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IMPROVEMENT PLANS
FOR

LAKE COUNTY, FL
REAL FLORIDA • REAL CLOSE

BUTLER STREET BOAT RAMP - RESTROOM BUILDING AND PARKING IMPROVEMENTS

SECTION 30 TOWNSHIP 15S RANGE 28E

SITE DATA:

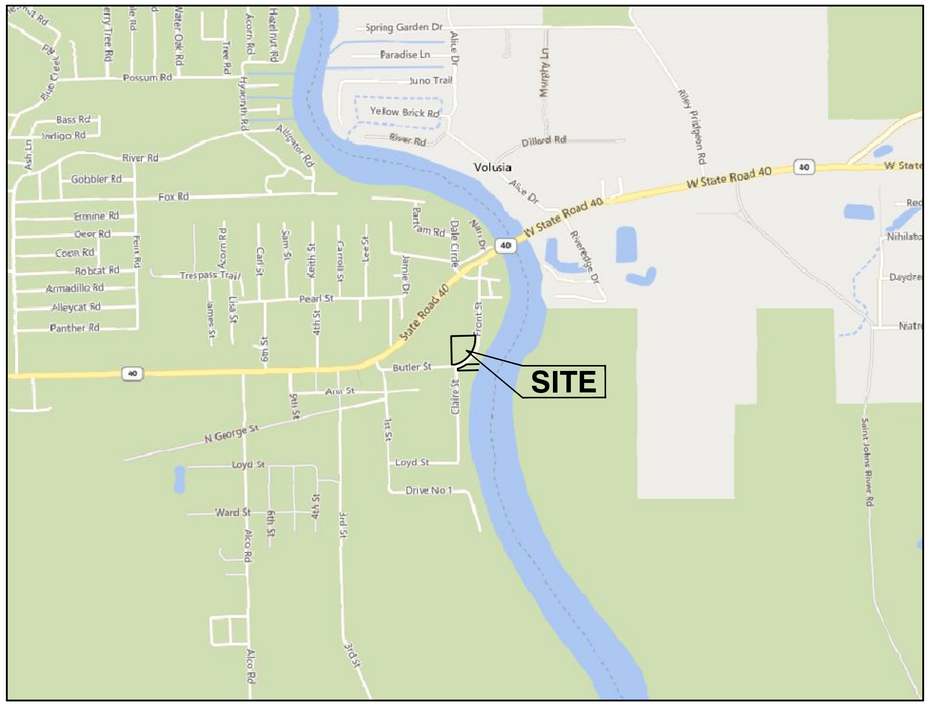
ALTERNATE KEY	1788412 & 3918957
EXISTING FLU	RECREATION
EXISTING ZONING	CP
PROPOSED USE	RESTROOM FACILITY
MAXIMUM BLDG. HEIGHT	9'-10"
PARKING	
EXISTING	
VEHICLE	5
VEHICLE W/ TRAILER	22
HANDICAP	2
HANDICAP W/ TRAILER	2
PROPOSED (IN ADDITION TO EXISTING)	
VEHICLE	8
VEHICLE W/ TRAILER	21
HANDICAP	0
TOTAL PARKING	60
SITE AREA	106,632.80 S.F. (2.45 AC.)
TOTAL IMPERVIOUS AREA	57268.41 S.F. (1.32 AC.)
EXISTING IMPERVIOUS	36664.45 S.F. (0.84 AC.)
PROPOSED BUILDING AREA	254.89 S.F.
PROPOSED PAVEMENT AREA	20349.07 S.F. (0.47 AC.)
IMPERVIOUS SURFACE RATIO (ISR)	0.537
FLOOR AREA RATIO (FAR)	0.239%
TOTAL OPEN SPACE	49364.39 S.F. (1.13 AC.)
WATER	ST. JOHN'S RIVER UTILITY, INC.
SEWER	ST. JOHN'S RIVER UTILITY, INC.
ELECTRIC	CLAY ELECTRICAL COOPERATIVE, INC.

LEGAL DESCRIPTION:

BEGIN AT THE SOUTHEAST CORNER OF BLOCK "54" OF THE TOWN SITE OF ASTOR, FLORIDA, AS RECORDED IN PLAT BOOK 2, PAGE 12, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, AND RUN N03°14'32"W ALONG THE EAST LINE OF SAID BLOCK "54" A DISTANCE OF 399.41 FEET; THENCE RUN N86°45'28"E, 337.37 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 4O; THENCE RUN S00°52'57"E ALONG SAID WESTERLY RIGHT-OF-WAY 47.66 FEET TO THE BEGINNING OF A CURVE CONCAVED NORTHWESTERLY AND HAVING A RADIUS OF 376.26 FEET; RUN THENCE ALONG SAID CURVE AND RIGHT OF WAY LINE THROUGH A CENTRAL ANGLE OF 75°07'08", AN ARC LENGTH OF 493.34 FEET TO THE END OF SAID CURVE; THENCE RUN S86°48'28"W, 41.01 FEET TO THE POINT OF BEGINNING.

AND ALSO:

THAT PART OF BUTLER STREET, ACCORDING TO THE TOWN OF ASTOR, EXTENDING EAST FROM THE EAST BOUNDARY OF STATE ROAD 40 TO THE ST. JOHNS RIVER



VICINITY MAP
1" = 1,000'

INDEX OF SHEETS

DEVELOPMENT REVIEW

PROJECT # 2016050009 APPLICATION REQUEST #_____
PROJECT NAME: BUTLER STREET BOAT RAMP - RESTROOM BUILDING AND PARKING IMPROVEMENTS
ALTERNATE KEY # 1788412, 3918957 ORDINANCE #_____

REVIEWER PLASE SIGN AND DATE BELOW

PLANNING AND ZONING: _____
COMMENTS: _____
ENVIRONMENTAL: _____
COMMENTS: _____
LANDSCAPE: _____
COMMENTS: _____
CONCURRENCY: _____
COMMENTS: _____
BUILDING SERVICES: _____
COMMENTS: _____
FIRE: _____
COMMENTS: _____
DEPARTMENT OF HEALTH: _____
COMMENTS: _____
PUBLIC WORKS DEPARTMENT: _____
COMMENTS: _____

PRELIMINARY/FINAL DEVELOPMENT REVIEW

APPROVAL: _____
DATE: _____ DIRECTOR, OFFICE OF PLANNING AND ZONING (OR DESIGNEE)

OWNER/DEVELOPER:
LAKE COUNTY OFFICE OF PARKS &TRAILS
2401 WOODLEA RD.
TAVARES FL 32778
ROBERT BONILLA, DIRECTOR
PHONE: (352 253-4950
RBONILLA@LAKECONTYFL.GOV

ENGINEER/SURVEYOR:
HALFF ASSOCIATES, INC.
902 N. SINCLAIR AVENUE
TAVARES, FL 32778
HUGO CABRERA, P.E.
(352) 343-8481
HCABRERA@HALFF.COM

