

MINOR SITE PLANS

for

VICTOR HART PARK RESTROOM / CONCESSION BUILDING

in

INDIAN RIVER COUNTY, FLORIDA

MARCH 2024

OWNER / APPLICANT

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UTILITIES

LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM INFORMATION FURNISHED BY UTILITY COMPANIES AND ARE APPROXIMATE ONLY. CONTRACTOR IS TO FAMILIARIZE HIMSELF WITH AND VERIFY CONDITIONS AT SITE. CONTRACTOR SHALL MAKE DILIGENT INQUIRY AT THE OFFICE OF THE UTILITY COMPANIES AND MUNICIPAL AUTHORITIES TO DETERMINE THE EXACT LOCATION OF UTILITY STRUCTURES. THE CONTRACTOR SHALL NOTIFY, IN WRITING, THE UTILITY COMPANIES, MUNICIPALITY AND OWNERS INVOLVED OF THE NATURE AND SCOPE OF THE PROJECT, AND OF HIS OPERATIONS THAT AFFECT THEIR FACILITIES OR PROPERTY.

DATUM

THE DATUM AND DESIGN GRADES SHOWN WITHIN THESE PLANS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88)

TRANSFER OF APPROVAL

PRIOR TO TRANSFER, THE TRANSFEREE MUST ASSUME IN WRITING ON A FORM, ACCEPTABLE TO THE COUNTY ATTORNEY, ALL COMMITMENTS, RESPONSIBILITIES, AND OBLIGATIONS OF THE PRIOR DEVELOPER. FAILURE TO GIVE TIMELY NOTICE OR TO PROVIDE THE ASSUMPTION OF PRIOR COMMITMENT VOIDS THE PRELIMINARY APPROVAL

GENERAL PROJECT STATEMENT

THIS PROJECT PROPOSES ADDING A RESTROOM / CONCESSION BUILDING TO SERVICE THE EXISTING FOOTBALL / SOCCER FIELD. THE PROJECT ALSO INCLUDES THE DEMOLITION AND REMOVAL OF THE EXISTING RESTROOM BUILDING, SEPTIC TANK AND DRAIN FIELD SOUTH OF THE PROPOSED RESTROOM BUILDING AT VICTOR HART PARK

INDEX OF SHEETS

CIVIL

- 1 TITLE SHEET
- 2 CONSTRUCTION NOTES & SWPPP
- 3-4 EXISTING CONDITIONS & DEMOLITION PLANS
- 5 MASTER SITE PLAN
- 6 SITE PLAN
- 7 UTILITY AND DRAINAGE PLANS
- 8 PAVING AND GRADING PLANS
- 9 CONSTRUCTION DETAILS
- 10-11 UTILITY DETAILS
- 12 LIFT STATION DETAILS

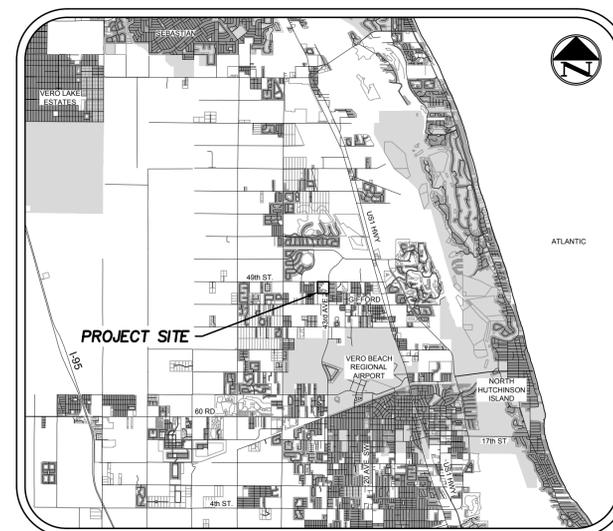
ARCHITECTURAL

- COVER COVER
- ACC ACCESSIBILITY DETAILS
- A-1 FLOOR PLANS/ ELEVATIONS
- A-2 SECTION/ DETAILS
- S-1 STRUCTURAL PLANS
- S-2 STRUCTURAL PLANS
- MEP-1 MECHANICAL/ ELECTRICAL/ PLUMBING PLANS

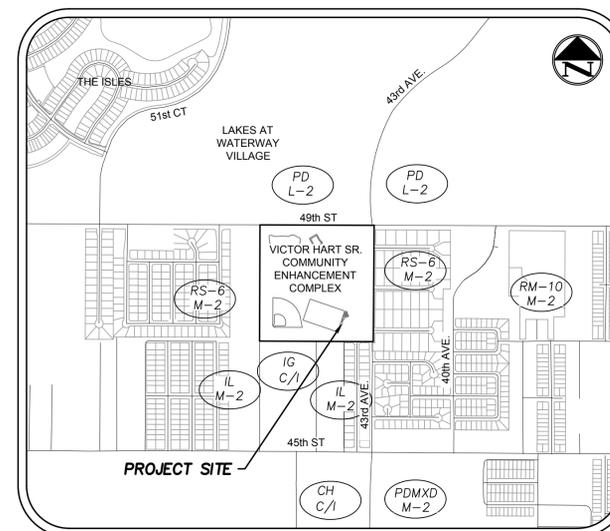
ELECTRICAL

- E-1 ELECTRICAL LEGEND, SPECIFICATIONS, & ABBREVIATIONS
- E-2 ELECTRICAL SITE PLAN AND DETAILS
- E-3 ELECTRICAL RISER AND CALCULATIONS
- E-4 LIFT STATION DETAILS

LOCATION MAP SCALE: 1" = 10,000'



VICINITY MAP SCALE: 1" = 1,000'



2226_COVER.dwg

NO.	DATE	DESCRIPTION	DR/APP
4	03/26/24	UPDATED FOR BIDDING	SCG/SCG
3	01/05/24	REVISED PER UCP EMAILED RAI #1 MARKUPS DATED 01/04/24	MBB/SCG
2	11/14/23	REVISED PER IRC EMAILED RAI #1 COMMENTS DATED 11/14/23	MBB/SCG
1	10/25/23	REVISED PER IRC COMMENTS DATED 10/25/23	MBB/SCG

REVISIONS

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Check positive response codes before you dig!

DATUM

THE DATUM AND DESIGN GRADES SHOWN WITHIN THESE PLANS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)

DATUM CONVERSION: NGVD '29 = NAVD '88 + (1.43')

VICTOR HART PARK RESTROOM / CONCESSION BUILDING



MASTELLER & MOLER, INC.

CONSULTING ENGINEERS

CERTIFICATE OF AUTHORIZATION NO. 4204
1655 27TH STREET, SUITE 2 VERO BEACH, FLORIDA 32960
PHONE: (772) 567-5300 ~ FAX: (772) 794-1106

FOR BIDDING PURPOSES ONLY

03/26/24

SEAN C. GREEN, P.E. FL#90797

GENERAL NOTES

- ALL WORK SHALL BE COMPLETED IN CONFORMANCE AS APPLICABLE WITH FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS" FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURE.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND IF ANY DISCREPANCIES ARE DISCOVERED, THE OWNER SHALL BE NOTIFIED IMMEDIATELY.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES PRIOR TO START OF CONSTRUCTION IN ORDER TO PREVENT DAMAGE TO EXISTING UTILITIES AND THE ADJUSTMENT AND/OR RELOCATION OF SAME IF REQUIRED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL REQUIRED ROAD CROSSING PERMITS.
- CONTRACTOR IS ADVISED TO FAMILIARIZE HIMSELF WITH THE OVERALL SCOPE OF WORK TO BE PERFORMED PRIOR TO SUBMITTING A BID.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER OF ANY CHANGES OR DEVIATIONS FROM THE ORIGINAL PLANS PRIOR TO CONSTRUCTION OF SAID CHANGE OR DEVIATION.
- CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES AND UTILITIES. ANY DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY INSURANCE AND BONDS REQUESTED BY THE OWNER FOR THIS PROJECT.
- THE OWNER WILL PROVIDE THE SELECTED CONTRACTOR WITH COPIES OF ALL PERMITS RECEIVED FOR THE PROJECT.
- ANY FEDERAL DATUM MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE THE PROJECT ENGINEER SHOULD NOTIFY:
 - GEODETIC INFORMATION CENTER
 - ATTN: MARK MAINTENANCE SECTION
 - 1400 N. UNIVERSITY BLVD.
 - 6001 EXECUTIVE BLVD.
 - ROCKVILLE, MARYLAND 20852
 - TELEPHONE NO. (301) 443-8319
- THE ELEVATIONS AS SHOWN ON THESE PLANS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES OR UNDERGROUND UTILITIES.
- ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE PROJECT ENGINEER SHOULD BE NOTIFIED IMMEDIATELY IN ORDER THAT THE COUNTY MAY HAVE A SURVEYOR REFERENCE SAID POINT PRIOR TO DISTURBANCE. ALSO, ALL GPS CONTROL POINTS ARE TO BE PROTECTED. IF DESTROYED DURING CONSTRUCTION, IT WILL BE THE CONTRACTOR RESPONSIBILITIES TO REPLACE THE GPS CONTROL POINTS AT THEIR EXPENSE.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF APPROVED CONSTRUCTION PLANS, SPECIFICATIONS AND ANY SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.

EROSION CONTROL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL WITHIN THE BEST MANAGEMENT PRACTICES FOR THE DURATION OF THE PROJECT UNTIL SUCH TIME AS THE PROJECT HAS BEEN CERTIFIED AS COMPLETE. SEE SWPPP TEMPLATE (THIS SHEET) FOR ADDITIONAL NOTES.
- ALL DISTURBED AREAS WITHIN RIGHTS-OF-WAY SHALL BE SODED WITHIN THREE DAYS OF FINAL GRADING.

CONSTRUCTION STAKEOUT NOTIFICATION

SOME CONSTRUCTION ELEMENTS DEPICTED ON THESE PLANS ARE DRAWN NOT TO SCALE IN ORDER TO PROVIDE CLARITY AS TO THE SCOPE OF WORK. THESE ELEMENTS INCLUDE BUT ARE NOT LIMITED TO CURBS, MANHOLES, VALVES, METERS & FIRE HYDRANTS, ETC. THE CONTRACTOR IS ADVISED TO UTILIZE BOTH THE PLAN VIEW AND DETAILS TO ACCURATELY CONSTRUCT ALL PROPOSED IMPROVEMENTS.

UTILITIES NOTES:

- ALL UTILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH INDIAN RIVER COUNTY UTILITIES STANDARDS.
- THE CONTRACTOR SHALL NOTIFY THE OWNER, ENGINEER AT (772-) 567-5300 AND UTILITIES DEPARTMENT A MINIMUM OF (48) HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL POTABLE WATER PIPING, JOINTING AND PACKING MATERIALS, INTERNAL COATING AND LININGS, FITTINGS, SPECIALS, AND APPURTENANCES USED IN THIS PROJECT SHALL BE IN CONFORMANCE WITH THE CORRESPONDING AWWA STANDARDS AND BE CONFORMING TO NSF REQUIREMENTS AS APPLICABLE.
- ALL PIPE AND PIPE FITTINGS AS WELL AS SOLDER AND FLUX INSTALLED OR USED UNDER THE CONSTRUCTION OF THIS PROJECT ARE TO COMPLY WITH F.A.C. 62-555.322 WITH REGARD TO LEAD.
- ALL WATER SERVICE LINES INSTALLED UNDER THIS PROJECT ARE TO COMPLY WITH AWWA C800.
- ALL PEX-G TUBING 3" AND SMALLER FOR WATER MAINS SHALL BE THICKNESS SDR-9 MEETING AWWA C904.
- ALL PVC PIPE 4"-12" IN DIAMETER FOR WATER MAINS SHALL BE THICKNESS CLASS DR-18 MEETING AWWA C900-97, OR LATEST REVISION, OR C909-98, OR LATEST REVISION.
- ALL PVC PIPE 14"-36" IN DIAMETER FOR WATER MAINS SHALL BE THICKNESS CLASS DR-18 MEETING AWWA C900-97 AND ASTM D1784, OR LATEST REVISIONS.
- ALL DIP FOR WATER MAINS SHALL BE PRESSURE CLASS 350 MEETING AWWA SPECIFICATION C150 (A 21.50-96) OR LATEST REVISION.
- ALL PVC PIPE FOR GRAVITY SEWER MAINS SHALL BE EXTRA STRENGTH PVC PIPE AND SHALL CONFORM TO THE LATEST ASTM DESIGNATION D3034-SDR26 AND SHALL BE PAINTED GREEN OR APPROVED EQUAL.
- ALL PVC PIPE FOR SEWAGE FORCE MAIN 4" - 12" DIAMETER SHALL BE C900 OR C909, LATEST REVISIONS AND SHALL BE BROWN OR GREEN OR APPROVED EQUAL.
- ALL PVC PIPE FOR REUSE FORCE MAIN 4" - 12" DIAMETER SHALL BE C900 OR C909, LATEST REVISIONS AND SHALL BE PURPLE OR APPROVED EQUAL.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- ALL GENERAL CONSTRUCTION, MATERIAL TESTING AND METHODS OF INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF INDIAN RIVER COUNTY UTILITIES.
- ALL POTABLE WATER PIPE AND PIPE FITTINGS INSTALLED WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(2)(B)3, F.A.C. USING BLUE AS THE PREDOMINANT COLOR.
- ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND IF ANY DISCREPANCIES ARE DISCOVERED, THE OWNER SHALL BE NOTIFIED IMMEDIATELY.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES PRIOR TO START OF CONSTRUCTION IN ORDER TO PREVENT DAMAGE TO EXISTING UTILITIES AND THE ADJUSTMENT AND/OR RELOCATION OF SAME IF REQUIRED.
- CONTRACTOR SHALL OBTAIN A COPY OF THE F.D.E.P. WATER & WASTEWATER PERMITS & PERFORM SAMPLING & TESTING IN CONFORMANCE W/ PERMIT CONDITIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL REQUIRED ROAD CROSSING PERMITS.
- CONTRACTOR IS ADVISED TO FAMILIARIZE HIMSELF WITH THE OVERALL SCOPE OF WORK TO BE PERFORMED PRIOR TO SUBMITTING A BID.
- WATER MAIN AND FORCE MAINS SHALL BE INSTALLED WITH 36" MINIMUM COVER AND SHALL BE CONSTRUCTED SO AS TO AVOID EXISTING AND KNOWN FUTURE UTILITY LOCATIONS.
- ALL WORK SHALL BE COMPLETED IN CONFORMANCE AS APPLICABLE WITH FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS" FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION AND THE STANDARDS OF THE UTILITY OWNER.

- WATERMAIN & FORCEMAIN PIPES INSTALLED UNDER PAVEMENT SHALL BE D.I.P. WITH 36" MIN. COVER (42" MIN. COVER FOR P.V.C. PIPE).
- BENDS SHALL BE INSTALLED ON WATER MAINS AS NECESSARY TO AVOID CONFLICT WITH PROPOSED OR EXISTING STRUCTURES AT NO ADDITIONAL COST TO OWNER.
- ALL CONSTRUCTION SHALL COMPLY WITH THE STANDARDS AND SPECIFICATIONS OF THE UTILITY OWNER. SHOP DRAWINGS FOR ALL SEWER AND WATER APPURTENANCES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- ALL PRESSURE AND BACTERIOLOGICAL TESTING FOR WATER MAINS, TUNNEL/INFILTRATION/EXFILTRATION TESTS FOR GRAVITY SEWER AND PRESSURE TEST FOR FORCE MAINS, SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND COORDINATED WITH THE OWNER, ENGINEER AND UTILITY OWNER. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL TEST RESULTS.
- THE CONTRACTOR SHALL SUPPLY THE OWNER AND ENGINEER WITH TWO COPIES OF AS-CONSTRUCTED INFORMATION SHOWING THE CONSTRUCTED LOCATION OF ALL MAINS, FITTINGS, VALVES, LATERALS (AT THE MAIN AND TERMINAL POINT), MANHOLES AND OTHER WATER AND SEWER APPURTENANCES. THE FORMAT SHALL BE APPROVED BY THE OWNER AND/OR UTILITY PRIOR TO SUBMISSION.
- WATER MAINS AND FORCE MAIN SHALL BE FLUSHED AT A MINIMUM VELOCITY OF 2.5 FPS PRIOR TO PRESSURE TESTING AND DISINFECTION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER OF ANY CHANGES OR DEVIATIONS FROM THE ORIGINAL PLANS PRIOR TO CONSTRUCTION OF SAID CHANGE OR DEVIATION.
- THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES AND UTILITIES. ANY DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- LATERALS AND CLEANOUTS SHALL BE INSTALLED AS REQUIRED BY APPLICABLE PLUMBING CODES.
- INSPECTION OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY THE UTILITY OWNER OR OTHER AGENCIES SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE PLANS, SPECIFICATIONS AND LAWS.
- THE CONTRACTOR SHALL OBTAIN A CURRENT COPY OF THE UTILITY OWNER CONSTRUCTION SPECIFICATIONS FOR WATER DISTRIBUTION AND SEWAGE COLLECTION FACILITIES PRIOR TO BIDDING THE UTILITY WORK. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THE UTILITY'S SPECIFICATIONS AND THE ENGINEER'S SPECIFICATIONS, THE UTILITY'S SPECIFICATIONS SHALL SUPERSEDE.
- TRACE WIRE SHALL BE INSTALLED OVER ALL WATER MAINS AND SEWAGE FORCE MAINS. #10 MULTIPLE-STRAND CONDUCTOR COPPER TRACE WIRE SHALL BE AFFIXED TO THE TOP OF PIPE. SEE TRACE WIRE DETAIL FOR SPECIFICATIONS.
- USE POTABLE WATER FOR PRESSURE TESTS.
- ALL POTABLE WATER MAINS SHALL BE CONSTRUCTED OF P.V.C. PIPE UNLESS NOTED OTHERWISE.
- FORCE MAIN SHALL BE PRESSURE TESTED THE SAME AS WATER MAINS, EXCEPT THAT TEST PRESSURE SHALL AVERAGE NO LESS THAN 100 PSI.
- THE CONTRACTOR SHALL DISINFECT THE NEW WATER SYSTEM IN CONFORMANCE WITH AWWA-C651 SPECIFICATIONS AND THE NOTES THIS SHEET.
- WATER SYSTEM PRESSURE TESTS SHALL BE COMPLETED IN THE PRESENCE OF THE ENGINEER OR HIS REPRESENTATIVE, FOR TWO (2) HOURS IN DURATION AS ACCEPTABLE TO UTILITY OWNER, AT AN AVERAGE PRESSURE OF 150 PSI. ALLOWABLE LEAKAGE WILL BE COMPUTED BASED ON AWWA C600 FOR DIP AND AWWA C605 FOR PVC.

$$L = \frac{NDP}{7400} \times 12$$
 WHERE: L = LEAKAGE ALLOWABLE (GPH)
 N = NUMBER OF JOINTS
 D = NOMINAL DIAMETER (INCHES)
 P = AVERAGE PRESSURE (PSI)

* NOTE: PRESSURE TESTING FOR PVC PIPE SHALL BE BASED ON AWWA STANDARD C605.

- A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE. BACKFILL OVER ANY WATER MAIN, FORCE MAIN AND SANITARY SEWER THAT IS TO BE INSTALLED UNDER PAVING, IS TO BE COMPACTED IN 12" LIFTS MAXIMUM TO A MINIMUM OF 95% MAXIMUM DENSITY WITH A MECHANICAL TAMPER OR OTHER MEANS ACCEPTABLE TO THE OWNER AND/OR ENGINEER. UNSUITABLY SIZED STONES (AS DESCRIBED IN AWWA STANDARDS) SHALL BE REMOVED FROM THE TRENCH FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF THE PIPE.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH COMPACTION TEST RESULTS AT 400' INTERVALS AT HIS EXPENSE BASED ON AASHTO-1180 SPECIFICATIONS.
- AT ALL INSTANCES WHERE WATER MAINS CROSS ABOVE OR BELOW REUSE MAINS, STORM CULVERTS, SANITARY SEWER, OR SANITARY SEWER FORCE MAIN, THE CONTRACTOR IS TO PROVIDE "AS-BUILT" INFORMATION TO THE ENGINEER DETAILING THE VERTICAL CLEARANCE OBTAINED.
- WATER MAINS SHALL BE LAID AT LEAST 7 FEET (EDGE TO EDGE) FROM ANY EXISTING OR PROPOSED STORM SEWER, SANITARY SEWER, OR SANITARY SEWER FORCE MAIN. WATER MAINS CROSSING SEWERS OR STROM PIPES SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 18 INCHES AND SHALL BE LAID SO THAT ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED AT THE CROSSING.
- WATER MAINS SHALL NEITHER PASS THROUGH NOR CONTACT SEWER MANHOLES.

PLEASE NOTE IN THE EVENT THAT F.D.E.P. AND CITY OF INDIAN RIVER COUNTY STANDARDS CONFLICT, THE MORE STRINGENT STANDARD SHALL APPLY.

FDEP SEPARATION NOTES:

- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SEVEN FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER, NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING AN EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- AT THE UTILITY CROSSING DESCRIBED ABOVE, ON FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWER, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.

* NOTE: PLEASE NOTE IN THE EVENT THAT F.D.E.P. AND INDIAN RIVER COUNTY STANDARDS CONFLICT, THE MORE STRINGENT STANDARD SHALL APPLY.

- WATER MAINS CROSSING ANY UTILITIES WILL BE LAID SO THAT ONE FULL LENGTH OF WATER MAIN WILL BE CENTERED AT THE CROSSING.

62-555.340 Disinfection and Bacteriological Evaluation of Public Water System Components.

(a) BACTERIOLOGICAL EVALUATIONS TO VERIFY PROPER DISINFECTION OF TREATMENT OR STORAGE FACILITIES AND WATER MAINS SHALL BE CONDUCTED AS SET FORTH IN PARAGRAPHS (A) THROUGH (C) BELOW. THE TOTAL RESIDUAL CHLORINE MEASUREMENTS REQUIRED UNDER PARAGRAPH (A) MAY BE PERFORMED BY ANY AUTHORIZED REPRESENTATIVE OF THE SUPPLIER OF WATER OR PERSON CONSTRUCTING OR ALTERING

THE TREATMENT OR STORAGE FACILITIES OR WATER MAINS BUT SHALL BE PERFORMED FOLLOWING THE APPROPRIATE PROCEDURES IN THE DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD OPERATING PROCEDURES FOR FIELD USE. DESIRED CHLORINE AS INCORPORATED INTO RULE 62-555.340, F.A.C. THE TOTAL COLIFORM ANALYSES REQUIRED UNDER PARAGRAPH (A) SHALL BE PERFORMED BY A LABORATORY OF THE DEPARTMENT OF HEALTH (DOH) OR A LABORATORY CERTIFIED BY THE DOH TO PERFORM BACTERIOLOGICAL ANALYSES OF DRINKING WATER AND SHALL BE PERFORMED USING AN APPROPRIATE METHOD REFERENCED IN SECTION 62-555.340, F.A.C.

(A) AFTER REDUCING THE TOTAL CHLORINE RESIDUAL IN THE FACILITIES OR MAINS TO NO MORE THAN FOUR MILLIGRAMS PER LITER, A TOTAL OF AT LEAST TWO SAMPLES - EACH TAKEN ON A SEPARATE DAY AND TAKEN AT LEAST SIX HOURS APART FROM THE OTHER SAMPLE(S) - SHALL BE COLLECTED AT EACH OF THE LOCATIONS IN THE APPLICABLE AWWA STANDARD REFERENCED IN SUBSECTION (1) ABOVE, AND THE SAMPLES SHALL BE ANALYZED FOR TOTAL RESIDUAL CHLORINE AND FOR THE PRESENCE OF TOTAL COLIFORM.

(B) IF ANY SAMPLE CONTAINS MORE THAN FOUR MILLIGRAMS PER LITER OF TOTAL CHLORINE, THE SAMPLE SHALL BE CONSIDERED INVALID. IF ANY SAMPLE SHOWS THE PRESENCE OF TOTAL COLIFORM, THE FACILITIES OR MAINS SHALL BE REDISINFECTED AS NECESSARY IN ACCORDANCE WITH SUBSECTION (1) ABOVE AND RESAMPLED IN ACCORDANCE WITH THIS SECTION UNTIL TWO CONSECUTIVE SAMPLES AT EACH SAMPLING LOCATION SHOW THE ABSENCE OF TOTAL COLIFORM.

(C) BACTERIOLOGICAL TEST RESULTS SHALL BE CONSIDERED UNACCEPTABLE IF THE TESTS WERE COMPLETED MORE THAN 60 DAYS BEFORE THE DEPARTMENT RECEIVED THE RESULTS.

(D) WHEN TAKING WATER MAINS OUT OF OPERATION FOR REPAIR OR REHABILITATION THAT MIGHT LEAD TO CONTAMINATION OF WATER, THE MAINS MAY BE RETURNED TO OPERATION WITHOUT THE DEPARTMENTS APPROVAL AFTER DISINFECTION AND BEFORE COMPLETION OF A BACTERIOLOGICAL EVALUATION IN ORDER TO MINIMIZE THE TIME CUSTOMERS ARE WITHOUT WATER; AN ADVISORY OR A PRECAUTIONARY "BOIL WATER" NOTICE SHALL BE ISSUED IF DEEMED NECESSARY BY THE SUPPLIER OF WATER OR IF RECOMMENDED IN THE DEPARTMENT OF HEALTH'S "GUIDELINES FOR THE ISSUANCE OF PRECAUTIONARY BOIL WATER NOTICES" AS ADOPTED IN RULE 62-555.335, F.A.C. A BACTERIOLOGICAL EVALUATION STILL MUST BE SATISFACTORILY COMPLETED IN ACCORDANCE WITH SUBSECTION (2) ABOVE AFTER THE MAINS ARE RETURNED TO OPERATION. IF ANY BACTERIOLOGICAL SAMPLE SHOWS THE PRESENCE OF TOTAL COLIFORM, THE SUPPLIER OF WATER SHALL TELEPHONE, AND SPEAK DIRECTLY TO A PERSON AT, THE APPROPRIATE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) DISTRICT OFFICE OF APPROVED COUNTY HEALTH DEPARTMENT (ACHD) AS SOON AS POSSIBLE, BUT NEVER LATER THAN NOON OF THE NEXT BUSINESS DAY. OTHERWISE, THE RESULTS OF THE BACTERIOLOGICAL EVALUATION SHALL BE SUBMITTED TO THE APPROPRIATE DEP DISTRICT OFFICE OR ACHA ALONG WITH THE NEXT MONTHLY OPERATION REPORT(S) REQUIRED UNDER PARAGRAPH 62-555.350(12)(B), F.A.C. OR IF NO MONTHLY OPERATION REPORT IS REQUIRED UNDER PARAGRAPH 62-555.350(12)(B), F.A.C., WITHIN TEN DAYS AFTER THE END OF THE MONTH DURING WHICH THE BACTERIOLOGICAL EVALUATION WAS COMPLETED.

PAVING NOTES:

- STRIP THE PROPOSED CONSTRUCTION LIMITS, INCLUDING A MARGIN OF AT LEAST FIVE' BEYOND PAVEMENT EDGES, OF VEGETATION, ROOTS, RUBBLE AND OTHER DELETERIOUS MATERIALS. WE EXPECT AVERAGE CLEARING AND GRUBBING TO DEEP OF UP TO 6" TO 12" IN MOST AREAS OF THE ROADWAYS; HOWEVER, AT SOME LOCATIONS, GRUBBING DEPTHS OF UP TO SEVERAL FEET MAY BE NECESSARY TO REMOVE LOCALIZED POCKETS OF ROOT MATS AND/OR LARGE STUMPS. THIS STRIPPED AND GRUBBED SURFACE SHOULD BE EXAMINED AND APPROVED BY THE ENGINEER BEFORE PLACEMENT OF SUBSEQUENT FILLS. ANY EXISTING COLLAPSIBLE OR LEAK PRONE UTILITIES SHOULD BE COMPLETELY REMOVED FROM PAVEMENT AREAS.
- PROOF ROLL THE STRIPPED SURFACE WITH A VIBRATORY ROLLER WEIGHING AT LEAST 6 TONS UNDER THE SUPERVISION OF THE ENGINEER. TO LOCATE ANY UNIFORM SOFT AREAS OF UNSATURABLE SOILS. TO INCREASE THE DENSITY OF THE SHALLOW VERY LOOSE TO LOOSE FINE SAND SOILS, AND TO PREPARE THE EXCAVATED SURFACE FOR THE ADDITION OF THE FILL SOILS. EACH PASS SHOULD OVERLAP THE PRECEDING PASS BY 30% TO INSURE COMPLETE COVERAGE. IF DEEMED NECESSARY, IN AREAS THAT CONTINUE TO YIELD REMOVE ALL DELETERIOUS MATERIALS AS INDICATED BY ENGINEER PERSONNEL AND REPLACE WITH A CLEAN COMPACTED SAND BACKFILL. THE PROOF-ROLLING SHOULD OCCUR AFTER STRIPPING AND BEFORE FILLING.
- CONTINUE COMPACTION EFFORTS UNTIL A SOIL DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) IS ACHIEVED TO A DEPTH OF 12" BELOW THE STRIPPED SURFACE. INCLUDING THE FIVE FEET MARGIN. DEPENDING ON WEATHER CONDITIONS OR OTHER FACTORS, THE ADDITION OF DRAINAGE OR WATER MAY BE NECESSARY TO AID COMPACTION EFFORTS. ADDITIONAL PASSES AND/OR OVER-EXCAVATION AND RE-COMPACTION MAY BE NECESSARY IF THESE MINIMUM DENSITY REQUIREMENTS ARE NOT ACHIEVED BY THE REQUIRED PROOF-ROLLING.
- FILL TO SUBGRADE LEVEL USING CLEAN SANDS WITH LESS THAN 5% SOLS FINER PASSING THE NO. 200 SIEVE. STRUCTURAL FILL SHOULD BE FREE OF ANY ORGANICS OR OTHER DELETERIOUS MATERIAL. THE FILL SHOULD BE PLACED IN UNIFORM 12" LIFT THICKNESS AND COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASHTO TO 100, ASTM D 1557).
- THE OWNER RESERVES THE RIGHT TO REQUEST FROM THE CONTRACTOR ASPHALTIC CONCRETE SURFACE COURSE MIX CERTIFICATIONS TO ASSURE COMPLIANCE WITH F.D.O.T. SPECIFICATIONS.
- IMPROPER DRAINAGE OF PAVED AREAS AND DRAINAGE SWALES WILL NOT BE ACCEPTED. ANY PONDING OR IMPROPERLY DRAINED AREAS WILL BE COMPLETELY STRIPPED OUT AND RE-GRADED OR RE-PAVED UNTIL ALL DEFECTIVE DRAINAGE IS CORRECTED, AT NO ADDITIONAL COST.
- TRAFFIC CONTROL SIGNS SHALL BE ERRECTED AND PAVEMENT MARKINGS SHALL BE PAINTED AS REQUIRED BY ORDINANCE AND THE GOVERNING AUTHORITY SPECIFICATIONS. ALL TRAFFIC PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY SHALL BE EXTRUDED ALKYLDA BASE THERMOPLASTIC.

