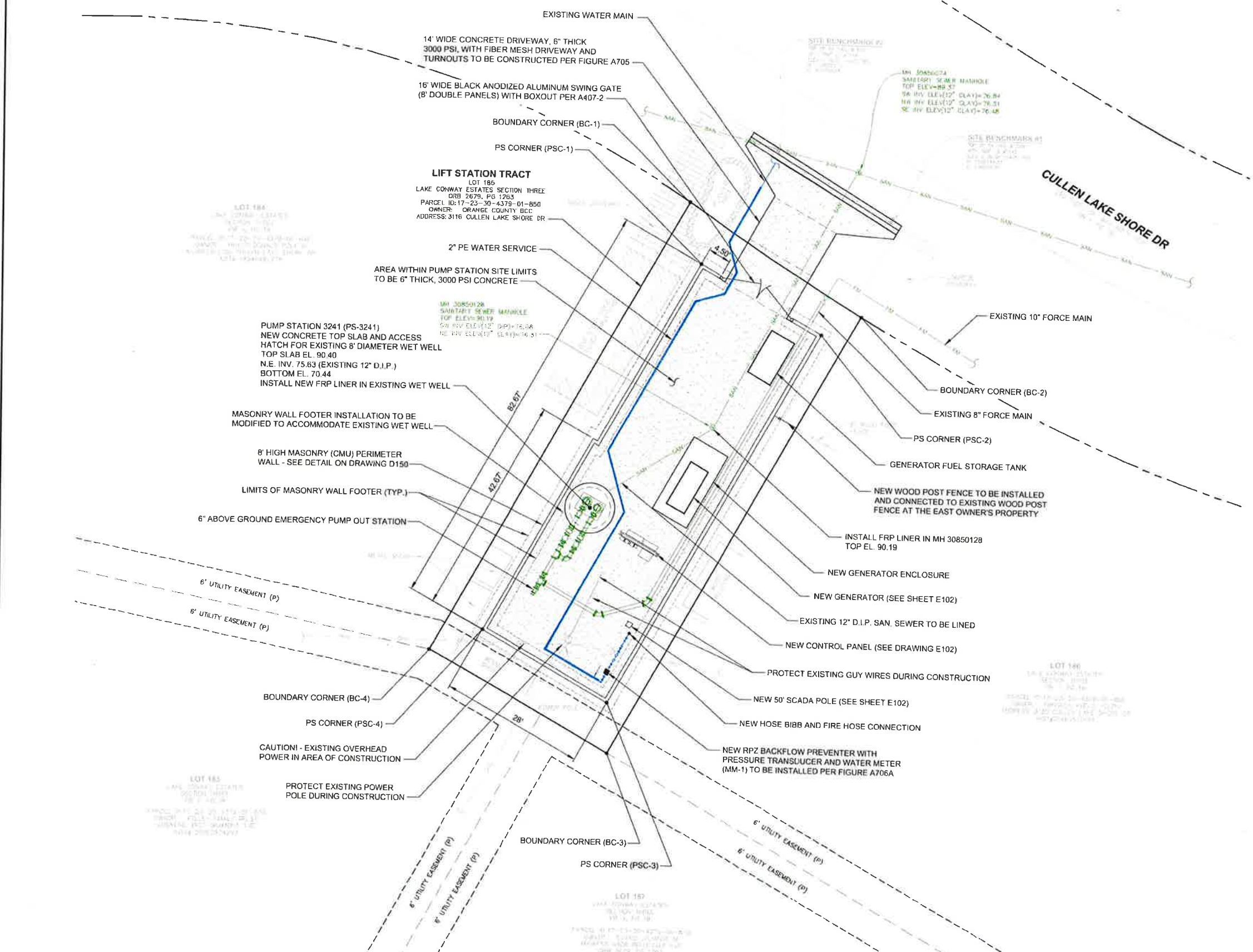
- NOTES:**
1. FINISHED GRADE SHALL MATCH EXISTING GRADE.
 2. ALL DISTURBED AREA TO BE SODDED, UNLESS GRAVEL OR CONCRETE IS SHOWN.
 3. REFER TO DRAWING P100 FOR ADDITIONAL DETAILS ON THE ACCESS HATCH, WET WELL, AND PIPING.
 4. FOR ALL EXISTING MAN HOLES TO BE LINED: CONTRACTOR SHALL FIX ALL LEAKS IN THE BENCHING AND PREPARE FOR COATING.
 5. PRIOR TO CONTROL PANEL INSTALLATION, CONTRACTOR TO COORDINATE FINAL LOCATION WITH RPR.
 6. ALL WORK WITHIN PUMP STATION PROPERTY IS INCLUDED IN LUMP SUM PAY ITEM.
 7. THE LIMITS OF THE POST-CONSTRUCTION BOUNDARY SURVEY FOR THE PUMP STATION REQUIRED BY SECTION 01720 "PROJECT RECORD DOCUMENTS" (2.02) (A) (1) (C) OF THE TECHNICAL SPECIFICATIONS FOR THE PROJECT SHALL BE BASED ON THE DESCRIPTION OF PUMP STATION 3085, AS SHOWN ON THE PREVIOUS BOUNDARY SURVEY INCLUDED IN APPENDIX E OF THE TECHNICAL SPECIFICATION FOR THE PROJECT.



2" FIRE HOSE CONNECTION WITH HOSE BIBB

Reviewed for Code Compliance
 Universal Engineering Sciences

60% SUBMITTAL



REV	DATE	DESCRIPTION

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT SCALE ACCORDINGLY)

ORANGE COUNTY
 UTILITIES DEPARTMENT
 ENGINEERING DIVISION
 9150 CURRY FORD ROAD ORLANDO, FL 32825

cph
 www.cphcorp.com

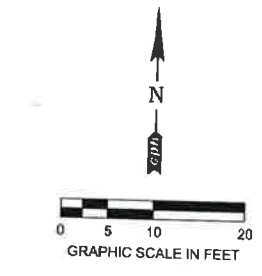
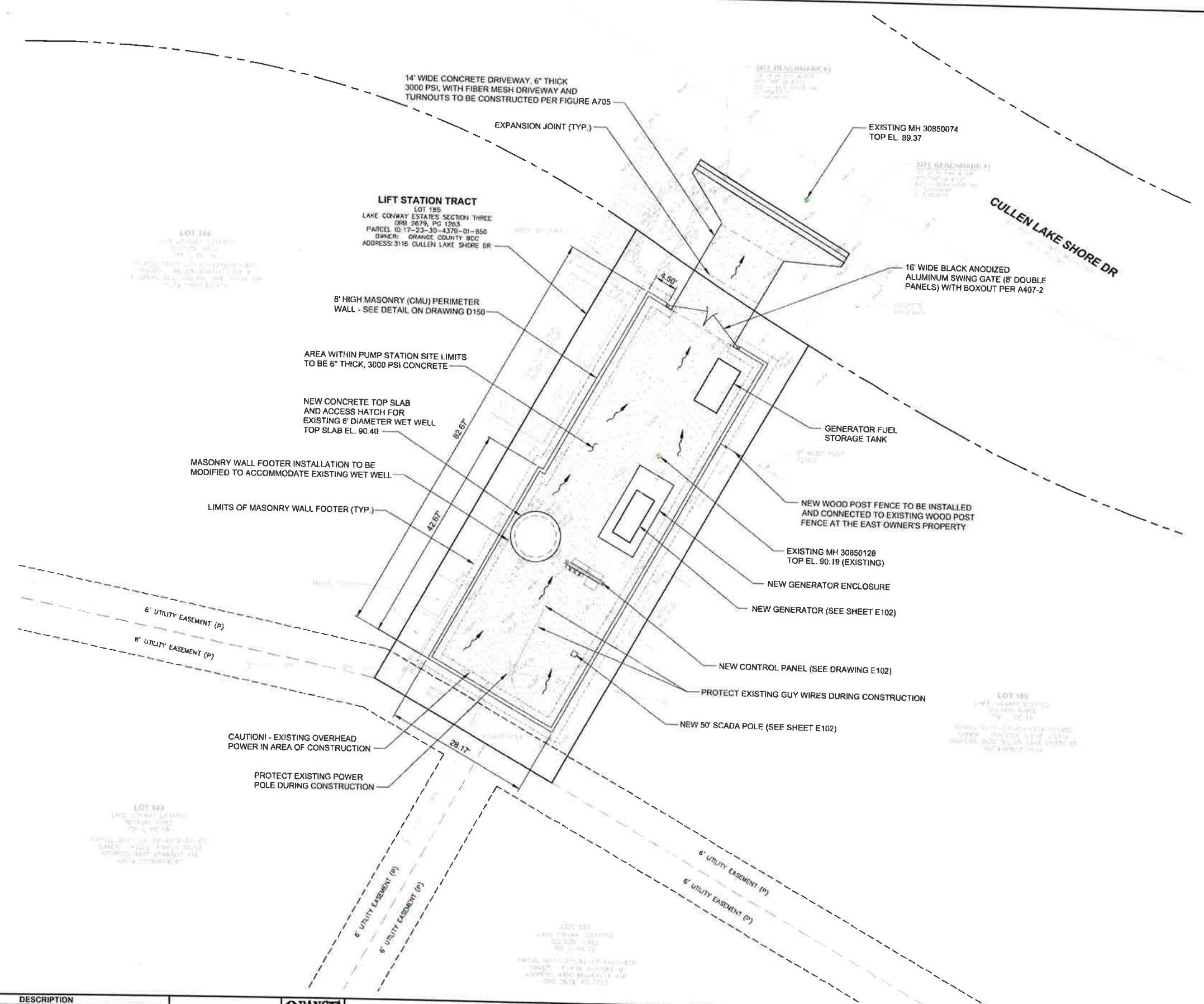
A Full Service A & E Firm
 Architects M/E/P
 Engineers Planners
 Environmental Structural
 Landscape Architects Surveyors
 Traffic/Transportation
 Licenses:
 Eng. C.D.A. No. 3215
 Survey L.B. No. 7143
 Arch. Lic. No. AA2600926
 Lndscp. Lic. No. LC6000268