N
W E
S

Hugo J Cabrera
Digitally signed by Hugo J Cabrera
DN: cn=Hugo J Cabrera, c=US, o=HALFF ASSOCIATES INC, email=hcabrera@halff.com
Date: 2023.01.16 11:31:00 -05'00'

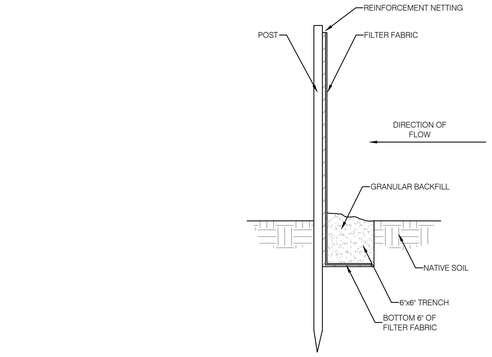
HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

HUGO J. CABRERA LICENSE No. 93087 STATE OF FLORIDA PROFESSIONAL ENGINEER

ORIGINAL DOCUMENT SIZE 24"x36"
0 1 2 3 4 5
(INCHES)

NOVEMBER 29, 2022, SUBMITTAL #3 TO LAKE COUNTY (NOT FOR CONSTRUCTION UNTIL CONFORMED)

11/29/2022 3:20 PM AH5134



SILT BARRIER DETAIL

THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF-SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.

PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.

TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.

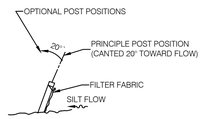
EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.

NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

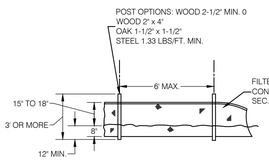
MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.



SECTION

NOT TO SCALE



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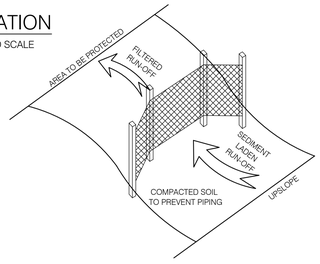
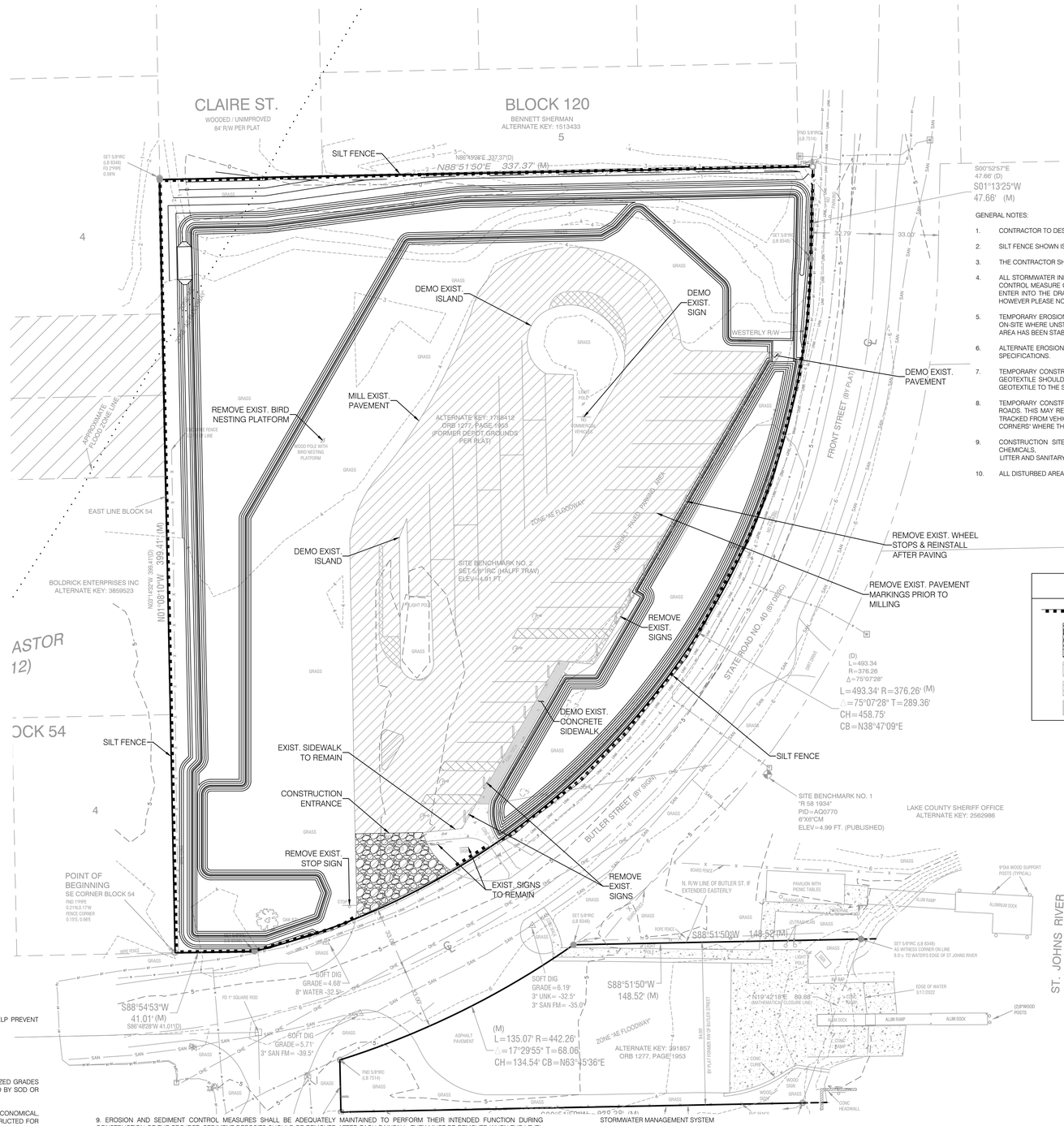


SILT FENCE DETAIL

NOT TO SCALE



GENERAL NOTES:

1. CONTRACTOR TO DESILT ALL PIPES PRIOR TO COMPLETION OF CONSTRUCTION OF PROJECT.
2. SILT FENCE SHOWN IS STRICTLY SCHEMATIC, FOR ILLUSTRATION ONLY, ALL FENCE TO BE WITHIN THE PROPERTY LINE OF THE PROJECT SITE.
3. THE CONTRACTOR SHALL APPLY WITH AND OBTAIN NPDES PERMIT FROM THE FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION (FDEP).
4. ALL STORMWATER INLETS TO HAVE EROSION CONTROL MEASURES APPLIED UPON THE COMPLETION OF THEIR INSTALLATION. THIS EROSION CONTROL MEASURE CAN BE A 'SOCK' WITH ROCK BAGS THAT WILL NOT ALLOW FOR SEDIMENTS TO ENTER INTO THE INLETS AND ULTIMATELY ENTER INTO THE DRA. OTHER METHODS OF PROTECTION CAN BE OBTAINED FROM THE MOST RECENT FDOT STANDARD SPECIFICATIONS, HOWEVER PLEASE NOTE THE USE OF HAYSTRAW BALES IS NOT PERMITTED, A SYNTHETIC BALE MAY BE USED INSTEAD.
5. TEMPORARY EROSION CONTROL STRUCTURE TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY THE ENGINEER OR AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURE MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY CONTRACTOR.
6. ALTERNATE EROSION CONTROL STRUCTURE: WOVEN FILTER FABRIC SILT FENCE IN ACCORDANCE WITH THE MOST RECENT FDOT STANDARD SPECIFICATIONS.
7. TEMPORARY CONSTRUCTION ENTRANCE AREA SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. A GEOTEXTILE SHOULD BE LAID DOWN TO IMPROVE STABILITY AND SIMPLIFY MAINTENANCE. THE GRAVEL SHALL THEN BE PLACED OVER THE GEOTEXTILE TO THE SPECIFIED DIMENSIONS.
8. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF MUD ONTO PUBLIC ROADS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, OR TRACKED FROM VEHICLES ONTO ROADWAYS MUST BE REMOVED IMMEDIATELY. LOOK FOR SIGNS OF TRUCKS TRAILERED EQUIPMENT 'CUTTING CORNERS' WHERE THE GRAVEL MEETS THE ROADWAY. SWEEP THE PAVED ROAD DAILY FOR SEDIMENTS.
9. CONSTRUCTION SITE OPERATORS MUST CONTROL WASTE SUCH AS DISCARDED BUILDING MATERIALS. CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE AT THE CONSTRUCTION SITE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY.
10. ALL DISTURBED AREAS TO BE SEEDED AND MUCHED.

LEGEND

- SILT FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- LIMITS OF MILLING & RESURFACING (1" AVG.)
- LIMITS OF PAVEMENT DEMO
- LIMITS OF CONCRETE SIDEWALK DEMO

EROSION AND SEDIMENT CONTROL NOTES:

THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF-SITE
SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.

EROSION AND SEDIMENT CONTROL

A. EROSION CONTROL DURING CONSTRUCTION.

1. TEMPORARY EROSION CONTROL STRUCTURES SHALL BE UTILIZED DURING CONSTRUCTION AT AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURES MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD OR COMPACTED AS DETERMINED BY THE CONTRACTOR.

2. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.

3. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PREDICTABLE TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.

4. STORM WATER MANAGEMENT AREAS, STORM SEWER SYSTEM AND CONTROL STRUCTURES SHALL BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACES WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES. TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATE, ALL ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE STORM WATER FACILITIES PRIOR TO FINAL GRADING, STABILIZATION AND GRASSING.

5. EROSION CONTROL STRUCTURES, SUCH AS SILT FENCE AND BERMS, SHALL BE INSTALLED AROUND INLETS AND IN SWALES TO TRAP ERODED MATERIAL, PREVENT SEDIMENTATION IN DOWN STREAM AREAS AND KEEP RUNOFF VELOCITIES LOW.

6. THE CONTRACTOR SHALL MINIMIZE THE EXTENT OF AREA EXPOSED AT ANY ONE TIME AND THE DURATION OF EXPOSURE.

7. STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS NO MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN ANY PORTION OF THE SITE THAT HAS CEASED.

8. THE CONTRACTOR WILL INSTALL A PERMANENT VEGETATIVE COVER FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES DISTURBED BY CONSTRUCTION. THIS PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN (14) DAYS AFTER FINAL GRADING OF THE EFFECTED LAND SURFACES. A PERMANENT VEGETATIVE COVER MUST BE ESTABLISHED WITHIN SIXTY (60) DAYS AFTER PLANTING OR INSTALLATION.

9. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

10. PLACEMENT OF BARRIERS OR NECESSARY REPAIRS TO BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.

11. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCK PILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATER COURSE BY RUNOFF OR HIGH WATER.

12. ANY ACCUMULATED SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED, AND SEEDED.

13. TO PROVIDE DUST CONTROL, A CONTRACTOR SHALL PROVIDE A WATER TRUCK OR IRRIGATION SYSTEM AS NEEDED, TO MAINTAIN SOIL MOISTURE.

14. IF SITE SPECIFIC CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR MUST IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY, IN ACCORDANCE WITH THE SPECIFICATION IN SECTION 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, 1988).

B. PERMANENT STABILIZATION

WHERE CONSTRUCTION IS COMPLETE, PERMANENT VEGETATION SHALL BE INSTALLED AS SPECIFIED ON THE CONSTRUCTION PLANS AND IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATION DOCUMENTS. PERMANENT VEGETATION WILL INCLUDE SOD OR SEED AND MULCH.

STORMWATER MANAGEMENT SYSTEM

THE STORMWATER RETENTION PONDS SHALL BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACES WITHIN THE DRAINAGE AREA SERVED BY THIS FACILITY. ALL ACCUMULATED SEDIMENT MUST BE REMVOED FROM THE RETENTION POND PRIOR TO FINAL GRADING, STABILIZING AND GRASSING.

OTHER CONTROLS

A. OFFSITE VEHICLE TRACKING

PAVED STREETS ADJACENT TO THE CONSTRUCTION SITE ENTRANCE WILL BE SWEPT AS NEEDED TO PREVENT EXCESS MUD, DIRT OR ROCK FROM LEAVING THE CONSTRUCTION SITE. ALL DUMP TRUCKS HAULING MATERIAL TO AND FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP. TEMPORARY STABILIZED OR ROCK CONSTRUCTION ENTRANCE MAY BE REQUIRE TO REMOVE EXCESS DIRT AND MUD FROM TIRES BEFORE CONSTRUCTION VEHICLES ENTER ADJACENT PAVED STREETS.

TIMING OF SEDIMENT AND EROSION CONTROL MEASURES

A SILT FENCE SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY. A RETENTION POND AND STORM WATER CONVEYANCE SYSTEM SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF ANY IMPERVIOUS AREA. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14-DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN ANY AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH OR SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WITHIN ANY CATCH BASIN, STORM PIPES, OR RETENTION PONDS WILL BE REMOVED.

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LAKE COUNTY, FLORIDA

BUTLER ST. BOAT RAMP PARKING LOT IMPROVEMENT PLANS

EXISTING CONDITIONS, DEMO, & EROSION CONTROL PLAN

LAKE COUNTY FL — REAL FLORIDA • REAL CLASS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	JUNE 2022
DESIGNED BY:	HJC
DRAWN BY:	TNJ
CHECKED BY.:	HJC
JOB NO.:	043862.059
FILE NAME:	BUTLER ST.