LEGEND

DESCRIPTION	EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED
BLOCK NUMBER	(A)	(A)	STORM DRAIN PIPE	---D---	---D---
BUILDING OR STRUCTURE	[Symbol]	[Symbol]	STORM MANHOLE	---S---	---S---
CENTERLINE	⊕	⊕	STRUCTURE NUMBER	S-1	S-1
HEAD WALL	[Symbol]	[Symbol]	SWALE	---S---	---S---
CURB	[Symbol]	[Symbol]	BASIN DIVIDE	[Symbol]	[Symbol]
CUT AND PATCH	[Symbol]	[Symbol]	SILT FENCE	X-X-X-X	X-X-X-X
EASEMENT LINE	[Symbol]	[Symbol]	CLEAN OUT	[Symbol]	[Symbol]
FENCE (AS INDICATED)	[Symbol]	[Symbol]	UNDERDRAIN	[Symbol]	[Symbol]
LOT LINE	[Symbol]	[Symbol]	DITCH BLOCK	[Symbol]	[Symbol]
LOT NUMBER	2	(2)	PLUG, BLOW-OFF & TERMINAL RESTRAINTS	[Symbol]	[Symbol]
PHASE LINE	[Symbol]	[Symbol]	REDUCER	[Symbol]	[Symbol]
PROPERTY LINE	[Symbol]	[Symbol]	FIRE HYDRANT W/ GATE VALVE WATER VALVE BOX, HYDRANT TEE & RESTRAINTS	[Symbol]	[Symbol]
RAILROAD TRACKS	[Symbol]	[Symbol]	GATE VALVE & BOX	[Symbol]	[Symbol]
RIGHT-OF-WAY LINE	[Symbol]	[Symbol]	WATERMAIN W/ 3' COVER TYPICAL	WM-(6")	WM-(6")
SIGN (POST MOUNTED)	[Symbol]	[Symbol]	1" SERVICE LATERAL W/ METER BOX	[Symbol]	[Symbol]
TRAFFIC FLOW ARROW	[Symbol]	[Symbol]	1-1/2" SERVICE LATERAL W/ (2) METER BOXES	[Symbol]	[Symbol]
ASPHALT DRIVE	AD	[Symbol]	RESTRAINED JOINT TEE	[Symbol]	[Symbol]
GRAVEL DRIVE	GD	[Symbol]	RESTRAINED BEND	[Symbol]	[Symbol]
CONCRETE DRIVE	CD	[Symbol]	TELEPHONE JUNCTION BOX	[Symbol]	[Symbol]
EDGE OF PAVEMENT	[Symbol]	[Symbol]	TELEPHONE LINE	---TELE---	---TELE---
MAILBOX/NEWSPAPER BOX	[Symbol]	[Symbol]	UNDERGROUND ELECTRIC LINE	---ELEC---	---ELEC---
TREE	[Symbol]	[Symbol]	OVERHEAD WIRE	---OH---	---OH---
BENCH MARK	[Symbol]	[Symbol]	LIGHT POLE	[Symbol]	[Symbol]
CONCRETE FLUME	[Symbol]	[Symbol]	WATER WELL	[Symbol]	[Symbol]
CONCRETE MITER END	[Symbol]	[Symbol]	POWER POLE	[Symbol]	[Symbol]
CONTOURS	20	20	GUY WIRE	[Symbol]	[Symbol]
CURB INLET	[Symbol]	[Symbol]	TV CABLE BOX	[Symbol]	[Symbol]
DRAINAGE FLOW ARROW	[Symbol]	[Symbol]	GAS MAIN	---GAS---	---GAS---
FINISH FLOOR	F.F.=20.00	F.F.=20.00	UNDERGROUND CABLE TV	---CATV---	---CATV---
INLET	[Symbol]	[Symbol]			
SOIL BORING LOCATION AND NO.	[Symbol]	[Symbol]			
SPOT ELEVATION	[Symbol]	[Symbol]			

SWPPP TEMPLATE FOR MINIMUM BMP'S

1

EROSION CONTROL NOTES

- Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land disturbing activity and shall be made functional before up-slope and land disturbance takes place.
- All sediment control measures are to be adjusted to meet field conditions at the time of construction and be constructed prior to any grading or disturbance of existing surface material on balance of site. Perimeter sediment barriers shall be constructed to prevent sediment or trash from flowing or floating on to adjacent properties.
- Permanet or temporary soil stabilization shall be applied to denuded areas within seven (7) days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied to denuded areas that may not be at final grade but will remain undisturbed for longer than 30 days. Permanent stabilization shall be applied to areas that are to be left undisturbed for more than one year.
- During construction of the project, soil stock piles shall be stabilized, covered or contained with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as soil intentionally transported from the project site.
- A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized.
- After any significant rainfall, sediment control structures will be inspected for integrity. Any damaged devices shall be corrected immediately.
- Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate trench or permanent channel, flume, slope drain structure or approved control.
- Sediment will be prevented from entering any storm water system, ditch or channel. All storm water inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.
- When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction.
- Periodic inspection and maintenance of all sediment control structures must be provided to ensure intended purpose is accomplished. The developer, owner and/or contractor shall be continually responsible for all sediment controls. Sediment control measures shall be in working condition at the end of each working day.
- Where construction vehicle access routes intersect paved public roads, provisions shall be made to minimize the transport of sediment to the paved surface. Where sediment is transported onto a public road surface with curbs and gutters, the road shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual subdivision lots as well as to larger land disturbing activities.
- All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization or after the temporary measures are no longer needed.
- Properties and waterways downstream from construction sites shall be protected from sediment deposition and erosion at all times during construction.
- Erosion control design and construction shall follow the requirements in index numbers 101, 102 and 103 of F.D.O.T. Roadway and Traffic Design Standards and county permits.
- Contractor is responsible for all surface water discharges, rainfall run off or dewatering activities.
- Contractor must incorporate all BMP's necessary to meet or exceed state water quality and SWPPP requirements.
- The Pollution Prevention Plan is a minimum guideline only. Additional BMP's may be necessary at contractor's expense.
- NOI to be posted on site.
- Dewatering activities:
 - Discharge must not exceed state water quality standards.
 - Contractor must have a transferable SWPMD Consumptive Use permit known as a "Noticed General Permit For Short Term Construction De-Watering".
 - No hydraulic pumps may be used for dewatering unless approved by the water management district for that area.
 - No turbid discharge. Turbidity readings are required once an week and must be reported to the project Engineer.
- Failure to develop and implement a certified stormwater pollution prevention plan shall be deemed a violation of the permit and the permittee shall be subject to enforcement action. The plan shall be completed prior to the submittal of an NOI (Notice of Intent) to be covered under the permit and updated as appropriate. The plan shall also provide for compliance with the terms and schedule of the plan beginning with the initiation of the construction activities.

2

NOTE: ALL STOCKPILES SHALL BE A MAXIMUM OF 25' HIGH.

SECTION A-A

EXISTING TREE TRUNK-DIAMETER VARIES

ORANGE VINYL CONSTRUCTION FENCING, CHAIN LINK OR SNOW FENCING OR APPROVED EQUIVALENT

10' MAX.

10' MIN.

2" X 2" STAKE

FABRIC EXTENDS 1' MIN.

VIEW OF FRAME WITHOUT SILT FENCE

VIEW OF FRAME WITH SILT FENCE

2" X 4" WOOD FRAME

3

ELEVATION

PLAN

PROTECTIVE FENCING FOR TREES-N.T.S.

NOTE: 1. ALL TREES RETAINED ON A SITE SHALL BE PROTECTIVELY BARRICADED BEFORE AND DURING CONSTRUCTION ACTIVITIES.

2. UNDERGROUND UTILITY LINES SHALL BE ROUTED AROUND EXISTING TREES TO THE OUTSIDE OF THE DRILLPIE WHERE APPLICABLE.

3. INSTALLATION OF FENCES AND WALLS SHALL TAKE INTO CONSIDERATION THE ROOT SYSTEMS OF EXISTING TREES.

4. FENCE/BARRICADE SHALL BE INSTALLED AT PERIMETER OF ALL TREES OR GROUP OF TREES TO BE PROTECTED. FENCE SHALL BE MAINTAINED DURING CONSTRUCTION.

5. DO NOT PARK HEAVY EQUIPMENT ON TREE ROOTS. DO NOT ADD FILL 4" TO 6" AROUND TREE. ALL WORK WITHIN THE CRZ MUST BE DONE BY HAND.

NOTES:

- SILT FENCE SHALL BE PLACED ON SLOPE TO CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
- INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
- REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO THE OPPOSITE SIDE OF THE DIRECTION OF FLOW.

EXTRA STRENGTH FILTER FABRIC NEEDED WITHOUT WIRE MESH SUPPORT

ATTACH FILTER FABRIC SECURELY TO UPSTREAM SIDE OF POST

STEEL OR WOOD POST

10" MAXIMUM SPACING WITH WIRE SUPPORT FENCE. MAXIMUM SPACING WITHOUT WIRE SUPPORT FENCE

9" MAX. STORAGE HEIGHT

10' MIN.

4"x6" TRENCH WITH COMPACTED BACKFILL

36" MIN. DRAIN ROCK

TRENCH DETAIL

INSTALLATION WITHOUT TRENCHING

SILT FENCE-N.T.S.

NOTE

- THIS PLAN SHEET SHALL NOT BE CONSIDERED A SWPPP (STORMWATER POLLUTION PREVENTION PLAN) BUT IS A PLAN REPRESENTATIVE OF THE MINIMUM REQUIRED BMP'S (BEST MANAGEMENT PRACTICES).
- THE SWPPP SHALL BE COMPLETED PRIOR TO THE SUBMITTAL OF THE NOTICE OF INTENT (NOI) TO BE COVERED UNDER THE DEPARTMENT'S GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES.
- THESE MINIMUM BMP'S SHALL APPLY TO WORK PERFORMED WITHIN BOTH PUBLIC AND PRIVATE RIGHTS-OF-WAY.

CONSTRUCTION NOTES / SWPPP

NO.	DATE	DESCRIPTION	DR/APP
4	03/26/24	UPDATED FOR BIDDING	SCG/SCG
3	01/05/24	REVISED PER UCP ENHALED RAI #1 MARKUPS DATED 01/04/24	MBB/SCG
2	11/14/23	REVISED PER RVC ENHALED RAI #1 COMMENTS DATED 11/14/23	MBB/SCG
1	10/25/23	REVISED PER TRC COMMENTS DATED 10/25/23	MBB/SCG

REVISIONS

M M MASTELLER & MOLER, INC.
CONSULTING ENGINEERS

CERTIFICATE OF AUTHORIZATION NUMBER 4204
 1655 27th STREET, SUITE 2, VERO BEACH, FLORIDA 32960
 (772) 567-5300 / FAX (772) 794-1106

INDIAN RIVER COUNTY

CONSTRUCTION PLANS
VICTOR HART PARK RESTROOM & CONCESSION BUILDING
 FOR
I.R.C. PARKS & RECREATION

FLORIDA

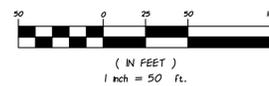
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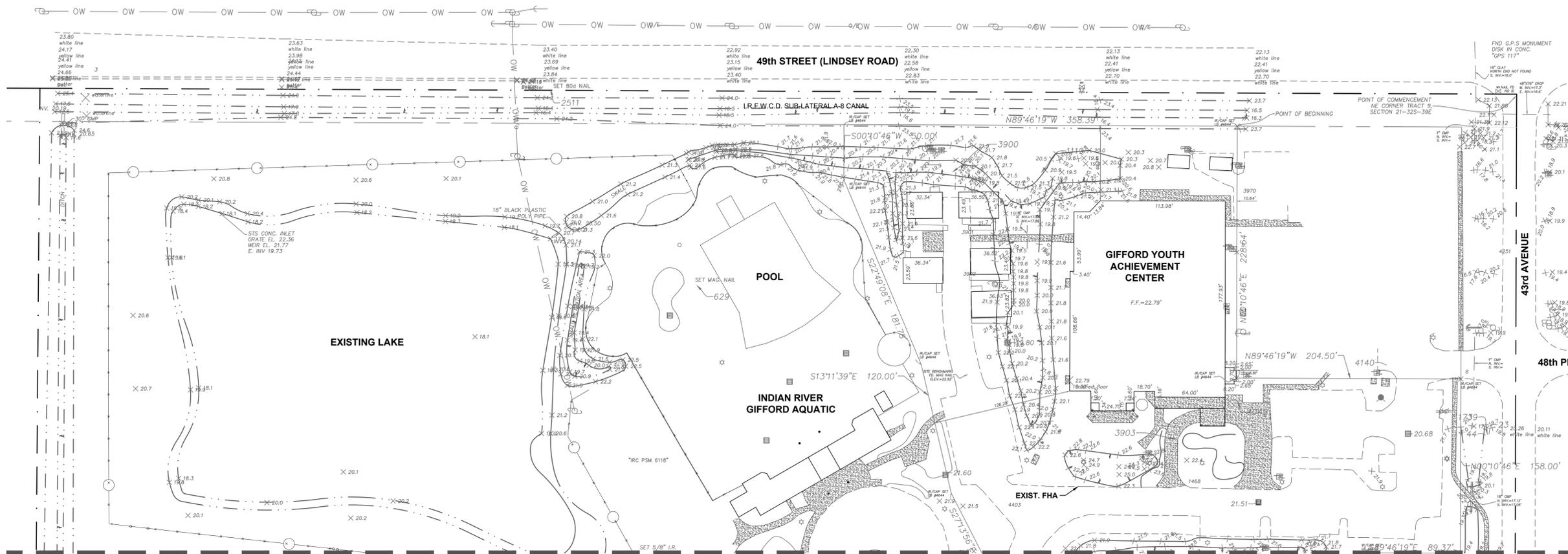
FOR BIDDING PURPOSES ONLY

DRAWN: GEV
 DESIGNED: MBB
 CHECKED: SCG
 DATE: 02/01/23
 SCALE: N.T.S.
 SHEET: 2 OF 12
 PROJECT NO.: 2226

03/26/24
SEAN C. GREEN, P.E. FL #90797



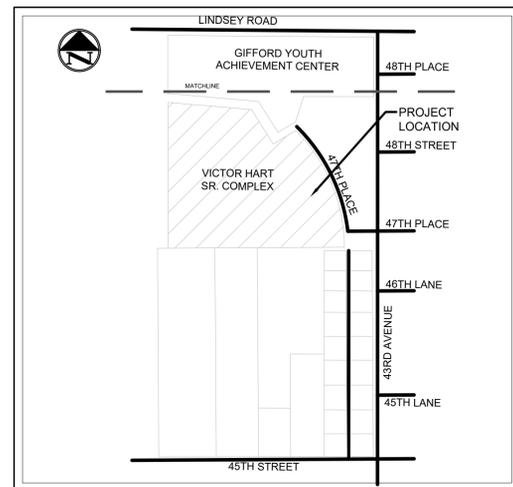
DATUM
THE DATUM AND DESIGN GRADES SHOWN WITHIN THESE PLANS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)
DATUM CONVERSION: NGVD '29 = NAVD '88 + (1.43')



MATCHLINE SEE SHEET 4

VICINITY MAP

(NOT TO SCALE)



GENERAL SITE DATA

APPLICANT / OWNER
INDIAN RIVER COUNTY PARKS, RECREATION, AND CONSERVATION DEPT.
1590 9TH STREET SW
VERO BEACH, FLORIDA 32962
Ph. (772) 226-1780

ENGINEER
MASTELLER & MOLER, INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FLORIDA 32960
Ph. (772) 567-5300

SURVEYOR
MASTELLER, MOLER & TAYLOR INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FLORIDA 32960
Ph. (772) 564-8050

LEGAL DESCRIPTION
INDIAN RIVER FARMS CO SUB PBS 2-12
TR 9, LESS W 310 FT OF E 335 FT OF S 281.03 FT OF N 311.03 FT THEREOF, LESS RWS

UTILITY PROVIDERS
POTABLE WATER IRCUDS
WASTEWATER IRCUDS

SCHEDULE
PROJECT COMMENCEMENT: DECEMBER 2023
PROJECT COMPLETION: SEPTEMBER 2024

GENERAL STATEMENT
THIS PROJECT PROPOSES ADDING A RESTROOM / CONCESSION BUILDING TO SERVICE THE EXISTING FOOTBALL / SOCCER FIELD. THE PROJECT ALSO INCLUDES THE DEMOLITION AND REMOVAL OF THE EXISTING RESTROOM BUILDING, SEPTIC TANK AND DRAIN FIELD SOUTH OF THE PROPOSED RESTROOM BUILDING AT VICTOR HART PARK

TAX PARCEL
TAX I.D. # 32-39-21-00001-0090-00001.0

SITE ADDRESS
4691 43RD AVENUE
VERO BEACH, FLORIDA 32967

FIRM PANEL
FLOOD ZONE: "X"
MAP NUMBER: 12061C0241H
DATED: DECEMBER 4, 2012
ESTIMATED BASE FLOOD ELEVATION: '21.95' NAVD88
*ESTIMATED BASE FLOOD ELEVATION PER SURFWM DEP. NO. 40158-5 PLANS PREPARED BY MASTELLER & MOLER, INC.

DEMOLITION DETAILS

- SITE DEMOLITION NOT TO COMMENCE UNTIL CONTRACTOR HAS SECURED ALL NECESSARY PERMITS FOR DEMOLITION OF THE EXISTING RESTROOM BUILDING AND RELATED INFRASTRUCTURE AS SHOWN ON THE DEMOLITION PLAN. ALL DISTURBED GREEN AREAS TO BE HYDROSEEDDED. CONTRACTOR SHALL PROVIDE A WRITTEN DEMOLITION PROTOCOL NARRATIVE DESCRIBING THE SEQUENCE OF DEMOLITION EVENTS FOR REVIEW AND APPROVAL BY THE PROJECT ENGINEER BEFORE INITIATING CONSTRUCTION.
- DEMOLITION NOT TO OCCUR UNTIL NEW RESTROOM AND CONCESSION STAND RECEIVES ITS CERTIFICATE OF OCCUPANCY.
- WATER SERVICE TO THE SOUTHERLY SOFTBALL FIELD TO BE MAINTAINED THROUGHOUT CONSTRUCTION AND DEMOLITION.
- NO TREES ARE PROPOSED TO BE REMOVED AS PART OF THE DEMOLITION OR NEW CONSTRUCTION EFFORT.

NOTES

- CONTRACTOR TO CONDUCT CONSTRUCTION EFFORTS IN A MANNER THAT WILL NOT INTERFERE WITH NORMAL VEHICULAR TRAFFIC WITHOUT PRIOR APPROVAL FROM INDIAN RIVER COUNTY.
- THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES IN THE VICINITY PRIOR TO BEGINNING CONSTRUCTION, WHETHER DEPICTED ON THESE PLANS OR NOT.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH INDIAN RIVER COUNTY, FPL, AT&T, BELLSOUTH, AND ANY OTHER RELEVANT UTILITY PROVIDERS/OWNERS REGARDING THE LOCATION OF EXISTING AND PROPOSED UNDERGROUND UTILITIES.
- ALL PAVED OR UNPAVED DRIVEWAYS OR PARKING AREAS THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED IN-KIND.
- ALL GREEN AREAS DISTURBED BY CONSTRUCTION SHALL BE SOODED. HYDROSEEDING IS NOT PERMITTED, UNLESS OTHERWISE NOTED.
- ALL SIGNS AND INSTALLED LANDSCAPING DISTURBED BY CONSTRUCTION SHALL BE REPLACED OR RESTORED IN-KIND.
- PRE-DEMOLITION INSPECTION AND PERMITTING IS REQUIRED THROUGH THE DEPARTMENT OF HEALTH PRIOR TO STRUCTURAL DEMOLITION.

DEMOLITION SPECIFICATIONS

THE INITIAL PHASE OF THE PROJECT WILL BE THE DEMOLITION OF THE EXISTING RESTROOM BUILDING, AND THE REMOVAL OF THE RELATED INFRASTRUCTURE, ELECTRICAL/MECHANICAL STRUCTURES, WIRING, CONDUIT, ETC. A TEMPORARY FENCE SHALL BE ERRECTED AND WILL SERVE AS A SETUP TO CREATE A WORK PERIMETER AND PREVENT UNAUTHORIZED PERSONNEL FROM ENTERING THE WORK ZONE. THE EXISTING BUILDING WILL BE TAKEN APART BY THE CONTRACTOR WHILE CAREFULLY PRESERVING VALUABLE ELEMENTS THAT CAN BE SAFELY REUSED OR RECYCLED. INDIAN RIVER COUNTY PARKS AND RECREATION DEPARTMENT SHALL RETAIN THE RIGHTS TO ANY MATERIALS RELATED TO THE BUILDING.

ALL THE WORK ASSOCIATED WITH THE DEMOLITION OF THE EXISTING SITE WILL COMMENCE UPON CONTRACTOR'S RECEIPT OF ALL PERMITS NECESSARY FOR PROJECT DEMOLITION. ONCE THE WORK HAS BEEN COMPLETED BY THE CONTRACTOR, THE CONTRACTOR WILL PROVIDE NOTIFICATION TO THE PROJECT ENGINEER AND ALL AGENCIES HAVING JURISDICTION, AS TO THE COMPLETION OF THE DEMOLITION.

NOTIFICATION OF OWNERS OF UTILITY LINES AND EQUIPMENT

CONTRACTOR SHALL NOTIFY THE OWNER OR LOCAL AUTHORITY OWNING ANY CONDUITS, PIPES, WIRES, OR EQUIPMENT AFFECTED BY THE DEMOLITION WORK. ANY REMEDIAL WORK REQUIRED AS A RESULT OF DAMAGES TO EXISTING UTILITY LINES AND EQUIPMENT CAUSED DURING DEMOLITION SHALL BE AT THE CONTRACTOR'S EXPENSE.

PROTECTION

PRIOR TO STARTING ANY WORK ON SITE, CONTRACTOR SHALL PROVIDE A SAFETY PLAN TO THE PROJECT ENGINEER FOR APPROVAL, AND UPON APPROVAL, COORDINATE THE IMPLEMENTATION OF THE SAFETY PLAN WITH THE OWNER AS NECESSARY THROUGHOUT THE DURATION OF THE DEMOLITION PHASE.

PRIOR TO STARTING DEMOLITION OPERATIONS, PROVIDE NECESSARY PROTECTION OF EXISTING SPACES AND ITEMS TO REMAIN. THE CONTRACTOR IS ADVISED THAT THE PROJECT SITE IS ADJACENT TO THE HOSPITAL AND RELATED EMERGENCY SERVICES TRAFFIC. THE CONTRACTOR SHALL CONDUCT DEMOLITION OPERATIONS IN A MANNER THAT WILL MINIMIZE NEED FOR DISRUPTION OF THE HOSPITAL'S NORMAL OPERATIONS AND PROVIDE PROTECTIVE MEASURES AS REQUIRED TO PROVIDE FREE AND SAFE PASSAGE OF HOSPITAL PERSONNEL AND VISITORS, INCLUDING EMERGENCY SERVICES PERSONNEL.

CONTRACTOR SHALL PROVIDE A MINIMUM OF 72 HOURS ADVANCE NOTICE TO THE COUNTY OF DEMOLITION ACTIVITIES THAT WILL IMPACT NORMAL OPERATION AND OBTAIN SPECIFIC APPROVAL FROM INDIAN RIVER COUNTY, AS APPLICABLE, AND OWNER(S) FOR EACH INDIVIDUAL IMPACT.

THE OWNER ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITIONS OF THE ITEMS TO BE DEMOLISHED. THE OWNER AND/OR THEIR DESIGNATED PERSONNEL SHALL MAINTAIN CONDITIONS AT TIME OF COMMENCEMENT OF CONTRACT INsofar AS PRACTICAL.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING INFRASTRUCTURE TO REMAIN (INCLUDING CURBING AND/OR PAVING, WATER AND SEWER STRUCTURES/ FIXTURES, ETC.) DURING DEMOLITION OPERATIONS.

DEMOLITION SPECIFICATIONS (CONTD)

REGULATORY REQUIREMENTS

CONTRACTOR SHALL CONFORM TO APPLICABLE CODES FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF AND EROSION CONTROL, AND DISPOSAL OF DEMOLISHED MATERIALS. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS NECESSARY TO PERFORM THE DEMOLITION FROM AUTHORITIES HAVING JURISDICTION.

CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. CONTRACTOR SHALL NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, OR HYDRANTS WITHOUT PERMITS.

CONTRACTOR SHALL CONFORM TO ALL APPLICABLE REGULATORY PROCEDURES WHEN DISCOVERING HAZARDOUS OR CONTAMINATED MATERIALS. IF HAZARDOUS OR CONTAMINATED MATERIALS ARE DISCOVERED, CONTACT THE OWNER AND THE PROJECT ENGINEER IMMEDIATELY AND COMPLY WITH ALL APPLICABLE REGULATIONS, LAWS, AND ORDINANCES CONCERNING ASSESSMENT, REMOVAL, HANDLING, AND PROTECTION AGAINST EXPOSURE OR ENVIRONMENTAL POLLUTION.

EXPLOSIVES

THE USE OF EXPLOSIVES IS STRICTLY PROHIBITED.

PREPARATION

CONTRACTOR TO: VERIFY THE PROPER DISCONNECTION AND CAPPING OF ALL ABANDONED UTILITIES; VERIFY THAT REQUIRED BARRICADES AND OTHER PROTECTIVE MEASURES ARE IN PLACE; PROVIDE PHOTOGRAPHS/VIDEO OF EXISTING CONDITIONS OF SURROUNDING SPACES THAT COULD BE MISCONSTRUED AS DAMAGE RESULTING FROM SELECTIVE DEMOLITION WORK AND SUBMIT PHOTOGRAPHS/VIDEO TO PROJECT ENGINEER PRIOR TO STARTING WORK.

CONTRACTOR SHALL REPAIR DAMAGE CAUSED TO EXISTING FACILITIES AT NO COST TO OWNER UNLESS THEY CAN PROVIDE DOCUMENTATION INDICATING PRE-EXISTING DAMAGE.

DEMOLITION OPERATIONS

CONTRACTOR TO: ABANDON, DEMOLISH, AND REMOVE ELEMENTS AND EQUIPMENT AS DESIGNATED ON THE PLANS; REMOVE AND DISPOSE OF ELEMENTS IN THEIR ENTIRETY UNLESS OTHERWISE NOTED; EXECUTE DEMOLITION IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE OR DAMAGE TO ADJOINING SURFACES OR ADJACENT STRUCTURES; AVOID EXCESSIVE VIBRATIONS IN DEMOLITION PROCEDURES THAT MAY TRANSMIT THROUGH EXISTING STRUCTURES, ETC.

DISPOSAL

MATERIALS, EQUIPMENT, AND DEBRIS RESULTING FROM DEMOLITION OPERATIONS SHALL BECOME PROPERTY OF CONTRACTOR UNLESS OTHERWISE NOTED. THE COUNTY SHALL RETAIN THE RIGHTS TO ANY MATERIALS RELATED TO THE BUILDING.

CONTRACTOR SHALL REMOVE DEMOLITION DEBRIS AT LEAST ONCE EACH DAY IN ACCORDANCE WITH APPLICABLE CITY, STATE, AND FEDERAL LAWS. DEBRIS IN TRUCKS SHALL BE COVERED WITH APPROVED NETTING TO PREVENT SPILLAGE DURING TRANSPORTATION. DO NOT STORE DEMOLITION MATERIALS ON SITE EXCEPT IN APPROVED CONTAINERS OR BURN MATERIALS ON SITE.

CONTRACTOR TO: REMOVE ANY COMBUSTIBLE WASTE MATERIALS IN A MANNER APPROVED BY LOCAL FIRE DEPARTMENT; REMOVE, HANDLE, AND DISPOSE OF ANY HAZARDOUS WASTE AND DEBRIS IN ACCORDANCE WITH APPLICABLE CITY, STATE, AND FEDERAL LAWS; TRANSPORT DEMOLITION MATERIALS TO OFF-SITE DISPOSAL AREA AND LEGALLY DISPOSE OF DEBRIS; USE STREET ROUTES SPECIFICALLY DESIGNATED BY THE CITY FOR HAULING DEBRIS (IF AVAILABLE); DISPOSE OF MATERIAL TO RECYCLING CENTERS WHEN POSSIBLE.