P.S. 3085 CULLEN LAKE SHORE
 SITE PLAN

SCOTT A. BREITENSTEIN
 PROFESSIONAL ENGINEER
 FLORIDA LICENSE #57402

OCU FILE NO.: 93867
 DESIGNED BY: SAB
 DRAWN BY: RAS
 CHECKED BY: SAB/DEM
 CADD FILE: Site Plans

SCALE: AS SHOWN
 DRAWING NO.:
C101
 SHEET: 16 OF 82



NOTE:
ALL DISTURBED AREAS TO BE SODDED.

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE
(IF NOT SCALE ACCORDINGLY)



ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
9150 CURRY FORD ROAD ORLANDO, FL. 32825



A Full Service A & E Firm
Architects, Engineers, Environmental, Landscape Architects, Planners, Structural, Surveyors, Traffic/Transportation.
Licenses:
Eng. C.O.A. No. 3215
Survey L.B. No. 7143
Arch. Lic. No. AA2600926
Landscape Lic. No. LC6000298

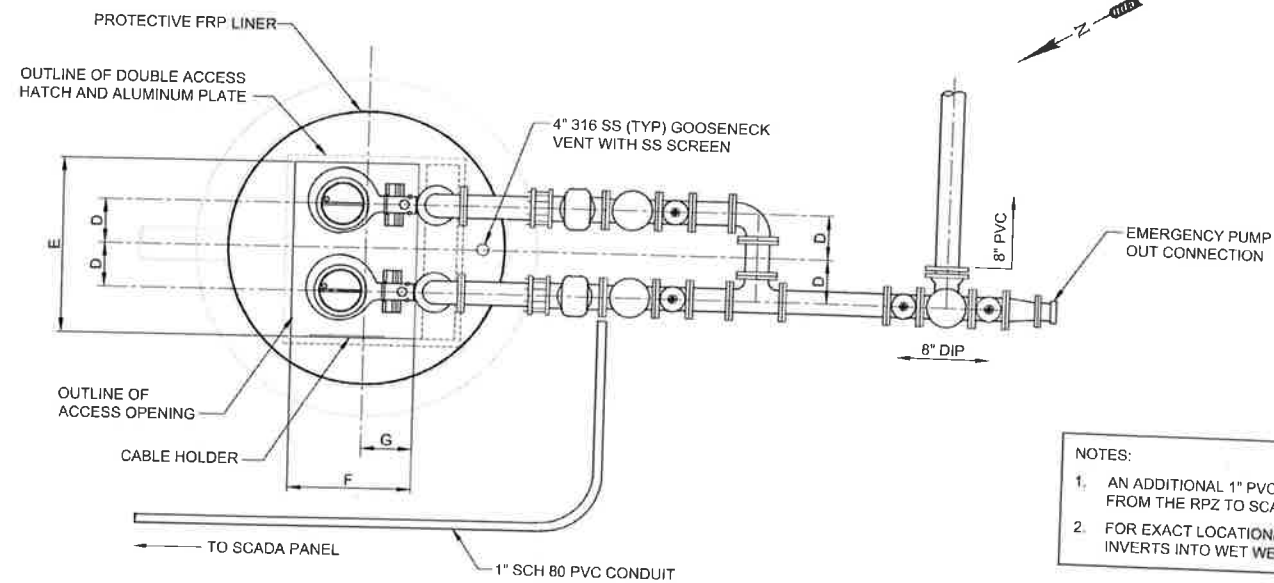
P.S. 3085 CULLEN LAKE SHORE SITE GRADING PLAN

SCOTT A BREITENSTEIN
PROFESSIONAL ENGINEER
FLORIDA LICENSE #57402

OCU FILE NO.: 93687
DESIGNED BY: SAB
DRAWN BY: RAS
CHECKED BY: SAB/DEM
CADD FILE: Site Plans

60% SUBMITTAL
SCALE: AS SHOWN
DRAWING NO.: **C102**
SHEET: 17 OF 82

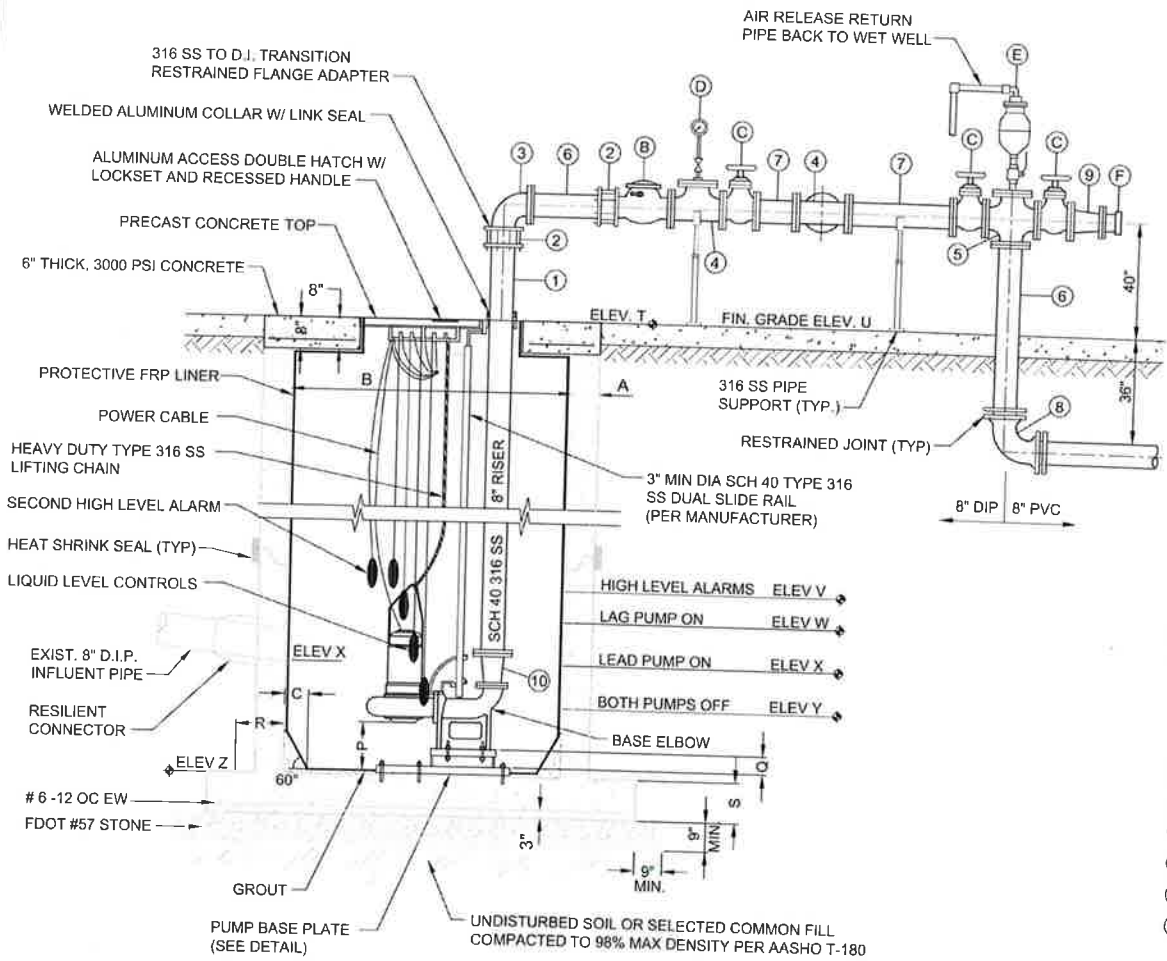




NOTES:

1. AN ADDITIONAL 1" PVC CONDUIT IS NEEDED FROM THE RPZ TO SCADA PANEL.
2. FOR EXACT LOCATION/ORIENTATION OF INVERTS INTO WET WELL SEE SHEET C101.

- GENERAL NOTES:**
1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE ORANGE COUNTY UTILITIES STANDARDS AND SPECIFICATIONS MANUAL (LATEST EDITION), AND/OR AS SPECIFIED HEREIN.
 2. ALL EXPOSED METAL OUTSIDE OF THE WET WELL SHALL BE IN ACCORDANCE WITH THE ORANGE COUNTY UTILITIES STANDARDS AND SPECIFICATIONS MANUAL.
 3. A CRYSTALLINE WATER PROOFING ADMIXTURE SHALL BE ADDED TO THE CONCRETE DURING THE MIXING CYCLE FOR THE WET WELL AND VALVE VAULT PRECAST STRUCTURES. THE CRYSTALLINE WATER PROOFING ADMIXTURE SHALL BE APPROVED PRODUCT AS LISTED IN OCU APPENDIX D.
 4. FOR EXISTING WET WELL AND MANHOLES, THE INSIDE SHALL BE LINED WITH A FIBERGLASS REINFORCED POLYESTHER (FRP) LINER, FINAL SEALS AND SEALING TO BE MADE IN THE FIELD.
 5. FOR NEW CONSTRUCTION, THE INSIDE OF THE WET WELL, VALVE VAULT AND MANHOLES SHALL BE LINED WITH EITHER A HIGH DENSITY POLYETHYLENE (HDPE) LINER A FIBERGLASS REINFORCED POLYESTHER (FRP) LINER, OR AN ACCEPTABLE EQUAL AS LISTED IN OCU APPENDIX D. FINAL SEALS AND SEALING TO BE MADE IN THE FIELD.
 6. WET WELL ACCESS OPENING SHALL BE COVERED ON ALL FOUR VERTICAL SIDES WITH A PROTECTIVE LINER.
 7. WET WELL ACCESS HATCH AND COVER SHALL BE ALUMINUM, WITH 316 STAINLESS STEEL HARDWARE AND LOCK BRACKET PLATE WITH THE WORDS "CONFINED SPACE" STAMPED (ETCHED) ON THE TOP SIDE.
 8. ALL HARDWARE IN THE WET WELL SHALL BE 316 STAINLESS STEEL.