Sheet 02

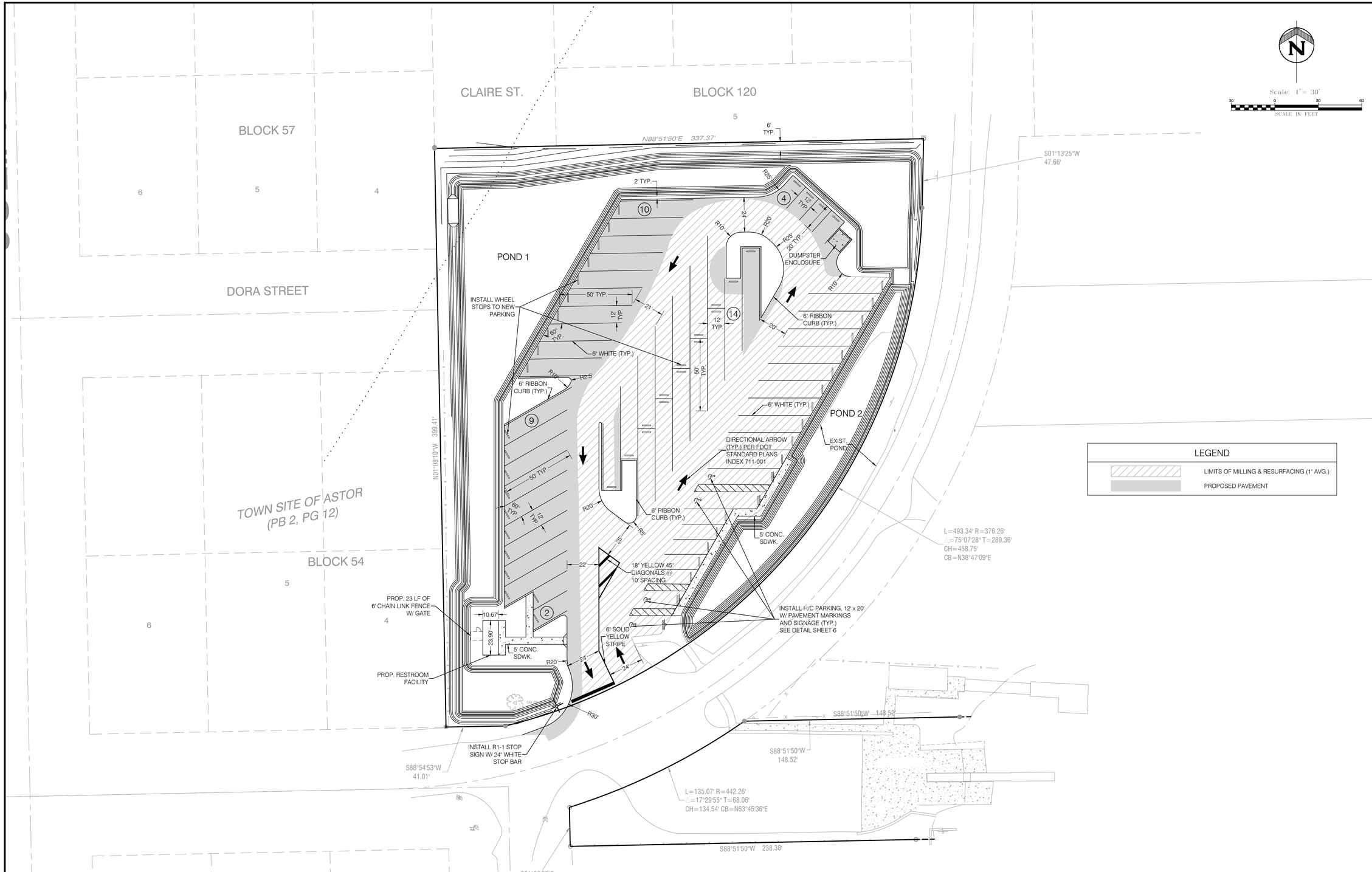
HUGO J. CABRERA LICENSE No. 93087 STATE OF FLORIDA PROFESSIONAL ENGINEER

HUGO J. CABRERA, PE
Registered Eng 93087

Hugo J Cabrera

Digitally signed by Hugo J Cabrera
DN: cn=Hugo J Cabrera, c=US, o=HALFF ASSOCIATES INC, email=hcabrera@halff.com
Date: 2023.01.16 11:28:01 -05'00'

11/29/2022 3:21 PM AH5134



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LAKE COUNTY, FLORIDA

BUTLER ST. BOAT RAMP PARKING LOT IMPROVEMENT PLANS

SITE PLAN

LAKE COUNTY, FL
REAL FLORIDA - REAL CLOSE

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	JUNE 2022
DESIGNED BY:	HJC
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CHECKED BY.:	HJC
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Sheet 03

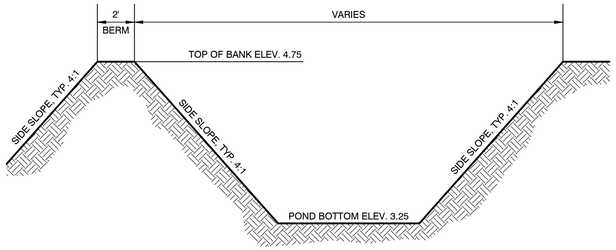
HUGO J. CABRERA LICENSE No. 93087 STATE OF FLORIDA PROFESSIONAL ENGINEER

HUGO J. CABRERA, PE
Registered Eng 93087

Hugo J Cabrera

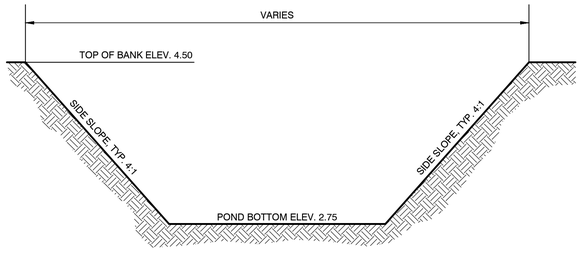
Digitally signed by Hugo J Cabrera
DN: cn=Hugo J Cabrera, c=US, o=HALFF ASSOCIATES INC, email=hcabrera@halff.com
Date: 2023.01.16 11:28:44 -05'00'