EXISTING CONDITIONS & DEMOLITION PLANS

NO.	DATE	DESCRIPTION	DR/APP
4	03/26/24	UPDATED FOR BIDDING	SCG/SCG
3	01/05/24	REVISED PER UCP EMAILED RAI #1 MARKUPS DATED 01/04/24	MBB/SCG
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VICTOR HART PARK RESTROOM & CONCESSION BUILDING
FOR I.R.C. PARKS & RECREATION

FLORIDA

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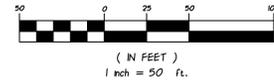
FOR BIDDING PURPOSES ONLY

03/26/24

SEAN C. GREEN, P.E. FL #90797

DRAWN	GEV
DESIGNED	MBB
CHECKED	SCG
DATE	02/01/23
SCALE	1"=50'
SHEET	3 OF 12
PROJECT NO.	2226

MATCHLINE SEE SHEET 3



DATUM
THE DATUM AND DESIGN GRADES SHOWN WITHIN THESE PLANS REFER TO THE
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)
DATUM CONVERSION: NGVD '29 = NAVD '88 + (1.43)

GENERAL SITE DATA

APPLICANT / OWNER
INDIAN RIVER COUNTY PARKS, RECREATION, AND CONSERVATION DEPT.
1690 9TH STREET SW
VERO BEACH, FLORIDA 32962
Ph. (772) 226-1780

ENGINEER
MASTELLER & MOLER, INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FLORIDA 32960
Ph. (772) 567-5300

SURVEYOR
MASTELLER, MOLER & TAYLOR INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FLORIDA 32960
Ph. (772) 564-8050

LEGAL DESCRIPTION
INDIAN RIVER FARMS CO SUB PLS 2-12
TR 9, LESS W 310 FT OF E 335 FT OF S 281.03 FT OF N 311.03 FT THEREOF, LESS R/W'S

TAX PARCEL
TAX I.D. # 32-39-21-00001-0090-00001.0

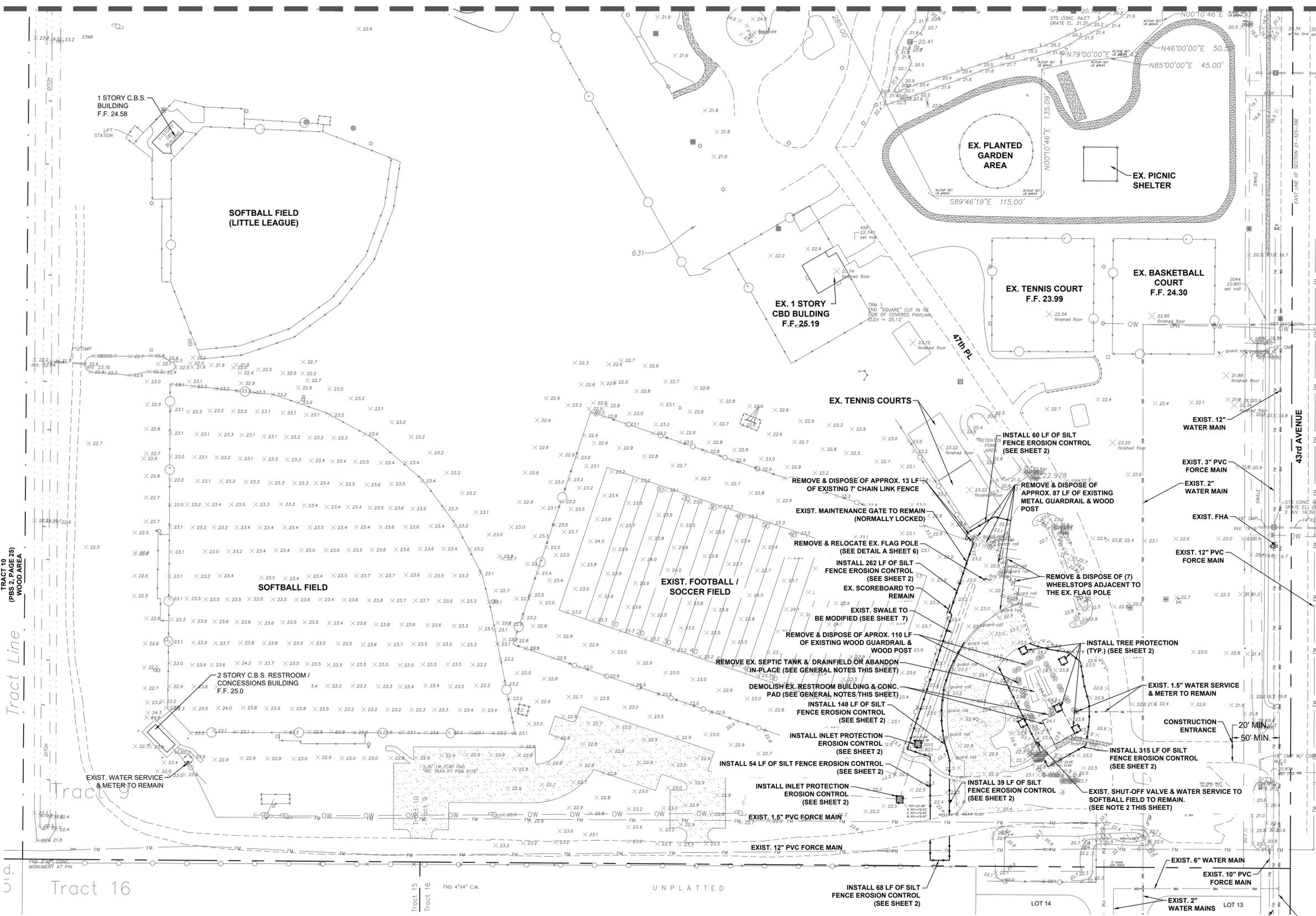
SITE ADDRESS
4691 43RD AVENUE
VERO BEACH, FLORIDA 32967

FIRM PANEL
FLOOD ZONE: "X"
MAP NUMBER: 12061C0241H
DATED: DECEMBER 4, 2012
ESTIMATED BASE FLOOD ELEVATION: "21.95" NAVD'88
*ESTIMATED BASE FLOOD ELEVATION PER SURWMD ERP NO. 40158-5 PLANS PREPARED BY MASTELLER & MOLER, INC.

SCHEDULE
PROJECT COMMENCEMENT: DECEMBER 2023
PROJECT COMPLETION: SEPTEMBER 2024

UTILITY PROVIDERS
POTABLE WATER: IRCUDS
WASTEWATER: IRCUDS
*EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY IRCUDS

- GENERAL NOTES:**
- SEE DEMOLITION, SEQUENCING NOTES, AND SPECIFICATIONS ON SHEET 3.
 - CONTRACTOR TO USE CAUTION WHEN DEMOLISHING THE EX. RESTROOM BUILDING, DRAIN FIELD AND SEPTIC. THE EX. WATER SERVICE WITHIN THE VICINITY OF THE DEMOLITION LIMITS SHALL REMAIN IN SERVICE AFTER DEMOLITION IS COMPLETE.
 - ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF PROJECT LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL WITHIN BEST MANAGEMENT PRACTICES FOR THE DURATION OF THE PROJECT UNTIL SUCH TIME AS THE PROJECT HAS BEEN CERTIFIED AS COMPLETE. SEE SWPPP TEMPLATE (SHEET 2) FOR ADDITIONAL NOTES.
 - PRE-DEMOLITION PERMITTING AND INSPECTION IS REQUIRED THROUGH THE DEPARTMENT OF HEALTH PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES. CONTACT THE DEPARTMENT OF HEALTH AT (772) 794-7440.
 - THE EXISTING STRUCTURE IS SERVED BY AN ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM WHICH MUST BE PROPERLY ABANDONED BY A REGISTERED SEPTIC CONTRACTOR. PERMITTING WILL BE REQUIRED THROUGH THE DEPARTMENT OF HEALTH PRIOR TO COMMENCEMENT OF SEPTIC TANK ABANDONMENT.



EXISTING CONDITIONS & DEMOLITION PLAN

NO.	DATE	DESCRIPTION	DR/APP
4	03/26/24	UPDATED FOR BIDDING	SCG/SCG
3	01/05/24	REVISED PER UCP EMAILED RAI #1 MARKUPS DATED 01/04/24	MBB/SCG
2	11/14/23	REVISED PER IRC EMAILED RAI #1 COMMENTS DATED 11/14/23	MBB/SCG
1	10/25/23	REVISED PER TRC COMMENTS DATED 10/25/23	MBB/SCG

REVISIONS

M M MASTELLER & MOLER, INC.
CONSULTING ENGINEERS

CERTIFICATE OF AUTHORIZATION NUMBER 4204
1655 27th STREET, SUITE 2, VERO BEACH, FLORIDA 32960
(772) 567-5300 / FAX (772) 794-1106

CONSTRUCTION PLANS
VICTOR HART PARK RESTROOM & CONCESSION BUILDING
FOR
I.R.C. PARKS & RECREATION

INDIAN RIVER COUNTY
FLORIDA

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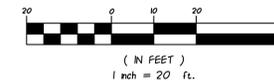
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03/26/24

SHEET 4 OF 12

PROJECT NO. 2226

SEAN C. GREEN, P.E. FL #90797



DATUM
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INDIAN RIVER COUNTY PARKS, RECREATION, AND CONSERVATION DEPT.
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VERO BEACH, FLORIDA 32962
Ph. (772) 226-1780

ENGINEER
MASTELLER & MOLER, INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FLORIDA 32960
Ph. (772) 567-5300

GENERAL STATEMENT
THIS PROJECT PROPOSES ADDING A RESTROOM / CONCESSION BUILDING TO SERVICE THE EXISTING FOOTBALL / SOCCER FIELD. THE PROJECT ALSO INCLUDES THE DEMOLITION AND REMOVAL OF THE EXISTING RESTROOM BUILDING, SEPTIC TANK AND DRAIN FIELD SOUTH OF THE PROPOSED RESTROOM BUILDING AT VICTOR HART PARK

SURVEYOR
MASTELLER, MOLER & TAYLOR INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FLORIDA 32960
Ph. (772) 564-8050

LEGAL DESCRIPTION
INDIAN RIVER FARMS CO SUB PBS 2-12 TR 9, LESS W 310 FT OF E 335 FT OF S 281.03 FT OF N 311.03 FT THEREOF, LESS RWS

TAX PARCEL
TAX I.D. # 32-39-21-00001-0090-00001.0

SITE ADDRESS
4691 43RD AVENUE
VERO BEACH, FLORIDA 32967

FIRM PANEL
FLOOD ZONE: "X"
MAP NUMBER: 12061C0241H
DATED: DECEMBER 4, 2012
ESTIMATED BASE FLOOD ELEVATION: "21.95' NAVD88"

UTILITY PROVIDERS
POTABLE WATER IRCDUS
WASTEWATER IRCDUS

SCHEDULE
PROJECT COMMENCEMENT: DECEMBER 2023
PROJECT COMPLETION: SEPTEMBER 2024

ESTIMATED BASE FLOOD ELEVATION PER SJRWMD ERP NO. 40158-5 PLANS PREPARED BY MASTELLER & MOLER, INC.

EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY IRCDUS

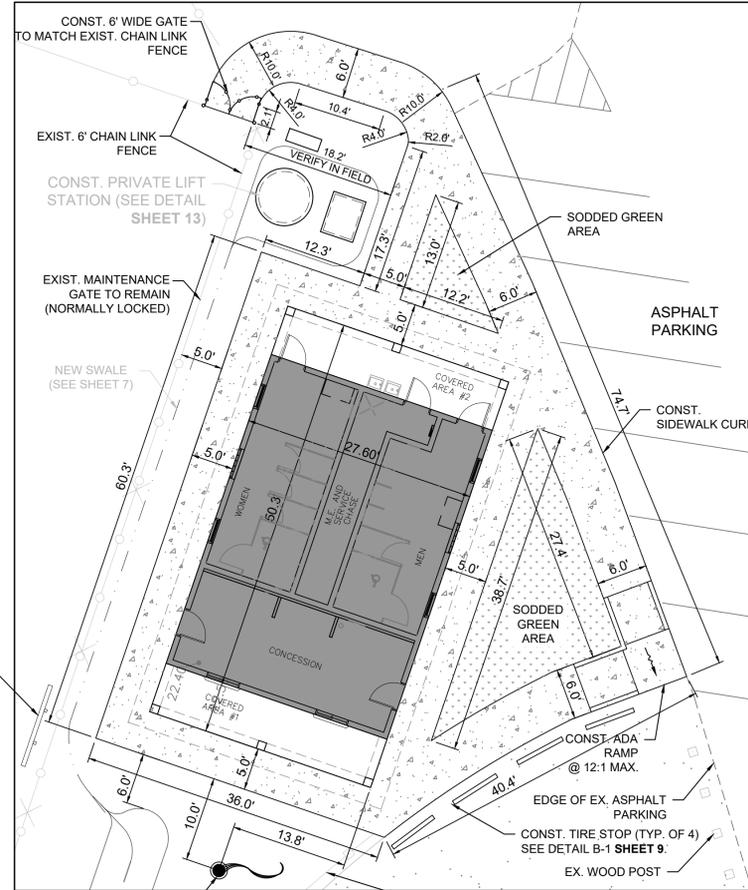
DRAINAGE BASIN AREA SUMMARY

EXISTING CONDITIONS			
EXISTING IMPERVIOUS:	377,665 SF	OR	8.67 ACRES
OPEN SPACE AREA:	444,312 SF	OR	10.20 ACRES
LAKE AREA (UNCHANGED):	101,495 SF	OR	2.33 ACRES
TOTAL SITE AREA:	923,472 SF	OR	21.20 ACRES
PROPOSED DEVELOPMENT			
PROPOSED SIDEWALK:	2,021 SF	OR	0.04 ACRES
PROPOSED BUILDING:	1,385 SF	OR	0.03 ACRES
EXISTING BUILDINGS & MAINT. PAD (DEMO):	1,701 SF	OR	(0.01) ACRES
TOTAL PROPOSED NET IMPERVIOUS:	2,705 SF	OR	0.06 ACRES
TOTAL DEVELOPMENT			
PROPOSED TOTAL IMPERVIOUS:	380,370 SF	OR	8.73 ACRES 41.16%***
LAKE AREA (UNCHANGED):	101,495 SF	OR	2.33 ACRES 10.99%
PROPOSED TOTAL OPEN SPACE:	441,193 SF	OR	10.14 ACRES 47.83%
TOTAL SITE AREA:	923,472 SF	OR	21.20 ACRES 100%

***LESS THAN ALLOWABLE IMPERVIOUS AREA 403,801 SF OR 9.27 ACRES APPROVED FOR THE DRAINAGE BASIN THROUGH ERP 40158-5.

Jurisdictional Permitting Requirements

INDIAN RIVER COUNTY: MINOR SITE PLAN APPROVAL
INDIAN RIVER COUNTY: LAND CLEARING PERMIT
INDIAN RIVER COUNTY: UTILITY CONSTRUCTION PERMIT
ST. JOHNS RIVER WMD: ENVIRONMENTAL RESOURCE PERMIT MODIFICATION
FLORIDA DEP: WASTEWATER SYSTEM PERMIT



DETAIL A
SCALE 1" = 10'

RESTROOM BUILDING NOTES:

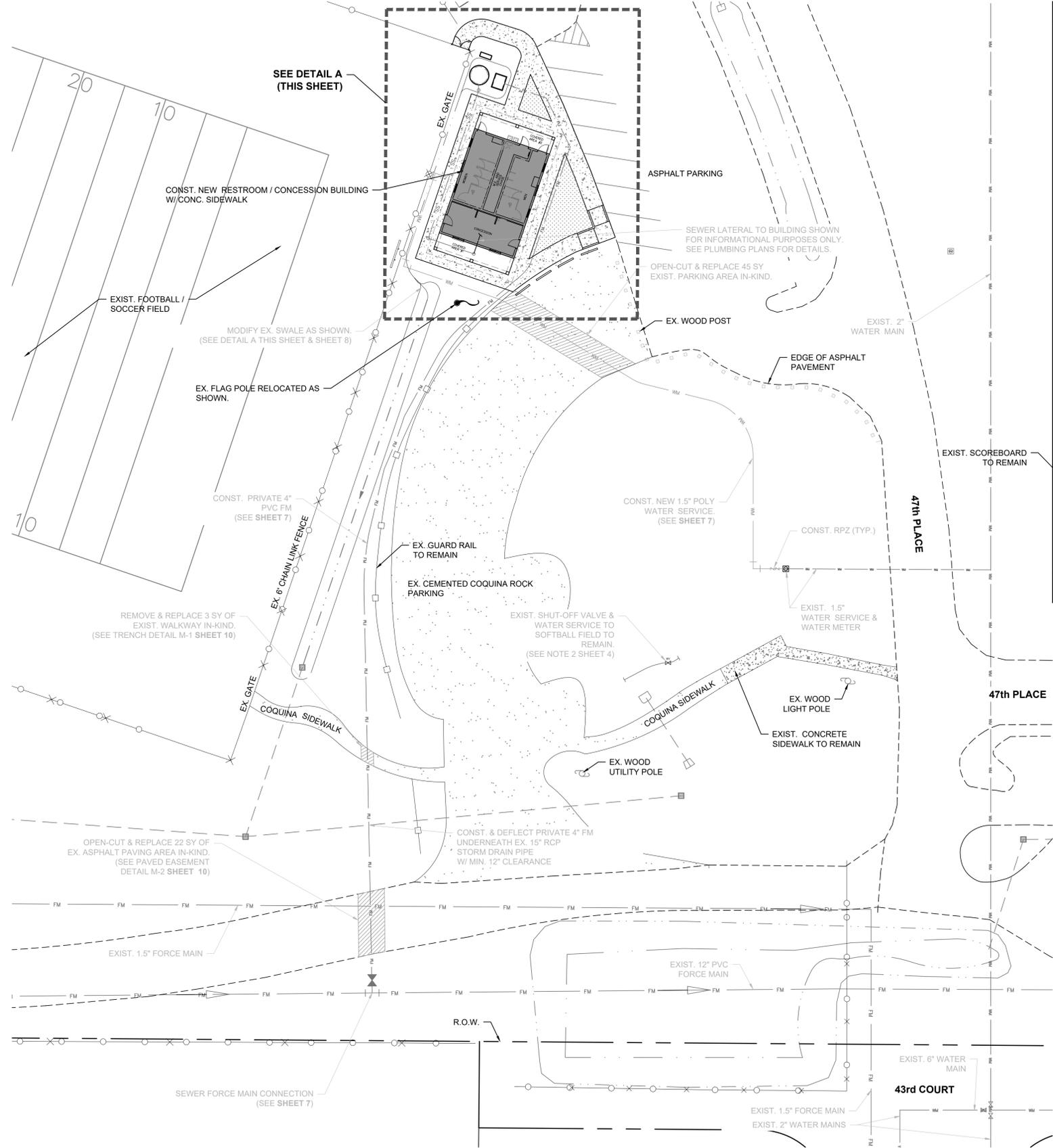
- SEE SHEET 9 FOR ADDITIONAL INFORMATION REGARDING THE PROPOSED RESTROOM / CONCESSION BUILDING.
- THIS PLAN HAS BEEN PREPARED TO DEMONSTRATE THAT THE PROPOSED RESTROOM / CONCESSION BUILDING AT VICTOR HART PARK MEETS ALL APPLICABLE INDIAN RIVER COUNTY RULES AND REQUIREMENTS REGARDING DRAINAGE CONDITIONS AND IMPROVEMENTS FOR MINOR SITE PLANS [914.14(15)(2)].
- THE STRUCTURE IS PROPOSED TO BE SET WITH A FINISHED FLOOR ELEVATION EQUIVALENT TO 23.58' NAVD 88' WHICH IS GREATER THAN THE SITE'S ESTIMATED BASE FLOOD ZONE ELEVATION OF 20.92' NAVD88' PER SJRWMD ERP NO. 40158 - 5 PLANS PREPARED BY MASTELLER & MOLER, INC.

SITE PLAN NOTES:

- NO WETLANDS/NATIVE UPLANDS EXIST WITHIN THE PROJECT LIMITS.
- ALL NEW OUTDOOR LIGHTING (IF APPLICABLE) SHALL BE SHIELDED FROM ADJACENT PROPERTIES AND ROADWAYS.
- ALL NUISANCE EXOTIC VEGETATION SHALL BE REMOVED IN CONJUNCTION WITH SITE IMPROVEMENTS.
- COMMERCIAL BUILDINGS SHALL POST A MINIMUM 6" NUMERICAL ADDRESS.
- SURVEY DATA IS PROVIDED BY MASTELLER, MOLER, & TAYLOR, INC. REFERENCE: PROJECT # 8490.
- PRIOR TO COMMENCING DEMOLITION OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES IN THE VICINITY, WHETHER SHOWN ON THESE PLANS OR NOT.
- SEE ARCHITECTURAL, STRUCTURAL, PLUMBING, ELECTRICAL, ETC. PLANS BY OTHERS.
- NO EXISTING TREES ARE PROPOSED TO BE REMOVED AS PART OF CONSTRUCTION OR DEMOLITION ACTIVITIES.

GENERAL NOTES:

- ON-SITE MATERIAL STORAGE AREA LOCATION(S) TO BE COORDINATED WITH THE PARKS DEPARTMENT.
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. CONTRACTOR SHALL FIELD LOCATE EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH INDIAN RIVER COUNTY, FPL, AT&T, BELLSOUTH, AND ANY OTHER RELEVANT UTILITY PROVIDERS REGARDING THE LOCATION OF EXISTING AND PROPOSED UNDERGROUND UTILITIES.
- ALL PAVED OR UNPAVED ROADS, DRIVEWAYS, OR SIDEWALKS THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED IN-KIND. TRENCH MATERIAL SHALL NOT BE STORED IN THE SWALE AREA (BLOCKING DRAINAGE) AND ANY DISTURBED SWALES SHALL BE REGRADED TO RESTORE HISTORICAL DRAINAGE PATTERNS AND STORAGE VOLUME.
- ALL GREEN AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED (OR HYDROSEEDING IF APPROVED BY ENGINEER) WITHIN THREE (3) DAYS OF FINAL GRADING.
- ALL SIGNS, MAILBOXES, AND INSTALLED LANDSCAPING DISTURBED BY CONSTRUCTION SHALL BE RESTORED IN-KIND.
- POTABLE WATER SERVICE & SANITARY SEWER LATERAL LOCATIONS MAY BE ADJUSTED BASED ON FIELD OBSERVATIONS. TERMINATE CONSTRUCTION OF 1.5" POTABLE WATER PIPELINE AND 6" PVC SEWER LATERAL FIVE (5) FEET FROM EDGE OF EXTERIOR WALL OF PROPOSED RESTROOM FACILITY.
- CONTRACTOR TO MAKE ALL EFFORTS TO REDUCE IMPACTS TO SPECIMEN OAK & PALM TREE CRITICAL ROOT ZONES TO THE GREATEST EXTENT POSSIBLE.



SITE PLAN

NO.	DATE	DESCRIPTION	DR/APP
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1	10/25/23	REVISED PER TRC COMMENTS DATED 10/25/23	MBB/SCG

REVISIONS

M M MASTELLER & MOLER, INC.
CONSULTING ENGINEERS

CERTIFICATE OF AUTHORIZATION NUMBER 4204
1655 27TH STREET, SUITE 2, VERO BEACH, FLORIDA 32960
(772) 567-5300 / FAX (772) 794-1106

CONSTRUCTION PLANS
VICTOR HART PARK RESTROOM & CONCESSION BUILDING
FOR I.R.C. PARKS & RECREATION

INDIAN RIVER COUNTY FLORIDA

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03/26/24

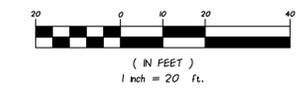
SCALE 1"=20'

SHEET 6 OF 12

PROJECT NO: 2226

DRAWN: GEV
DESIGNED: MBB
CHECKED: SCG
DATE: 02/01/23

SEAN C. GREEN, P.E. FL #90797



DATUM
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DATUM CONVERSION: NGVD '29 = NAVD '88 + (1.43)

GENERAL SITE DATA

APPLICANT / OWNER
INDIAN RIVER COUNTY PARKS, RECREATION, AND CONSERVATION DEPT.
1590 9TH STREET SW
VERO BEACH, FLORIDA 32962
Ph. (772) 226-1780

ENGINEER
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Ph. (772) 564-8050

TAX PARCEL
TAX I.D. # 32-39-21-00001-0090-00001.0

LEGAL DESCRIPTION
INDIAN RIVER FARMS CO SUB PLS 2-12 TR 9, LESS W 310 FT OF E 335 FT OF S 281.03 FT OF N 311.03 FT THEREOF, LESS RWS

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UTILITY PROVIDERS
POTABLE WATER IRCDUS
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SCHEDULE
PROJECT COMMENCEMENT: DECEMBER 2023
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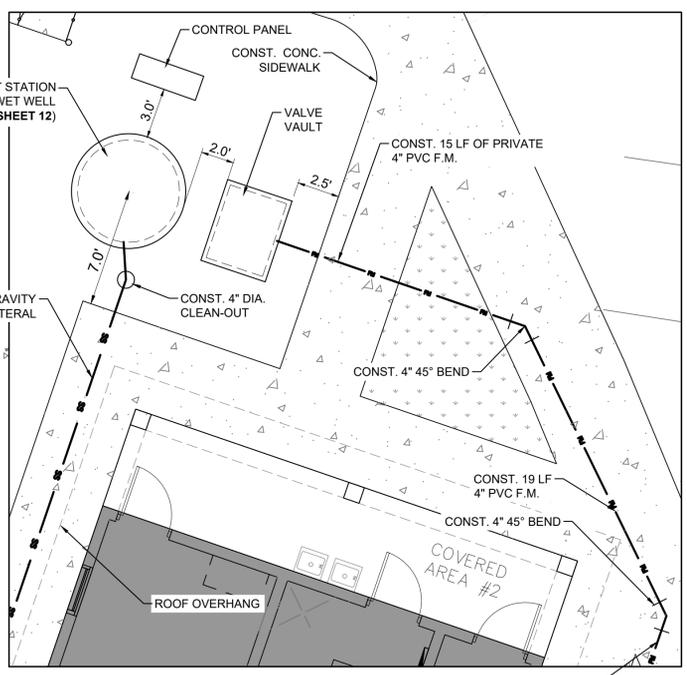
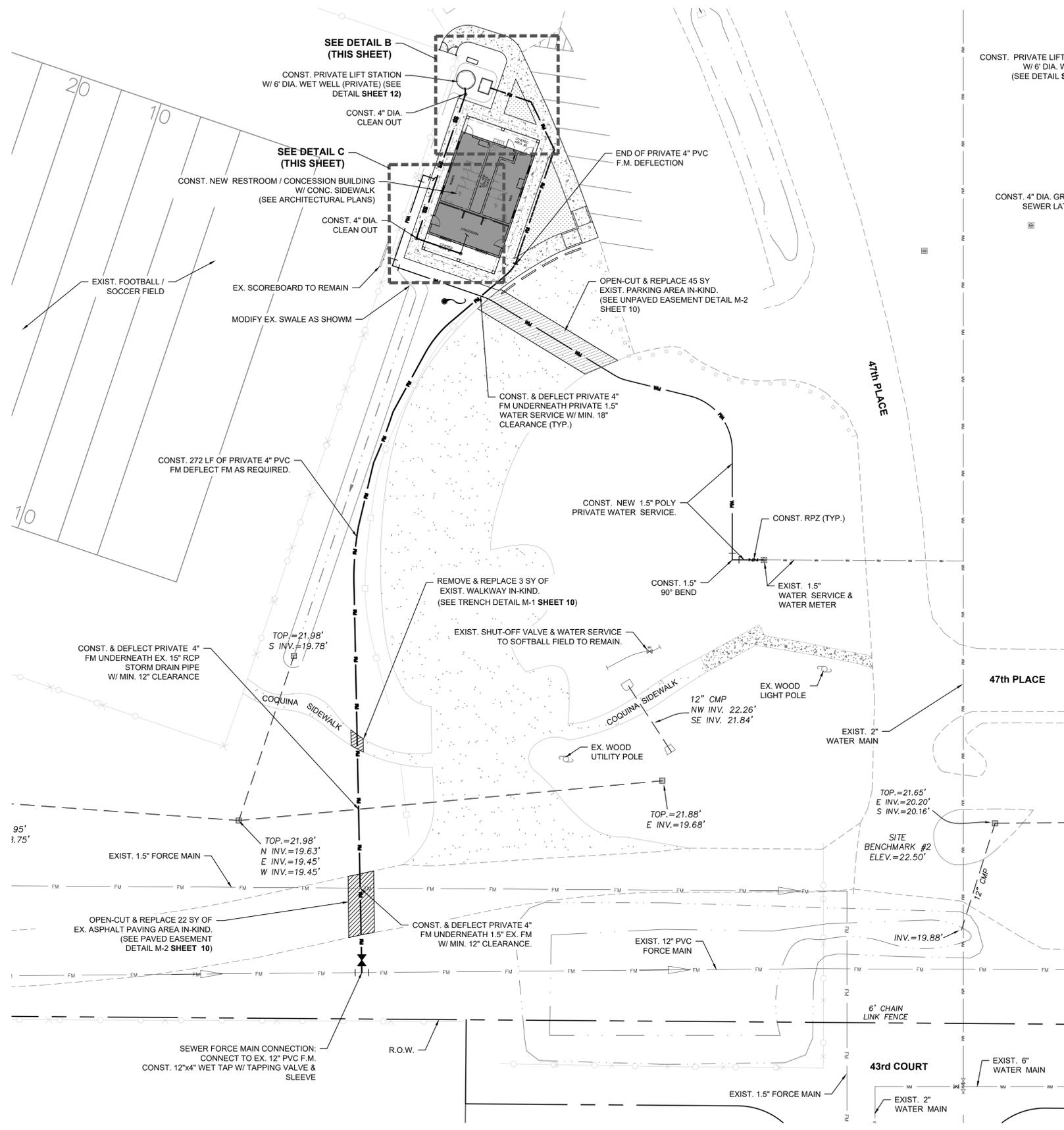
EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY IRCDUS

RESTROOM FACILITY NOTES:

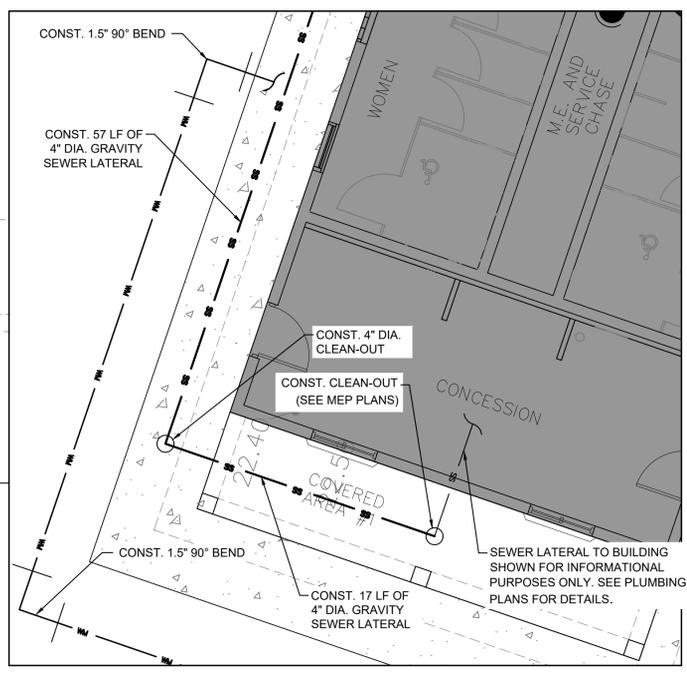
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WATER & SEWER NOTES:

- ALL NEWLY CONSTRUCTED WATER MAINS, SEWAGE FORCE MAINS, AND GRAVITY SEWER SHALL HAVE A MINIMUM 36" COVER.
- ALL NEWLY CONSTRUCTED WATER MAIN AND SEWAGE FORCE MAIN VALVES, FITTINGS, AND PIPES SHALL BE PROPERLY RESTRAINED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS TO MAINTAIN THE REQUIRED VERTICAL AND HORIZONTAL SEPARATION BETWEEN NEWLY CONSTRUCTED WATER AND SEWAGE FORCE MAINS, AND STORM, SANITARY SEWER, AND OTHER UTILITIES.
- AT UTILITY CROSSINGS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THAT THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT THE WATER MAIN JOINTS ARE AT LEAST THREE FEET (3') FROM ALL JOINTS IN VACUUM TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER, AND AT LEAST SIX FEET (6') FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, OR WASTEWATER FORCE MAINS.
- THE APPARENT SIZE OF VALVES, FITTINGS, METER BOX & SEWER CLEANOUTS DEPICTED IN THESE CONSTRUCTION PLANS HAS BEEN EXAGGERATED FOR CLARITY. IT IS INTENDED THAT ALL WATER MAIN VALVES & VALVE BOXES SHALL BE LOCATED IN GREEN AREAS OR PAVEMENT, AND NOT IN CURB OR SIDEWALK AREAS.
- THE LOCATIONS OF EXISTING UTILITIES DEPICTED ON THESE PLANS ARE APPROXIMATE. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES IN THE VICINITY, WHETHER DEPICTED ON THESE PLANS OR NOT.
- ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING.
- CONCRETE CRADLE/SADDLE SHALL BE USED WHEREVER WATER MAINS, GRAVITY SEWER MAINS, FORCE MAINS, AND STORM SEWER PIPES CROSS WITH A VERTICAL SEPARATION OF LESS THAN TWELVE (12") INCHES.
- CONSTRUCTION OF THE WATER DISTRIBUTION AND WASTEWATER COLLECTION PIPE NETWORKS SHALL COMPLY WITH THE CITY OF VERO BEACH WATER & SEWER DEPARTMENT STANDARD DETAILS & SPECIFICATIONS, LATEST EDITION AND BE IN ACCORDANCE WITH FDEP REGULATIONS.
- ALL DRAINAGE STRUCTURES SHALL COMPLY WITH FDOT STANDARD PLANS (FY 2022-23).
- ONSITE DRAINAGE PIPE BELOW GREEN AREAS MAY BE CORRUGATED ALUMINUM (CAF).
- ALL ROOF DRAINAGE SHALL BE DIRECTED TOWARD GREEN AREAS OUTSIDE THE BUILDING ENVELOPE, SWALE, OR INLETS, AS DEPICTED ON THIS PLAN.
- CONTRACTOR SHALL INSTALL & MAINTAIN INLET PROTECTION SYSTEMS AS NEEDED AT APPLICABLE EXISTING AND NEWLY CONSTRUCTED DRAINAGE STRUCTURES, AND IN ACCORDANCE WITH SWPPP AND EROSION PREVENTION & SEDIMENT CONTROL BMPs.
- PIPE LENGTHS LISTED ARE MEASURED FROM END-OF-MITERED-END TO END-OF-MITERED-END.