 9. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN THE WET WELL.
 10. ALL PIPING AND CONDUIT PENETRATIONS THROUGH CONCRETE SHALL BE WATERTIGHT. CAST-IN-PLACE SLEEVES SHALL BE PLACED IN ALL OPENINGS WHERE PRESSURE PIPE ENTER OR LEAVE THE WET WELL AND/OR VALVE VAULT. PENETRATIONS THROUGH WET WELL AND VALVE VAULT SHALL BE A COMPRESSION TYPE SEAL, SUCH AS "LINK-SEAL", OR AN ACCEPTABLE EQUAL AS LISTED IN OCU APPENDIX D.
 11. ALL CONNECTIONS WITHIN THE WET WELL AND THE VALVE VAULT SHALL BE FLANGED JOINTS. ALL REMAINING JOINTS BETWEEN THE WET WELL AND THE CONNECTION TO THE EXISTING FORCE MAIN SHALL BE RESTRAINED MECHANICAL JOINTS. (SEE TABLE ON DETAIL SHEET D110)
 12. ALL PIPING WITHIN THE WET WELL AND VALVE VAULT SHALL BE STAINLESS STEEL 316 SCHEDULE 40.
 13. VALVE VAULT SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE SPINDLES, WITH MINIMUM CLEARANCE, AS SHOWN FOR 6" DIAMETER PIPE, OR SMALLER.
 14. PIPE SUPPORTS SHALL BE 316 STAINLESS STEEL, PROVIDED AND INSTALLED TO SUPPORT AND ANCHOR THE PIPING SECURELY IN THE VALVE VAULT.
 15. CONTRACTOR SHALL, AS DIRECTED BY THE COUNTY REPRESENTATIVE, REMOVE AND SALVAGE TO THE COUNTY, ALL EXISTING PUMP STATION EQUIPMENT, INCLUDING PUMPS, CHECK VALVES, SHUTOFF VALVES, AND CONTROL PANEL.
 16. CONTRACTOR SHALL DEMOLISH AND REMOVE FROM SITE ALL DEBRIS RESULTING FROM THE REMOVAL OF THE EXISTING STRUCTURES.
 17. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO ORDERING ANY MATERIALS OR EQUIPMENT.
 18. CONTRACTOR SHALL GROUT FLOOR OF WET WELL, AS REQUIRED BY MANUFACTURER'S SPECIFICATIONS, TO ACCOMMODATE INSTALLATION OF THE NEW PUMPS.
 19. STRUCTURAL DESIGN OF THE PRECAST WET WELL, TOP, AND VALVE VAULT SHALL BE THE RESPONSIBILITY OF THE PRECAST MANUFACTURER. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE PRECAST WET WELL, THE PRECAST WET WELL TOP AND HATCH COVER, RISERS AND THE VALVE VAULT, TO THE ENGINEER.
 20. 100-YEAR FLOOD ELEVATION: OUT OF THE 100-YEAR FLOOD ZONE, (100 YEAR FLOOD ELEVATION IS 53).
 21. ALL EXTERNAL JOINTS SHALL BE COVERED WITH A HIGH STRENGTH, WATER TIGHT, PRESS-TO-SEAL TYPE TAPE/AS LISTED IN OCU APPENDIX D.
 22. A SECOND HIGH LEVEL ALARM LIQUID FLOAT SHALL BE INSTALLED TO PROVIDE DRY CONTACT FOR SCADA. REFER TO PUMP CONTROL SCHEMATIC.
 23. ALL SPOOLS SHALL BE MINIMUM OF SIX INCHES WHERE SPACE ALLOWS.
 24. CONTRACTOR SHALL BE RESPONSIBLE FOR ALIGNMENT FROM THE BASE PLATE TO THE RISER PLATE AT NO EXTRA COST TO OCU.



NOTE:
PUMP STATION DISCHARGE PIPING FROM EMERGENCY PUMP OUT IS SHOWN ROTATED FOR CLARITY IN PROFILE VIEW. SEE ABOVE FOR EXACT ORIENTATION.

