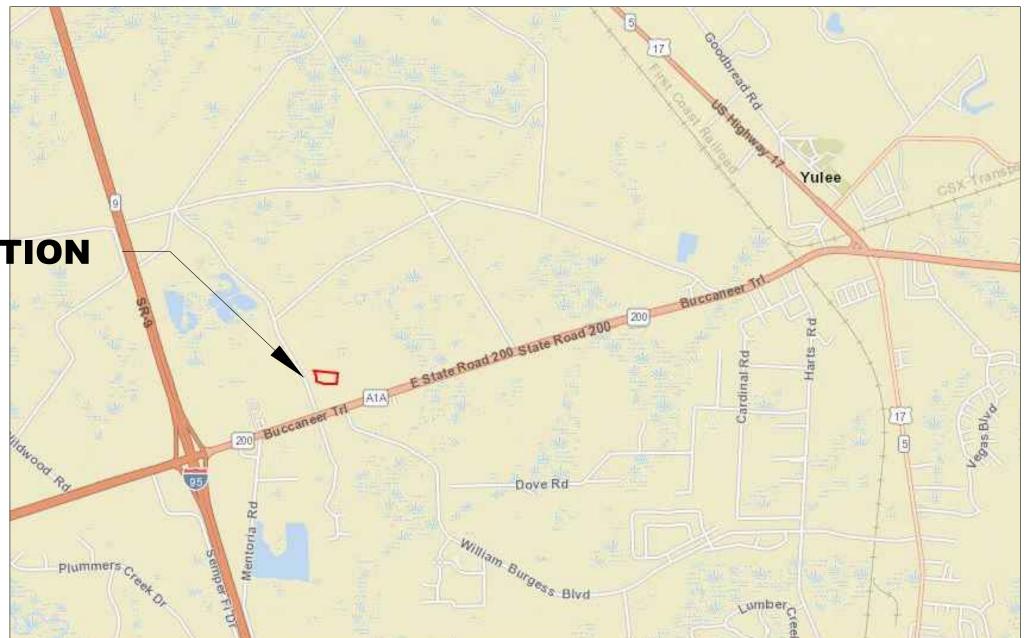
FAIRFIELD INN & SUITES WILDLIGHT, FL

YULEE, FL 32097 JKM IMPACT WILDLIGHT, LLC





PROJECT LOCATION

UTILITY CONTACTS

,		1 000 000 0400
Α.	American Telephone and Telegraph	1-800-222-0400
В.	Bell South Telephone	780-2800
C.	Nassau County, Public Works	530-6225
D.	Nassau County Road and Bridge	530-6175
E.	Distribution Projects	665-6050
F.	Florida Department of Transportation	360-5400
G.	JEA — Collection and Distribution	904-665-6000
Н.	JEA — General Information	904-665-6000
١.	JEA — Community Outreach	904-665-6000
J.	FPL — Power Outages	1-800-226-3545
K.	JEA - Sewer Problems	904-665-6000
L.	JEA — Water Problems	904-665-6000
М.	AT&T Broadband	1-800-222-0400
N.	Mobile Gas	733-9533
0.	Peoples Gas	737-4635
Р.	Sunshine One Call	1-800-432-4770

VICINITY MAP

LEGAL DESCRIPTION:

WHICH BEARS S 02°40'05" W. A DISTANCE OF 74.22 FEET TO THE POINT OF BEGINNING

SHEET INDEX:

- 1. COVER SHEET
- 2. GENERAL NOTES
- 3. EXISTING CONDITIONS
- 4. MASTER POST DEVELOPMENT
- 5. HORIZONTAL CONTROL PLAN
- **6. SITE GRADING PLAN**
- 7. STORM DRAINAGE PLAN
- 9. WATER DETAILS
- 10. WATER DETAILS
- 8. WATER AND SEWER PLAN
- 11. WATER DETAILS

12. WATER DETAILS

- 13. SEWER DETAILS
- 14. GRADING & DRAINAGE DETAILS
- 15. EROSION CONTROL DETAILS
- 16. SWPPP-1
- 17. SWPPP-2

PROJECT CONTACTS

JKM IMPACT WILDLIGHT, LLC 10175 FORTUNE PARKWAY, SUITE 504 JACKSONVILLE, FL 32256

CODYS PROFESSIONAL SURVEYING AND MAPPING, INC P.O. BOX 7540, JACKSONVILLE, FL 32238 (904) 696-8840

LANDSCAPE ARCHITECT

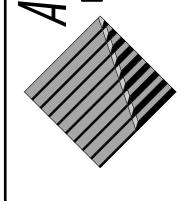
A&K LAND PLANNING AND DESIGN KRIS REED, LA6667112 **2621 SUNRISE RIDGE LANE** JACKSONVILLE, FL 32211 (904) 476-9692

DEANNA DAVIS 21 W CHURCH ST, T-4 JACKSONVILLE, FL 32202 (904) 665-8451

PROJECT INFORMATION

GENERAL PROJECT NAME	FA	IRFIELD INN & SUITES WILDLIGHT
PROJECT ADDRESS		YULEE, FL 32097
PROJECT ACREAGE (TOTAL/IMPERVIOUS)		1.76 AC./1.25 AC.
CONCURRENCY APPLICATION NUMBER		N/A
PROPERTY APPRAISER	44-2N-27-1000)-00TB-0010
NUMBER (RE#) JEA AVAILABILITY #		2022-2767
FUTURE LAND USE		ENCPA
ZONING DESIGNATION		PD-ENCPA
PUD ORDINANCE NUMBER		N/A
FIRM / COMMUNITY / PANEL		N/A ZONE X
FLOOD ZONES (SHOW IN PLANS) BASE FLOOD ELEV. (SHOW IN PLANS)		N/A
VERTICAL DATUM USED FOR PROJECT		NAVD 88
SUBDIVISION		
PSD NUMBER		N/A
CITY OR PRIVATE INSPECTION		N/A
PUBLIC OR PRIVATE ROADS		N/A
SUBDIVISION (911) DISK PROVIDED?		N/A
NON-SUBDIVISION NORTH AMERICAN INDUSTRY		
CLASSIFICATION SYSTEM (NAICS)		721110
IMPERVIOUS AREA (SQ. FT.)		54,450 SF

THIS PROJECT HAS BEEN DESIGNED UNDER JEA 2023 STANDARDS.