DETAIL B
SCALE 1" = 5'



DETAIL C
SCALE 1" = 5'

UTILITY & DRAINAGE PLANS

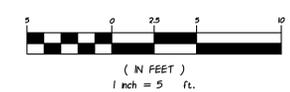
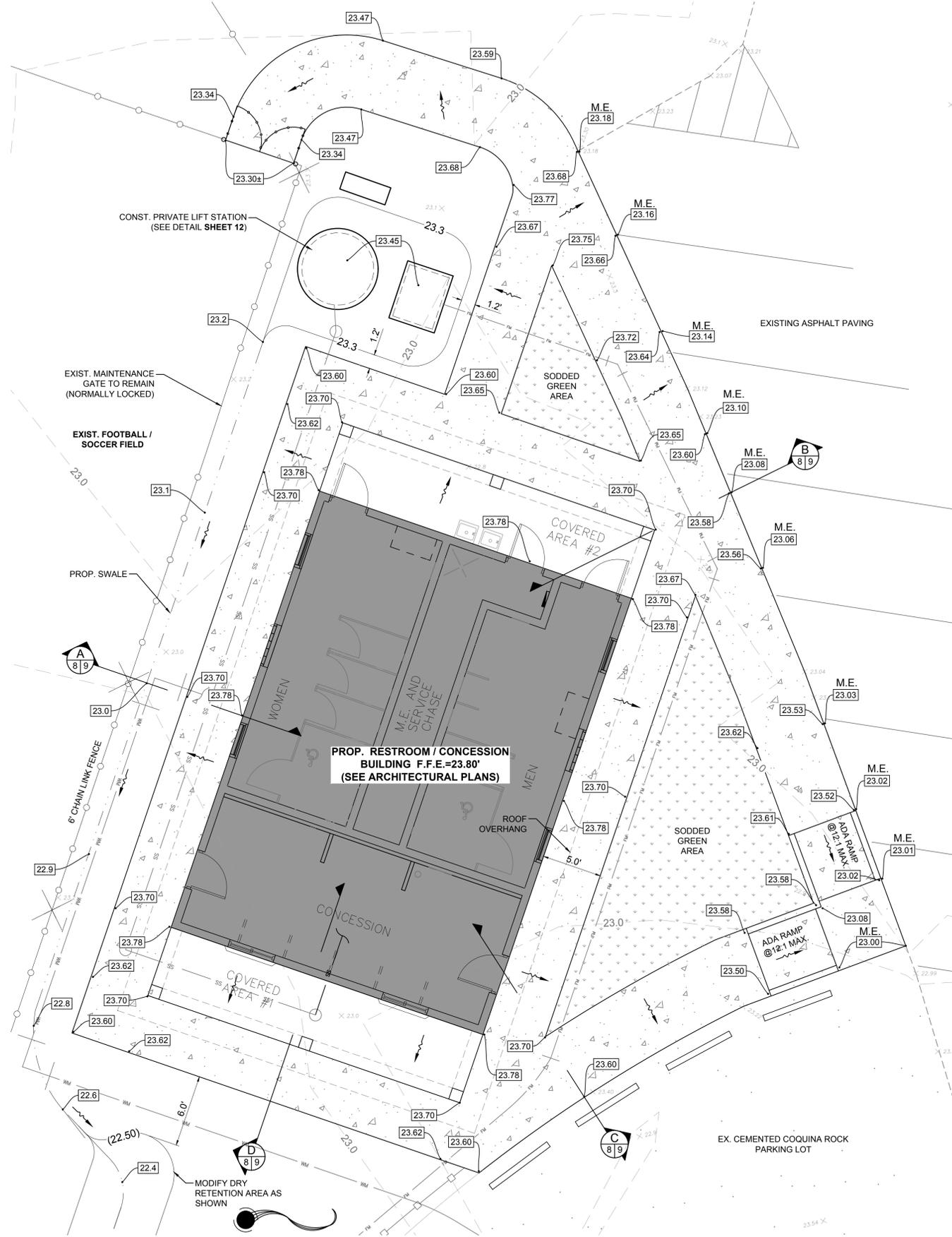
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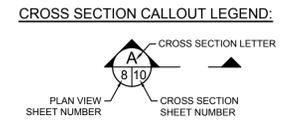
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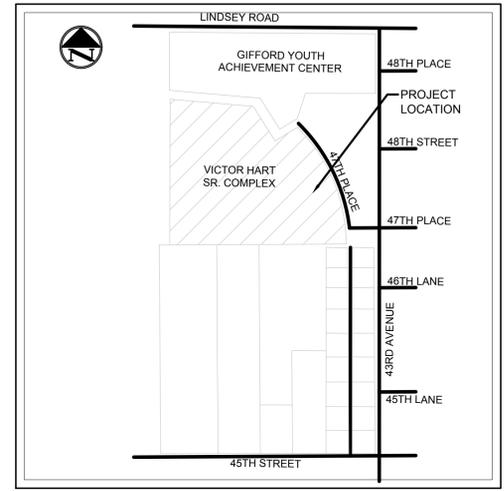
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LEGEND

SYMBOL OR LINE	DESCRIPTION
5.00	EXISTING SPOT ELEVATION
5.00	Proposed Spot Elevation
5	Existing Contour
(5)	Proposed Contour
M.E.	Match Existing Elevation



VICINITY MAP (NOT TO SCALE)



GENERAL SITE DATA

APPLICANT / OWNER
 INDIAN RIVER COUNTY PARKS, RECREATION, AND CONSERVATION DEPT.
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TAX PARCEL
 TAX I.D. # 32-39-21-00001-0090-00001.0

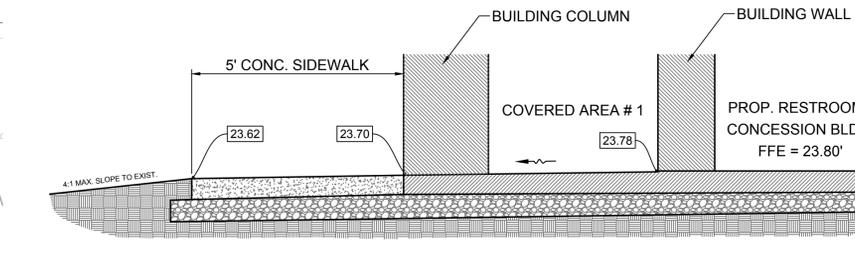
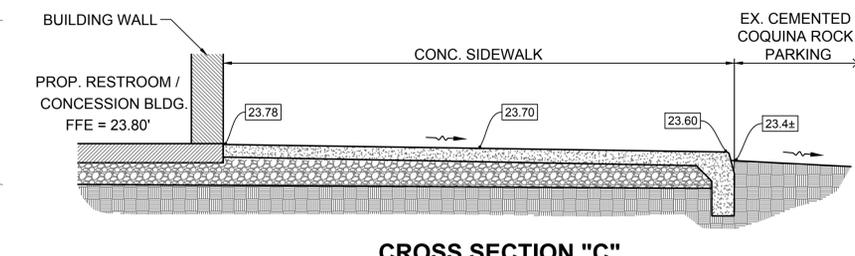
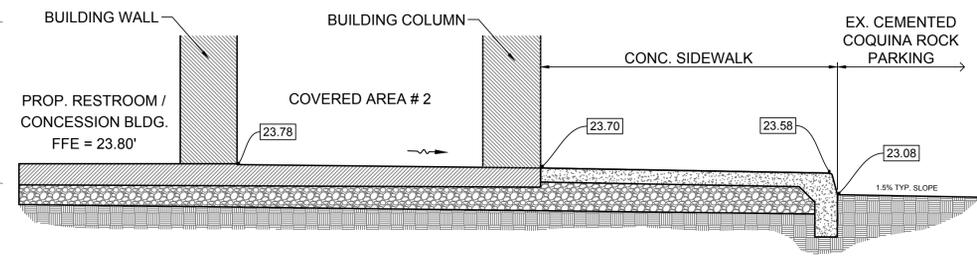
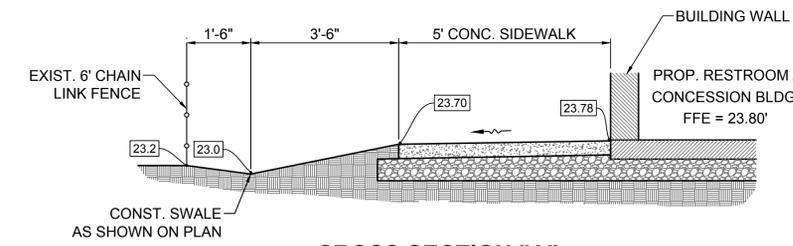
SITE ADDRESS
 4691 43RD AVENUE
 VERO BEACH, FLORIDA 32967

FIRM PANEL
 FLOOD ZONE: "X"
 MAP NUMBER: 12061C0241H
 DATED: DECEMBER 4, 2012
 ESTIMATED BASE FLOOD ELEVATION: "21.95" NAVD88"

UTILITY PROVIDERS
 POTABLE WATER: IRCUDS
 WASTEWATER: IRCUDS

SCHEDULE
 PROJECT COMMENCEMENT: DECEMBER 2023
 PROJECT COMPLETION: SEPTEMBER 2024

*EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY IRCUDS



PAVING & GRADING PLAN

NO.	DATE	DESCRIPTION	DR/APP
4	03/26/24	UPDATED FOR BIDDING	SCG/SCG
3	01/05/24	REVISED PER UCP EMAILED RAI #1 MARKUPS DATED 01/04/24	MBB/SCG
2	11/14/23	REVISED PER IRC EMAILED RAI #1 COMMENTS DATED 11/14/23	MBB/SCG
1	10/25/23	REVISED PER TRC COMMENTS DATED 10/25/23	MBB/SCG

REVISIONS

M M MASTELLER & MOLER, INC.
CONSULTING ENGINEERS

CERTIFICATE OF AUTHORIZATION NUMBER 4204
 1655 27TH STREET, SUITE 2, VERO BEACH, FLORIDA 32960
 (772) 567-5300 / FAX (772) 794-1106

CONSTRUCTION PLANS
VICTOR HART PARK RESTROOM & CONCESSION BUILDING
 FOR
I.R.C. PARKS & RECREATION

INDIAN RIVER COUNTY
 FLORIDA

FOR BIDDING PURPOSES ONLY

03/26/24

SEAN C. GREEN, P.E. FL #90797

DRAWN	GEV
DESIGNED	MBB
CHECKED	SCG
DATE	02/01/23
SCALE	1"=5'
SHEET	8 OF 12
PROJECT NO.	2226

1

SIDEWALK SECTION DETAIL
NTS

2

DIMENSIONS & QUANTITIES

DIMENSIONS & QUANTITIES										CONCRETE (CU. Yds.)				STEELING (Lbs. Yds.)					
D	A	B	C	E	F	G	H	I	J	1	2	3	4	5	6	7	8	9	10
8"	2'-0"	2.5'	0.72'	3.32'	0.7'	4.0'	0.58'	3.75'	5.75'	7.75'	1.04'	0.52'	0.90'	1.22'	1.54'	7	8	8	9
12"	2'-0"	2.5'	1.34'	1.34'	1.3'	5.0'	0.81'	3.32'	6.08'	8.25'	0.41'	1.04'	0.64'	0.99'	1.34'	7	8	9	10
18"	2'-4"	2.5'	2.06'	4.56'	2.0'	6.0'	1.00'	4.08'	6.42'	8.75'	0.08'	1.04'	0.68'	1.09'	1.48'	7	8	9	10
24"	2'-7"	2.5'	3.09'	5.59'	3.0'	7.0'	1.23'	4.33'	6.82'	9.50'	0.08'	1.04'	0.64'	1.00'	1.35'	7	8	9	10

TOP VIEW - SINGLE PIPE

SECTION MITERED END SECTION - CAP
NTS (REFERENCE FDOT INDEX 430-021 & 430-022, FY 2022-23)

3

UTILITY PIPE SEPARATION REQUIREMENTS

PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS					
	POTABLE WATER		SANITARY SEWER (GRAVITY & F.M.)		STORM SEWER	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	-	-	6' (min)	18"	3'	18"
SANITARY SEWER	6' (min)	18"	-	-	-	-

GENERAL NOTES:

- THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.) THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
- ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.
- USE ONE FULL LENGTH OF PIPE CENTERED AT THE POINT OF CROSSING. SPECIAL SUPPORT MAY BE REQUIRED.
- NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
- HORIZONTAL AND VERTICAL CLEARANCES MUST MEET FDEP REQUIRED MINIMUMS. MITIGATION FOR VARIANCES WILL REQUIRE AN INDIVIDUAL PERMIT.

CONSTRUCTION DETAILS
NTS

4

TYPICAL PAVEMENT SECTION
NTS

5

TYPICAL ASPHALT PAVEMENT SECTION
NTS

6

STANDARD DUTY (PARKING) HEAVY DUTY HEAVY DUTY (58TH AVE COUNTY RW)

1 ASPHALT COURSE:	1 1/2" SP 9.5 or SP 12.5	2" SP 9.5 or SP 12.5	1" FC 9.5 or 12.5 over 1 1/2" SP 12.5
2 BASE COURSE:	6-INCHES	8-INCHES	8-INCHES

THE BASE COURSE SHALL BE CEMENTED COQUINA ROCK (LBR 100) OR LIMEROCK AND COMPACTED TO 98 PERCENT OF ITS MODIFIED DRY PROCTOR VALUE (AASHTO T-180). BASE SHALL BE PLACED IN 6 INCH LIFTS.

3 STABILIZED SUBGRADE: 8-INCHES 12-INCHES 12-INCHES

SUITABLE CLAYED SOIL HAVING A LIMEROCK BEARING RATIO (LBR) OF 40 SHOULD BE USED FOR THE STABILIZED SUBGRADE AND COMPACTED TO 98 PERCENT OF ITS MODIFIED DRY PROCTOR VALUE (AASHTO T-180). STAB. SUBGRADE SHALL BE PLACED IN 6 INCH LIFTS.

4 ADDITIONAL FILL SHALL CONSIST OF CLEAN GRANULAR SAND CONTAINING LESS THAN 10% MATERIAL PASSING THE U.S. STANDARD NO. 200 MESH SIEVE. ON-SITE FILL SHALL BE PLACED IN LOOSE LAYERS OF 12 INCHES AND COMPACTED TO NO LESS THAN 95 PERCENT OF ITS MODIFIED DRY PROCTOR VALUE (AASHTO T-180). IN THE IRC RIGHT-OF-WAY, ADDITIONAL FILL SHALL BE PLACED IN 6 INCH LIFTS AND COMPACTED TO A MINIMUM OF 98 PERCENT OF ITS MODIFIED DRY PROCTOR VALUE.

NOTES:

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE SPECIFICATIONS UNDER THE "STANDARD SPECIFICATIONS FOR THE ROAD AND BRIDGE CONSTRUCTION" BY THE FLORIDA DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
- TESTING: AN INDEPENDENT TESTING FIRM SHALL BE RETAINED BY THE CONTRACTOR TO PERFORM LBR AND DENSITY TESTING PER THE TESTING REQUIREMENTS BY LOCAL CODES.

B

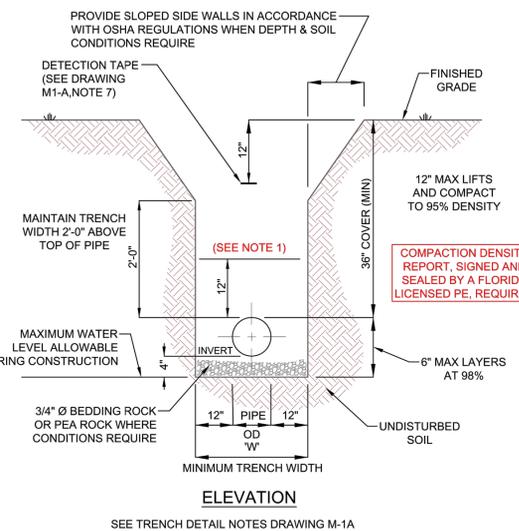
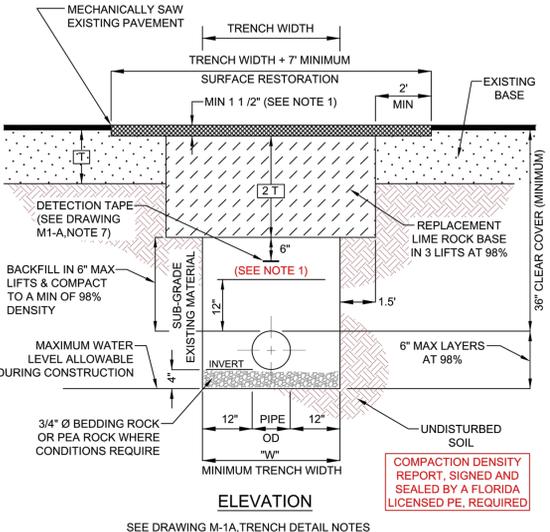
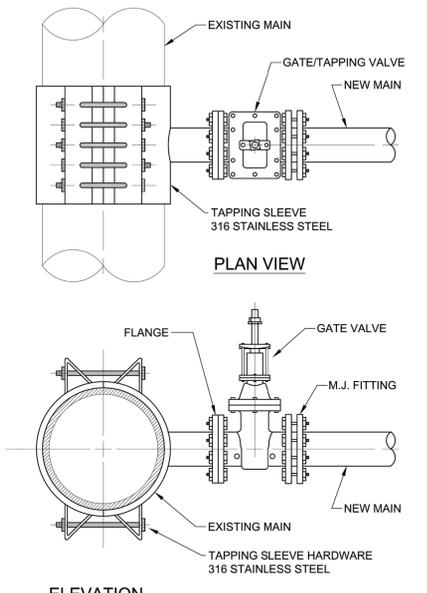
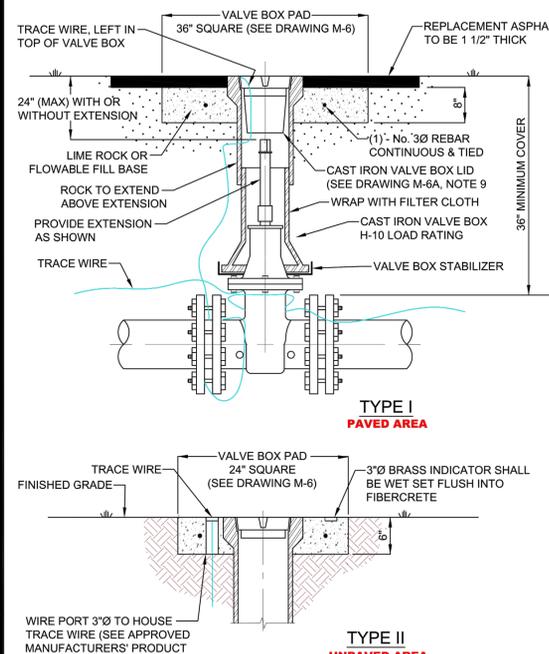
SAW CUT/BUTT JOINT DETAIL
NTS

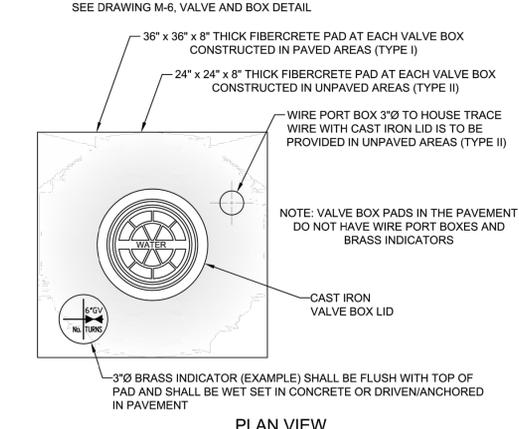
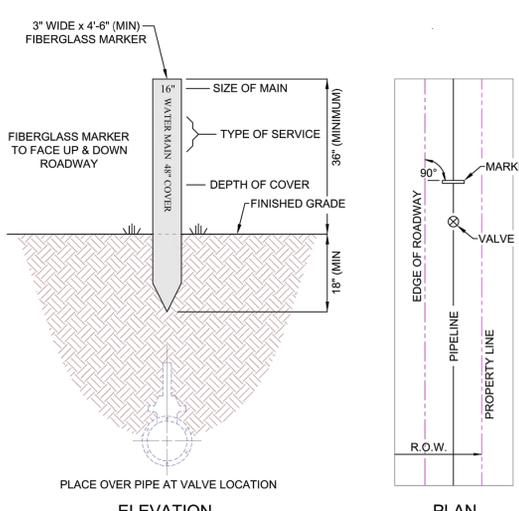
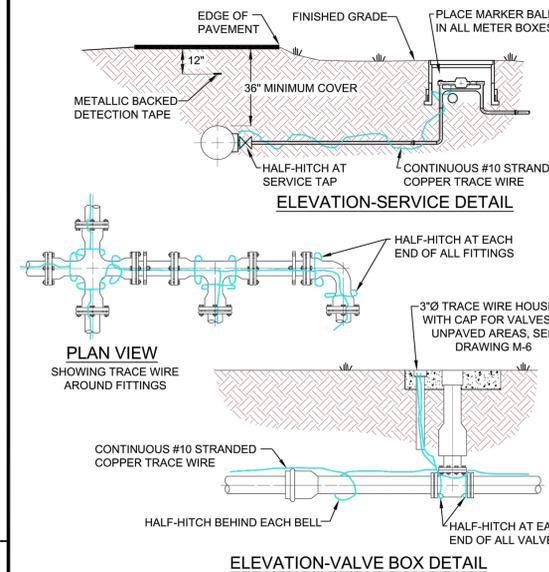
TIRE STOP DETAIL
NTS