PIPE AND FITTING LEGEND:

1. 8" FLANGED x PLAIN END 316 S.S. SCH. 40 SPOOL PIECE - (2)
2. 8" FLANGED COUPLING ADAPTER (4)
3. 8" FLANGED 90° BEND - (3)
4. 8" FLANGED TEE - (3)
5. 8" FLANGED CROSS - (1)
6. 8" FLANGED x PLAIN END D.I. SPOOL PIECE - (3)
7. 8" FLANGED D.I. SPOOL PIECE - (4)
8. 8" M.J. 90° BEND - (1)
9. 8" x 6" FLANGED REDUCER - (1)
10. 8" x 6" 316 S.S. SCH. 40 REDUCER - (2)

EQUIPMENT TAG NUMBERS:

- A. SUBMERSIBLE PUMP - (2)
- B. 8" CHECK VALVE WITH LEVER AND WEIGHT - (2)
- C. 8" PLUG VALVE - (4)
- D. PRESSURE GAUGE/DIAPHRAGM ASSEMBLY
- E. AUTOMATIC AIR AND VACUUM VALVE ASSEMBLY
- F. 6" CAM-LOCK FEMALE QUICK DISCONNECT, DUST COVER AND CHAIN LOCK PLUG/CAP - ALL ALUMINUM - (1)

DESIGN SPECIFICATIONS

MANUFACTURER: ABS/SULZER
 MODEL: XFP100G CB1 60 HZ
 IMP: XXX
 DIA: 288 MM.
 SPEED: 1763 RPM
 DISCHARGE SIZE: X IN

VOLTAGE: 480 V
 PHASE: 3
 H.P.: 33.5
 MAX. SOLID SIZE (3 IN MIN): 3.93 IN
 CURVE NUMBER: XXX

SHUT OFF HEAD: 145 FEET TDH
 HIGH HEAD CONDITION: 510 GPM AT 110 FEET TDH
 MINIMUM HEAD CONDITION: 750 GPM AT 95 FEET TDH

DESCRIPTION	SYMBOL	DIMENSION	ELEVATION
THICKNESS OF WALL	A	8"	-
DIAMETER OF WET WELL	B	8"	-
WIDTH OF BOTTOM FILLET	C	SEE NOTE 9	-
C/L OF WET WELL TO C/L OF PIPES	D	SEE NOTE 9	-
LENGTH OF PUMP ACCESS OPENING	E	SEE NOTE 9	-
WIDTH OF PUMP ACCESS OPENING	F	SEE NOTE 9	-
CENTER OF WET WELL TO EDGE OF HATCH	G	SEE NOTE 9	-
VALVE BOX HATCH OPENING	H	N/A	-
VALVE BOX HATCH OPENING	I	N/A	-
LIP WIDTH OF WETWELL BASE	R	18"	-
THICKNESS OF WETWELL BASE	S	12"	-
TOP OF WET WELL	T	-	90.40
FINISHED GRADE	U	-	90.40
HIGH LEVEL ALARMS	V	-	76.63
LAG PUMP ON	W	-	76.63
LEAD PUMP ON / INFLUENT PIPE INVERT	X	-	76.13
PUMPS OFF (TOP OF PUMP VOLUTE)	Y	-	75.63
BOTTOM OF PUMP TO FLOOR OF WET WELL	P	XXX	-
STEP HEIGHT (IF REQUIRED)	Q	XXX	-
FLOOR OF WET WELL	Z	-	70.44

DESIGN SPECIFICATIONS

MANUFACTURER: XYLEM/FLYGT
 MODEL: NP 3202 HT 3
 IMP: 462
 DIA: 278 MM.
 SPEED: 1770 RPM
 DISCHARGE SIZE: 6 IN

VOLTAGE: 480 V
 PHASE: 3
 H.P.: 45
 MAX. SOLID SIZE (3 IN MIN): 3 IN
 CURVE NUMBER: NP 3202 HT 462

SHUT OFF HEAD: 144 FEET TDH
 HIGH HEAD CONDITION: 535 GPM AT 113 FEET TDH
 MINIMUM HEAD CONDITION: 710 GPM AT 104 FEET TDH

DESCRIPTION	SYMBOL	DIMENSION	ELEVATION
THICKNESS OF WALL	A	8"	-
DIAMETER OF WET WELL	B	8"	-
WIDTH OF BOTTOM FILLET	C	SEE NOTE 9	-
C/L OF WET WELL TO C/L OF PIPES	D	SEE NOTE 9	-
LENGTH OF PUMP ACCESS OPENING	E	SEE NOTE 9	-
WIDTH OF PUMP ACCESS OPENING	F	SEE NOTE 9	-
CENTER OF WET WELL TO EDGE OF HATCH	G	SEE NOTE 9	-
VALVE BOX HATCH OPENING	H	-	-
VALVE BOX HATCH OPENING	I	-	-
LIP WIDTH OF WETWELL BASE	R	18"	-
THICKNESS OF WETWELL BASE	S	12"	-
TOP OF WET WELL	T	-	90.40
FINISHED GRADE	U	-	90.40
HIGH LEVEL ALARMS	V	-	76.63
LAG PUMP ON	W	-	76.63
LEAD PUMP ON / INFLUENT PIPE INVERT	X	-	76.13
PUMPS OFF (TOP OF PUMP VOLUTE)	Y	-	75.63
BOTTOM OF PUMP TO FLOOR OF WET WELL	P	XXX	-
STEP HEIGHT (IF REQUIRED)	Q	XXX	-
FLOOR OF WET WELL	Z	-	70.44

- NOTES:**
1. EACH PUMP SHALL BE FITTED WITH 6 FEET (6'-0") OF TYPE 316 SS 3/4" CHAIN ATTACHED TO THE LIFTING MECHANISM AND AIRCRAFT RATED 1/4" SS CABLE PROVIDED BETWEEN THE CABLE HOLDER AND THE CHAIN.
 2. WALL SLEEVE AND COMPRESSION SEALS SHALL BE COMPATIBLE WITH LINER.
 3. IF PV=4 IN, LEVER OPERATED, IF PV>4 IN, WHEEL OPERATED.
 4. ELEVATION X - ELEVATION Z ≥ 5 FEET.
 5. PUMP OFF ELEVATION TO BE PER MANUFACTURER'S MINIMUM SUBMERGENCE.
 6. SEE FIGURE A402-1 FOR DESCRIPTIONS OF DIMENSION SYMBOLS.
 7. INSTALLED TO PROVIDE DRY CONTACT FOR SCADA.
 8. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 S.S. HARDWARE.
 9. PER PUMP MANUFACTURER'S REQUIREMENTS.

- NOTES:**
1. EACH PUMP SHALL BE FITTED WITH 6 FEET (6'-0") OF TYPE 316 SS 3/4" CHAIN ATTACHED TO THE LIFTING MECHANISM AND AIRCRAFT RATED 1/4" SS CABLE PROVIDED BETWEEN THE CABLE HOLDER AND THE CHAIN.
 2. WALL SLEEVE AND COMPRESSION SEALS SHALL BE COMPATIBLE WITH LINER.
 3. IF PV=4 IN, LEVER OPERATED, IF PV>4 IN, WHEEL OPERATED.
 4. ELEVATION X - ELEVATION Z ≥ 5 FEET.
 5. PUMP OFF ELEVATION TO BE PER MANUFACTURER'S MINIMUM SUBMERGENCE.
 6. SEE FIGURE A402-1 FOR DESCRIPTIONS OF DIMENSION SYMBOLS.
 7. INSTALLED TO PROVIDE DRY CONTACT FOR SCADA.
 8. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 S.S. HARDWARE.
 9. PER PUMP MANUFACTURER'S REQUIREMENTS.