1/16/2023 10:30 AM AH5134



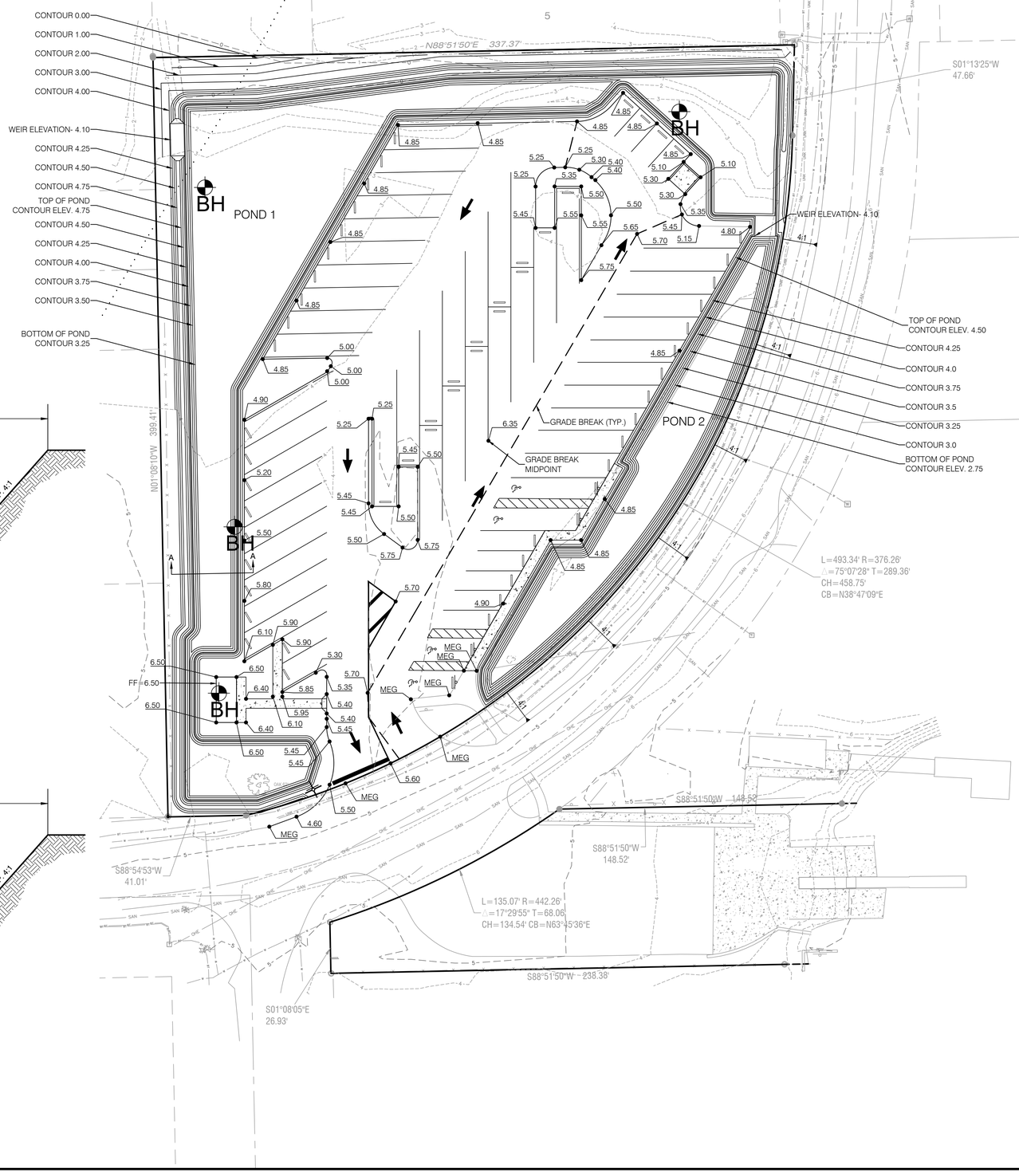
POND 1 SECTION A-A

NOTES:
1. MAXIMUM SIDE SLOPES NOT TO EXCEED 4:1.
2. SOD ALL SIDE SLOPES
3. SEED AND MULCH BOTTOM



POND 2 TYPICAL SECTION

NOTES:
1. MAXIMUM SIDE SLOPES NOT TO EXCEED 4:1.
2. SOD ALL SIDE SLOPES
3. SEED AND MULCH BOTTOM



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SCALE IN FEET

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LAKE COUNTY, FLORIDA

BUTLER ST. BOAT RAMP PARKING LOT IMPROVEMENT PLANS

GRADING PLAN

LAKE COUNTY
REAL FLORIDA - REAL CLASSE

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	JUNE 2022
DESIGNED BY:	HJC
DRAWN BY:	TNJ
CHECKED BY.:	HJC
JOB NO.:	043862.059
FILE NAME:	BUTLER ST.

Sheet 04

HUGO J. CABRERA
LICENSE
No. 93087
STATE OF FLORIDA
PROFESSIONAL ENGINEER

HUGO J. CABRERA, PE
Registered Eng 93087

Hugo J Cabrera

Digitally signed by Hugo J Cabrera
DN: cn=Hugo J Cabrera, c=US, o=HALFF ASSOCIATES INC, email=hcabrera@halff.com
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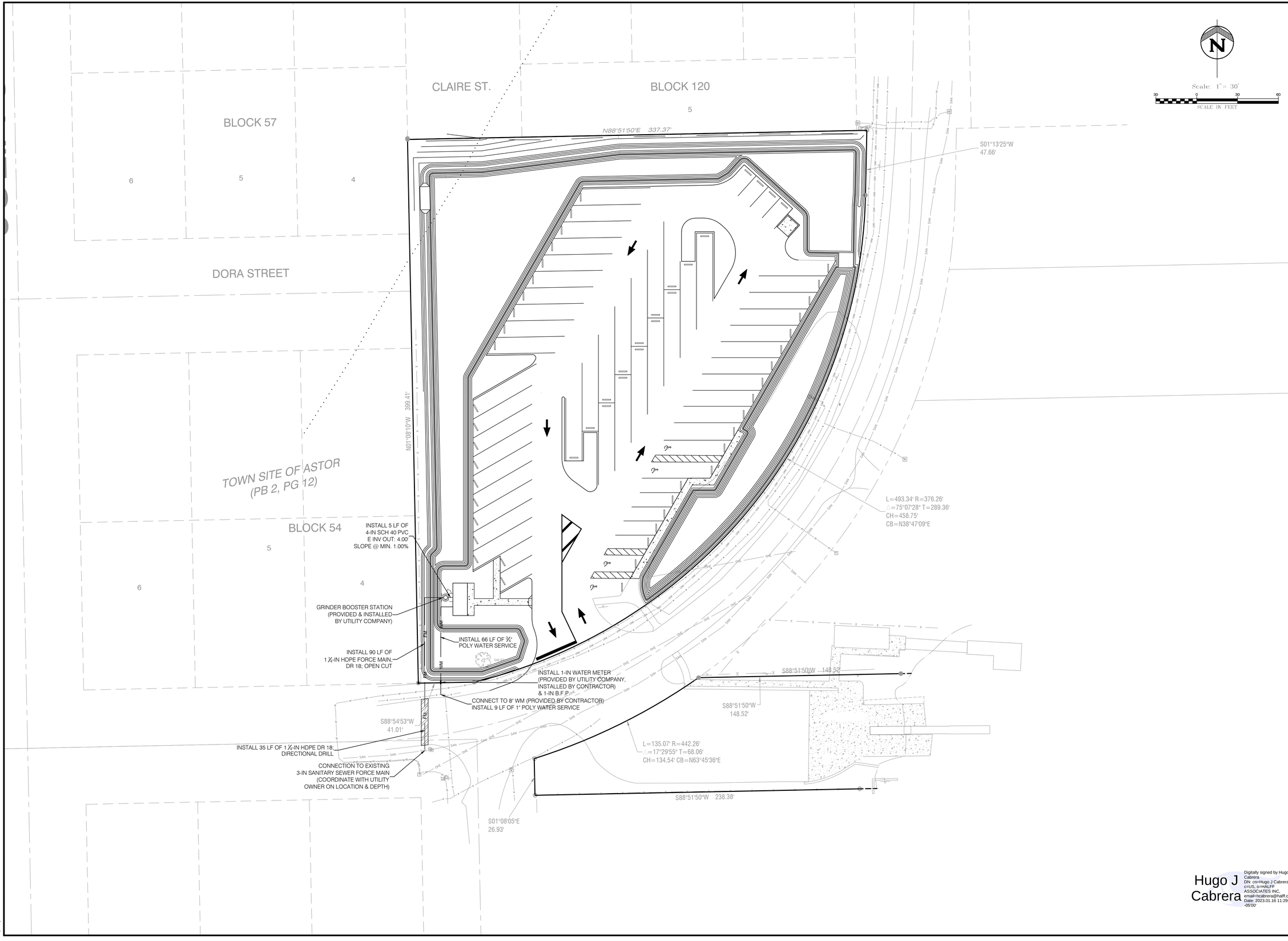