SIDEWALK CURB DETAIL
NTS

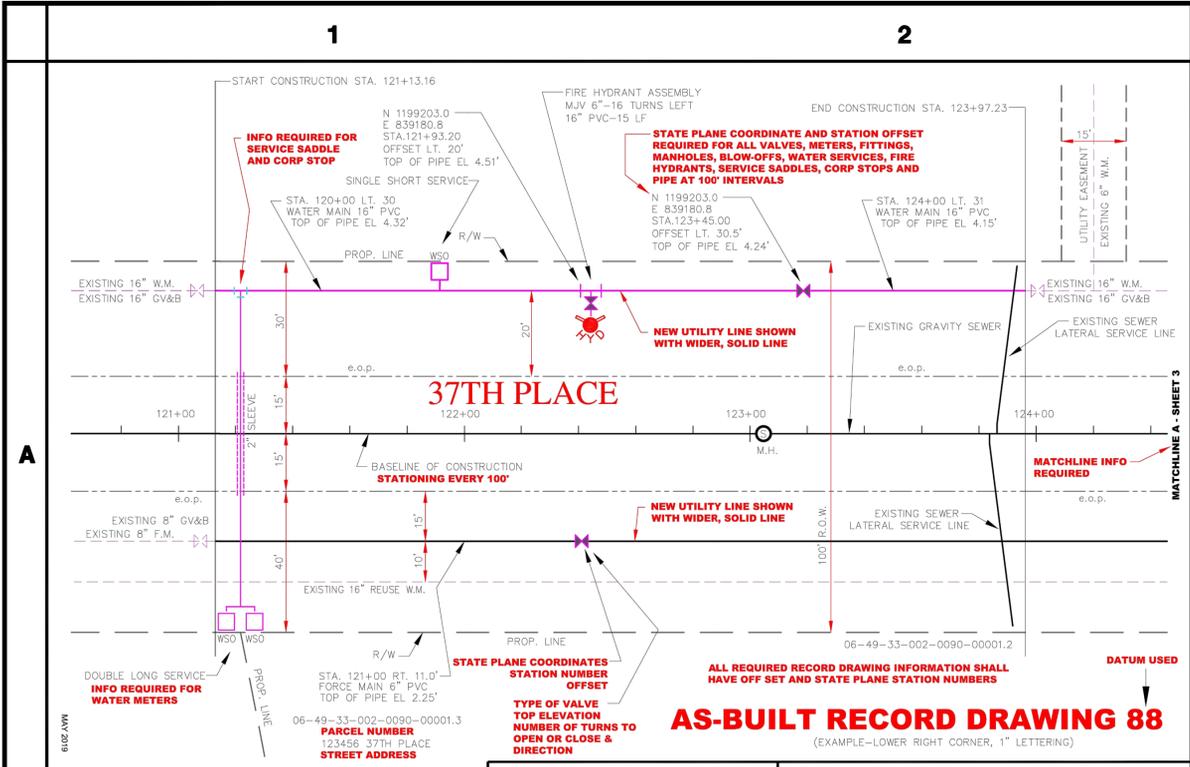
CONSTRUCTION DETAILS

	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>DR/APP</th> </tr> <tr> <td>4</td> <td>03/26/24</td> <td>UPDATED FOR BIDDING</td> <td>SCG/SCG</td> </tr> <tr> <td>3</td> <td>01/05/24</td> <td>REVISED PER UCP EMAILED RAI #1 MARKUPS DATED 01/04/24</td> <td>MBB/SCG</td> </tr> <tr> <td>2</td> <td>11/14/23</td> <td>REVISED PER RC EMAILED RAI #1 COMMENTS DATED 11/14/23</td> <td>MBB/SCG</td> </tr> <tr> <td>1</td> <td>10/25/23</td> <td>REVISED PER TRC COMMENTS DATED 10/25/23</td> <td>MBB/SCG</td> </tr> </table> <p style="text-align: center; font-weight: bold;">REVISIONS</p>	NO.	DATE	DESCRIPTION	DR/APP	4	03/26/24	UPDATED FOR BIDDING	SCG/SCG	3	01/05/24	REVISED PER UCP EMAILED RAI #1 MARKUPS DATED 01/04/24	MBB/SCG	2	11/14/23	REVISED PER RC EMAILED RAI #1 COMMENTS DATED 11/14/23	MBB/SCG	1	10/25/23	REVISED PER TRC COMMENTS DATED 10/25/23	MBB/SCG	<p style="font-size: 24px; font-weight: bold;">M M</p> <p style="font-size: 18px; font-weight: bold;">MASTELLER & MOLER, INC.</p> <p style="font-size: 18px; font-weight: bold;">CONSULTING ENGINEERS</p> <p>CERTIFICATE OF AUTHORIZATION NUMBER 4204 1655 27th STREET, SUITE 2, VERO BEACH, FLORIDA 32960 (772) 567-5300 / FAX (772) 794-1106</p>	<p style="font-size: 18px; font-weight: bold;">CONSTRUCTION PLANS</p> <p style="font-size: 18px; font-weight: bold;">VICTOR HART PARK RESTROOM & CONCESSION BUILDING</p> <p style="font-size: 18px; font-weight: bold;">FOR I.R.C. PARKS & RECREATION</p> <p style="font-size: 12px;">INDIAN RIVER COUNTY</p>	<p style="font-size: 18px; font-weight: bold;">FOR BIDDING PURPOSES ONLY</p> <p style="font-size: 12px;">DRAWN: GEV DESIGNED: MBB CHECKED: SCG DATE: 02/01/23 SCALE: AS SHOWN SHEET: 9 OF 12 PROJECT NO.: 2226</p>
NO.	DATE	DESCRIPTION	DR/APP																					
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1  <p style="text-align: center;">ELEVATION SEE TRENCH DETAIL NOTES DRAWING M-1A</p>	2 <p>NOTES:</p> <ol style="list-style-type: none"> WHERE SOIL CONDITIONS CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE METHOD OF CONSTRUCTION TO IRCUDS FOR APPROVAL. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD IN ACCORDANCE WITH OSHA REGULATIONS. COMPACTION PERCENTAGES SHOWN REFER TO AASHTO T-180 MODIFIED PROCTOR METHOD. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL OTHER THAN HAND VIBRATORY MEANS. COMPACTION REPORTS REQUIRED. MINIMUM TRENCH WIDTH "W" = PIPE O.D. PLUS 2'-0". 2" DETECTION TAPE WITH METALLIC BACKING TO BE INSTALLED OVER MAIN 6" BELOW BOTTOM OF BASE COURSE. TAPE TO BE MARKED "CAUTION-WATER LINE BELOW", "CAUTION-FORCE MAIN BELOW", OR "CAUTION-REUSE MAIN BELOW". TRACE WIRE SHALL BE USED CONTINUOUSLY ON ALL PIPE. SEE DRAWING, No. M-14, TRACE WIRE DETAIL. ALL RESTORATION IN EASEMENTS OR RIGHT-OF-WAYS OR WHEN REQUIRED BY OTHER JURISDICTIONAL AGENCIES SHALL CONFORM TO IRCUDS SPECIFICATIONS OR THE OTHER JURISDICTIONAL AGENCY SPECIFICATION, WHICHEVER IS MORE STRINGENT. ALL PIPE TO BE LOCATED A MINIMUM OF 5' O.C. (TYPICAL) FROM EDGE OF PAVEMENT. EXCAVATABLE FLOWABLE FILL IS ALLOWED WITH PRIOR APPROVAL OF PROPOSED MATERIAL STRENGTH BY COUNTY PUBLIC WORKS ENGINEER OR DESIGNEE. 	3  <p style="text-align: center;">ELEVATION SEE DRAWING M-1A, TRENCH DETAIL NOTES</p>	4  <p style="text-align: center;">ELEVATION</p>	5  <p style="text-align: center;">ELEVATION</p>																
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THRUST BLOCK ON EXISTING MAIN AT TAPPING SLEEVE LOCATION MAY BE REQUIRED. ALL MATERIALS SHALL BE PER IRCUDS APPROVED MANUFACTURERS' PRODUCT LIST. 	<p>NOTES:</p> <ol style="list-style-type: none"> MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL OTHER THAN HAND VIBRATORY MEANS. NEW SURFACE MATERIALS SHALL BE CONSISTENT IN DEPTH WITH EXISTING MATERIALS AND SHALL HAVE LAPPED JOINTS, (1 1/2" MINIMUM THICKNESS). PAVEMENT MATERIAL TO BE SPECIFIED. MINIMUM TRENCH WIDTH "W" = PIPE OD PLUS 2'-0". EXCAVATABLE FLOWABLE FILL IS ALLOWED WITH PRIOR APPROVAL OF PROPOSED MATERIAL STRENGTH BY COUNTY PUBLIC WORKS ENGINEER OR DESIGNEE. 	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> ALL AS-BUILT RECORD DRAWINGS SHALL MEET THE MINIMUM REQUIREMENTS OF THE CHAPTER AJ-17, FLORIDA ADMINISTRATION CODE PURSUANT TO SECTION 472 OF THE FLORIDA STATUTES. ALL AS-BUILT RECORD DRAWINGS SHALL BE IN STATE PLANE COORDINATES. STATE PLANE COORDINATES SHALL BE BASED ON THE FLORIDA STATE PLANE HORIZONTAL DATA (EAST ZONE), OR FLORIDA HIGH PRECISION GEODETIC NETWORK (SUPERSTATION) AND NAD 83/1999 - FINAL ADJUSTMENT, OR THE MOST CURRENT DATUM ADOPTED BY INDIAN RIVER COUNTY. FLORIDA STATE PLANE HORIZONTAL DATA AND STATION OFF-SET SHALL BE TIED TO VALVES, METERS, FITTINGS, MANHOLES, BLOW-OFFS, WATER SERVICES, FIRE HYDRANTS, SERVICE SADDLES, CORP STOPS AND PIPE (PIPE AT 200' INTERVALS). ALL ELEVATIONS SHOWN SHALL BE BASED ON 1988 NAVD (NORTH AMERICAN VERTICAL DATUM). ALL AS-BUILT RECORD DRAWINGS SHALL BE TIED TO A MINIMUM OF ONE (1) PERMANENT REFERENCE MONUMENT (P.R.M.) AT THE END OF EACH PROJECT. ONE P.R.M. SHALL BE TIED TO A MINIMUM OF ONE (1) SECTION CORNER OR ONE-QUARTER (1/4) SECTION CORNER WHICHEVER IS CLOSEST TO THE PROJECT. STATE PLANE COORDINATES SHALL BE PHYSICALLY SHOWN ON THE DRAWING NEXT TO THE P.R.M. USED. HORIZONTAL CONTROL MONUMENTATION FOR UTILITY LINES SHALL BE A MINIMUM OF TWO (2) POINTS AT A MAXIMUM OF 1,400 FEET BETWEEN POINTS AND SHOWN ON ALL PLANS. VERTICAL CONTROL (WHEN REQUIRED) FOR LINEAR UTILITY LINES, SUCH AS WATER AND SEWER, SHALL HAVE A MAXIMUM OF 1,100 FEET BETWEEN EXISTING CONSTRUCTION OR ESTABLISHED BENCHMARKS. <p>NOTE: PRIOR TO SUBMITTING THE ELECTRONIC COPY, ONE (1) COPY OF EACH AS-BUILT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.</p> <p>AFTER ALL APPROVALS, ALL INCOMING RECORD DRAWINGS SHALL BE RECEIVED ON A CD AS AN ELECTRONIC COPY, AUTOCAD 2015 OR LATEST VERSION, WITH A TIE TO A MINIMUM OF (2) TWO STATE PLANE COORDINATES. (1) ONE (24"x36") SIGNED AND SEALED COPY OF EACH AS-BUILT SHALL BE SUBMITTED. ALL RECORD DRAWINGS SHALL STATE IN 1/2" LETTERING "RECORD DRAWING" AND THE DATUM USED (1/2" LETTERING) IN THE LOWER RIGHT HAND SIDE OF THE ORIGINAL DRAWING OR COPY ALONG WITH THE AS-BUILT DATE. ALL RECORD DRAWINGS SHALL BE IN A MINIMUM SCALE OF 1"=40'. MINIMUM TEXT SHALL BE 1/8".</p> <p>NOTE: PRIOR TO SUBMITTING THE ELECTRONIC COPY, ONE (1) COPY OF EACH AS-BUILT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>AUTOCAD LAYER NAME</th> <th>DATA TO BE CONTAINED IN LAYER</th> </tr> </thead> <tbody> <tr> <td>WATER MAIN</td> <td>WATER MAIN ONLY</td> </tr> <tr> <td>WATER FITTINGS</td> <td>WATER FITTINGS, METERS, VALVES, SERVICES LATERALS, ETC.</td> </tr> <tr> <td>GRAVITY SEWER</td> <td>GRAVITY SEWER MAIN ONLY</td> </tr> <tr> <td>SEWER FORCE MAINS</td> <td>SEWER FORCE MAIN ONLY</td> </tr> <tr> <td>SEWER FITTINGS</td> <td>SEWER FITTINGS, MANHOLES, SERVICE LATERALS, VALVES, ETC.</td> </tr> <tr> <td>R/O CONCENTRATE</td> <td>MAINS, FITTINGS, VALVES, ETC.</td> </tr> <tr> <td>RECLAIMED WATER</td> <td>MAINS, FITTINGS, VALVES, ETC.</td> </tr> </tbody> </table>	AUTOCAD LAYER NAME	DATA TO BE CONTAINED IN LAYER	WATER MAIN	WATER MAIN ONLY	WATER FITTINGS	WATER FITTINGS, METERS, VALVES, SERVICES LATERALS, ETC.	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INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES TRENCH DETAIL (UNPAVED EASEMENT) DRAWING NO. M-1 MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES TRENCH DETAIL NOTES DRAWING NO. M-1 A MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES TRENCH DETAIL (PAVED AREAS & SHOULDERS) DRAWING NO. M-2 MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES TAPPING SLEEVE AND VALVE ASSEMBLY DRAWING NO. M-5 MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES VALVE AND BOX DETAIL DRAWING NO. M-6 MAY 2019																

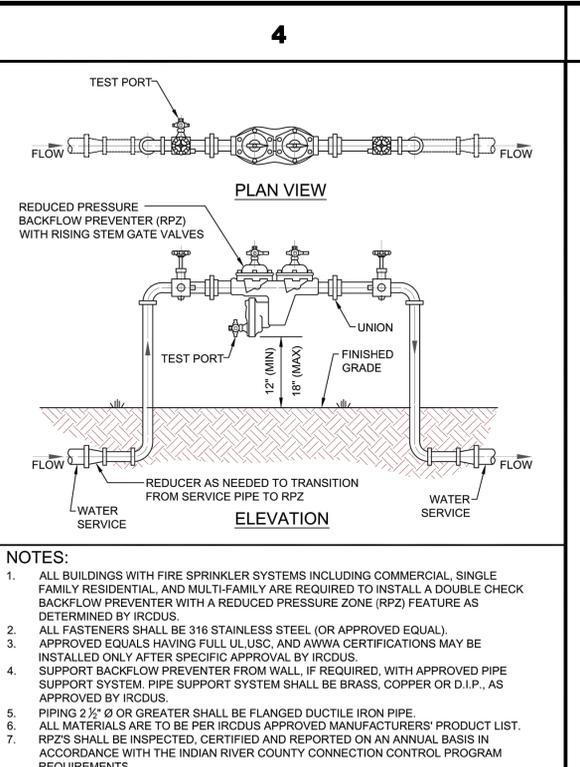
6 <p>NOTES:</p> <ol style="list-style-type: none"> VALVE BOXES SHALL BE CONSTRUCTED PER MANUFACTURERS' SPECIFICATION. ALL VALVE BOXES SHALL BE SHAFT/SCREW TYPE AND CANNOT REST ON THE VALVE. ALL VALVE BOLTS SHALL BE STAINLESS STEEL WITH BRASS NUTS. VALVE MARKERS ARE TO BE INSTALLED ADJACENT TO ALL VALVES IN UNPAVED AREAS AS DIRECTED BY IRCUDS. (SEE DRAWING, No. M-10, VALVE MARKER) ALL VALVES REQUIRE STATE PLANE COORDINATES. TRACE WIRE IS REQUIRED. (SEE DRAWING, No. M-14, TRACE WIRE DETAILS) BLUE REFLECTIVE MARKERS (RPM'S) ARE TO BE LOCATED IN MID-LANE OF ROADWAY FOR ALL HYDRANT VALVES. (SEE DRAWING, No. W-1, FIRE HYDRANTS & VALVE LOCATIONS) REFLECTIVE MARKERS SHALL NOT BE PLACED IN BIKE LANES. VALVE BOX LID LOCATED IN PAVEMENT SHALL BE A MINIMUM 24 LBS. WITH A MINIMUM 6" LONG THROAT. VALVE BOX SHALL COMPLY WITH FDOT STANDARDS AS APPLICABLE. VALVE EXTENSIONS OVER 36" REQUIRE IRCUDS ENGINEERING APPROVAL. VALVE SPACING ON WATER MAINS SHALL NOT EXCEED 1,000' MAXIMUM. 	 <p style="text-align: center;">PLAN VIEW</p>	<p>SEE DRAWING M-6, VALVE AND BOX DETAIL</p>  <p style="text-align: center;">ELEVATION</p>	 <p style="text-align: center;">PLAN VIEW SHOWING TRACE WIRE AROUND FITTINGS</p>	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> ALL AS-BUILT RECORD DRAWINGS SHALL MEET THE MINIMUM REQUIREMENTS OF THE CHAPTER AJ-17, FLORIDA ADMINISTRATION CODE PURSUANT TO SECTION 472 OF THE FLORIDA STATUTES. ALL AS-BUILT RECORD DRAWINGS SHALL BE IN STATE PLANE COORDINATES. STATE PLANE COORDINATES SHALL BE BASED ON THE FLORIDA STATE PLANE HORIZONTAL DATA (EAST ZONE), OR FLORIDA HIGH PRECISION GEODETIC NETWORK (SUPERSTATION) AND NAD 83/1999 - FINAL ADJUSTMENT, OR THE MOST CURRENT DATUM ADOPTED BY INDIAN RIVER COUNTY. FLORIDA STATE PLANE HORIZONTAL DATA AND STATION OFF-SET SHALL BE TIED TO VALVES, METERS, FITTINGS, MANHOLES, BLOW-OFFS, WATER SERVICES, FIRE HYDRANTS, SERVICE SADDLES, CORP STOPS AND PIPE (PIPE AT 200' INTERVALS). ALL ELEVATIONS SHOWN SHALL BE BASED ON 1988 NAVD (NORTH AMERICAN VERTICAL DATUM). ALL AS-BUILT RECORD DRAWINGS SHALL BE TIED TO A MINIMUM OF ONE (1) PERMANENT REFERENCE MONUMENT (P.R.M.) AT THE END OF EACH PROJECT. ONE P.R.M. SHALL BE TIED TO A MINIMUM OF ONE (1) SECTION CORNER OR ONE-QUARTER (1/4) SECTION CORNER WHICHEVER IS CLOSEST TO THE PROJECT. STATE PLANE COORDINATES SHALL BE PHYSICALLY SHOWN ON THE DRAWING NEXT TO THE P.R.M. USED. HORIZONTAL CONTROL MONUMENTATION FOR UTILITY LINES SHALL BE A MINIMUM OF TWO (2) POINTS AT A MAXIMUM OF 1,400 FEET BETWEEN POINTS AND SHOWN ON ALL PLANS. VERTICAL CONTROL (WHEN REQUIRED) FOR LINEAR UTILITY LINES, SUCH AS WATER AND SEWER, SHALL HAVE A MAXIMUM OF 1,100 FEET BETWEEN EXISTING CONSTRUCTION OR ESTABLISHED BENCHMARKS. <p>NOTE: PRIOR TO SUBMITTING THE ELECTRONIC COPY, ONE (1) COPY OF EACH AS-BUILT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.</p> <p>AFTER ALL APPROVALS, ALL INCOMING RECORD DRAWINGS SHALL BE RECEIVED ON A CD AS AN ELECTRONIC COPY, AUTOCAD 2015 OR LATEST VERSION, WITH A TIE TO A MINIMUM OF (2) TWO STATE PLANE COORDINATES. (1) ONE (24"x36") SIGNED AND SEALED COPY OF EACH AS-BUILT SHALL BE SUBMITTED. ALL RECORD DRAWINGS SHALL STATE IN 1/2" LETTERING "RECORD DRAWING" AND THE DATUM USED (1/2" LETTERING) IN THE LOWER RIGHT HAND SIDE OF THE ORIGINAL DRAWING OR COPY ALONG WITH THE AS-BUILT DATE. ALL RECORD DRAWINGS SHALL BE IN A MINIMUM SCALE OF 1"=40'. MINIMUM TEXT SHALL BE 1/8".</p> <p>NOTE: PRIOR TO SUBMITTING THE ELECTRONIC COPY, ONE (1) COPY OF EACH AS-BUILT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>AUTOCAD LAYER NAME</th> <th>DATA TO BE CONTAINED IN LAYER</th> </tr> </thead> <tbody> <tr> <td>WATER MAIN</td> <td>WATER MAIN ONLY</td> </tr> <tr> <td>WATER FITTINGS</td> <td>WATER FITTINGS, METERS, VALVES, SERVICES LATERALS, ETC.</td> </tr> <tr> <td>GRAVITY SEWER</td> <td>GRAVITY SEWER MAIN ONLY</td> </tr> <tr> <td>SEWER FORCE MAINS</td> <td>SEWER FORCE MAIN ONLY</td> </tr> <tr> <td>SEWER FITTINGS</td> <td>SEWER FITTINGS, MANHOLES, SERVICE LATERALS, VALVES, ETC.</td> </tr> <tr> <td>R/O CONCENTRATE</td> <td>MAINS, FITTINGS, VALVES, ETC.</td> </tr> <tr> <td>RECLAIMED WATER</td> <td>MAINS, FITTINGS, VALVES, ETC.</td> </tr> </tbody> </table>	AUTOCAD LAYER NAME	DATA TO BE CONTAINED IN LAYER	WATER MAIN	WATER MAIN ONLY	WATER FITTINGS	WATER FITTINGS, METERS, VALVES, SERVICES LATERALS, ETC.	GRAVITY SEWER	GRAVITY SEWER MAIN ONLY	SEWER FORCE MAINS	SEWER FORCE MAIN ONLY	SEWER FITTINGS	SEWER FITTINGS, MANHOLES, SERVICE LATERALS, VALVES, ETC.	R/O CONCENTRATE	MAINS, FITTINGS, VALVES, ETC.	RECLAIMED WATER	MAINS, FITTINGS, VALVES, ETC.
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INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES VALVE AND BOX DETAIL NOTES DRAWING NO. M-6 A MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES VALVE BOX PAD DRAWING NO. M-7 A MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES VALVE MARKER DRAWING NO. M-10 A MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES TRACE WIRE DETAILS DRAWING NO. M-14 A MAY 2019	INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES AS-BUILT RECORD DRAWING GENERAL NOTES DRAWING NO. M-16 A MAY 2019																

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GENERAL NOTES
(continued)

- A MINIMUM TEXT SIZE OF 1/8" IS REQUIRED ON ALL CONSTRUCTION/ROUTE SURVEY AND RECORD DRAWINGS.
- ALL AS-BUILT RECORD DRAWINGS SHALL BE CERTIFIED BY THE PROJECT ENGINEER OR CONTRACTING SURVEYOR.
- ALL AS-BUILT RECORD DRAWINGS SHALL CLEARLY DEPICT UTILITY LINES THAT WERE CONSTRUCTED ALONG THEIR RESPECTIVE EASEMENT (IF REQUIRED). AS-BUILT RECORD DRAWINGS WILL NOT BE ACCEPTED UNLESS THE VERBIAGE "PROPOSED" AND/OR "TO BE CONSTRUCTED" HAVE BEEN DELETED ON THE DRAWING. AS-BUILT RECORD DRAWINGS WITH "PROPOSED" OR "TO BE CONSTRUCTED" TERMINOLOGY WILL NOT BE ACCEPTED.
- ALL NEW UTILITY CONSTRUCTION LOCATED WITHIN THE RIGHTS-OF-WAY, EASEMENTS AND ALIKE SHALL BE TIED TO THE RESPECTIVE RIGHTS-OF-WAY, EASEMENTS, ETC. EVERY 1,000 FEET AND CHANGE OF DIRECTION.
- ALL AS-BUILT RECORD DRAWINGS SHALL BE COMPLETE AND APPROVED BEFORE COMMENCEMENT OF FIELD TEST.
- BASELINE OF CONSTRUCTION AND STATION OF ITEMS TO BE LOCATED ON THE CENTER OF THE ROADWAY, UNLESS CONDITIONS WARRANT AND APPROVED BY IRCDS. BASELINE STATIONING SHALL BE EVERY 100', CONTROL POINTS SET AT EVERY 500' AND ANGLE CHANGE OF DIRECTION.
- ALL NEW UTILITY CONSTRUCTION LINES ON ALL AS-BUILT RECORD DRAWINGS SHALL BE SHOWN WITH A WIDER, SOLID LINE. EXISTING UTILITY LINES SHALL BE SHOWN WITH A THINNER, DASHED LINE.
- TOP OF PIPE ELEVATIONS & STATIONING TO BE TYPED, LISTED, SEALED & SUBMITTED BY THE ENGINEER FOR LOCATING THE AIR RELEASE VALVES AS CONSTRUCTION PROCEEDS.
- SHOW TOP ELEVATION OF THE UTILITY LINES THAT WERE CONSTRUCTED AND SHOW EXISTING UTILITY LINES FOR ALL UTILITY CROSSINGS.
- PUMP STATION POWER SUPPLY FROM FP&L OR COVB ELECTRIC POWER POLE OR TRANSFORMER TO THE PUMP STATION ELECTRIC PANEL SHALL BE INCLUDED ON THE AS-BUILT RECORD DRAWING.
- ALL FIRE HYDRANTS AND FIRE HYDRANT VALVES SHALL BE LOCATED BY STATE PLANE COORDINATES, STATION NUMBER AND OFFSET AND SHALL BE CLEARLY IDENTIFIED ON AS-BUILT RECORD DRAWING.
- ALL NEWLY CONSTRUCTED VALVES SHALL BE CLEARLY IDENTIFIED BY SIZE, TYPE, TOP ELEVATION AND DIRECTION/NUMBER OF TURNS TO OPEN OR CLOSE VALVE.



M-15 DRAINING NO. 15
This represents the basic style and format for As-Built Record Drawings to be received by the Indian River County Department of Utility Services. Refer to drawings M-16 and M-17 for the minimum information requirements to be provided by the engineer of record to IRCDS.

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

AS-BUILT RECORD DRAWING (EXAMPLE)

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

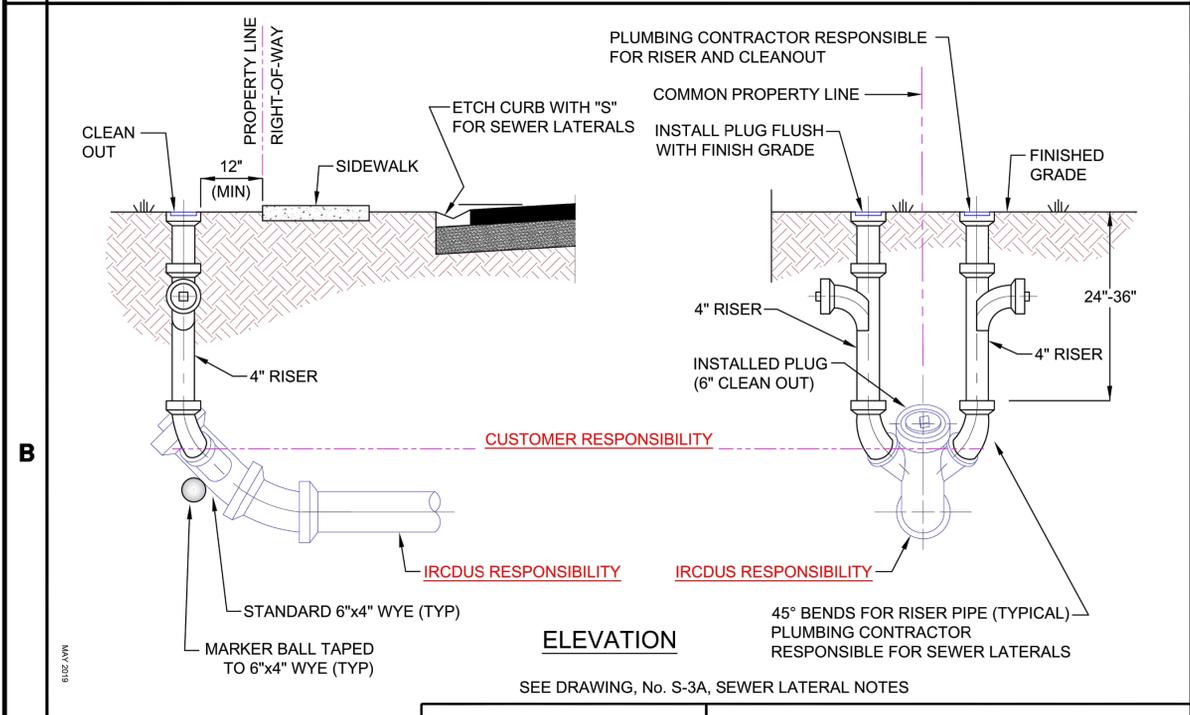
AS-BUILT RECORD DRAWING GENERAL NOTES
CONTINUED

M-16 DRAINING NO. 16
A

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

REDUCED PRESSURE BACKFLOW PREVENTER RPZ

W-11 DRAINING NO. 11



NOTES:

- ALL SEWER LATERALS (SINGLE OR DOUBLE) SHALL HAVE A RISER PIPE WITH BENDS AS REQUIRED FOR SERVICE CONNECTIONS AND WITH A 4"Ø CLEANOUT AT GRADE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RISER PIPE WITH BEND FOR SERVICE CONNECTION AND FOR SETTING 4"Ø SEWER CLEANOUT TO FINISH GRADE PRIOR TO CONNECTION.
- SANITARY SEWER LATERAL LATERALS SHALL BE A MINIMUM OF 6" IN DIAMETER.
- GRAVEL (3/4") BEDDING SHALL BE USED FOR EXCAVATION ON ROCK. SAND BEDDING SHALL BE USED FOR EXCAVATION IN SAND. (SEE DRAWING, No. S-2, MODIFIED SEWER LATERAL, DEEP SEWER.)
- GRAVEL (3/4") BED SHALL CONTINUE UNDER AND PARALLEL TO SEWER LATERAL PIPE INTO UNDISTURBED SOIL AT THE PROPERTY LINE. (SEE DRAWING, No. S-2, MODIFIED SEWER LATERAL, DEEP SEWER.)
- FOR RISERS AND CLEANOUTS SEE DRAWING, No. S-3, SEWER LATER RISER.
- FOR CUTTING IN SEWER LATERAL CLEANOUT TO FINISH GRADE SEE DRAWING, No. S-3, SEWER LATER RISER.
- RISERS AND CLEANOUT SHALL NOT BE CONSTRUCTED WITHIN 12" OF SIDEWALK.
- MAGNETIC DETECTION TAPE SHALL BE INSTALLED OVER TOP OF ALL SEWER MAINS AND SERVICE LATERALS.
- ELECTRONIC MARKER BALLS, 4"Ø, SHALL BE TAPED TO 6"x4" WYE, 24" BELOW FINISHED GRADE.
- ALL MATERIALS ARE TO BE PER IRCDS APPROVED MANUFACTURERS' PRODUCT LIST.

S-3 DRAINING NO. 3
INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

STANDARD LATERAL NOTES

S-3 DRAINING NO. 3
A

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES

STANDARD LATERAL NOTES

S-3 DRAINING NO. 3
A

UTILITY DETAILS

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REVISIONS

M M MASTELLER & MOLER, INC.
CONSULTING ENGINEERS

CERTIFICATE OF AUTHORIZATION NUMBER 4204
1655 27th STREET, SUITE 2, VERO BEACH, FLORIDA 32960
(772) 567-5300 / FAX (772) 794-1106

CONSTRUCTION PLANS
VICTOR HART PARK RESTROOM & CONCESSION BUILDING
FOR
I.R.C. PARKS & RECREATION

INDIAN RIVER COUNTY FLORIDA

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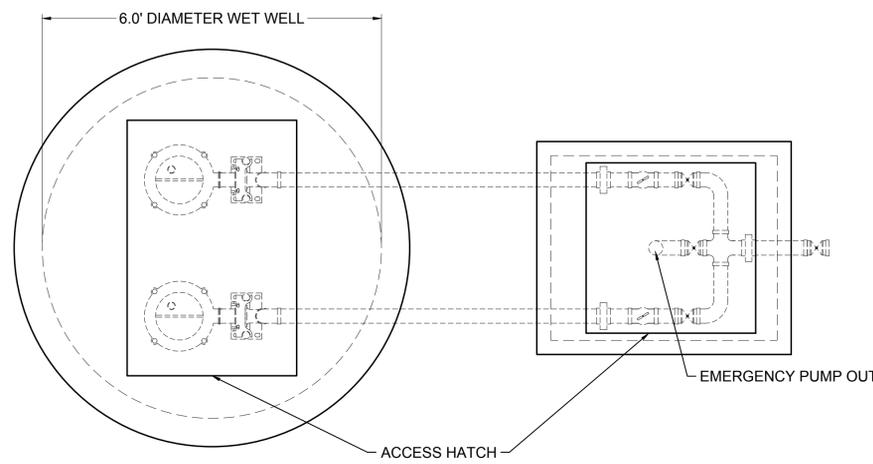
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FOR BIDDING PURPOSES ONLY

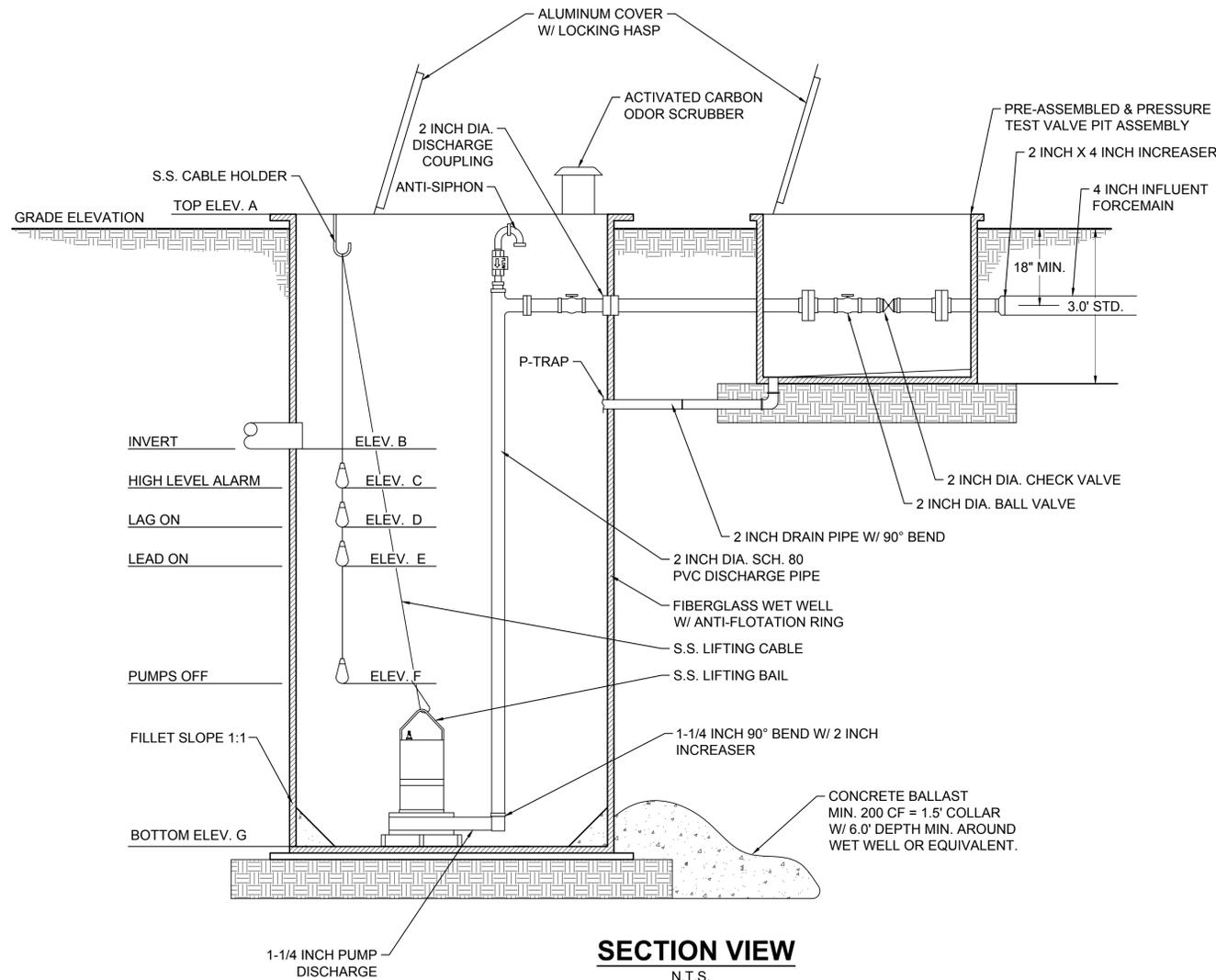
03/26/24

SEAN C. GREEN, P.E. FL #90797

DRAWN: GEV
DESIGNED: MBB
CHECKED: SCG
DATE: 02/01/23
SCALE: NTS
SHEET 11 OF 12
PROJECT NO.: 2226



PLAN VIEW
N.T.S.