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT SCALE ACCORDINGLY)



ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
 9150 CURRY FORD ROAD ORLANDO, FL 32825



A Full Service A & E Firm
 Architects M.E.P.
 Engineers Planners
 Environmental Structural
 Landscape Architects Surveyors
 Traffic/Transportation

Licenses:
 Eng. C.O.A. No. 3215
 Survey L.B. No. 7143
 Arch. Lic. No. AA260926
 Landsc. Lic. No. LC9000298

P.S. 3085 CULLEN LAKE SHORE
 PUMP PLAN, SECTION AND DETAIL

OCU FILE NO.: 93687
 DESIGNED BY: SAB
 DRAWN BY: RAS
 CHECKED BY: SAB/DEM
 CADD FILE: Pump Station Details

60% SUBMITTAL

SCALE: AS SHOWN
 DRAWING NO.:
P100
 SHEET: 30 OF 62

SCOTT A. BREITENSTEIN
 PROFESSIONAL ENGINEER
 FLORIDA LICENSE #57402

PLAN SYMBOLS

- HOME RUN TO PANELBOARD. NO. OF ARROWS INDICATE NO. OF CIRCUITS, HASH MARKS INDICATE NO. OF #12 AWG. CONDUCTORS. NO HASH MARKS INDICATE 2 #12 CONDUCTORS.
- CONDUIT CONCEALED IN WALL, IN SLAB ABOVE, OR ABOVE CEILING
- CONDUIT CONCEALED IN OR BELOW FLOOR OR UNDERGROUND.
- CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.
- FLEXIBLE CONDUIT WITH EQUIPMENT CONNECTION.
- POLE MOUNTED LIGHTING FIXTURE.
- ELECTRIC A.C. MOTOR, NO. INDICATES HORSEPOWER.
- ELECTRIC HEATER
- FLOW ELEMENT
- LEVEL ELEMENT
- LIMIT SWITCH
- PRESSURE SWITCH
- SOLENOID VALVE
- LEVEL INDICATING TRANSMITTER
- LIQUID LEVEL SWITCH
- FLOAT SWITCH
- FLOW INDICATING TRANSMITTER
- LEVEL INDICATING TRANSMITTER
- PRESSURE INDICATING TRANSMITTER

RISER & CONTROL DIAGRAM SYMBOLS

- VOLTMETER
- AMMETER
- THREE PHASE VOLT SWITCH
- THREE PHASE AMP SWITCH
- GROUND FAULT INTERRUPTER
- FUSE
- MOLDED CASE CIRCUIT BREAKER
- SERVICE OR EQUIPMENT GROUND.
- OTHERWISE INDICATED.
- CURRENT TRANSFORMERS
- POTENTIAL TRANSFORMERS
- DUPLEX RECEPTACLE
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- FLOAT SWITCH, NORMALLY OPEN
- FLOAT SWITCH, NORMALLY CLOSED
- FLOW SWITCH, NORMALLY OPEN
- FLOW SWITCH, NORMALLY CLOSED
- TEMPERATURE SWITCH, NORMALLY OPEN
- TEMPERATURE SWITCH, NORMALLY CLOSED

RISER & CONTROL DIAGRAM SYMBOLS

- NORMALLY OPEN, TIMED TO CLOSE CONTACT
- NORMALLY CLOSED, TIMED TO OPEN CONTACT
- NORMALLY CLOSED, TIMED TO CLOSE CONTACT
- NORMALLY OPEN, TIMED TO OPEN CONTACT
- LIMIT SWITCH
- TORQUE SWITCH
- PRESSURE SWITCH
- ZERO SPEED SWITCH
- SOLENOID VALVE
- LIQUID LEVEL SWITCH
- VIBRATION SWITCH
- ALARM RELAY
- ALARM TIMER
- CONTROL RELAY
- MOTOR STARTER
- TIMING RELAY
- ALARM INDICATING LIGHT
- RUN INDICATING LIGHT
- MOMENTARY CONTACT PUSHBUTTON
- MOMENTARY BREAK PUSHBUTTON OR RESET
- KEYED SWITCH
- MAINTAINED CONTACT ON-OFF SWITCH
- START/STOP(S/S) CONTROL SWITCH MAINTAINED CONTACT
- THREE POSITION MAINTAINED CONTACT SELECTOR SWITCH
- CONTROL POWER TRANSFORMER
- REMOTE TERMINAL BLOCK POINT
- MINI-POWER ZONE

ABBREVIATIONS

- A AMPERES
- AFF ABOVE FINISHED FLOOR
- AH ALARM HORN
- AIC AMPS INTERRUPTING CURRENT
- AL ALARM LIGHT
- ATS AUTOMATIC TRANSFER SWITCH
- ASB ALTERNATOR TEST SWITCH
- BKR BREAKER
- CCB CONTROL CIRCUIT BREAKER
- CCT CONTROL CIRCUIT TRANSFORMER
- CP CONTROL PANEL
- CPT CONTROL POWER TRANSFORMER
- CU COPPER
- DE DUKE ENERGY
- DH DATA HIGHWAY
- DISC DISCONNECT
- DR DUPLEX RECEPTACLE
- ELEC ELECTRICAL
- ELR EMERGENCY LOCK-OUT RELAY
- EM EMERGENCY
- ENCL ENCLOSURE
- EP EXPLOSION PROOF
- ESB ENERGY SAVING BALLAST
- ETM ELAPSED TIME METER
- EXH EXHAUST
- EXIST EXISTING
- F FUSE
- FL FLASHER
- FVNR FULL VOLTAGE NON-REVERSING GENERATOR
- GEN GENERATOR
- GFR GROUND FAULT RECEPTACLE
- GF GROUND FAULT INTERRUPTER
- GND GROUND
- GRS GALVANIZED RIGID STEEL
- HOA HAND-OFF-AUTOMATIC
- HOLR HAND-OFF-LOCAL-REMOTE
- HOR HAND-OFF-REMOTE
- HP HORSEPOWER
- HPS HIGH PRESSURE SODIUM
- HSS HORN SILENCE SWITCH
- HWY HIGHWAY
- KVA KILO VOLT-AMPERES
- KW KILOWATT
- LA LIGHTNING ARRESTOR
- LF LINEAR FEET
- LTG LIGHTING
- MAX MAXIMUM
- MB MOTOR BREAKER
- NCB MAIN CIRCUIT BREAKER
- MPZ MINI POWER ZONE
- MIN MINIMUM
- MLO MAIN LUGS ONLY
- MTD MOUNTED
- MS MOTOR STARTER
- NEC NATIONAL ELECTRICAL CODE
- N NEUTRAL
- NTS NOT TO SCALE
- OCU ORANGE COUNTY UTILITIES
- OLC ORLANDO UTILITIES COMMISSION
- OH OVERHEAD
- OL OVERLOAD HEATER
- P POLE
- PA POWER AVAILABLE LIGHT
- PCP PUMP CONTROL PANEL
- PL PILOT LIGHT
- PM PHASE MONITOR
- PNL PANEL
- PRI PRIMARY
- PVC POLYVINYL CHLORIDE
- R RELAY
- RL RUNNING LIGHT
- PR1 PRIMARY
- SC SURGE CAPACITOR
- SEC SECONDARY
- SH SHIELDED
- SPD SURGE PROTECTIVE DEVICE
- SS STAINLESS STEEL
- STR STARTER
- SUPP SUPPRESSOR
- SW SWITCH
- TBR TO BE REMOVED
- TC TIME CLOCK
- TLS TROUBLE LIGHT SWITCH
- TS TERMINAL STRIP
- TTS THERMAL TERMINAL STRIP
- TYP TYPICAL
- UC UNDERGROUND
- V VOLT
- W WATT
- W/ WITH
- WP WEATHERPROOF
- ø PHASE

NOTES

1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED.
2. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. EXISTING CONDITIONS OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, ETC... THAT ARE PART OF THE FINAL SYSTEM SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING HIS BID.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 6TH EDITION (2017) (F.B.C.), THE NFPA 70, 2014 NATIONAL ELECTRICAL CODE (N.E.C.) (F.B.C. ADOPTED DECEMBER 31, 2017), ORANGE COUNTY STANDARDS AND SHALL COMPLY WITH ALL LOCAL RULES AND ORDINANCES.
4. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. EXCLUDING CONTROL WIRING, UNLESS OTHERWISE NOTED. ALL CONDUCTORS SHALL BE COPPER.
5. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
6. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE 2014 EDITION OF THE N.E.C. OR LOCAL CODES. ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250 OF THE NATIONAL ELECTRICAL CODE.
7. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
8. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/OWNER.
9. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN TWO YEARS FROM DATE OF ACCEPTANCE.
10. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED OF HIS WORK.
12. ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS W/ TYPEWRITTEN DIRECTORIES (NEW & EXISTING).
13. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
14. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO THE MECHANICAL DRAWINGS & THE APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.
15. **SHADED TEXT** DENOTES EXISTING EQUIPMENT OR STRUCTURES. **NON-SHADED TEXT** DENOTES NEW EQUIPMENT, STRUCTURES AND WORK. **SLANTED TEXT (NOT SHADED)** DENOTES FUTURE EQUIPMENT, STRUCTURES AND WORK.