Date: 03/2023

Designer: HAV 19-014

Drawn: GCO

Scale: **Sheet:**

Development Review General Notes:

- Engineering Plans approval does not constitute permission to violate any adopted Federal, State, or Local law, code, or ordinance.
- All work within the public streets and right-of-ways shall conform to Nassau County Land Development Codes (LDC), FDOT Standard Indices, Florida Greenbook, Nassau County Roadway and Drainage Standards, and Nassau County Standard Details as necessary. For any discrepancy between standards, the most stringent shall prevail.
- 3. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 6.2.4, site shall be constructed per approved construction drawings. Any substantial deviation shall be concurrently reviewed by Engineer of Record and Nassau County Development Review Committee prior to field changes.
- 4. A pre-construction meeting with Nassau County Engineering Services Construction Inspector is required. Attendees shall be Nassau County, Engineer of Record, Contractor, Testing firm, Paving firm, and utility companies per Nassau County Ordinance 99-17 Section 7.2.3. Nassau County may cancel pre-construction meeting if attendee list is inadequate. Nassau County Engineering Services can be reached at 904-530-6225.
- 5. The contractor shall schedule and coordinate all work with the appropriate Nassau County Construction Inspector assigned to the project per Nassau County Ordinance 99-17 Section 7.2.
- 6. All work shall be performed in a safe manner. All safety rules and guidelines of O.S.H.A. shall be followed. The contractor shall be wholly responsible for any injuries to his employees and any damage to private property or persons during the course of this project.
- 7. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 11.8.1, any disturbed areas within Nassau County Right-of-Way shall be sodded.
- 3. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 7.4.1, at the time of final inspection, grassing shall be a minimum of seventy percent coverage and fully established and/or sodding to be one hundred percent coverage and stabilized.
- 9. Engineer of Record approved shop drawings shall be provided to Nassau County Construction Inspector a minimum of one week before beginning structure installation.
- 10. Parking at mail kiosks is required per Nassau County Roadway and Drainage Standards,
 Ordinance 99-17 Section 8.4. Mail kiosk locations are subject to USPS Postmaster

- 11. The developer's contractor is the single responsible party for the proper implementation of an Erosion Protection Sediment Control (EPSC) within each lot or construction site. This includes the responsibility for the actions/inactions of employees, subcontractors, and/or suppliers.
- 12. Sidewalks to be provided and built in accordance Florida Building Code. All proposed sidewalks shall meet ADA requirements.
- 13. The Contractor shall comply with current Florida accessibility standards for all work on this project.
- 14. Per Ordinance 99-17 Section 8.5.1, minimum cover for water lines and force mains under pavement shall 42" and 36" in green areas.
- 15. All water, sewer, and storm water construction within Nassau County ROW shall be accomplished by an underground utility contractor licensed under the provisions of Chapter 409 of the Florida Statutes.
- 16. No work shall be permitted between the hours of 7:00 PM 7:00AM without prior approval from Nassau County Engineering Services.
- 17. All trees required to be protected shall be flagged for protection prior to clearing.
- All grading and placement of compacted fill shall be in accordance with the latest Nassau County Specifications.
- 19. Any damages (sidewalk, curb, asphalt, ditch grading, et cetera) within Public Right-of-Way shall be repaired or replaced in accordance with Nassau County Specifications. Proposed repair method shall be approved by Nassau County Engineering Services.
- 20. Any asphalt millings from Nassau County ROW shall be delivered to the Road Department Laydown yard located on Gene Lasserre Boulevard or Pea Farm Road. Please contact the Road Department at (904) 530-6175.
- 21. Per Nassau County Ordinance 99-17 Section 7.4.2 and 7.4.4, as-built drawings shall be submitted to Nassau County before a final inspection can be scheduled. As-builts submittals will be in accordance with Nassau County as-built requirement checklist. As-built drawings shall be certified by required licensed surveyor and approved by Engineer of Record.

ROADWAY AND DRAINAGE STANDARDS	REVISION D	DATES	DEVELOPMENT DEVUE	
NASSAU COUNTY			DEVELOPMENT REVIEW	NOTE SHEET: 1
ENGINEERING SERVICES DEPARTMENT			GENERAL NOTES	DWG:
			3211211112113	ISSUED: 12/09/2020

Stormwater Drainage Notes:

- All stormwater drainage facilities within Public Right-of-Way and paved areas, including Nassau County Right-of-Way, turn lanes, residential roadways, drive aisles for multi-family developments, and major drive aisles for commercial developments shall be laser profiled per FDOT Section 430.
- 2. A builder cannot modify the County's storm water management system including the pipes, inlets, area drains, ditches and related elements typically within the street or within a drainage easement without the prior written approval of the County Engineer
- Drainage easements and ditches should remain free of stockpiled soil, sediment, mud, construction materials/waste, et cetera at all times. Positive stormwater flow must be maintained throughout construction.
- 4. The contractor shall temporarily or permanently stabilize bare soil areas and soil stockpiles when the area is inactive for fourteen days or more or has reached finished grade.
- Per Ordinance 99-17 Section 11.11.5.4, all gravity flow pipe installations shall have a soil tight joint performance unless specific site factors warrant watertight joint performance.
- 6. Per Ordinance 99-17 Section 10.6.5.1, immediately install additional Erosion Protection Sediment Control measures if sediment is leaving your site. Failure to contain sediment to your site may result in delayed inspections, notices of violation, citations, fines, penalties, and/or stop work orders.
- 7. Per 99-17 Section 10.1.2.a-e, stormwater management for a project shall not have adverse effects on adjacent properties, downstream structures, or rights of other landowners.

Paving Notes:

- Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 12.2
 and 12.4, a construction bond and 26-month maintenance bond will be required for all
 work within Nassau County Right-of-Way.
- A pre-pave meeting is required prior to any paving operations within Nassau County ROW, residential subdivisions, or multi-family developments.
- Approved mix designs shall be provided to Nassau County Construction Inspector 48
 hours prior to pre-pave meeting or placement of concrete.