SECTION VIEW
N.T.S.

PUMP PERFORMANCE DATA			
LIFT STATION NUMBER		1	
PRIMARY CONDITION	PUMPING CAPACITY	G.P.M.	86
	TOTAL HEAD (±)	FEET	54
SECONDARY CONDITION	PUMPING CAPACITY	G.P.M.	74
	TOTAL HEAD (±)	FEET	74
MIN. SOLIDS PASS. IMPELLER	INCHES	GRINDER	
PUMP MODEL NUMBER	NO.	PIR PE1 60 HZ	
PUMP IMPELLER	INCHES	5.87	
PUMP SPEED (DESIGN)	R.P.M.	3538	
VOLTAGE:	200-208 1 PHASE	230-240 <OR>	460-480 3 PHASE
MOTOR NAMEPLATE H.P.	H.P.	5.36	
MAX. PUMP BRAKE H.P.	H.P.	-	
MAX. NPSHR @ SECONDARY	FEET	-	
MAX. MOTOR SPEED	R.P.M.	-	
AVG. INFLUENT FLOW	G.P.M.	16.95	
MIN. PUMP CYCLE TIME	MINS.	15.08	
PUMP MANUFACTURER	SULZER		

CRITICAL DIMENSIONS & ELEVATIONS	
ADJACENT BASE FLOOD ELEV.	21.95
GRADE ELEV.	23.30
TOP OF WET WELL ELEV.	ELEV."A" 23.45
INFLUENT PIPE INV. ELEV.	ELEV."B" 18.00
ALARM SIGNAL ON ELEV.	ELEV."C" 17.50
LAG PUMP ON ELEV.	ELEV."D" 17.00
LEAD PUMP ON ELEV. (+)	ELEV."E" 16.50
PUMPS OFF ELEVATION	ELEV."F" 15.50
BOTTOM OF WET WELL	ELEV."G" 13.45
INSIDE DIAMETER OF WET-WELL	6.00'
OUTSIDE DIA. OF ANTI-FLOATATION RING	6.67'
MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU FT)	200
INVERT PIPE DIAMETER	4"
FORCE MAIN DIAMETER	4"

PRE-ASSEMBLED & PRESSURE TESTED VALVE PIT ASSEMBLY*

- ASSEMBLED VALVE PIT ASSEMBLY SHALL BE PRESSURE TESTED @100 PSIG FOR MINIMUM 15 MINUTES WITH ZERO LOSS (TEST AGAINST CHECK VALVES AND CLOSED DISCHARGE).
- CHECK VALVES AND ISOLATION VALVES ARE PROVIDED FOR EACH PUMP PER RSWF 42.5 AND FDEP PERMIT ITEM 50.
- VALVE PIT SHALL HAVE ENCLOSED BOTTOM WITH SLOPED FLOOR AND DRAIN LINE RETURNING TO THE WET WELL (COMPLETE WITH P-TRAP ASSEMBLY) PER RSWF 44.33 AND FDEP PERMIT ITEM 70.
- BY-PASS PUMP CONNECTION IS PROVIDED PER FAC 62-604.400(2)(a)(3).
- COVER MUST INCLUDE TAMPER RESISTANT HARDWARE AND PADLOCK.

PUMP STATION GENERAL NOTES

- CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS AGAINST FLOATATION OF WET WELL UNTIL ALL BACKFILL IS IN PLACE.
- ALL CONCRETE SHALL BE CLASS A-A 4000 PSI FOR PRECAST AND 3000 PSI FOR CAST-IN-PLACE UNLESS OTHERWISE SPECIFIED.
- REINFORCING STEEL SHALL BE GRADE 60 FABRICATED AND PLACED IN ACCORDANCE WITH AASHTO-180 AND SHALL BE 10 TIMES THE BAR DIAMETER NUMBER SIZE OR 10 MINIMUM UNLESS OTHERWISE NOTED (6#40-1#10).
- ALL BACKFILL AROUND THE PUMP STATION SITE SHALL BE COMPACTED @ 98% OF MAXIMUM DENSITY PER AASHTO-T-190.
- CHAMFER EXPOSED CONCRETE EDGES 1/4" (TYP).
- WETWELL WALL SHALL CONTAIN A MINIMUM OF .022 SQ IN LINEAR FOOT REINFORCEMENT, EACH WAY TOP TO BOTTOM.
- ALL PIPING AT THE PUMP STATION SITE SHALL BE RESTRAINED.
- ALL PUMPS AND PUMPING EQUIPMENT - SEE IRCDS APPROVED MANUFACTURERS' PRODUCT LIST.
- STAINLESS STEEL (316) CABLE HOLDER SHALL BE LOCATED ON OPPOSITE SIDE OF WETWELL FROM THE INFLUENT PIPE.
- BUOYANCY CALCULATIONS SHALL BE REQUIRED FOR ALL PUMP STATIONS ALONG WITH THE REQUIRED PUMP STATION CALCULATIONS.
- NO UN-FLANGE PIPE CONNECTIONS ALLOWED.
- MAINTAIN MINIMUM OF 6" BETWEEN ANY PIPING, FITTINGS ETC. AND PRECAST CONCRETE.
- FIBERGLASS LINERS SHALL BE INSTALLED ON ALL PUMP STATION WETWELLS AND MANHOLES RECEIVING PUMPED SEWAGE, PLUS 2 MANHOLES IN EACH DIRECTION.
- ALL NEW MANHOLES SHALL BE COATED PER IRCDS APPROVED MANUFACTURERS' PRODUCT LIST.
- PUMP STATION CONTROL PANEL SHALL BE PROVIDED WITH APPROPRIATE LIGHTNING ARRESTOR. VERIFY ALL DRIVEN GROUNDING GRIDS PER N.E.C. 250.56 AND SCADA (LATEST STANDARDS).
- AN ACCESS DRIVE SHALL BE PROVIDED TO ALL IRCDS MAINTAINED LIFT STATIONS. ALL ACCESS DRIVES SHALL BE A MINIMUM OF 12" WIDE, 48" LONG. IF FENCE IS INSTALLED, SWING GATE SHALL HAVE A 12" OPENING.
- ALL PROPOSED PRIVATE STATION OWNERS ARE TO SIGN AN AGREEMENT ACKNOWLEDGING STATION IS TO REMAIN PRIVATE UNLESS SUBJECT STATION IS CONSTRUCTED TO IRCDS STANDARDS.
- PUMPS SHALL BE DESIGNED TO PROVIDE A MINIMUM PUMP RUN TIME EQUAL TO HALF THE CYCLE TIME.
- PUMPS SHALL BE DESIGNED TO PROVIDE A MAXIMUM CLEARANCE OF TEN FEET OUTSIDE OF LIFT STATION WETWELL FOR FUTURE MAINTENANCE.
- ALL PUMP STATIONS SHALL HAVE BODOR CONTROL SYSTEMS AS REQUIRED BY MANUFACTURER, AND APPROVED BY IRCDS.
- LIFT STATION IS TO BE LOCATED IN A DEDICATED UTILITY EASEMENT, 50' AWAY FROM HOMES, SUB-PE-CANALS AND SURFACE BODY WATER.
- A SAFETY GRATE WITH STAINLESS STEEL (316) HARDWARE IS REQUIRED FOR ALL WETWELLS.

REFER TO SPECIFICATIONS SECTION 10 SUBMERSIBLE WASTEWATER PUMPING STATION

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | PUMPING STATION GENERAL NOTES | TYPICAL WASTEWATER PUMPING STATION | DRAWING NO. S-19

PUMP STATION GENERAL NOTES (CONTINUED)

- CONTRACTOR TO INSTALL PERMANENT SIGNAGE WITH CONTACT INFORMATION AND PHONE NUMBER AT ALL IRCDS AND PRIVATE LIFT STATIONS. CONTRACTOR TO PROVIDE SECURITY FOR PRIVATE LIFT STATIONS PER IRCDS PLANS REVIEW SECURITY TO INCLUDE, BUT NOT LIMITED TO, LOCKABLE HATCH COVER LIDS FOR THE WETWELL AND VALVE PIT.
- CONTRACTOR TO CONTACT IRCDS INSPECTOR PRIOR TO PUMP STATION CONSTRUCTION.
- SEE TYPICAL WASTEWATER PUMPING STATION DRAWINGS, S-14 & S-14A PLAN VIEW AND DRAWINGS, S-15 & S-15A CROSS SECTION FOR GENERAL LAYOUT OF WETWELL AND VALVE VAULT. SEE DRAWING S-16, S-16A AND S16B FOR TYPICAL PUMPING STATION SITE PLAN GENERAL LAYOUT. SEE DRAWINGS S-17, S-18, S-18A, S-19 AND S-19A FOR ELECTRICAL DETAILS.
- STRUCTURE DIMENSIONS MAY VARY UPON APPROVAL BY THE IRCDS DUE TO BUOYANCY COMPENSATION OR OTHER REQUIREMENTS.
- GATE VALVE TO BE LOCATED AT FORCE MAIN JUNCTION.
- STAINLESS STEEL (316) LIFTING BAILS SHALL BE USED FOR PUMPS IN LIFT STATIONS.
- GRINDER PUMPS SHALL BE A MAXIMUM OF 5.0 HP UNLESS OTHERWISE APPROVED BY IRCDS.
- ELECTRICAL CONTROL PANEL (NEMA 4X POWDER COATED 316 STAINLESS STEEL) SHALL CONFORM TO PUMP MANUFACTURERS' & SCADA SYSTEM REQUIREMENTS.
- ALL WET WELLS SHALL BE LINED. SEE SPECIFICATIONS SECTION 10.
- ALL WET WELLS 15" DEEP OR GREATER THAN 10" DIAMETER MUST BE APPROVED BY IRCDS ENGINEERING.
- OUTSIDE WALLS AND UNDERSIDE OF WETWELL TOP SLAB AND VALVE BOX SHALL BE PAINTED WITH (2) TWO COATS OF WATER BASE EPOXY.
- ALL HARDWARE TO BE 316 STAINLESS STEEL.
- PUMP STATION POWER SUPPLY FROM FLORIDA POWER & LIGHT ELECTRIC POWER POLE OR TRANSFORMER TO THE PUMP STATION ELECTRIC PANEL SHALL BE INCLUDED ON THE RECORD DRAWING.
- PAINT OUTSIDE OF WALLS, UNDERSIDE OF WETWELL TOP SLAB AND VALVE VAULT WITH TWO COATS OF WATER BASE EPOXY.

REFER TO SPECIFICATIONS SECTION 10 SUBMERSIBLE WASTEWATER PUMPING STATION

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | PUMPING STATION GENERAL NOTES | TYPICAL WASTEWATER PUMPING STATION | DRAWING NO. S-19

PRIVATE LIFT STATION DETAILS

NO.	DATE	DESCRIPTION	DR/APP
4	03/26/24	UPDATED FOR BIDDING	SCG/SCG
3	01/05/24	REVISED PER UCP EMAILED RAI #1 MARKUPS DATED 01/04/24	MBB/SCG
2	11/14/23	REVISED PER IRC EMAILED RAI #1 COMMENTS DATED 11/14/23	MBB/SCG
1	10/25/23	REVISED PER TRC COMMENTS DATED 10/25/23	MBB/SCG

REVISIONS

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CONSULTING ENGINEERS

CERTIFICATE OF AUTHORIZATION NUMBER 4204
1655 27th STREET, SUITE 2, VERO BEACH, FLORIDA 32960
(772) 567-5300 / FAX (772) 794-1106

INDIAN RIVER COUNTY

CONSTRUCTION PLANS
VICTOR HART PARK RESTROOM & CONCESSION BUILDING
FOR
I.R.C. PARKS & RECREATION

FLORIDA

FOR BIDDING PURPOSES ONLY

03/26/24

SEAN C. GREEN, P.E. FL #90797

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES | PUMPING STATION GENERAL NOTES | TYPICAL WASTEWATER PUMPING STATION | DRAWING NO. S-19

DRAWN	GEV
DESIGNED	MBB
CHECKED	SCG
DATE	02/01/23
SCALE	N.T.S.
SHEET	12 OF 12
PROJECT NO.	2226

VICTOR HART PARK RESTROOM BUILDING

4715 43rd Avenue
Vero Beach, FL 32967

INDEX TO DRAWINGS

ARCHITECTURAL

ACC	ACCESSIBILITY DETAILS
A-1	FLOOR PLAN/ELEVATIONS
A-2	SECTION/DETAILS
S-1	STRUCTURAL PLANS
S-2	STRUCTURAL PLANS
MEP-1	MECHANICAL/ELECTRICAL/PLUMBING PLANS

ARCHITECT

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SEAL:

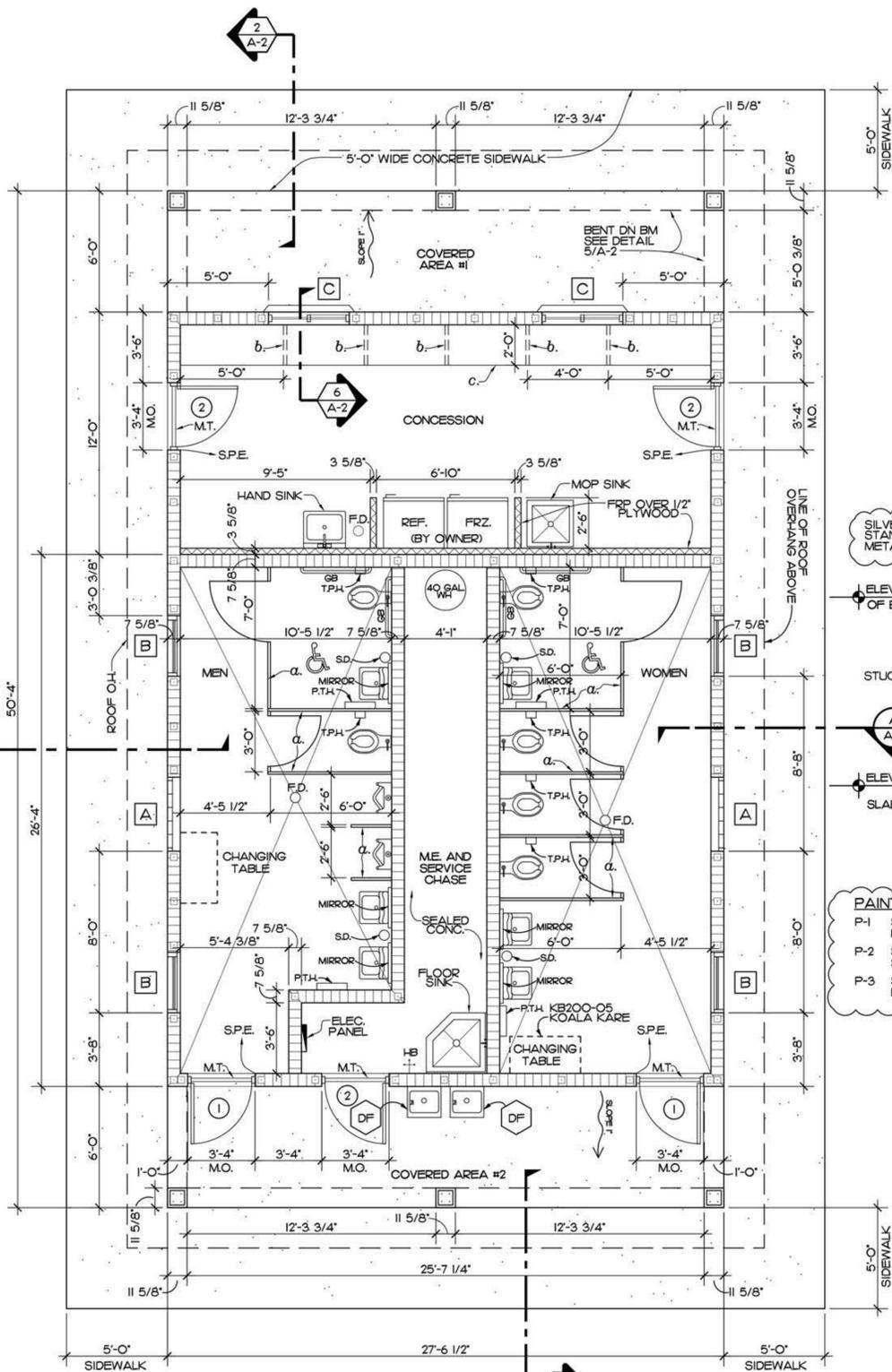
PROJECT: VICTOR HART PARK
RESTROOM BUILDING
INDIAN RIVER COUNTY PARKS AND RECREATION
5570 7TH STREET
VERO BEACH, FL 32967
FOR:

NO.	DATE	REVISIONS

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BY: LJD
CHKD: JFB

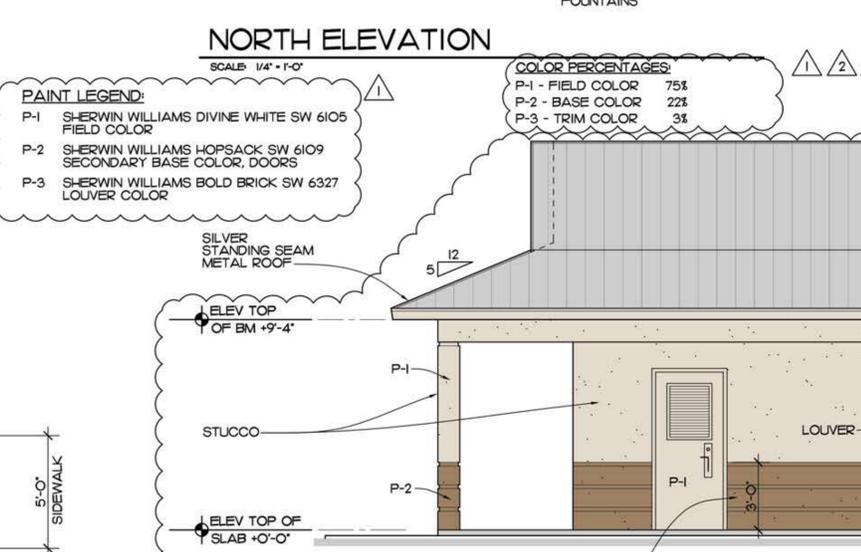
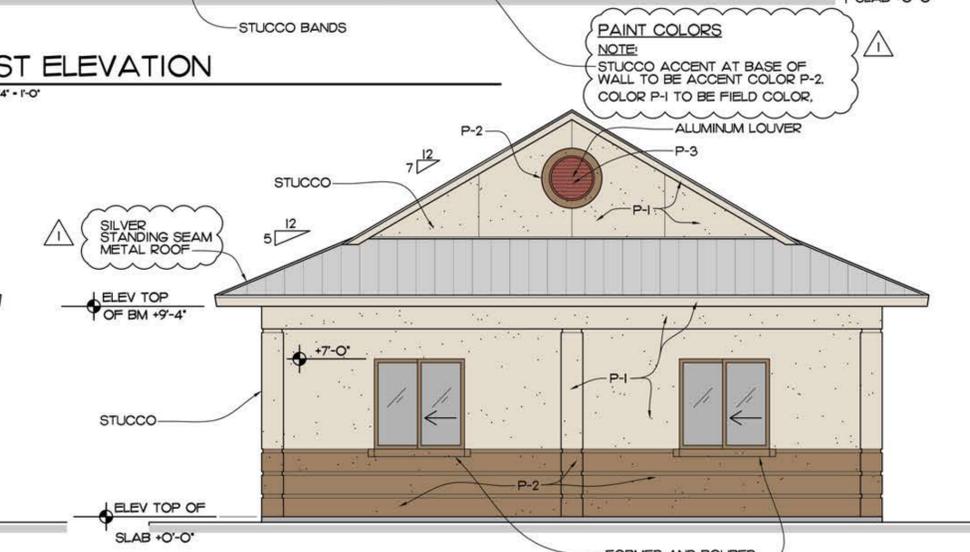
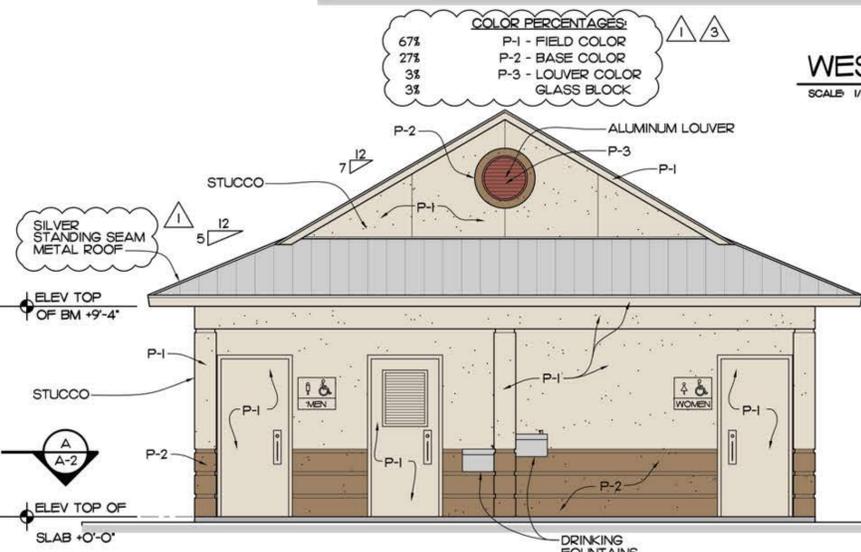
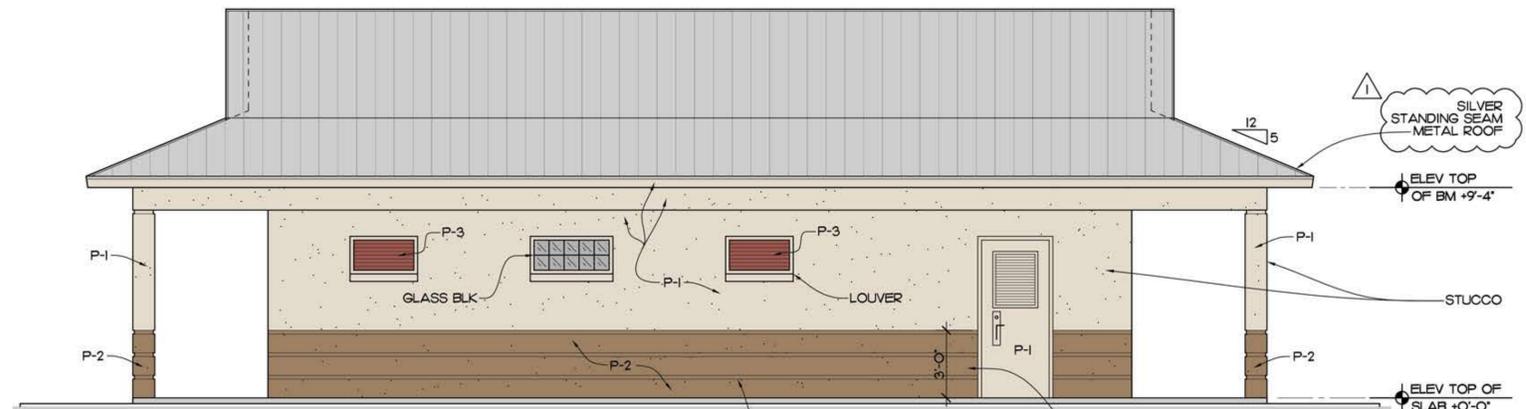
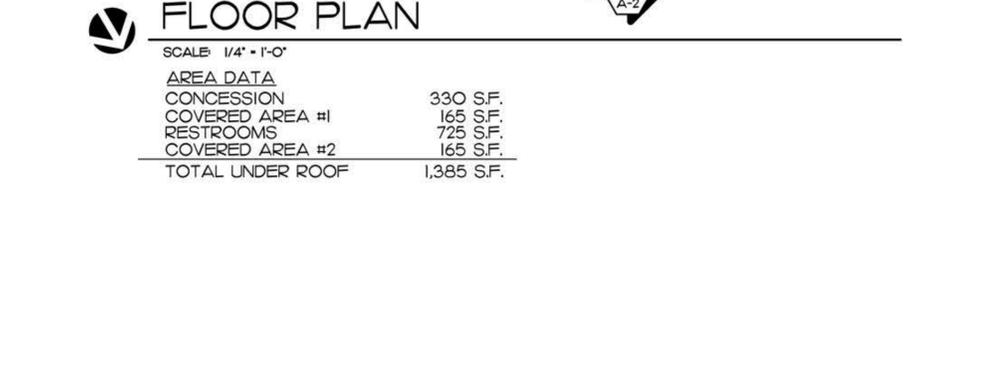
SHEET NO.
COVER
OF ONE



FLOOR PLAN

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

AREA DATA	
CONCESSION	330 S.F.
COVERED AREA #1	165 S.F.
RESTROOMS	725 S.F.
COVERED AREA #2	165 S.F.
TOTAL UNDER ROOF	1,385 S.F.



- PAINTING AND FINISHING NOTES:**
- ALL INTERIOR AND EXTERIOR WALLS/CEILINGS TO RECEIVE EPOXY PAINT OVER PROPER PRIMERS. REFER TO SPECIFICATIONS.
 - ALL EXTERIOR BORAL, FASCIA, TO BE PRIMED ON ALL FACES AND FINISH PAINTED WITH TWO COATS APPROVED PAINTS PER PLANS AND SPECIFICATIONS.
 - DO NOT PAINT ANY COVERED PATIO FLOOR CONCRETE TO BE FINISHED WITH A CLEAR CONCRETE SEALER.
 - COLORS AS NOTED OR AS SELECTED BY OWNER.
 - RESTROOM FLOORS TO BE SINGLE PLY EPOXY WITH BASE TURNED UP 4". COVERED PATIO FLOOR TO BE FLOAT/SPONGE FINISHED CONCRETE.

- NOTES:**
- PROVIDE SOLID PLASTIC TOILET PARTITIONS SANTANA OR EQUAL, OWNER TO SELECT COLOR.
 - LAMINATE OVER 3/4" PLYWOOD SUPPORTS AT 4'-0" O.C.
 - 3'-0" H X 2'-0" WIDE COUNTER SEE DETAIL 6/A-2.