Reviewed for Code Compliance
Universal Engineering Sciences

EDA
Electrical Design Associates
9085 PIAZZA GRANDE AVE., STE. 311
ORLANDO, FLORIDA 32838
PHONE: (407) 745-3004
FAX: (407) 745-5603
C.O.A. No. 8078
WILLIAM C. NELSON, P.E.
Florida P.E. No. 42317

60% SUBMITTAL

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE
(IF NOT SCALE ACCORDINGLY)

ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
9150 CURRY FORD ROAD ORLANDO, FL. 32825

cph
A Full Service A & E Firm
1117 East Robinson Street - Orlando, FL 32801 - Phone: 407.425.0452

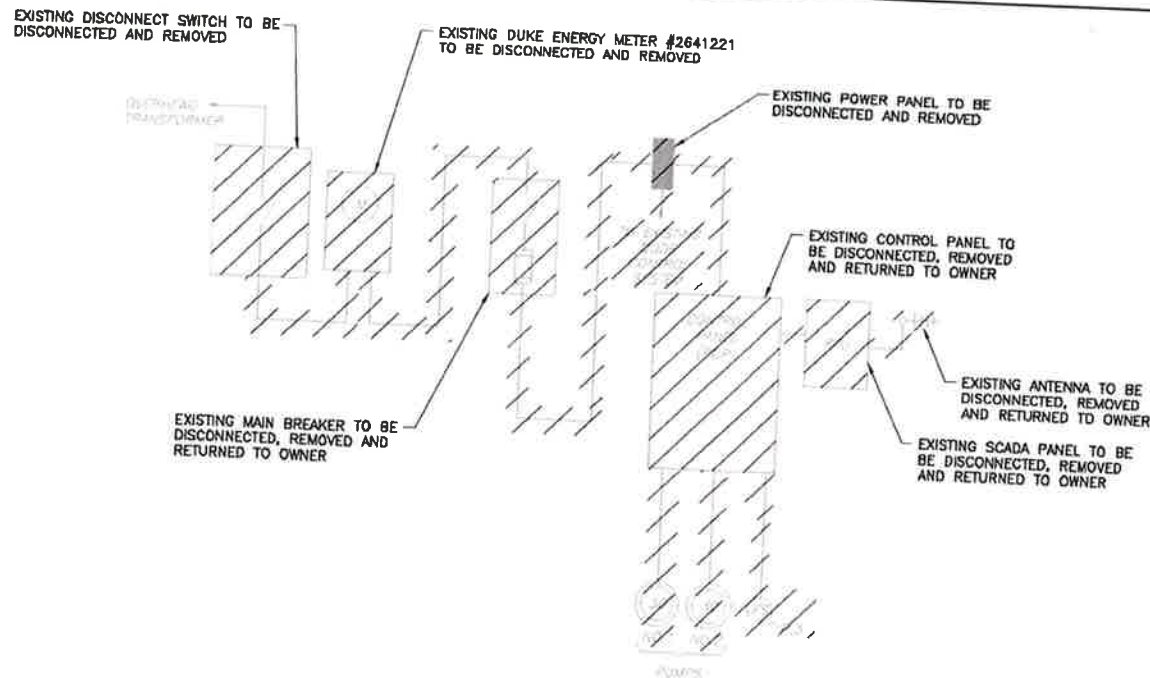
Licenses:
Eng. C.O.A. No. 3215
Survey L.B. No. 7143
Arch. Lic. No. AA2600920
Landscape Architecture License/Transportation License Lic. No. LC0000288

ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS

WILLIAM C. NELSON
PROFESSIONAL ENGINEER
FLORIDA LICENSE #42017

OCU FILE NO.: XXXXX
DESIGNED BY: AHH
DRAWN BY: SDV
CHECKED BY: WCN
CADD FILE: E001 NOTE

SCALE:
DRAWING NO.:
E001
SHEET: 41 OF 62

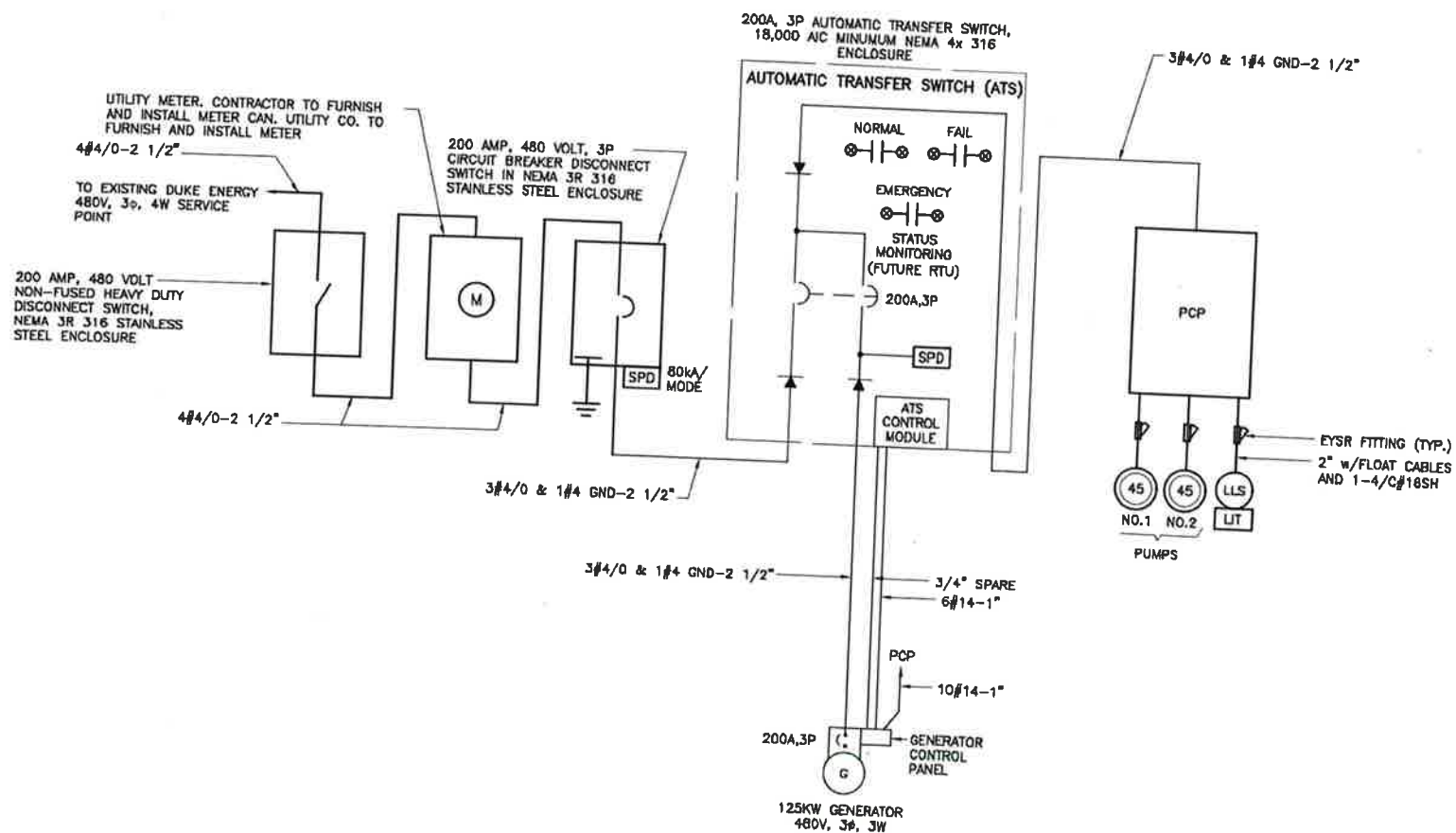


P.S. NO. 3085 DEMOLITION SINGLE LINE DIAGRAM
SCALE: N.T.S.