- 4. Contractor is required to have a Certified QC Asphalt Level II Technician during any asphalt operations within Nassau County ROW, residential subdivision, or multi-family
- 5. All bases shall be primed in accordance with Ordinance 99-17 Section 11.5.2.3, Nassau County Standard Details, and FDOT Standard Specifications.
- 6. Signage and pavement markings shall be in compliance with Nassau County Standards, Manual on Uniform Traffic Control Devices (MUTCD), and FDOT Standard Plans.
- 7. Maintenance of Traffic (MOT) shall be in compliance with FDOT Standard Index 600
- 8. All work, materials, and testing performed within Nassau County right-of-way and single-family/multi-family developments shall be in accordance with the current revision of Nassau County's Ordinance 99-17 and all current Nassau County Standard Details
- Per Ordinance 99-17 Section 11.9.2, all pavement markings within Nassau County ROW shall be lead free thermoplastic meeting Nassau County and FDOT Standard Specification Latest Edition.
- 10. Removing pavement markings within Nassau County ROW shall be:
- Grinding or hydro-blasting on weathered asphalt surfaces.
- b. Hydro-blasting only on new asphalt surfaces.
- c. Paint Blackout is prohibited.
- 11. Per Ordinance 99-17 Section 8.5.5, any damage to pavement resulting from construction or pavement marking removal withinPublic ROW not planned as part of the project shall be milled and overlaid for entire width of roadway and length of damage plus 50' in each direction.
- 12. All underground utilities, or appropriate conduit sleeves, that are to be installed under pavement must be installed prior to preparation of the subgrade for pavement.
- 13. Single Vertical Joints in roadway construction shall be avoided in Nassau County Right-of-Way using Nassau County Standard Detail #26.
- 14. All drainage structures shall have traffic bearing grates that meet or exceed the rating for the facilities expected traffic.
- 15. All concrete shall be a minimum of 3000 psi within Public Right-of-Way.

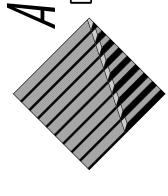
ADWAY AND DRAINAGE CTANDARDS	REVISION	IDATES	07001444750 004444054	
DADWAY AND DRAINAGE STANDARDS NASSAU COUNTY			STORMWATER DRAINAGE &	NOTE SHEET: 2
IGINEERING SERVICES DEPARTMENT			PAVING NOTES	DWG:
			17111101120	ISSUED: 12/09/2020

No. Revisions By

(1)
(2)
(3)

(2), **///** | | Marine | | Marine | LE. FLORIDA 32217

A ENGINELLA,
nmercial | Residential |
Florida Certificate No. 00008161



ULESS THIS DRAWING BEARS THE EMBOSSED SEAL OF A ORIDA REGISTERED ENGINEER ACTING AS AN ITHORIZED AGENT FOR AVA ENGINEERS, INC., IT IS FOR FORMATION PURPOSES ONLY AND IS NOT VALID.

E STORMWATER SYSTEM AS SHOWN ON THESE PLANS IS BEEN PREPARED IN ACCORDANCE WITH STANDARD, CEPTED ENGINEERING PRACTICE, HAT ARE MANDATED OTHERS (IE CITY, COUNTY, STATE, FEDERAL, etc.)

INE BEEN USED TO DETERMINE THE FINAL DESIGN FOR CEPT STORMWATER FACILITIES. THE ENGINEER DOES NOT CEPT STORMWATER FACILITIES. THE ENGINEER DOES NOT CEPT RESOLUTING FROM THE REQUIREMENT FOR