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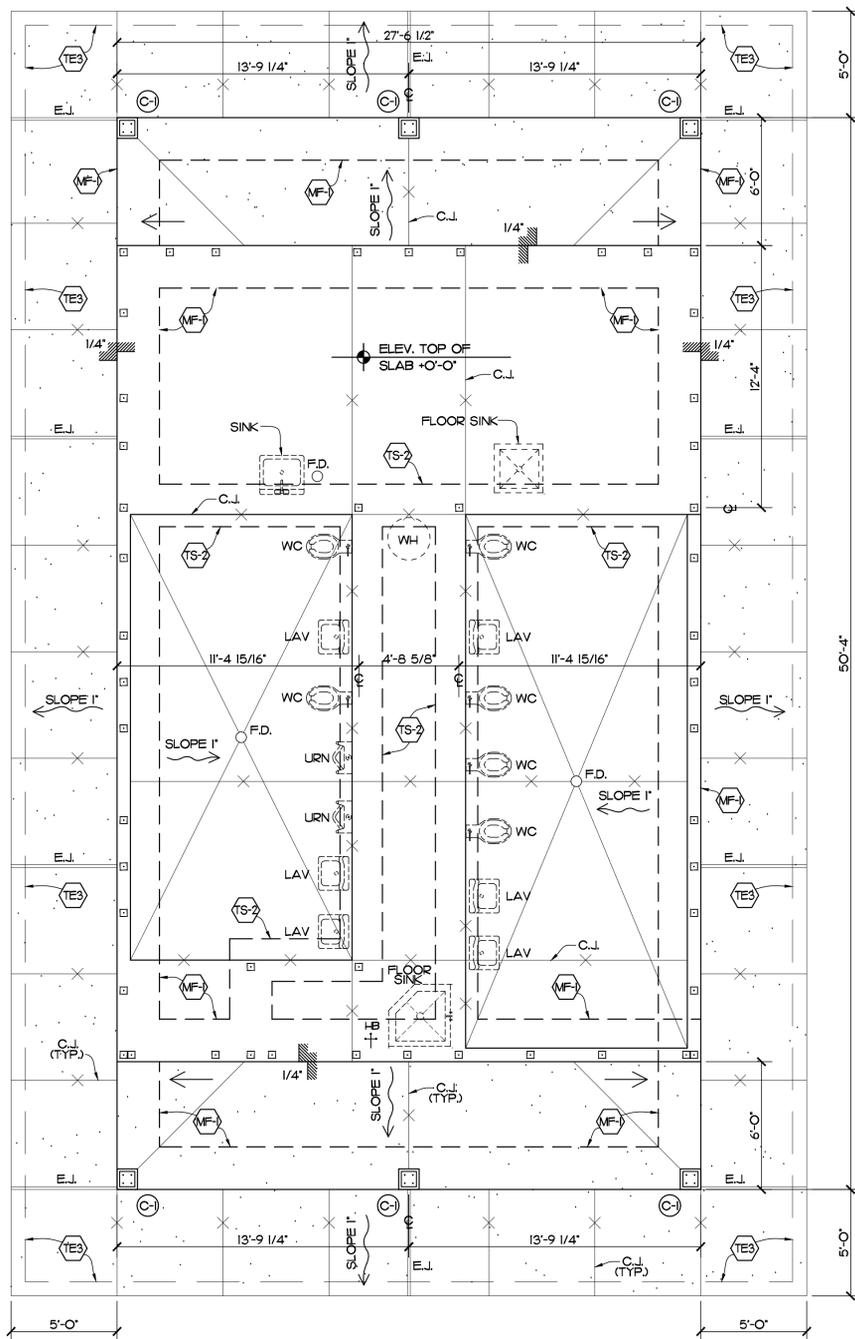
PROJECT: VICTOR HART PARK
RESTROOM BUILDING

INDIAN RIVER COUNTY PARKS AND RECREATION
5570 77TH STREET
VERO BEACH, FL 32967

NO.	DATE	REVISIONS
1	14DEC23	TRC COMMENT REVISIONS
2	20NOV23	TRC COMMENT REVISIONS
3	18OCT23	TRC COMMENT REVISIONS

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CH'KD: JFB



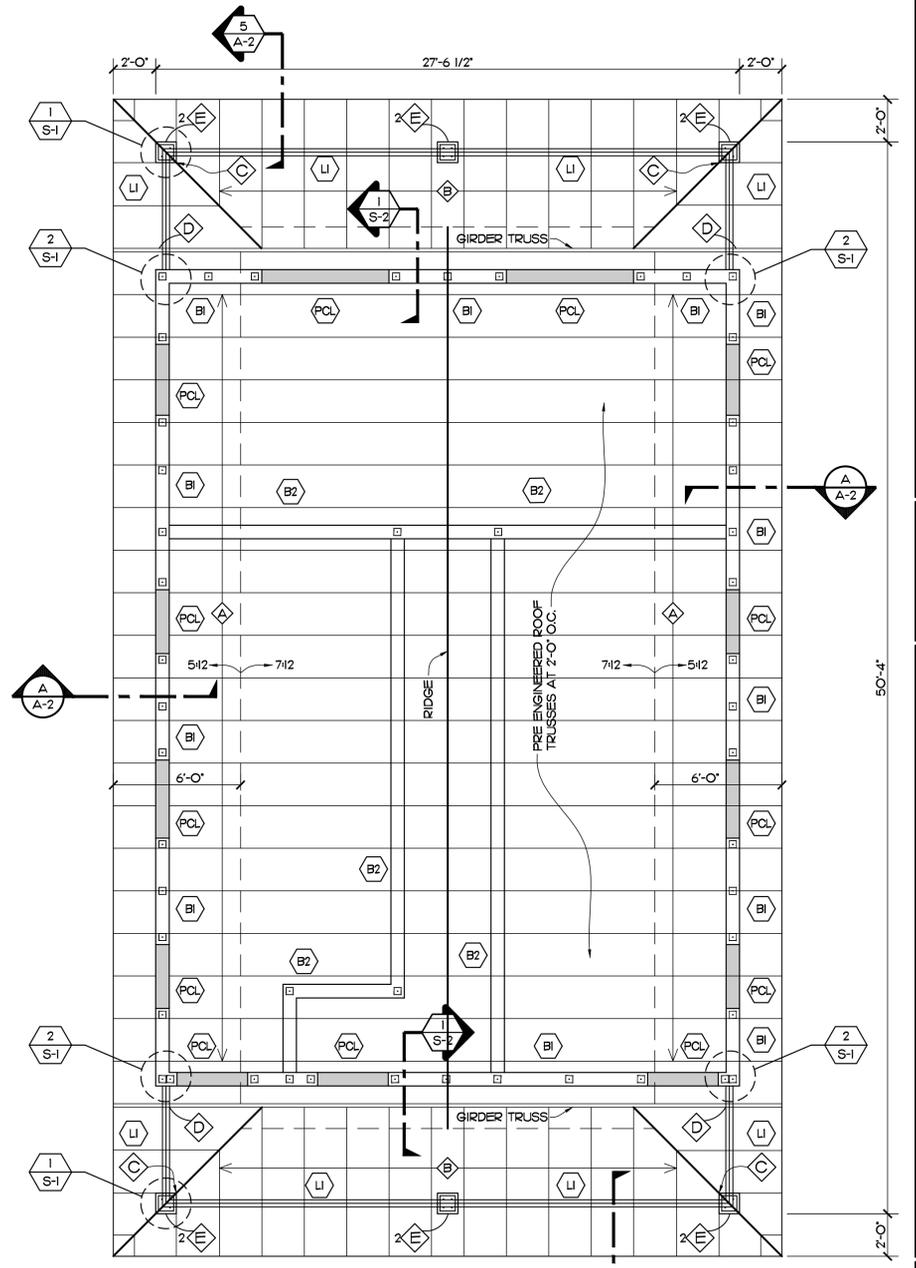
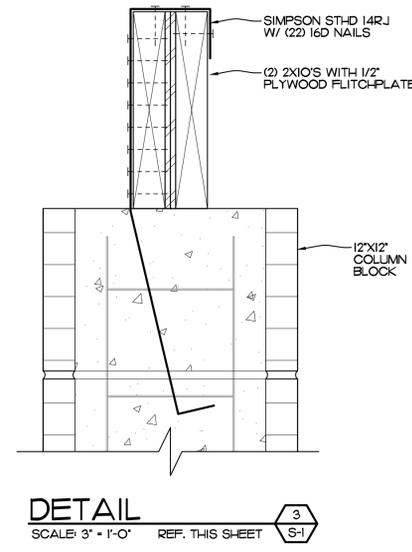
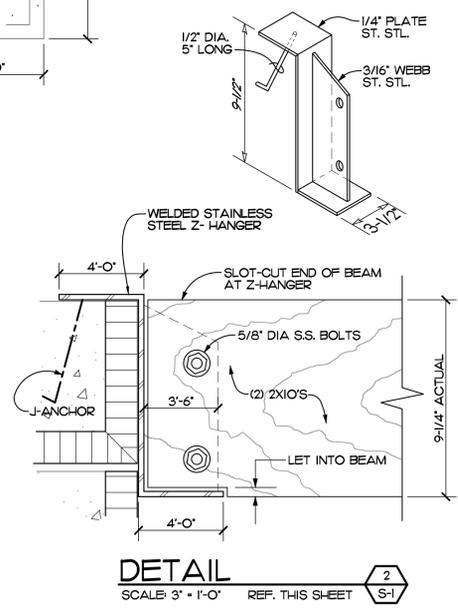
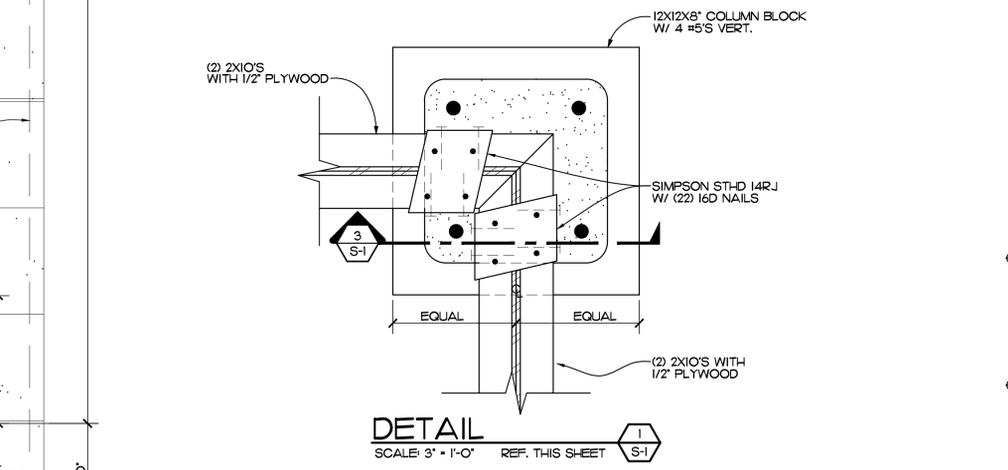
FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

- LEGEND:**
- C.J. 1/8" WIDE X 1" DEEP CONTROL JT. CUT WITHIN 24 HOURS OF SLAB POUR
 - E.J. 1/2" EXPANSION JT.
 - MF- FOOTING DESIGNATION SEE FOOTING SCHEDULE
 - C- COLUMN DESIGNATION SEE COLUMN SCHEDULE

FOOTING SCHEDULE			
MARK	SIZE	TYPE	REINFORCING
MF-1	24" W. X 20" DP.	MONOLITHIC FOOTING	3 #5'S CONT. BOTTOM W/#5'S TRANSV. AT 36" O.C.
TS-2	24" W. X 12" DP.	THICKENED SLAB	2 #5'S CONT. BOTTOM W/#5'S TRANSV. AT 36" O.C.
TE-3	8" X 8" DP.	AT SIDEWALKS/SOOPS TYPICAL	1 #5 CONTINUOUS

COLUMN SCHEDULE			
MARK	SIZE	VERTICAL REINFORCING OR CAP P. AND BOLTS	COLUMN TIES OR BASE P. AND ANCHOR BOLTS
C-1	12" X 12" X 8" COL. BLK.	4 #6'S VERT.	#3 TIES AT 8" O.C. VERTICAL

WOOD TRUSS CONNECTOR SCHEDULE					
MARK	CONNECTORS	FASTENERS	ALLOWABLE UPLIFT	MAX. CALC. UPLIFT	REMARKS
A	HETA 16	(9) 10D X 1-1/2"	1810 LBS	580 LBS	TYPICAL TRUSS TO CMU. UNLESS NOTED OTHERWISE
B	HTS 20	(24) 10D X 1-1/2"	1450 LBS	580 LBS	
C	(2) HETA 16	(18) 10 D X 1-1/2" NAILS	3620 LBS	770 LBS	
D	(2) HTS 20	(2) 24 16D X 1-1/2"	2900 LBS	770 LBS	
E	(2) STD 14FJ	(2) 22 16D X 1-1/2"	2 X 3695 LBS	2900 LBS	



ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

BEAM SCHEDULE						
MARK	SIZE B X H	REINFORCING		STIRRUPS		REMARKS
		TOP	BOT	SIZE	SPACING	
B1	2 ROWS OF CONC. FILLED 8"X8"X16" CHANNEL BLK	#7	---	---	---	TYPICAL TIE BEAM
B2	CONCRETE FILLED 8"X8"X16" CHANNEL BLK	#7	---	---	---	TYPICAL AT INTERIOR BLK WALLS
PCL	8" W X 8" H PRECAST CONC. LINTEL	---	---	---	---	

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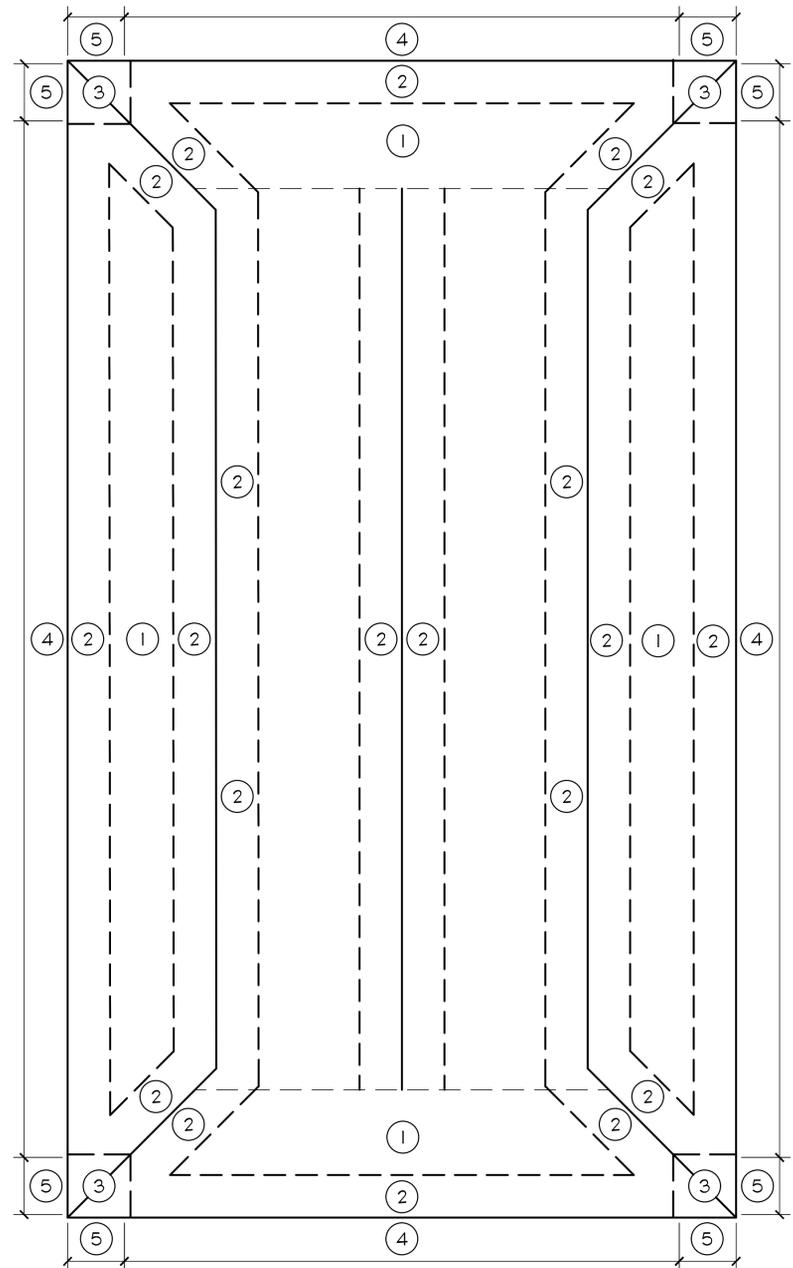
PROJECT: VICTOR HART PARK
RESTROOM BUILDING
INDIAN RIVER COUNTY PARKS AND RECREATION
5570 77TH STREET
VERO BEACH, FL 32967

NO.	DATE	REVISIONS

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COMM. NO: OIO423VB
DATE: AUGUST 1, 2023
BY: LJB
CHKD: JFB

SHEET NO.
S-1
OF TWO



WIND PRESSURE ZONE DIAGRAM
SCALE: NTS

DESIGN CRITERIA

FLORIDA BUILDING CODE, 6TH EDITION (2017) BUILDING

ROOF LOADS
 DEAD 20 PSF (METAL ROOF)
 LIVE
 TRUSS TOP CHORD 20 PSF
 TRUSS BOTTOM CHORD / STORAGE 20 PSF
 TRUSS BOTTOM CHORD W/O STORAGE 10 PSF

WIND LOADS
 DESIGN CRITERIA PER ASCE-7
 ULTIMATE WIND SPEED REGION, V(ULT) 170 MPH
 NOMINAL WIND SPEED REGION, V(ASD) 132 MPH
 WIND BORNE DEBRIS REGION
 ENCLOSED STRUCTURE
 BUILDING HEIGHT 42 FT.
 ROOF PITCH 7/12
 RISK CATEGORY III
 INTERNAL PRESSURE COEFFICIENT ±0.18
 EXPOSURE C
 HEIGHT AND EXPOSURE COEFFICIENT 1.29

ZONE		EFFECTIVE AREA (IN SQ. FT.)							
		0 < 10		11 < 20		21 < 50		51 < 100	
ROOF	1	+23	-37	+21	-36	+19	-35	+15	-34
	2	+23	-64	+21	-59	+19	-52	+15	-47
	3	+23	-95	+21	-89	+19	-81	+15	-75
WALL	4	+40	-44	+39	-42	+36	-40	+34	-38
	5	+40	-54	+39	-50	+36	-46	+34	-42
	SOFFIT	4	-44	-42	-40	-38	-42	-40	-38
	5	-54	-50	-46	-42	-42	-40	-38	-42

NOTES:
 1) END ZONE 5 IS WITHIN A DISTANCE (A) = 6'-6" FROM BUILDING CORNERS
 2) THE PROPOSED STRUCTURE IS LOCATED WITHIN A WINDBORNE DEBRIS AREA.

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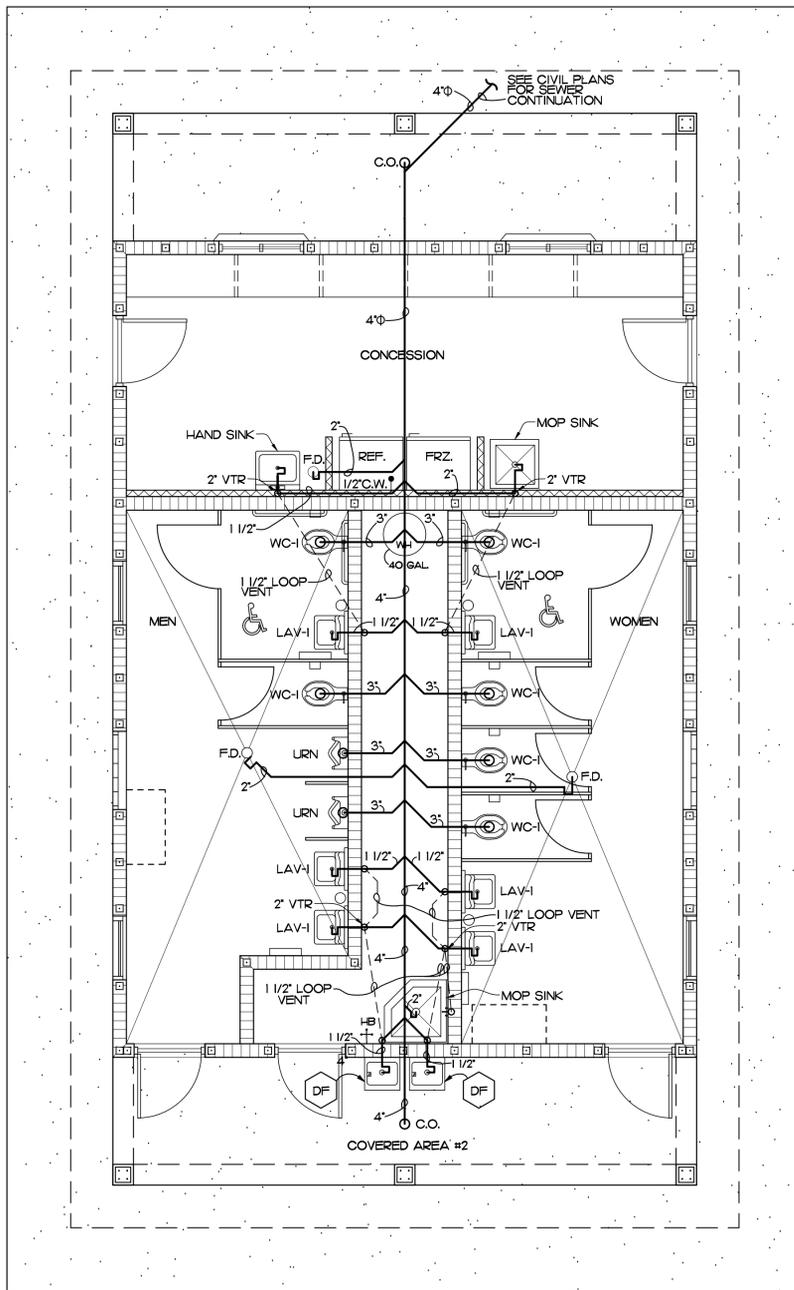
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 INDIAN RIVER COUNTY PARKS AND RECREATION
 5570 7TH STREET
 VERO BEACH, FL 32967

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 DATE: AUGUST 1, 2023
 BY: LJB
 CH'KD: JFB

SHEET NO.
S-2
 OF TWO



PLUMBING PLAN

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

PLUMBING FIXTURE SCHEDULE

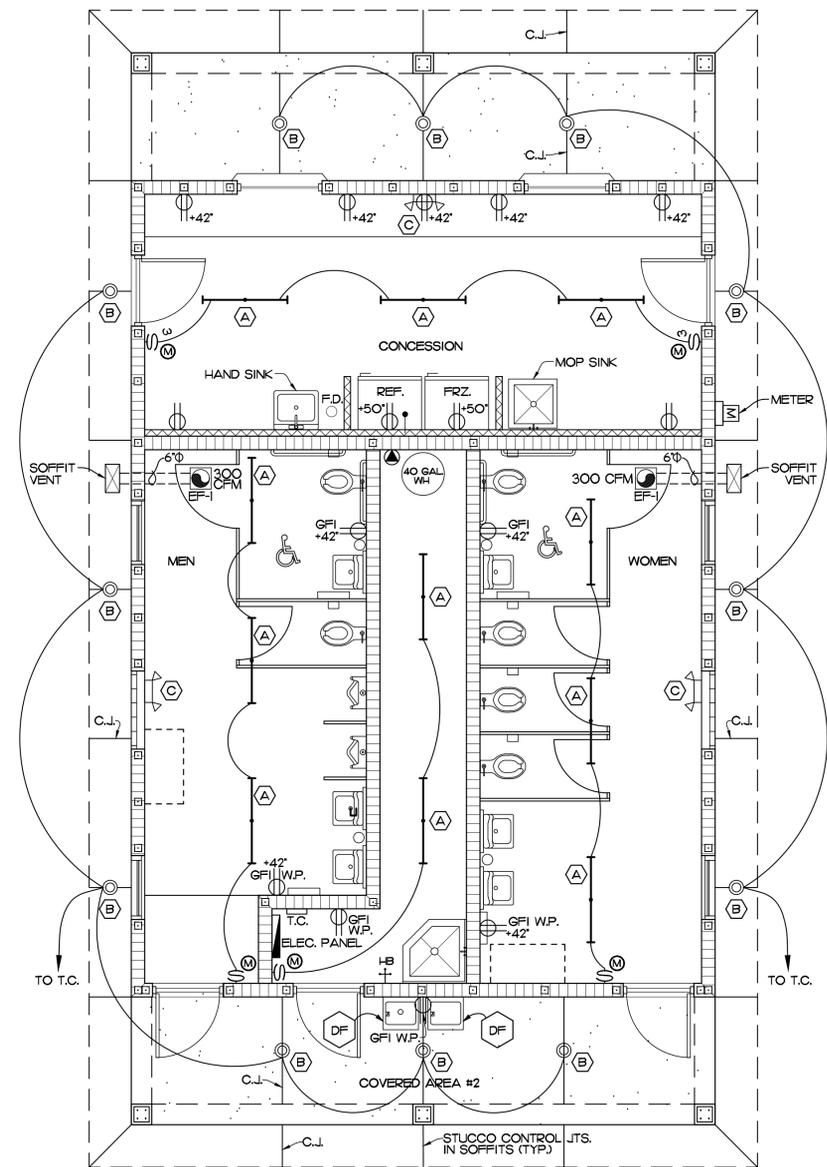
MARK	TYPE	MANUFACTURER
LAV-1	HANDICAP LAVATORY, AMERICAN STANDARD, LUCERNE, LUCERNE WALL HUNG VITREOUS CHINA WITH ELONGATED RIM AND 1 1/2" TOP SPUD, 18" HIGH AMERICAN STANDARD 3541.00US ELDERLY NEW CADET AQUAMETER, 126 GPF TOILET WITH SLOAN ROYAL III-16 FLUSH VALVE AND CENTOO 5000C OPEN FRONT SEAT LESS COVER.	
D.F.	ELKAY WALL MOUNTED DRINKING FOUNTAIN W/ MECHANICAL FRONT BUBBLER BUTTON MODEL ELKAY #8751080083 ZORO # G8372730 COLOR: STAINLESS STEEL	
WC-1	HANDICAP WATER CLOSET - FLUSH VALVE BOWL, FLOOR MOUNTED, SIPHON-JET VITREOUS CHINA WITH ELONGATED RIM AND 1 1/2" TOP SPUD, 18" HIGH AMERICAN STANDARD 3541.00US ELDERLY NEW CADET AQUAMETER, 126 GPF TOILET WITH SLOAN ROYAL III-16 FLUSH VALVE AND CENTOO 5000C OPEN FRONT SEAT LESS COVER.	
F.D.	FLOOR DRAIN, JOSAM SERIES 30000A, C.I. BODY, POLISHED BRONZE STRAINER, INTEGRAL TRAP, WITH PRIMER CONNECTION AND TRAP GUARD INSERT BY PROSET.	
C.O.	EXTERIOR CLEAN OUT, ADJUSTABLE TOP, INTERNAL CLOSURE PLUG, HEAVY DUTY COVER PLATE.	
UR	URINAL AMERICAN STANDARD, WASI-BROOK #6501.010, FLUSH VALVE SLOAN ROYAL #186-1, WALL MOUNTED WHITE URINAL, WALL CARRIER, WADE #400AMI-M36, MUST MEET A.D.A. CODE.	

LIGHT FIXTURE SCHEDULE

MARK	TYPE	MANUFACTURER
A	4 FT. LONG SURFACE MOUNTED LED FIXTURE WITH WEATHER PROOF COVER	HE WILLIAMS 75L-4-L38-840 -A 12125-DRV-UNV OR EQUAL
B	RECESSED LED CAN WEATHERPROOF	HE WILLIAMS 4DR-TL-L20-835 -DIM-UNV-O-W-OF-WETCC OR EQUAL
C	EMERGENCY LIGHT DUAL HEAD	BEGHELLI - PEH-I TWO LAMP EMERGENCY LIGHTING FIXTURE OR EQUAL

PANEL:	VOLTAGE 120/240V 1Ø LOCATION SERVICE CHASE	BUS/BREAKER AIC RATING 22KA/10KA MOUNTING SURFACE-NEMA 3R FED FROM FPL TRANSFORMER	RATING 200A MAIN CONNECTION M.C.B. DEVICE FAMILY: SIEMENS/SQUARE D	CONNECTED KVA		CONNECTED KVA		P	L Ø	WIRE SIZE	DESCRIPTION
				A	C	A	C				
L-LIGHTING				1.0	2	1.0			20	12	EXHAUST FANS
L-LIGHTING				1.0	3	4			20	12	WATER COOLERS
L-LIGHTING				1.0	5	6	3.5		30	8	WATER HEATER
L-LIGHTING				1.0	7	8			20	12	REFRIGERATOR
SPARE				1.0	9	10	1.0		20	12	FREEZER
R-RECEPTACLES				1.0	11	12			20	12	SMALL APPLIANCES
R-RECEPTACLES				1.0	13	14	1.0		20	12	SMALL APPLIANCES
R-RECEPTACLES				1.0	15	16			20		SPARE
R-RECEPTACLES				1.0	17	18			20		SPARE
SPARE					19	20			20		SPARE
SPARE					21	22			20		SPARE
SPARE					23	24			20		SPARE
SPARE					25	26			20		SPARE
SPARE					27	28			20		SPARE
SPARE					29	30			20		SPARE
SERVES				4.0	4.0	TOTAL 1.0	1.0				TOTAL CONNECTED KVA 17.5
LIGHTING				CONNECTED LOAD KVA			DF				CALCULATED DEMAND-KVA
RECEPTACLES (FIRST 10KVA)				2.0			125				2.5
RECEPTACLES (FIRST 10KVA)				0.00			0.5				0.00
LARGEST MOTOR				0.00			125				0.00
OTHER MOTORS				2.0							2.0
EQUIPMENT-HEAT				19.0			1				19.0
KITCHEN EQUIPMENT				30.0			1				30.0
TOTAL DEMAND KVA											55.5
TOTAL AMPERAGE											103.2

NOTES:
1. VERIFY ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT WITH MANUFACTURERS MANUAL PRIOR TO BIDDING AND INSTALLATION.
2. PROVIDE TYPE WRITTEN DIRECTORY ON INSIDE OF PANEL COVER.