OCU ADDRESS:
PUMP STATION #3085
3116 CULLEN LAKE SHORE DR.

DUKE ADDRESS:
PUMP STATION #3085
3116 CULLEN LAKE SHORE DR.

DUKE ENERGY CONTACT:
-



LOAD TABULATION - PS 3085
SERVICE VOLTAGE: 480V-3p

DESCRIPTION	LOAD	CAPACITY
PUMPS	2 @ 45 HP EACH	= 130.00 AMPS
MISCELLANEOUS LOADS		= 5.00 AMPS
CONNECTED LOAD		= 135.00 AMPS
① SERVICE ENTRANCE - 135.00 AMPS + (.25)(66.00)		= 151.25 AMPS

NOTES:
① SERVICE ENTRANCE MINIMUM SIZE AS PER ARTICLE 230 OF THE NATIONAL ELECTRICAL CODE.
② SERVICE ENTRANCE MINIMUM SIZE FOR ORANGE COUNTY IS 100 AMPS.

P.S. NO. 3085 PROPOSED SINGLE LINE DIAGRAM
SCALE: N.T.S.

Reviewed for Code Compliance
Universal Engineering Sciences

EDA
Electrical Design Associates
8885 PUZZA GRANDE AVE., STE. 311
ORLANDO, FLORIDA 32838
PHONE: (407) 743-3804
FAX: (407) 743-5803
C.O.A. No. 8079
WILLIAM C. NELSON, P.E.
FL0690 P.E. No. 42017

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE
(IF NOT SCALE ACCORDINGLY)



ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
9150 CURRY FORD ROAD ORLANDO, FL 32825



A Full Service A & E Firm
Architects, Engineers, Environmental, Landscape Architects, Traffic/Transportation, M/E/P, Planners, Surveyors
Licenses:
Eng. C.O.A. No. 3215
Survey L.B. No. 7143
Arch. Lic. No. AA260928
Landscape Lic. No. LC000299

P.S. 3085 CULLEN LAKE SHORE
DUPLIX PUMP CONTROL PANEL
SINGLE LINE DIAGRAM

WILLIAM C. NELSON
PROFESSIONAL ENGINEER
FLORIDA LICENSE #42017

60% SUBMITTAL

OCU FILE NO.: XXXXX	SCALE:
DESIGNED BY: AHH	DRAWING NO.:
DRAWN BY: SDV	E100
CHECKED BY: WCN	SHEET: 42 OF 62
CADD FILE: E100 PS 3085 SLD	



EXISTING SCADA PANEL TO BE DISCONNECTED AND REMOVED
 EXISTING UTILITY METER TO BE DISCONNECTED AND REMOVED
 EXISTING UTILITY DISCONNECT TO BE DISCONNECTED AND REMOVED

P.S. 3085 FIGURE NO. 1
 SCALE: N.T.S.



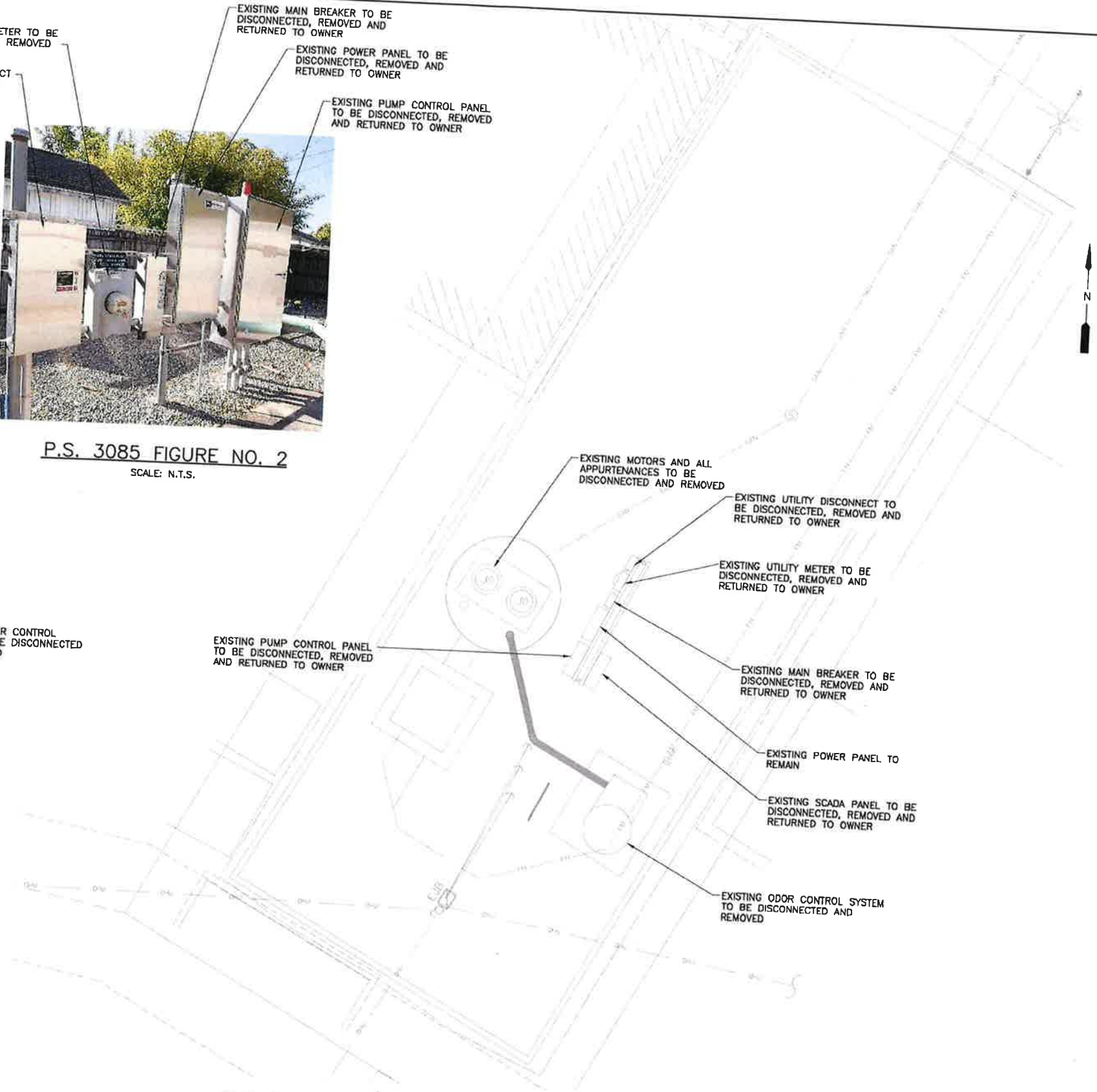
EXISTING MAIN BREAKER TO BE DISCONNECTED, REMOVED AND RETURNED TO OWNER
 EXISTING PUMP CONTROL PANEL TO BE DISCONNECTED, REMOVED AND RETURNED TO OWNER

P.S. 3085 FIGURE NO. 2
 SCALE: N.T.S.



EXISTING ODOR CONTROL SYSTEM TO BE DISCONNECTED AND REMOVED

P.S. 3085 FIGURE NO. 3
 SCALE: N.T.S.



OCU ADDRESS:
 PUMP STATION #3085
 3116 CULLEN LAKE SHORE DR.

DUKE ADDRESS:
 PUMP STATION #3085
 3116 CULLEN LAKE SHORE DR.