Florida

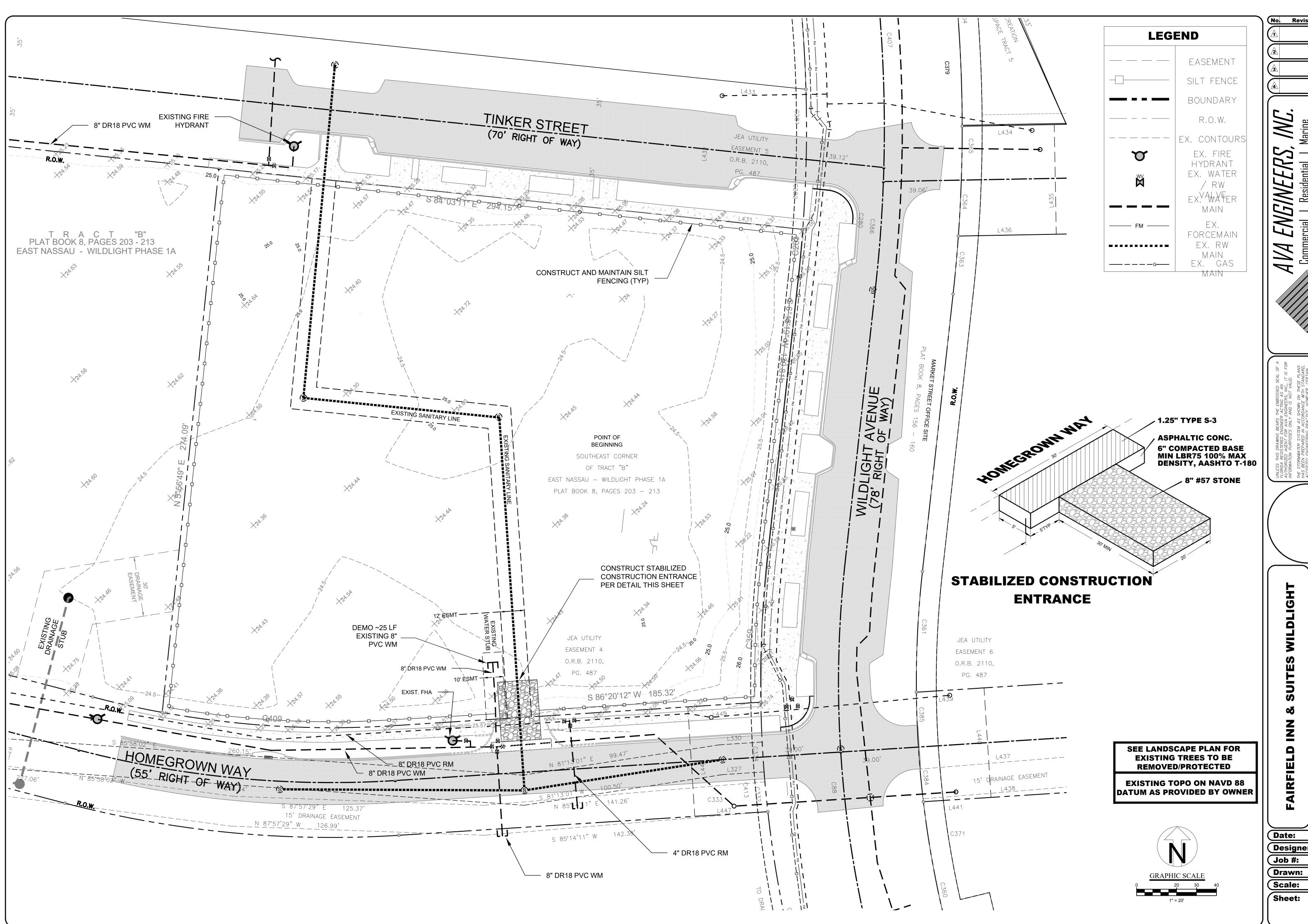
Date: 03/2023

Designer: HAV

Job #: 19-014

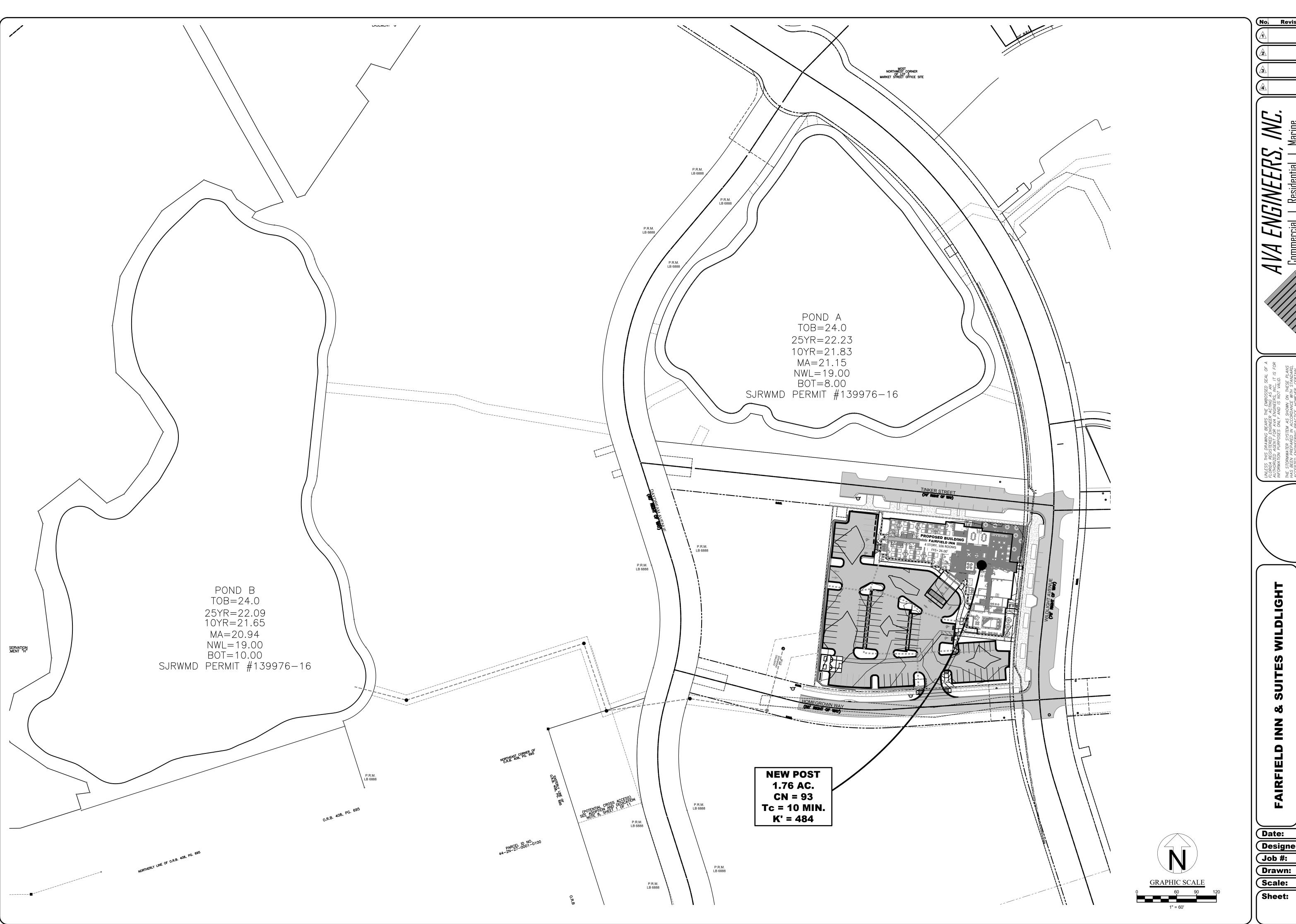
Job #: 19-0
Drawn: GC
Scale:

Sheet:



Date: 03/2023 Designer: HAV 19-014 GCO

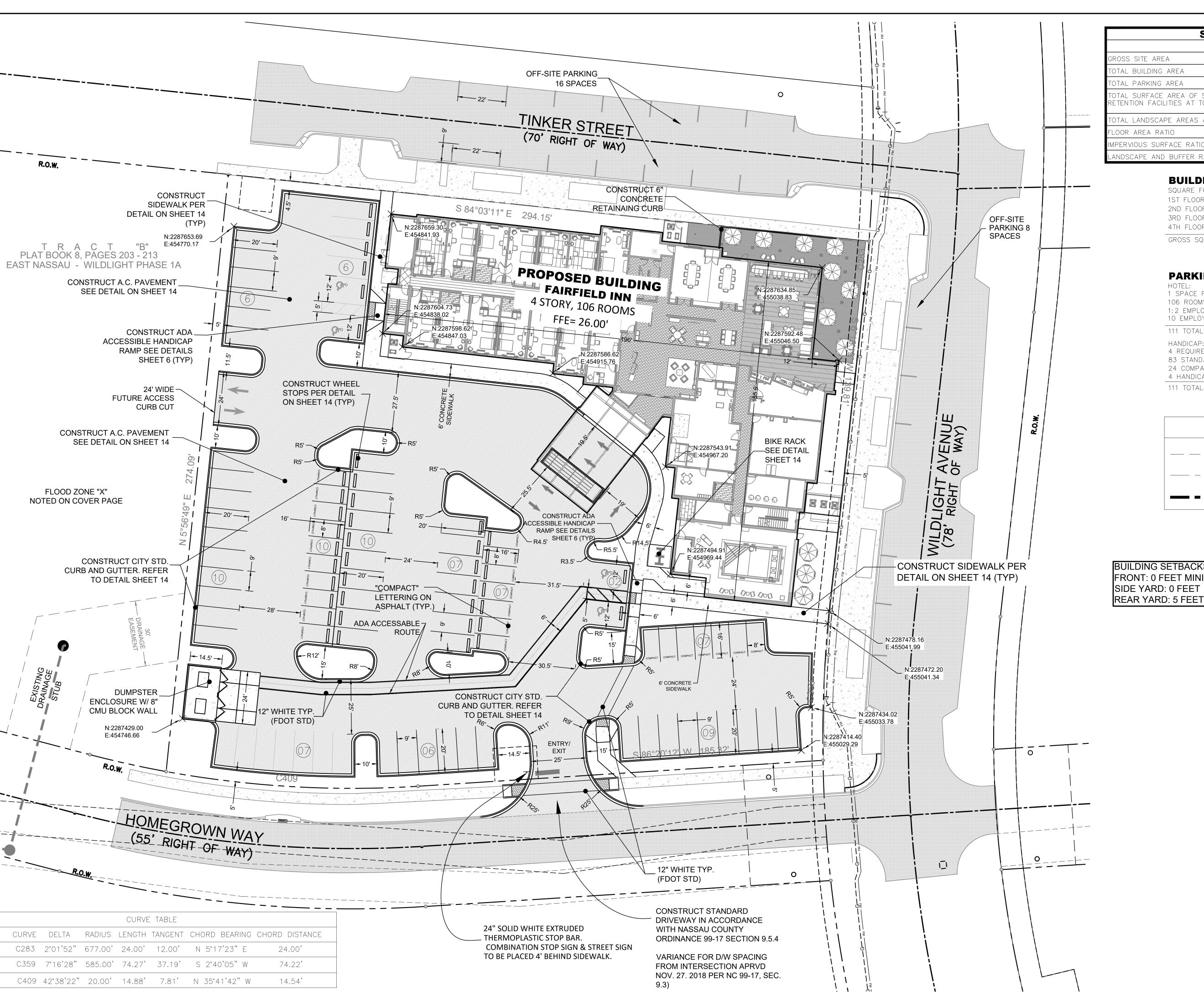
1"=20'

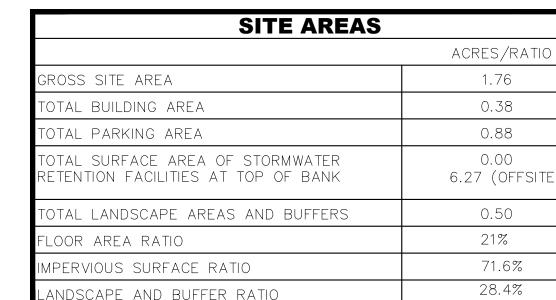


Date: 05-21-19 **Designer: HAV** 19-014)

Drawn: GCO

1"=60'





BUILDING AREA:

SQUARE FOOTAGE BY FLOOR: 1ST FLOOR = 16,687 SF2ND FLOOR = 15,764 SF3RD FLOOR = 15,764 SF4TH FLOOR = 15,764 SF GROSS SQUARE FOOTAGE = 63,979 SF

PARKING CALCULATIONS:

1 SPACE FOR EACH ROOM: 106 ROOMS= 106 SPACES

1:2 EMPLOYEES: 10 EMPLOYEES (PEAK)/ 2= 5 SPACES

111 TOTAL SPACES REQUIRED

HANDICAP: 4 REQUIRED

83 STANDARD SPACES (62 ON-SITE, 24 OFF-SITE)

24 COMPACT SPACES 4 HANDICAP SPACES

111 TOTAL SPACES TOTAL PROVIDED

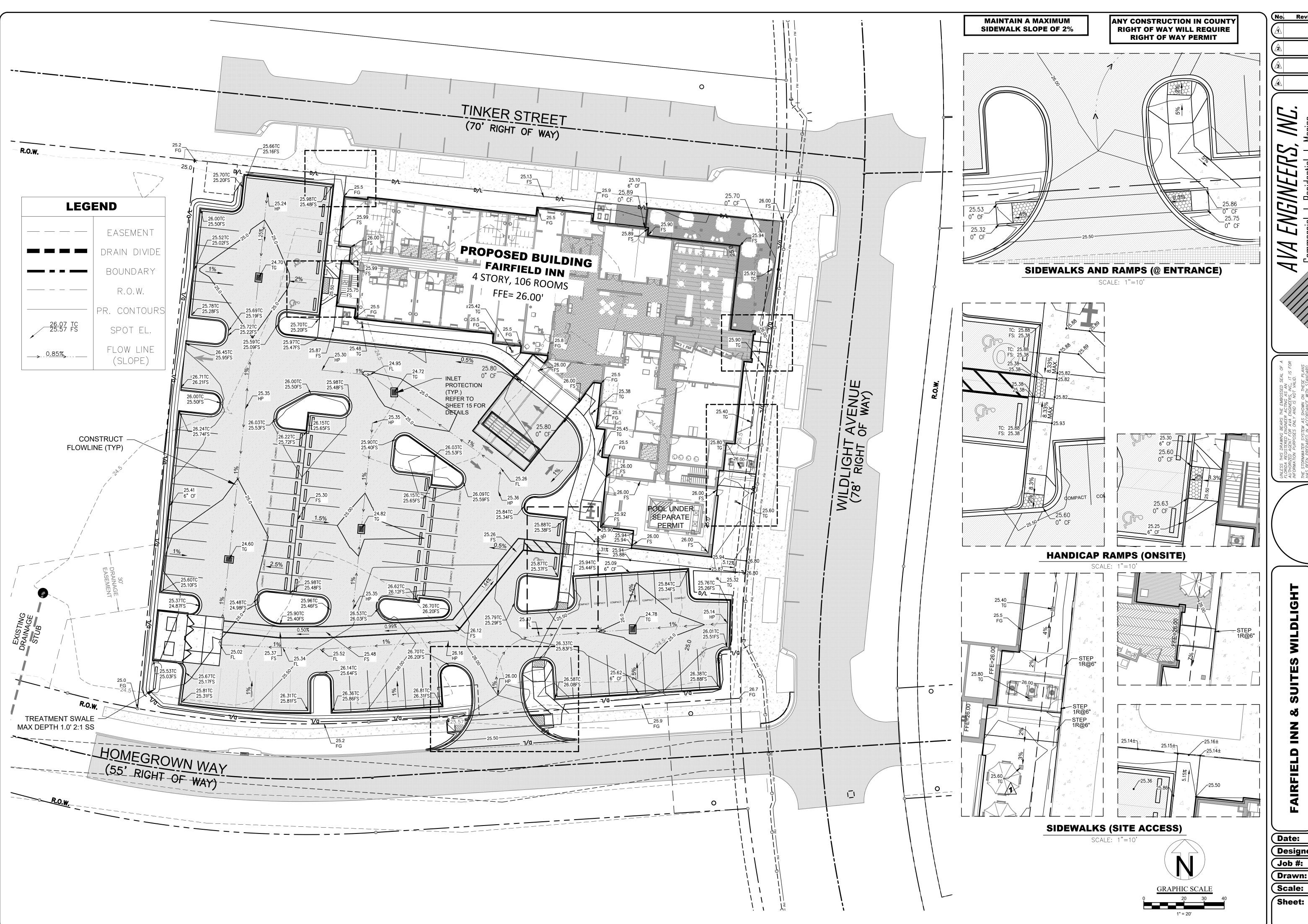
LEGI	END
	EASEMENT
	R.O.W.
— —	BOUNDARY

BUILDING SETBACKS FRONT: 0 FEET MINIMUM, 15 FEET MAXIMUM SIDE YARD: 0 FEET

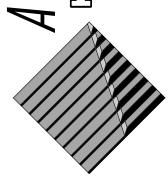
No. Revisions By

Date: 03/2023 Designer: HAV Job #: Drawn:

19-014 GCO 1"=20' Scale: Sheet:

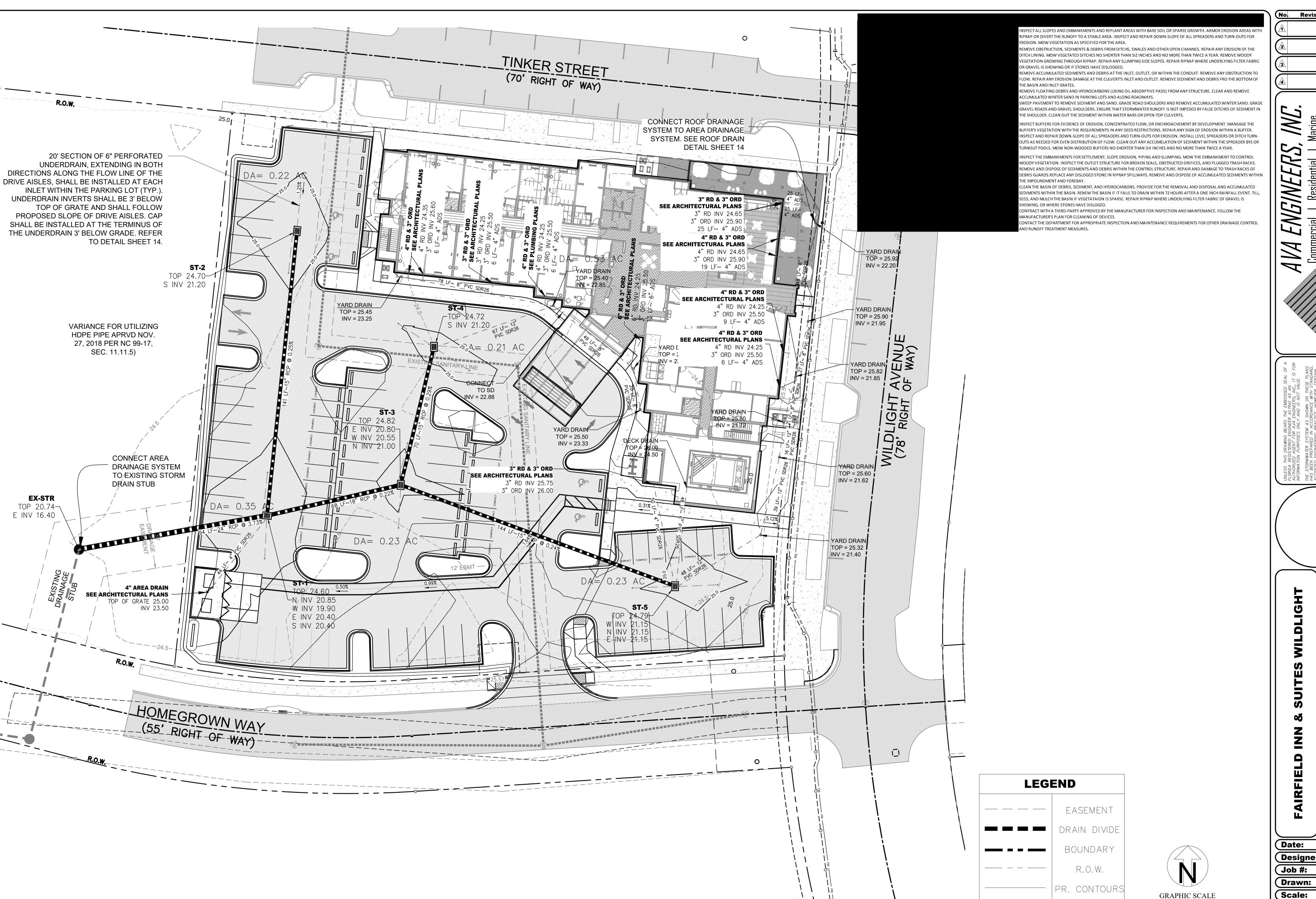


No. Revisions By



Date: 03/2023

Designer: HAV 19-014 Drawn: GCO Scale: 1"=20'