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LAKE COUNTY, FLORIDA

BUTLER ST. BOAT RAMP PARKING LOT IMPROVEMENT PLANS

UTILITY PLAN

LAKE COUNTY, FL
REAL FLORIDA - REAL CLOSE

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	JUNE 2022
DESIGNED BY:	HJC
DRAWN BY:	TNJ
CHECKED BY.:	HJC
JOB NO.:	043862.059
FILE NAME:	BUTLER ST.

Sheet 05

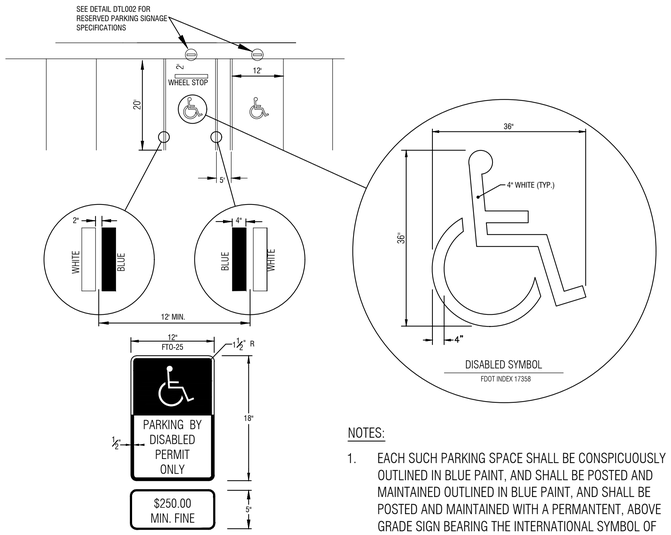
HUGO J. CABRERA LICENSE No. 93087 ★ STATE OF FLORIDA PROFESSIONAL ENGINEER

HUGO J. CABRERA, PE
Registered Eng 93087

Hugo J Cabrera

Digitally signed by Hugo J Cabrera
DN: cn=Hugo J Cabrera, c=US, o=HALFF ASSOCIATES INC, email=hcabrera@halff.com
Date: 2023.01.16 11:29:25 -05'00'

1/16/2023 10:30 AM AH5134



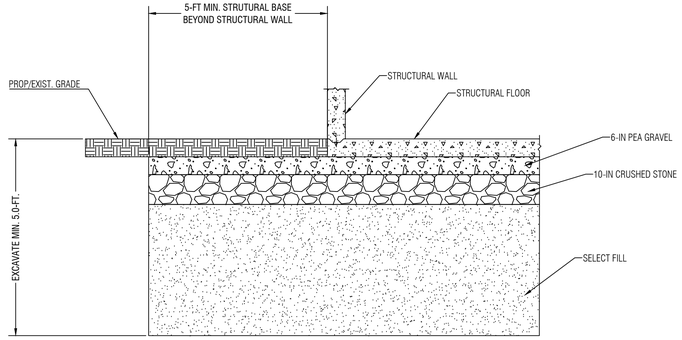
NOTE: (HANDICAP SIGN ONLY)

1. ALL LETTERS SHALL BE BLACK AND 1" IN HEIGHT. LETTERS ARE TO BE SERIES "B" OR "C", PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK BORDER.
4. ONE SIGN REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORMED TRAFFIC CONTROL DEVICES (MUTCD)

NOTES:

1. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANTENT, ABOVE GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY, OR THE CAPTION "PARKING BY DISABLED PERMIT ONLY." OR BEARING BOTH SUCH SYMBOL AND CAPTION. SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAPPED PARKING SPACES MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPOTATION. THE CITY OF TAVARES DISCOURAGES VARIATIONS FROM THE STANDARD.
2. FL DOT RECOMMENDS MEASURING PARKING SPACE WIDTH FROM CENTER TO CENTER BETWEEN BLUE AND WHITE STRIPES.