DUKE ENERGY CONTACT:
 -

P.S. 3085 DUPLEX PUMP CONTROL PANEL ELECTRICAL DEMOLITION PLAN

SCALE: 1"=5'-0"
 5 2.5 0 5'

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
 AT FULL SIZE
 (IF NOT SCALE ACCORDINGLY)



ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
 9150 CURRY FORD ROAD ORLANDO, FL 32825



A Full Service A & E Firm
 Architects M/E/P
 Engineers Planners
 Environmental Surveyors
 Landscape Architects Traffic/Transportation
 License: Eng. C.O.A. No. 5215
 Survey L.B. No. 1143
 Arch. Lic. No. AA2600920
 Landsc. Lic. No. LC0000299
 1117 East Robinson Street - Orlando, FL 32801 - Phone: 407.425.0452

P.S. 3085 CULLEN LAKE SHORE ELECTRICAL DEMOLITION PLAN



Reviewed for Code Compliance
 Universal Engineering Sciences



EDA Electrical Design Associates
 6005 PIAZZA GRANDE AVE., STE. 311
 ORLANDO, FLORIDA 32835
 PHONE (407) 245-3804
 FAX (407) 245-5603
 C.O.A. No. 8078
 WILLIAM C. NELSON, P.E.
 Florida P.E. No. 42017

60% SUBMITTAL

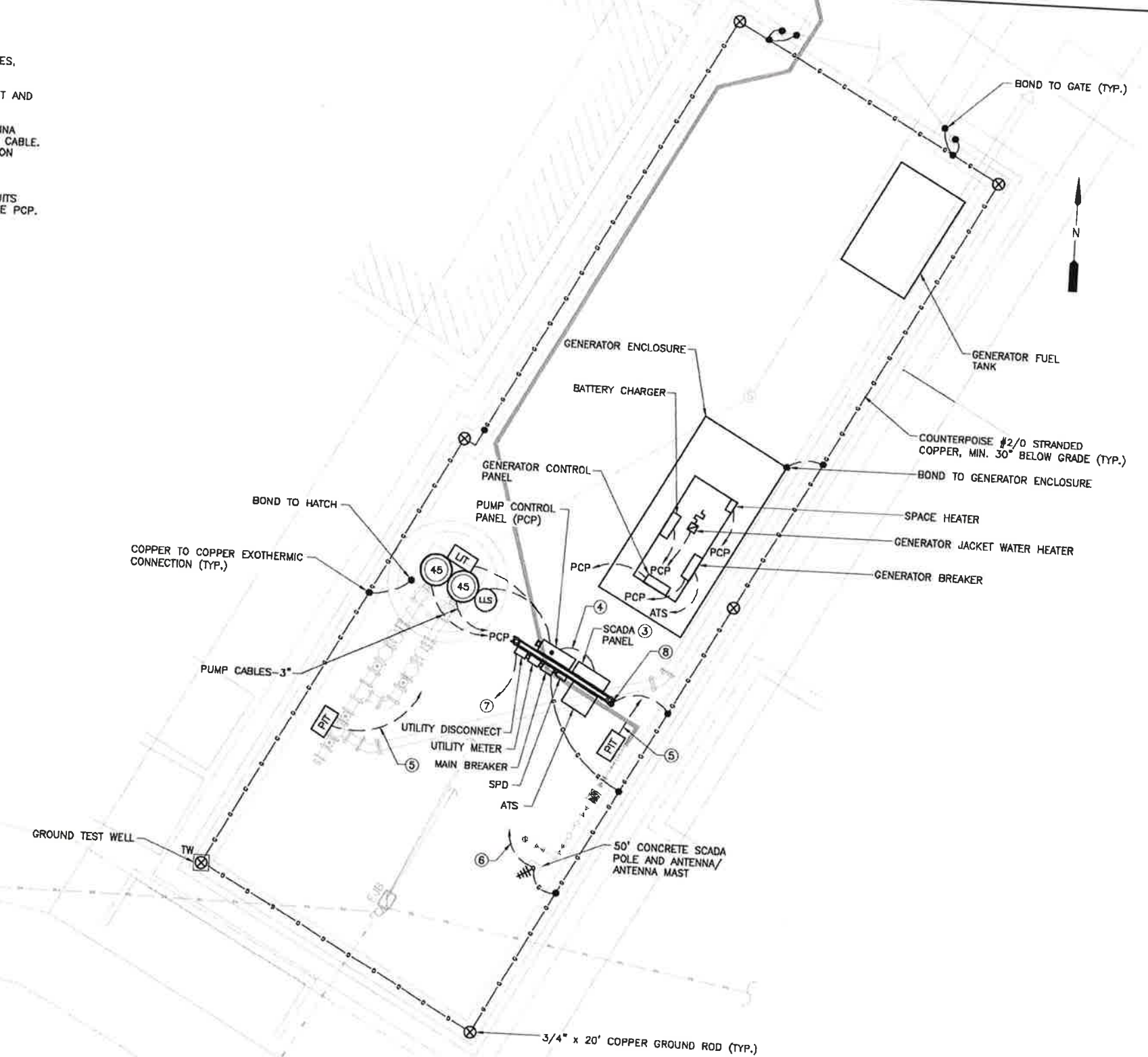
OCU FILE NO.: XXXXX	SCALE:
DESIGNED BY: AHH	DRAWING NO.:
DRAWN BY: SDV	E101
CHECKED BY: WCN	SHEET: 43 OF 62
CADD FILE: E101 PS 3085 DEMO	

WILLIAM C. NELSON
 PROFESSIONAL ENGINEER
 FLORIDA LICENSE #42017

- NOTES:**
- ① REFER TO SHEET E001 FOR ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS.
 - ② REFER TO SINGLE LINE DIAGRAM FOR CONDUIT AND WIRE REQUIREMENTS.
 - ③ CONTRACTOR TO FURNISH AND INSTALL ANTENNA MAST, SCADA PANEL, ANTENNA, AND ANTENNA CABLE. CONTRACTOR TO PROVIDE THE INTERCONNECTION BETWEEN THE PCP AND THE SCADA PANEL, INCLUDING TERMINATION OF THE ANTENNA.
 - ④ CONTRACTOR TO FURNISH AND INSTALL CONDUITS WITH CABLING FROM THE SCADA PANEL TO THE PCP.
 - ⑤ 1" WITH CABLING TO SCADA PANEL.
 - ⑥ 2" WITH CABLING TO SCADA PANEL.
 - ⑦ TO 480V-3 ϕ SERVICE POINT.
 - ⑧ BOND EQUIPMENT RACK TO GROUND GRID.

OCU ADDRESS:
PUMP STATION #3085
3116 CULLEN LAKE SHORE DR.

DUKE ADDRESS:
PUMP STATION #3085
3116 CULLEN LAKE SHORE DR.
DUKE ENERGY CONTACT:
-



P.S. 3085 DUPLEX PUMP CONTROL PANEL ELECTRICAL PLAN

SCALE: 1"=5'-0"
5 2.5 0 5'

REV	DATE	DESCRIPTION

ORANGE COUNTY GOVERNMENT
FLORIDA

ORANGE COUNTY UTILITIES DEPARTMENT
ENGINEERING DIVISION
9150 CURRY FORD ROAD ORLANDO, FL 32825

gph A Full Service A & E Firm
Architects M/E/P
Engineers Planners
Surveyors
Landscape Architects Traffic/Transportation
www.cphcorp.com
1117 East Robinson Street - Orlando, FL 32801 - Phone: 407.425.0452

License:
Eng. C.O.A. No. 5215
Survey L.B. No. 7143
Arch. Lic. No. AA2809926
Landscape Lic. No. LC0000298

WILLIAM C. NELSON
PROFESSIONAL ENGINEER
FLORIDA LICENSE #42017

60% SUBMITTAL

OCU FILE NO.: XXXXX
DESIGNED BY: AHH
DRAWN BY: SDV
CHECKED BY: WCN
CADD FILE: E102 PS 3085

SCALE:
DRAWING NO.:
E102
SHEET: 44 OF 62



Reviewed for Code Compliance
Universal Engineering Sciences



EDA
Electrical Design Associates
6965 PIAZZA GRANDE AVE., STE. 311
ORLANDO, FLORIDA 32835
PHONE: (407) 745-5804
FAX: (407) 745-5803
C.O.A. No. 8079
WILLIAM C. NELSON, P.E.
FLORIDA P.E. No. 42817

Y:\C:\Orange County\1117_EPR\Project\102_P.S. 3085 Duplex\102_P.S. 3085 Duplex.dwg, 22/11/14, 10:20:15, 3, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000