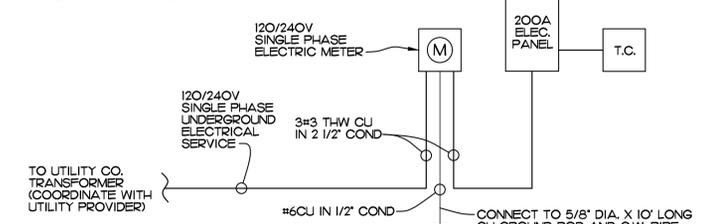


MECHANICAL/ELECTRICAL PLAN

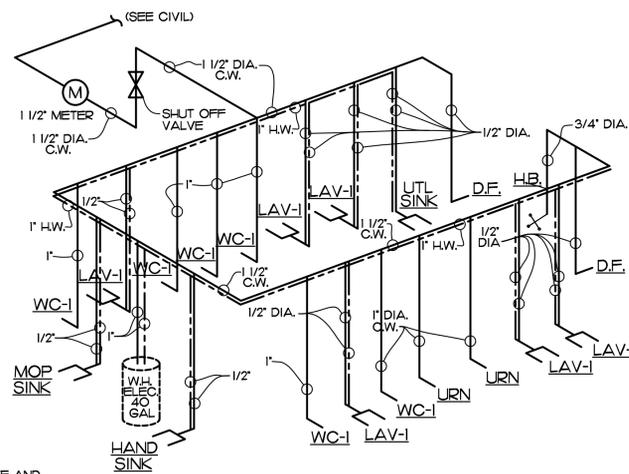
SCALE: 1/4" = 1'-0"

LEGEND:

- Ⓜ SINGLE POLE SWITCH WITH MOTION SENSOR
- Ⓞ RECESSED LED LIGHT
- Ⓢ EMERGENCY LIGHT W/BATTERY BACKUP
- Ⓣ SPECIAL PURPOSE OUTLET
- Ⓜ ELECTRICAL PANEL
- Ⓜ 110 VOLT OUTLET
- Ⓜ 1Ø 120/240V ELECTRIC METER
- Ⓜ 3 WAY SWITCH WITH MOTION SENSOR
- Ⓜ GFI W.P. OUTLET
- Ⓜ 1X4 SURFACE MOUNTED LED LIGHT FIXTURE
- Ⓜ 300 CFM EXHAUST FAN
- Ⓜ T.C. TIME CLOCK



POWER RISER DIAGRAM



WATER RISER DIAGRAM

NOTE:
COORDINATE METER SIZE AND LOCATION WITH UTILITY PROVIDER (SEE CIVIL PLANS)

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SEAL:

PROJECT: VICTOR HART PARK
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COMM. NO: OIO423VB
DATE: AUGUST 1, 2023
BY: LJD
CHKD: JFB

SHEET NO.
MEP-1
OF ONE

ELECTRICAL SYMBOL LEGEND

SPECIFICATIONS:

TELEPHONE/DATA SYSTEM	
SYMBOL	DESCRIPTION
	PHONE/DATA OUTLETS MOUNTED AT RECEPTACLE HEIGHT UNLESS OTHERWISE NOTED. C = ABOVE THE COUNTER M = NUMBER OF DATA PORTS, DEFAULT = 1 N = NUMBER OF PHONE PORTS, DEFAULT = 1 DATA OUTLET, 8P8C
	PHONE OUTLET, RJ II
	COMBINED DATA/PHONE OUTLET, 8P8C/RJII
	TELEPHONE OUTLET FLOOR MOUNTED
	TELEPHONE/COMPUTER TERMINAL BOARD
	TELEPHONE TERMINAL CABINET
	TELEPHONE SYSTEM RACEWAY

TELEVISION RACEWAY SYSTEM	
SYMBOL	DESCRIPTION
	TELEVISION OUTLET FOR ANTENNA
	TELEVISION SIGNAL WALL OUTLET
	TV DISTRIBUTION SYSTEM RACEWAY
	MAGNETIC LOCK
	CCTV CAMERA W/ CONDUIT TO VIDEO JUNCTION BOX
	PAN/ TILT/ ZOOM CCTV CAMERA W/CONDUIT TO VIDEO JUNCTION BOX - MOUNTED MIN 15' AFF OR • CEILING

SYNCHRONOUS MASTER CLOCK SYSTEM	
SYMBOL	DESCRIPTION
	SYNCHRONOUS SYSTEM CLOCK
	MASTER CLOCK CONTROL PANEL
	MASTER CLOCK SYSTEM CONDUIT AND WIRING

DOORBELL SYSTEM	
SYMBOL	DESCRIPTION
	DOOR PUSH-BUTTON STATION WP = WEATHERPROOF
	DOORBELL CHIME (SELF CONTAINED)
	DOORBELL SYSTEM CONDUIT AND WIRING

DOOR CONTROL SYSTEM	
SYMBOL	DESCRIPTION
	MOTION DETECTOR 360
	CARD READER
	DIGITAL KEYPAD
	BALANCED MAGNETIC DOOR CONTACT

INTERCOM SYSTEM	
SYMBOL	DESCRIPTION
	MASTER STATION C = COUNTER D = DESK W = WALL MOUNTED H = HAND SET TYPE HF = HANDS FREE WP = WEATHER PROOF
	INTERCOM SYSTEM SPEAKER W = WALL MOUNTED
	INTERCOM EQUIPMENT CABINET
	INTERCOM TERMINAL CABINET
	INTERCOM SYSTEM CONDUIT AND WIRING
	SOUND SYSTEM EQUIPMENT CABINET
	SOUND SYSTEM TERMINAL CABINET
	SOUND SYSTEM CONDUIT AND WIRING

FIRE ALARM/DETECTION SYSTEM	
SYMBOL	DESCRIPTION
	MANUAL PULL STATION
	CEILING SMOKE DETECTOR, PHOTOELECTRIC TYPE UNLESS OTHERWISE NOTED E = ELEVATOR WITH RECALL CONTACTS I = IONIZATION
	DUCT SMOKE DETECTOR, SIMPLEX 4098-9686 OR EQUAL SA = SIMPLEX 4098-9687 OR EQUAL
	SUPERVISED CONTROL RELAY
	DUCT DETECTOR REMOTE ALARM INDICATOR AND, TEST STATION, WALL MOUNTED 72" AFF, SIMPLEX 4098-9835 OR EQUAL
	DUCT DETECTOR REMOTE A/V CONTROL STATION WITH TEST SWITCH, WALL MOUNTED 72" AFF, SIMPLEX 4098-9842 OR EQUAL
	COMBINATION AUDIBLE/VISUAL NOTIFICATION DEVICE CD = CANDELA RATING, MINIMUM 75 CD PER FBC II-4.28.3(4)
	FIRE ALARM SPEAKER - CEILING MOUNTED
	WALL MOUNTED SPEAKER WITH STROBE CD = CANDELA RATING
	FIRE ALARM SPEAKER - WALL MOUNTED
	FIRE ALARM SPEAKER WITH STROBE - CEILING MOUNTED CD = CANDELA RATING
	VISUAL SIGNALING UNIT, WALL MOUNTED (NO AUDIO DEVICE)
	FIREMAN'S PHONE JACK
	SPRINKLER TAMPER SWITCH CONNECTION
	SPRINKLER WATER FLOW SWITCH CONNECTION
	FIRE ALARM SYSTEM PRINTER
	ZONE ADDRESSABLE MODULE
	ELECTROMAGNETIC DOOR HOLD OPEN DEVICE
	ELECTROMAGNETIC DOOR HOLD OPEN DEVICE CONNECTION TO CLOSURE/ HOLDER
	ELECTROMAGNETIC DOOR HOLD OPEN DEVICE CONNECTION TO CLOSURE/ HOLDER INCLUDES DETECTOR
	CEILING HEAT DETECTOR I35 F UNLESS OTHERWISE INDICATED.
	BEAM DETECTOR - TRANSMITTER
	BEAM DETECTOR - RECEIVER
	FIRE ALARM CONTROL PANEL
	FIRE ALARM TERMINAL CABINET
	FIRE ALARM ANNUNCIATOR PANEL - FLUSH MOUNTED
	FIRE ALARM SYSTEM CONDUIT AND WIRING
	FIREMAN'S ELEVATOR WARNING LIGHT
	KNOX BOX-LOCATION TO BE COORDINATED WITH THE AHJ

PAGING SYSTEM & BACKGROUND MUSIC	
SYMBOL	DESCRIPTION
	LOUDSPEAKER/ TRANSFORMER/ BAFFLE/ SUPPORT TRUSS. (CEILING MOUNTED) W = WALL MOUNTED
	LOUDSPEAKER/ TRANSFORMER/ BAFFLE/ ENCLOSURE FOR EXPOSED CEILING AREAS W = WALL MOUNTED
	HORN/TRANSFORMER FOR HIGH NOISE AREAS
	PAGING SYSTEM EQUIPMENT CABINET
	PAGING SYSTEM TERMINAL CABINET
	DOCTORS REGISTRY SYSTEM CONDUIT AND WIRING
	VOLUME CONTROL
	DEAD FRONT/BLANK FACED, WHITE GFCI DEVICE. EATON • SFGD20 W. MOUNTED AT 48" AFF OR EQUAL
	CONTROLLED RECEPTACLE. BREAK OUT TAB FOR SPLIT OPERATION. SHALL BE MARKED IN FIELD PER 406.3(E). BOTTOM RECEPTACLE TO BE CONTROLLED
	PASSIVE INFRARED, 0-10V DIMMING WALL SWITCH/OCCUPANCY SENSOR WATTSTOPPER • PW-310W
	COMMERCIAL - WALL MOUNTED - SWITCH/OCCUPANCY SEN. WATT STOPPER - • WS250 (IR)

BASIC MATERIALS	
SYMBOL	DESCRIPTION
	SINGLE POLE SWITCH (SUBSCRIPT INDICATES ITEM CONTROLLED)
	THREE-WAY SWITCH
	FOUR-WAY SWITCH
	DIMMER SWITCH (500 WATTS UNLESS OTHERWISE INDICATED)
	CEILING FAN/LIGHT CONTROL, DAN'S FAN CITY #423LW OR EQUAL WHITE COLOR
	SUPERVISED KEY SWITCH
	THREE-WAY KEY SWITCH
	FOUR-WAY KEY SWITCH
	SINGLE POLE SWITCH WITH SECURITY LOCKING KEY
	LOW VOLTAGE SWITCH
	MOTOR RATED SNAP SWITCH, IHP MIN., 20A, 120/277V LEVITON I021-2 OR EQUAL
	MANUAL MOTOR STARTER WITH OVERLOAD HEATERS AND PILOT LIGHT
	SINGLE POLE SWITCH WITH PILOT LIGHT
	SINGLE POLE SWITCH CONTROLLING SWITCHED RECEPTACLE
	SINGLE POLE SWITCH - TIME DELAY FOR EXHAUST FAN/LIGHTS
	SINGLE POLE SWITCH WITH WEATHERPROOF COVER
	SPRING WOUND WALL SWITCH TIMER (30 MIN.)
	DUPLEX RECEPTACLE, 5-20R UNLESS OTHERWISE NOTED
	SINGLE 5-20R RECEPTACLE, T DENOTES TWIST-LOCK DEAD FRONT/BLANK FACED, WHITE GFCI DEVICE. EATON • SFGD20 W. MOUNTED AT 48" AFF OR EQUAL
	SURGE PROTECTION TYPE (TVSS) DUPLEX RECEPTACLE
	PEDESTAL MOUNTED RECEPTACLE
	FLOOR OUTLET BOX AND DUPLEX RECEPTACLE WITH APPROPRIATE FLANGE.
	FLOOR OUTLET BOX WITH DUPLEX RECEPTACLE AND ONE COMBINATION W/ VOICE/DATA OUTLET
	FLOOR OUTLET BOX WITH TWO DUPLEX RECEPTACLES AND ONE COMBINATION W/ VOICE/DATA OUTLET
	POKE THRU
	POWER POLE
	SINGLE POLE SWITCH/RECEPTACLE COMBINATION
	DUPLEX RECEPTACLE WITH EACH HALF ON SEPARATE CIRCUIT (BREAKER SHALL BE TWO POLE WITH COMMON TRIP)
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
	DUPLEX TAMPER-RESISTANT RECEPTACLE. MOUNT COVER PLATE WITH SPANNER HEAD SCREWS
	DUPLEX RECEPTACLE WITH TOP HALF SWITCHED
	GFCI RECEPTACLE (EWC DENOTES ELECTRIC WATER COOLER. COORDINATE WITH EWC INSTALLER FOR MOUNTING HEIGHT)
	GFCI RECEPTACLE. WP DENOTES WEATHERPROOF COVER.
	GFCI RECEPTACLE MOUNTED ABOVE COUNTER
	DEAD-FRONT/BLANK FACE GFCI, EATON SFGD20 OR EQUAL
	TWO DUPLEX RECEPTACLES WITH COMMON COVER
	WALL MOUNTED VANITY OR CLOSET FIXTURE
	EXTERIOR WET LOCATION WALL MOUNTED FIXTURE
	CEILING OR SOFFIT MOUNTED DOWNLIGHT FIXTURE
	PENDANT OR BAY FIXTURE
	WALL WASH FIXTURE
	ACCENT FLOOD LIGHTING - AIMING AS INDICATED
	EXIT LIGHT FIXTURE
	DIRECTION ARROWS AS SHOWN (SHADED QUADRANT INDICATES FACE(S) OF FIXTURE)
	WALL MOUNTED EXIT LIGHT FIXTURE
	COMBINATION EXIT/EMERGENCY LIGHT FIXTURE W/REMOTES
	POLE MOUNTED AREA LIGHT FIXTURE WITH ARMS AS SHOWN ON DRAWINGS
	ELECTRICAL PULL BOX
	TRACK WITH TRACK LIGHT FIXTURE (TRIANGLES INDICATE QUANTITY OF LIGHT FIXTURES)
	BATTERY PACK WITH TWIN HEADS (CEILING MOUNT)
	BATTERY PACK WITH TWIN HEADS (WALL MOUNT)
	PLUG-IN STRIP WITH RECEPTACLES, I0" O.C. UNLESS OTHERWISE INDICATED
	UNDER GROUND CONCRETE ENCASED DUCTBANK
	JUNCTION BOX
	JUNCTION BOX- WALL MOUNTED
	JUNCTION BOX- FURNITURE SYSTEM FEED
	CONDUIT SEAL-OFF FITTINGS
	SURGE PROTECTIVE DEVICE C3 = TYPE I, NEMA 4X, CTEL MDS300 OR EQUAL B3 = DISTRIBUTION BOARD DEVICE, SEE RISER FOR RATING A3 = PANEL BOARD DEVICE, SQUARE D Q02175SB OR EQUAL
	SHUNT-TRIP BUTTON - FLUSH MOUNTED UNLESS OTHERWISE NOTED NEMA 3R FOR EXTERIOR LOCATIONS
	ELECTRIC DUCT HEATER
	MOTOR CONNECTION
	VARIABLE FREQUENCY DRIVE
	ELECTRIC HAND DRYER
	DIRECT DIGITAL CONTROL PANEL
	TRANSFORMER

BASIC MATERIALS CONT.	
SYMBOL	DESCRIPTION
	ELECTRIC VEHICAL CHARGING STATION W/J1772-2009 CONNECTOR(S) CHARGEPOINT OR EQUAL N = NUMBER OF CONNECTORS, DEFAULT = 1 P = PEDESTAL MOUNT W = WALL MOUNT
	AUTOMATIC TRANSFER SWITCH
	NON-FUSED DISCONNECT SWITCH, AMP RATING / # OF POLES NEMA I IF INDOORS NEMA 3R IF OUTDOORS
	FUSED DISCONNECT AR DENOTES AMP RATING OF SWITCH AF DENOTES AMP FUSE SIZE * DENOTES FUSE PER MANUFACTURER RECOMMENDATIONS
	# OF POLES COMBINATION MAGNETIC MOTOR STARTER, SIZE & # OF POLES 3 POLE UNLESS OTHERWISE NOTED ENCLOSURE NEMA RATING NEMA STARTER SIZE
	BRANCH CIRCUIT PANEL BOARD, UNDER 250 VOLTS, SURFACE MOUNTED
	BRANCH CIRCUIT PANEL BOARD, UNDER 250 VOLTS, FLUSH MOUNTED
	BRANCH CIRCUIT PANEL BOARD, OVER 250 VOLTS, SURFACE MOUNTED
	BRANCH CIRCUIT PANEL BOARD, OVER 250 VOLTS, FLUSH MOUNTED
	BRANCH CIRCUIT CONDUIT CONCEALED ABOVE CEILING OR IN WALL. CONDUIT SHALL INCLUDE PHASE, NEUTRAL AND GROUND CONDUCTORS AS REQUIRED FOR CIRCUITS UNLESS OTHERWISE NOTED.
	BRANCH CIRCUIT CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR.
	BRANCH CIRCUIT CONDUIT EXPOSED
	GROUND OUT CONDUIT ROD AS NOTED
	EMERGENCY BRANCH CONDUIT
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT STUB
	CONDUIT CONTINUED
	FLEXIBLE CONDUIT

LIGHTING	
SYMBOL	DESCRIPTION
	LINEAR OR STRIP FIXTURE
	LAY-IN TROFFER FIXTURE
	LOWER CASE LETTER INDICATES LIGHTING CONTROL
	LAY-IN TROFFER FIXTURE DIAGONAL SHADING DENOTES EMERGENCY LIGHT FIXTURE. WRAP AROUND OR SURFACE MOUNTED FIXTURE.
	WALL MOUNTED VANITY OR CLOSET FIXTURE
	EXTERIOR WET LOCATION WALL MOUNTED FIXTURE
	CEILING OR SOFFIT MOUNTED DOWNLIGHT FIXTURE
	PENDANT OR BAY FIXTURE
	WALL WASH FIXTURE
	ACCENT FLOOD LIGHTING - AIMING AS INDICATED
	EXIT LIGHT FIXTURE
	DIRECTION ARROWS AS SHOWN (SHADED QUADRANT INDICATES FACE(S) OF FIXTURE)
	WALL MOUNTED EXIT LIGHT FIXTURE
	COMBINATION EXIT/EMERGENCY LIGHT FIXTURE W/REMOTES
	POLE MOUNTED AREA LIGHT FIXTURE WITH ARMS AS SHOWN ON DRAWINGS
	ELECTRICAL PULL BOX
	TRACK WITH TRACK LIGHT FIXTURE (TRIANGLES INDICATE QUANTITY OF LIGHT FIXTURES)
	BATTERY PACK WITH TWIN HEADS (CEILING MOUNT)
	BATTERY PACK WITH TWIN HEADS (WALL MOUNT)

LIGHTING CONTROL SYSTEM	
SYMBOL	DESCRIPTION
	LIGHTING CONTROL PANEL
	WALL-MOUNTED, MANUAL ON/OFF SWITCH AND AUTOMATIC OFF OCCUPANCY SENSOR
	WALL-MOUNTED, ON PULSE / OFF PULSE BUTTON
	TIME SWITCH CONTROL PER FBC 405.2.2.1. INDEPENDENT 7-DAY PROGRAMMING HOLIDAY SETTING, 10 HOUR PROGRAM BACKUP TWO-HOUR MANUAL OVERRIDE MODE. INTERMATIC ET2800 SERIES OR EQUAL
	PASSIVE INFRARED / ULTRASONIC OCCUPANCY SENSOR C = CEILING MOUNT W = WALL MOUNT
	DAYLIGHT SENSOR
	SINGLE POLE SWITCH - PASSIVE INFRARED OCCUPANCY SENSOR
	LIGHTING ROOM CONTROLLER/POWER SUPPLY

- THE TOTAL ELECTRICAL INSTALLATION MUST MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA ADMINISTRATIVE CODE (FAC), SECTION 6105-33, AND, BY REFERENCE IN THE FAC, THE FLORIDA BUILDING CODE, 8TH EDITION, (2023), THE FLORIDA FIRE PREVENTION CODE, 8TH EDITION, (2023), AND THE 2020 EDITION OF NFPA 70, THE NATIONAL ELECTRICAL CODE.
- ON ALL ELECTRICAL PLAN SHEETS, E.G. "E-1", "E-2", ETC., THE TERM "CONTRACTOR" SHALL MEAN "ELECTRICAL CONTRACTOR", SOMETIMES ALSO ABBREVIATED AS "E.C."
- MATERIALS AND EQUIPMENT INSTALLED SHALL BE ENTIRELY NEW, UNLESS OTHERWISE NOTED, AND SHALL BE LISTED BY UNDERWRITERS LABORATORIES.
- EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED.
- CONTRACTOR TO INSTALL A COMPLETE ELECTRICAL SYSTEM FOR LIGHTING AND POWER FROM THE EQUIPMENT REQUIRED BY SERVING ELECTRIC UTILITY AT THE POINT OF DELIVERY TO AND THROUGH THE METER ENCLOSURE, LIFT STATION CONTROL PANEL, UNIT SUBSTATION, AND BUILDING BRANCH-CIRCUIT PANEL AND TO INCLUDING ALL EQUIPMENT SPECIFIED ON THESE PLANS AND THE ARCHITECTURAL ELECTRICAL PLANS AND EQUIPMENT FURNISHED BY OTHERS AS MAY BE REQUIRED.
- CONTRACTOR SHALL MAKE EARLY CONTACT AND MAINTAIN DIRECT COMMUNICATION WITH THE SERVING ELECTRIC UTILITY TO ENSURE CORRECT INSTALLATION OF CONDUITS PRIOR TO CONCRETE AND PAVEMENT INSTALLATIONS, TO ENSURE CORRECT INSTALLATION OF METERING FACILITIES, TO ASSIST THE OWNER IN OBTAINING A FAULT CURRENT LETTER, AND TO ENSURE THE TIMELY PROVISION OF ELECTRIC SERVICE.
- SPECIAL CONDITION I: E.C. SHALL PROVIDE AND INSTALL A LIFT STATION CONTROL PANEL COMPLYING WITH THESE PLANS AND ANSI/UL 508A. ALL CONTROL PANEL COMPONENTS SHALL COMPLY WITH INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES STANDARDS AND APPROVED MANUFACTURERS' PRODUCTS LIST. SEE DETAILS ON SHEET E-4. SHOP DRAWING REVIEW REQUIRED.
- SERVICE EQUIPMENT SHALL BE MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT AMPERES (FCA) PER NEC 110.24 AND THE DATE OF THE MARKING. SEE RISER DIAGRAM ON SHEET E-4 FOR FAULT CURRENT CALCULATED VALUES.
- UNLESS OTHERWISE NOTED OR SHOWN ON THESE PLANS, 8.4 KV MOVV LINE-TO-NEUTRAL, 75KV BIL, 33.7KV CREST FRONT-OF-WAVE PROTECTIVE LEVEL, 65KA MINIMUM SHORT-DURATION WITHSTAND SURGE PROTECTION (TYPICAL) IS PROVIDED BY THE SERVING ELECTRIC UTILITY AT THE PRIMARY RISER POLE SERVING THIS PREMISES.
- CONTRACTOR TO COMPLETE ALL WORK INCIDENTAL TO MECHANICAL TRADES FOR A COMPLETE INSTALLATION, INCLUDING CONTROL WIRING, MOTOR STARTERS, DISCONNECT SWITCHES AND EQUIPMENT GROUNDS.
- DEFERRED SUBMITTALS FOR THE LIFT STATION CONTROL PANEL, AND ANY LOW VOLTAGE SYSTEMS SHALL BE SUBMITTED TO THIS ENGINEER AND TO THE BUILDING OFFICIAL PRIOR TO INSTALLATION. CONTRACTOR TO MAKE NECESSARY PROVISIONS FOR THE INSTALLATION OF ANY AND ALL SYSTEMS FOR THIS PROJECT, INCLUDING RACEWAYS, CABINETS, PULL BOXES AND OUTLETS. SEE SHOP DRAWINGS FOR EACH SYSTEM FOR ADDITIONAL DETAIL AND INSTRUMENTATION.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES COMPLETE AS LISTED IN THE "LIGHTING FIXTURE SCHEDULE".
- PANELBOARDS, SWITCHBOARDS AND DISCONNECT SWITCHES SHALL HAVE ALUMINUM GROUND BUS AND SILVER/TIN PLATED COPPER OR COPPER (NOMINAL 15% BY VOLUME) CLAD ALUMINUM BUS.
- ALL PANELS, DISCONNECTS, TIME CLOCKS, AND CONTACTORS SHALL BE LABELED WITH A PERMANENT ENGRAVED LABEL. IDENTIFICATION ON THE LABEL MUST CONFORM TO THE ELECTRICAL DRAWINGS.
- TYPEWRITTEN CIRCUIT IDENTIFICATION SHALL BE INSTALLED IN ALL PANELBOARDS, EACH BREAKER HAVING A DISTINCTIVE DESCRIPTION COMPLYING WITH NEC 408.4(B). ALL PANELBOARDS SHALL BE MARKED WITH THEIR SOURCE OF SUPPLY PER NEC 408.4(B).
- MAIN BREAKERS SHALL BE A QUICK-MAKE, QUICK-BREAK, LOAD-BREAK DEVICES. CONDUIT FOR UNDERGROUND SHALL BE SCHEDULE 40 PVC OR CASTLE LISTED FOR UNDERGROUND USE UNLESS SHOWN AND/OR REQUIRED BY CODE. UNDERGROUND CONDUITS SHALL BE INSTALLED AT A DEPTH IN ACCORDANCE WITH TABLE 300.5.
- CONDUIT FOR ABOVE GRADE SHALL BE "RGC", "IMC" "SCH 80 PVC" OR "EMT". "LFNC" SHALL BE USED FOR CONNECTIONS TO AIR HANDLING UNITS, CONDENSING UNITS, WATER HEATERS AND OTHER EQUIPMENT. MC CABLE MAY BE USED FROM "J" BOXES IN CEILING, OR, WHEN STUDS OR OTHER POINTS OF SECURE SUPPORT NOT GREATER THAN 6 FEET APART, FROM BRANCH-CIRCUIT PANELS TO SWITCHES, RECEPTACLES AND BETWEEN DEVICES. SPARE CONDUITS SHALL HAVE A PULL WIRE INSTALLED.
- CONDUCTORS SHALL BE COPPER THIN/THIN EXCEPT WHERE SPECIFIED OTHERWISE ON THE DRAWINGS. CONDUCTORS NO. 8 AWG AND LARGER SHALL BE JOINED BY AN APPROVED PRESSURE CONNECTOR. CONNECTION TO GROUND CONDUCTORS NO. 1/0 AWG AND LARGER SHALL BE CAST BY FUSIBLE METAL PROCESS. ALL CONDUCTORS MUST BE INSTALLED IN CONDUIT, MC CABLE, OR LFNC. CONDUCTORS IN PANELS SHALL HAVE THEIR FACTORY LABELS VISIBLE TO A PERSON IN THE WORKING SPACE.
- CONDUCTORS OF MULTIWIRE CIRCUITS SHALL BE GROUPED IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGIN BY WIRE TIES OR SIMILAR MEANS PER 200.4(B). MULTIWIRE CIRCUIT DISCONNECTS SHALL BE PROVIDED WITH A MEANS TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WITHIN THE PANELBOARD.
- COLOR CODE FOR 480Y/277V 3ø SYSTEM SHALL BE: BROWN, ORANGE, YELLOW, GRAY & GREEN. COLOR CODE FOR 120/240V 1ø 3W SYSTEM SHALL BE: BLACK, RED, WHITE & GREEN.
- CONTRACTOR SHALL VERIFY WITH ARCHITECT FOR DETAILED DIMENSIONS AND LOCATIONS OF OUTLETS AND EQUIPMENT AND FOR ANY REVISIONS IN LAYOUT.
- MOUNT WALL SWITCHES 4" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON DRAWING. GANG SWITCHES WHEREVER POSSIBLE.
- RECEPTACLES SHALL BE INDUSTRIAL USE GRADE.
- RECEPTACLES SHALL BE LOCATED APPROXIMATELY 42" ABOVE FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED. ABOVE-COUNTER RECEPTACLES SHALL BE MOUNTED 6" ABOVE BACK SPLASH TO CENTERLINE OF DEVICE.
- COVER PLATES SHALL BE STAINLESS STEEL, UNLESS OTHERWISE NOTED. RECEPTACLES WITH PLASTIC COVER PLATES SHALL BE MOUNTED SUCH THAT THE GROUND PIN IS MOUNTED UP, UNLESS OTHERWISE NOTED.
- ALL NEW 125V RECEPTACLES SHALL BE NEMA 5-20R, AND COLOR SHALL BE WHITE UNLESS NOTED OTHERWISE. OUTDOOR RECEPTACLES SHALL COMPLY WITH 406.9(A) OR (B) AS APPROPRIATE TO CONDITIONS. GFCI TYPE RECEPTACLES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
- CONTRACTOR SHALL CONNECT AIR CONDITIONERS, PUMPS, FANS AND OTHER EQUIPMENT.
- AIR CONDITIONER BREAKER SHALL BE MARKED "LISTED HACR TYPE" AS REQUIRED BY NEC 110.3(B). IF BREAKER IS NOT MARKED, THE OUTSIDE DISCONNECT SHALL BE CHANGED TO A FUSED DISCONNECT WITH RATING AS NOTED ON A/C EQUIPMENT.
- CONTRACTOR SHALL MAKE TESTS AND ADJUSTMENTS AS REQUIRED, UPON COMPLETION OF THE WORK AND BEFORE FINAL ACCEPTANCE BY THE OWNER. THE CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM IN THE PRESENCE OF THE ENGINEER/ARCHITECT FOR CONTINUITY, FUNCTION, CONTROL, PERFORMANCE, LOAD BALANCE, GROUNDS AND GROUND RESISTANCE, SHORT CIRCUITS, AND TO INSURE SATISFACTORY OPERATION AND CONFORMANCE TO CONTRACT REQUIREMENTS.
- EQUIPMENT, LABOR AND MATERIAL REQUIRED FOR TESTING SHALL BE FURNISHED BY THE CONTRACTOR(S) AS PART OF THIS CONTRACT.
- PRIOR TO COMPLETION OF THE WORK, THE CONTRACTOR SHALL MARK THE SERVICE EQUIPMENT WITH THE AVAILABLE FAULT CURRENT PER NEC 110.24, USING EITHER THE FAULT-CURRENT FROM THE UTILITY FAULT CURRENT LETTER, OR THE SHORT CIRCUIT CURRENT CALCULATION FROM THESE PLANS. IF PROVIDED WITH THE FAULT CURRENT LETTER, THIS ENGINEER WILL UPDATE THE CALCULATION TO OBTAIN THE FAULT CURRENT AT THE SERVICE ENTRANCE.
- AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL SECURE CERTIFICATES

NOTE: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THESE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE 8TH EDITION (2023) AND THE FLORIDA FIRE PREVENTION CODE 8TH EDITION (2023). MICROSOFT EXCEL IS USED FOR CALCULATIONS.

- OF FINAL INSPECTION AND APPROVAL FROM AUTHORITIES HAVING JURISDICTION (AHJ).
- PER FBC 405.5.4.1, WITHIN 30 DAYS OF ELECTRICAL SYSTEM ACCEPTANCE BY THE AHJ, THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER WITH RECORD DRAWINGS OF THE ACTUAL INSTALLATION. THE RECORD DRAWINGS SHALL INCLUDE A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION. IF PROVIDED WITH COMPLETE FIELD MARKUPS ON THESE PLAN SHEETS, THE ENGINEER SHALL MODIFY THESE PLAN SHEETS INTO SAID RECORD DRAWINGS AND PROVIDE A COPY TO THE OWNER AND TO THE CONTRACTOR AND RETURN THE ORIGINAL FIELD MARKUP TO THE CONTRACTOR.
- PER FBC 405.5.4.2, WITHIN 30 DAYS OF ELECTRICAL SYSTEM ACCEPTANCE BY THE AHJ, THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER AN OPERATING AND MAINTENANCE MANUAL FOR ALL ELECTRICAL SYSTEMS INSTALLED IN ACCORDANCE WITH THESE PLANS THAT REQUIRE MAINTENANCE. AT A MINIMUM, THE MANUAL SHALL INCLUDE:
 - EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
 - OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
 - NAME AND ADDRESS OF AT LEAST ONE QUALIFIED SERVICE AGENCY.
- WORKMANSHIP, MATERIALS AND APPARATUS UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
- GREATER THAN 80% NONLINEAR LOADS: SHARED NEUTRALS AND GROUNDS ARE NOT PERMITTED FOR SINGLE PHASE CIRCUITS.
- WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC 110, AND WITH NEC 210.8 FOR GFCI DEVICES.
- THE EXCLUSIVELY-DEDICATED SPACE EXTENDING FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE PANEL BOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC 408. WHEN ELECTRICAL BOXES ARE LOCATED IN VERTICAL FIRE-RESISTIVE ASSEMBLIES, (CLASSIFIED AS FIRE/SMOKE AND SMOKE PARTITIONS), THEY SHALL BE