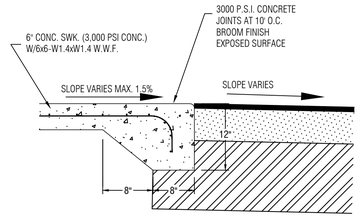
HANDICAP PARKING STRIPING
FOR SINGLE SPACES



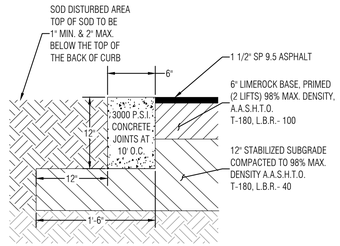
RESTROOM FACILITY STRUCTURAL FILL
NOT TO SCALE

DETAIL NOTE

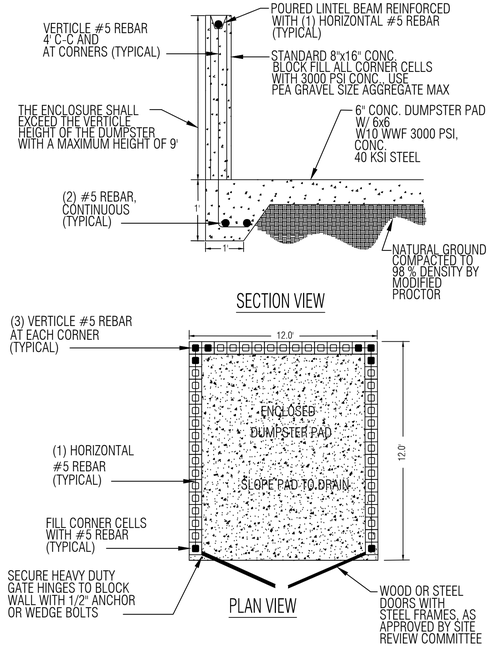
1. ENCOUNTERED , BURIED ORGANIC DEBRIS IS CONSIDERED UNSUITABLE FOUNDATION SOIL AND SHOULD BE REMOVED AND REPLACED WITH SUITABLE COMPACTED FILL MATERIAL WITHIN THE PROPOSED BUILDING AND A MINIMUM OF 5-FT OUTSIDE THE STRUCTURAL PERIMETER.
2. THE REMOVAL OF THESE UNSUITABLE ORGANIC SOILS AND DEBRIS SHOULD START ATHE BORING B-1 LOCATION WHERE THESE SOILS WERE ENCOUNTERED AND SHOULD CONTINUE IN ALL DIRECTIONS UNTIL ALL UNSUITABLE ORGANIC SOILS ARE REMOVED FROM THE BUILDING STRUCTURE AREA.



FLUSH SIDEWALK SECTION
NOT TO SCALE



6" RIBBON CURB & PAVEMENT DETAIL
NOT TO SCALE



DUMPSTER DETAIL
NOT TO SCALE

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

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main; 3 ft. minimum	Water Main; 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum; Water Main
Vacuum Sanitary Sewer	Water Main; 10 ft. preferred 3 ft. minimum	Water Main; 12 inches preferred 6 inches minimum	Alternate 3 ft. minimum; Water Main
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	Water Main; 10 ft. preferred 6 ft. minimum (3)	Water Main; 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 6 ft. minimum; Water Main
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

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

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

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LAKE COUNTY, FLORIDA
BUTLER ST.
BOAT RAMP PARKING LOT
IMPROVEMENT PLANS

DETAILS

LAKE COUNTY, FL
REAL FLORIDA - REAL CLOSE

HALFF
Office: 352.343.8481
Fax: 352.343.8495
902 North Sinclair Ave.
Tavares, Florida 32778
Certificate of Authorization Number: 33380

DATE:	JUNE 2022
DESIGNED BY:	HJC
DRAWN BY:	TNJ
CHECKED BY.:	HJC
JOB NO.:	043862.059
FILE NAME:	BUTLER ST.
Sheet 06	

HUGO J. CABRERA LICENSE No. 93087 STATE OF FLORIDA PROFESSIONAL ENGINEER
HUGO J. CABRERA, PE
Registered Eng 93087

Hugo J Cabrera
Digitally signed by Hugo J Cabrera
DN: cn=Hugo J Cabrera, c=US, o=HALFF ASSOCIATES INC, email=hcabrera@halff.com
Date: 2023.01.16 11:29:49 -05'00'

12/19/2022 1:35 PM AH5134

PRECAST CONCRETE PLUMBED RESTROOM

SPECIFICATION SHEET

PART 1 - GENERAL

1.01 SUMMARY

Contractor or manufacturer to furnish a turn-key precast concrete plumbed restroom to be brought to the site in assembled modules or site assembled depending on size and set upon a level and compacted granular rock sub-base with up to a 100 ton crane, all included in the bid price. All site clearing and rough grading to within 6 inches of level are done by contractor, excavation for restroom sub-base to be done by contractor or manufacturer. To be an EasiSet/EasiSpan Building as manufactured by Leesburg Concrete Company Incorporated. Contractor or Manufacturer will pull all permits and connect to utilities.

1.02 QUALITY ASSURANCE

A. Florida DBPR Insignia required, Section 553, Part I F.S.

B. ACI-318-08, "Building Code Requirements for Reinforced Concrete". Concrete Reinforcing Institute, "Manual of Standard Practice".

C. ANSI/ASCE-7-10 "Building Code Requirement for Minimum Design Loads in Buildings and Other Structures".

D. Florida Building Code 2021, 7th Edition

E. IBC 2021

F. Concrete Reinforcing Institute, "Manual of Standard Practice".

G. UL-752 test method level 5 for bullet resistance on concrete surfaces, certified by an independent ballistic laboratory.

H. Fabricator must be a certified producer/member of The National Precast Concrete Association (NPCA).

I. No alternate building designs to the pre-engineered building as produced by Leesburg Concrete will be allowed unless pre-approved by the owner 10 days prior to the bid date.

1.03 DESIGN REQUIREMENTS

A. Design Loads

1. Seismic Design Category 'C', Importance Factor 1
2. Standard Live Roof Load - 60 PSF
3. Standard Floor Load - 250 PSF (if precast floor provided by building manufacturer)
4. Standard Wind Loading - ASCE 7-10 conforming to geographic area.
5. Designed to meet the requirements of the Americans With Disabilities Act Requirements and Uniform Federal Accessibility Standard including as of the date of these specifications.

B. Roof: To be post tensioned. The roof shall extend 4" beyond the wall panel and have a turndown design which extends ½" below the top edge of the wall panels to prevent water migration into the building along the top of wall panels.

C. Floor - The floor is provided and the walls sit on top of the floor with the floor extending to the edge of the walls for additional strength. Floor should be a minimum of 5 inches thick and have a looped post tension cable. Floor will have a ½" recessed keyway around the perimeter to accept the walls so as to form a physical water barrier.

1.04 SUBMITTALS

A. Drawings and calculations sealed by a professional engineer, licensed to practice in the state where the project is located, shall be submitted for approval.

B. Manufacturer to provide cut sheets on all attached fixtures.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Concrete: Steel-reinforced, 5000 PSI minimum 28-day compressive strength.

B. Reinforcing Steel: ASTM A615, grade 60 unless otherwise specified.

C. Post-tensioning Strand: Roof and floor shall be post-tensioned with a 41K polystrand CP50, .50", 270 KSI, 7-wire strand post tension cable, enclosed within a greased plastic sheath (ASTM A416).

D. Caulking: All joints between panels shall be caulked on the exterior and interior surface of the joints. Caulking shall be SIKAFLEX-1A elastic sealant or equal. Exterior caulk joint to be 3/8" x 3/8" square so that sides of joint are parallel for correct caulk adhesion.

E. Vents: Two screened aluminum vents to be cast in rear wall. Vents shall be SUNVENT 8"x16"with bug screen, or equal

F. Panel Connections: All panel connections shall be welded together utilizing imbedded weld plates with Nelson anchors. Assembly shall be welded by a certified welder.

2.02 ACCESSORIES

1. Doors and Frames: 16 gauge galvanized 3068 HM door and frame, 4 7/8" throat, Schlage ND series heavy duty grade 1 cylindrical lockset and LCN series 1 Closer surface mounted. All doors and frames are in accordance with NOA 10-0209.07
2. ADA Stainless Steel Mirror
3. Stainless Steel, Jumbo Roll Type, Toilet tissue dispenser Bobrick model # BOB-2740
4. Grab bar 36" Bobrick model # B 5806.99x36.
5. Grab bar 42" Bobrick model # B 5806.99x42.
6. Stainless Steel, Refillable, Soap Dispenser by Bobrick model # BOB B-2112
7. Wall mounted trash can by Bobrick model # BOB-279
8. Door signs by Hillman with Braille, Men, Women, Family
9. Kohler K-1722-0 lavatory sink.
10. Kohler K-84323 toilet.
11. Sloan Royal Flushometer manual flush valve to include override flush button with Hardwire Power Supply
12. Sloan Sensor Faucet with Hardwire Power Supply
13. Solatube 160 DS 10" skylight in each restroom
14. Interior Lighting
15. Xlerator® Hand Dryer Model XL-BW
16. Drinking Water Fountain - Elkay Model VRCTL8WSK Bi-Level With Bottle Filler; ADA compliant installed on the front of restroom building
17. Exhaust Fan
18. Baby Changing Station
19. Door locks with a minimum of four (4) master keys

2.03 FINISHES

A. Interior of Building: Smooth form finish on all interior panel surfaces.

B. Exterior of Building shall be form lined finished in a pattern selected from the Lake County Building Finish Options page and noted on the drawings.

C. Paint: 1 coat of Loxon primer and two coats of Duracraft paint in owner's choice of exterior color. Inside walls to be painted in white, floor to be painted in Sherwin Williams HC Silver Gray # 124.

PART 3 - EXECUTION

3.01 SITE PREPARATION

A. Contractor or Manufacturer to bring all necessary utilities to a determined centralized point so as to align with an opening in the chase floor as called out in the manufacturer's provided plans.

B. Building shall bear fully on a bed of crushed 3/8"stone base that is at least one foot larger in all directions than the footprint of the building.

C. Pea gravel shall have a minimum depth of 6".

D. Stone shall have a minimum depth of 10" down to firm sub grade. The vertical soil capacity under stone shall be compacted to have minimum bearing of 1,500 pounds per square foot. Stone shall be 3/8" or smaller and must be screeded level within ¼" in both directions. Stone shall be placed within a perimeter form with flat and level top edge for screeding. Forming material shall remain around stone after the building is set.

E. The crushed stone base shall be kept within the confines of the soil or perimeter form. Do not allow the base to become unconfined so that it may wash, erode, or otherwise be undermined.

F. Select fill should be inorganic, non-plastic, granular soil with less than 10% passing the number 200 sieve. The fill should be placed in level lifts not to exceed 6 inches loose and should be compacted to a minimum of 95 percent (%) of the soil's modified proctor maximum dry density as determined by ASTM Specification D-1557. In-place density tests should be performed on each lift by an experienced engineering technician working under the direction of a registered geotechnical engineer to verify that the recommended degree of compaction has been achieved.

OR

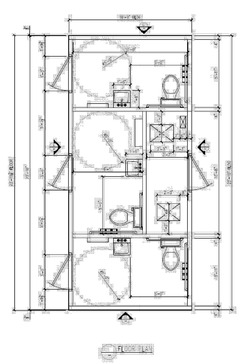
If building is placed on pavement or concrete slab, substrate below pavement or slab must have a vertical soil capacity of 1,500 pounds per square foot. Place stone or sand to 1" above highest point of area where building will be placed and at least 1'-0" wide all around the building footprint. Retain stone or sand with a perimeter form to prevent the material from washing out.

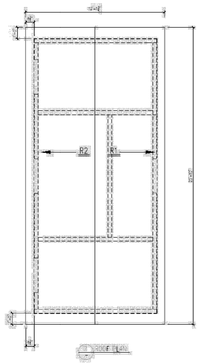
G. Provide positive drainage for the fill, pad, or slab as required.

H. Contractor or Manufacturer to haul off excess dirt from excavation for sub-base and sidewalk.

3.02 ACCESS

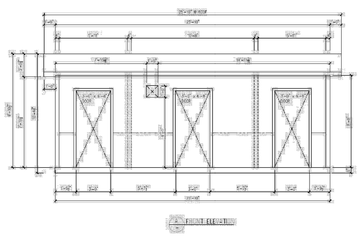
The contractor must provide for a level, unobstructed area large enough for a 100 ton crane and a tractor-trailer to park adjacent to the pad. Crane must be able to place outriggers within 5'-0" of edge of pad, and truck and crane must be able to get side by side under their own power. No overhead obstructions may be within 75' radius of center of pad. Firm roadbed with turns that allow 65' lowbed tractor-trailer must be provided directly to site. No building shall be placed closer than 2'-0" to an existing structure.

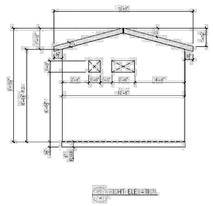




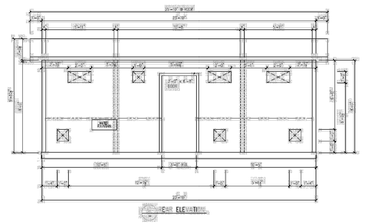
NOT FOR CONSTRUCTION DIMENSIONS FOR REFERENCE ONLY

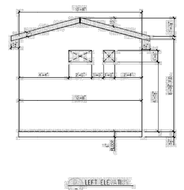
BUILDING WEIGHT IS APPROX 74,590 lbs





NOT FOR CONSTRUCTION DIMENSIONS FOR REFERENCE ONLY





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LAKE COUNTY, FLORIDA

BUTLER ST. BOAT RAMP PARKING LOT IMPROVEMENT PLANS

PREFABRICATED RESTROOM SPECIFICATIONS

LAKE COUNTY, FL
REAL FLORIDA - REAL CLOSE

HALFF
Office: 352.343.8481
Fax: 352.343.8495
902 North Sinclair Ave.
Tavares, Florida 32778
Certificate of Authorization Number: 33380

DATE:	JUNE 2022
DESIGNED BY:	HJC
DRAWN BY:	TNJ
CHECKED BY.:	HJC
JOB NO.:	043862.059
FILE NAME:	BUTLER ST.

Sheet 07

HUGO J. CABRERA LICENSE No. 93087 STATE OF FLORIDA PROFESSIONAL ENGINEER

Hugo J Cabrera

Digitally signed by Hugo J Cabrera
DN: cn=Hugo J Cabrera, c=US, o=HALFF ASSOCIATES INC, email=hcabrera@halff.com
Date: 2023.01.16 11:30:07 -05'00'

HUGO J. CABRERA, PE
Registered Eng 93087

11/29/2022 3:22 PM AH5134