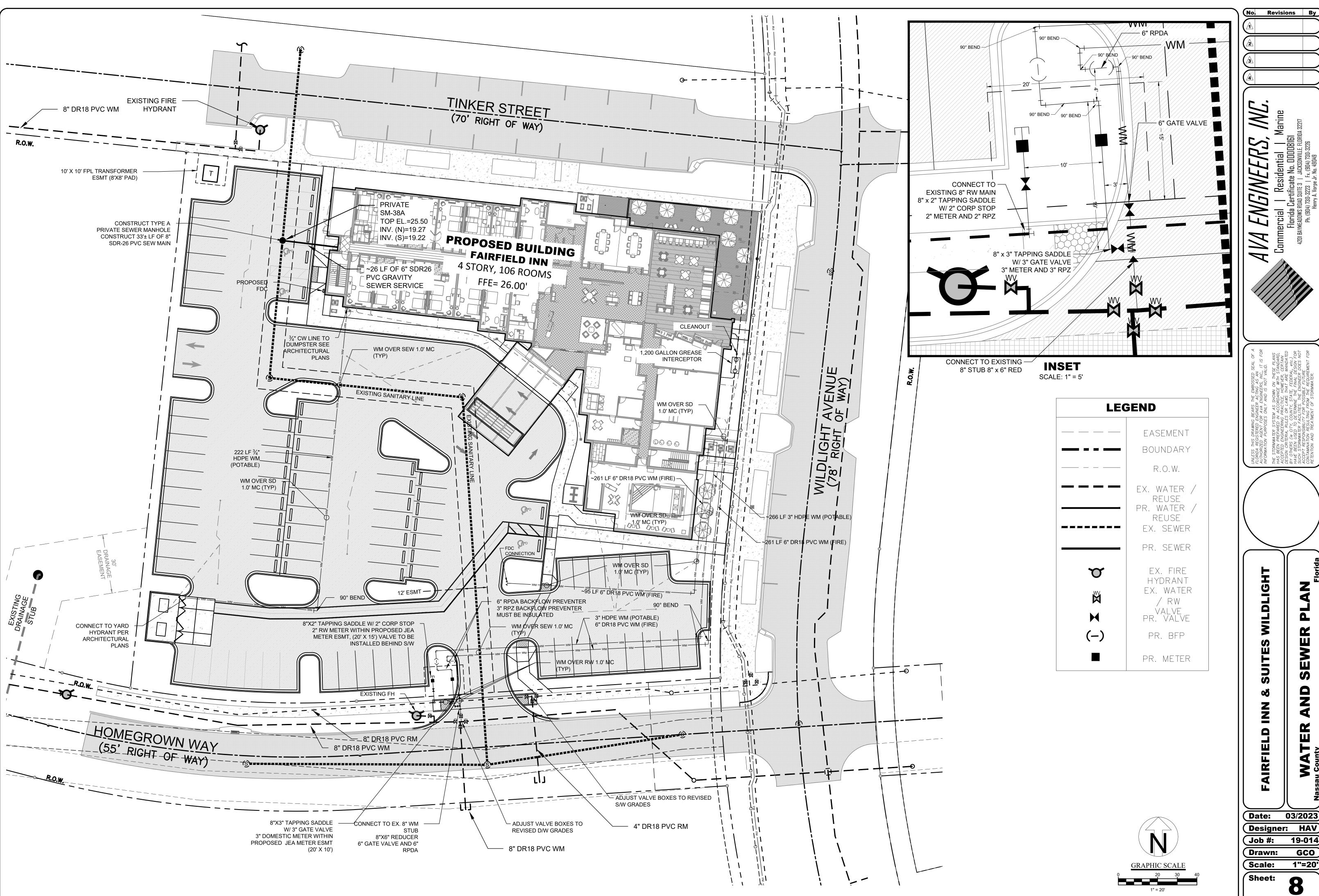
No. Revisions By

Date: 03/2023

Designer: HAV 19-014 GCO

1"=20' Sheet:

STORM PIPE



Date: 03/2023 19-014

Designer: HAV Job #: Drawn: GCO 1"=20' Scale:

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

					PRO	OPOSE	ED UT	ILITY				
	PO ⁻	ΓABLE WA	TER		STEWATE Y AND FOR		RECL	AIMED WA	ATER	VACI	JUM SEWI	ERS
CONFLICTING UTILITY	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*
POTABLE WATER	3' NOTE 1	12"	3' NOTE 2	6' to 10'	12" NOTE 5	6' NOTE 2	3'	12"	6' NOTE 2	3' to 10'	12"	3' NOTE 2
RECLAIMED WATER	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2
WASTEWATER (GRAVITY AND FORCE MAIN)	6' to 10'	12"	6' NOTE 2	3' NOTE 1	12"	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
VACUUM SEWERS	3' to 10'	12"	3' NOTE 2	3' NOTE 1	12"	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
RIGHT OF WAYS	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
PERMANENT STRUCTURES (SIGNS, POLES, ETC.)	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
STORM SEWERS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
GAS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
TREES	3'-6' NOTE 6	N/A	N/A	3'-6' NOTE 6	N/A	N/A	3'-6' NOTE 6	N/A	N/A	3'-6' NOTE 6	N/A	N/A
ALL OTHER UTILITIES	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2

- THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTH, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH
- 2. THE MINIMUM JOINT SPACING REQUIRED FROM CROSSING FROM OTHER UTILITIES WHILE STILL MAINTAINING MINIMUM VERTICAL SEPARATION.
- 3. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE
- 4. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURES.
- 5. WATER MAIN SHOULD CROSS ABOVE OTHER PIPES WHENEVER POSSIBLE. WHEN WATER MAIN MUST BE BELOW OTHER UTILITY PIPING, THE MINIMUM SEPARATION SHALL BE 12 INCHES.
- 6. REFER TO POTABLE WATER PIPING- SECTION 350, III.4.11.

SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

PLATE W-10 JANUARY 2023

WATER MAIN AND NON-WATER MAIN SEPARATION REQUIREMENTS - NOTES

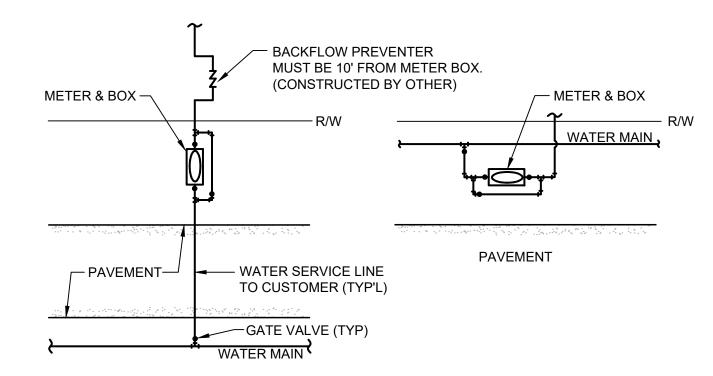
JANUARY 2023

- 1. IT IS REQUIRED THAT "WATER MAINS" BE INSTALLED, CLEANED, DISINFECTED AND HAVE A SATISFACTORY BACTERIOLOGICAL SURVEY PERFORMED IN ACCORDANCE WITH THE LATEST APPLICABLE AWWA STANDARDS, CHAPTER 62-555, F.A.C. AND LATEST JEA WATER AND SEWER STANDARDS. FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS. INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT HAVE AN INSIDE DIAMETER OF THREE (3) INCHES OR GREATER. IN ADDITION, THE PHRASE "RECLAIMED WATER" REFERS TO THE WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) 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. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS MAY BE REDUCED TO THREE (3) FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX (6) INCHES ABOVE THE TOP OF THE SEWER (SPECIAL CASE).
- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX (6) INCHES, AND PREFERABLE TWELVE (12) INCHES, ABOVE OR AT LEAST TWELVE (12) INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS A LEAST TWELVE (12) INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- 6. AT THE UTILITY CROSSINGS DESCRIBED IN NOTES 4 AND 5 ABOVE, ONE 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 (3) FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER, AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINE CONVEYING RECLAIMED WATER.
- NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SO THAT THE HYDRANTS ARE AT LEAST THREE (3) FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER; AT LEAST THREE (3) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER OR WASTEWATER FORCE MAIN.
- WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE, THE CONTRACTOR SHALL CONSULT THE DESIGN ENGINEER TO OBTAIN APPROVAL OF ANY ALTERNATIVE CONSTRUCTION METHODS.

NOTES ON UTILITY SEPARATION REQUIREMENTS

PLATE W-11

EASEMENT REQUIRED FOR THIS INSTALLATION. METER & BOX -METER & BOX -PAVEMENT PAVEMENT



- 1. THE SKETCHES ABOVE ARE SUGGESTIONS FOR SOME TYPICAL LARGE METER (3" AND LARGE SIZE METER) INSTALLATIONS. ACTUAL INSTALLATIONS WILL VARY ACCORDING TO FIELD CONDITIONS ENCOUNTERED. FOR OTHER LOCATION LIMITATIONS SEE PLATE NOS. W-10 & W-11.
- THE WATER METER BOX SHALL BE CO-POLYMER MATERIAL. IF THE BOX IS LOCATED IN A DRIVEWAY OR ROADWAY, THE BOX SHALL BE CONCRETE WITH HEAVY-DUTY ALL GALVANIZED (WITH REINFORCED GALV.) TOP. BOXES LOCATED IN DRIVEWAYS OR ROADWAYS MUST BE APPROVED BY JEA, PRIOR TO CONSTRUCTION.
- 3. FOR TYPICAL BOX INSTALLATION DETAILS SEE PLATE NO. W-6 THRU W-8.
- 4. FOR TYPICAL MANIFOLD INSTALLATION, SEE PLATE NO. W-9.

LARGE WATER METER INSTALLATIONS

JANUARY 2023

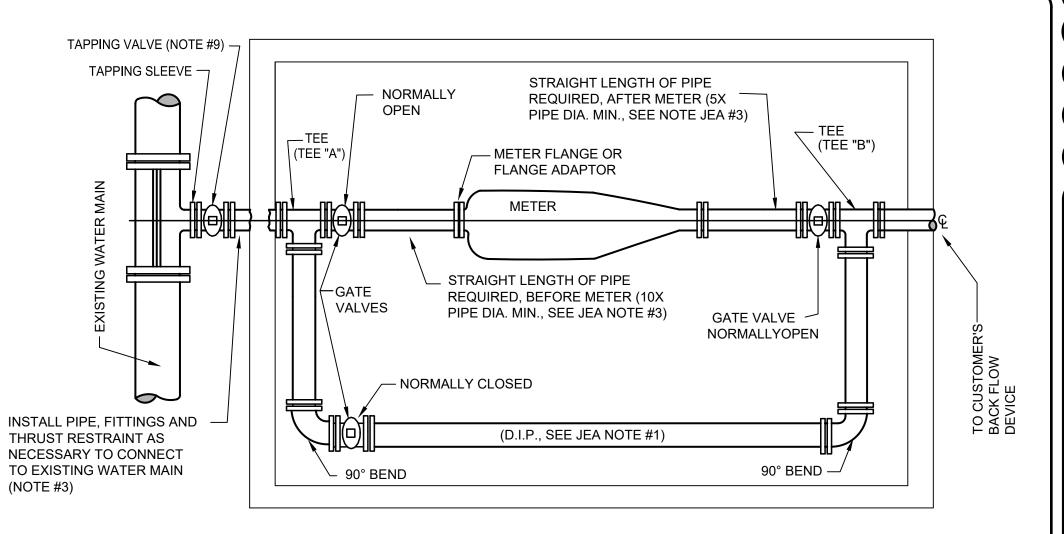
WATER METER BOX DIMENSIONS (3" - 20" METERS)

Mete Descrip		Polymer Concrete Box Non-Traffic Rated (Note 1)
Туре	SIZE	Width x Length x Depth (O.D.)
C-2 or T-2 Omni Style	3" 4" 6"	36" x 60" x 48" 36" x 60" x 48" 48" x 72" x 48"
Fire Meter	4" 6" 8" 10"	48" x 72" x 48" 48" x 96" x 48" 48" x 96" x 48" 48" x 96" x 48"
* Includ	les 6" Thic	k Bottom

- POLYMER CONCRETE BOXES SHALL ONLY BE PROVIDED IN NON-TRAFFIC (INCLUDING NOT IN DRIVEWAYS) LOCATIONS. FRP/ POLYMER CONCRETE METER BOX & COVER (BY ARMOURCAST PRODUCTS COMPANY): BOX AND THE EXTENSION IF REQUIRED, SHALL BE MANUFACTURED USING FIBERGLASS REINFORCED MATERIALS AND POLYMER CONCRETE. THE BODY OF THE BOX WITH NO BOTTOM SHALL BE MANUFACTURED USING FIBERGLASS REINFORCED MATERIALS, COMPRISED FROM POLYESTER RESINS AND FIBERGLASS MATTING. THE TOP COLLAR AND COVER SHALL BE MANUFACTURED FROM POURED POLYMER CONCRETE AND SHALL BE CONCRETE GREY COLOR. DURING THE MANUFACTURING PROCESS AND WHILE THE POLYMER CONCRETE IS IN A SOFTENED STATE, THE BODY SHALL BE MARRIED TO THE COLLAR BY INSERTING IT INTO THE COLLAR'S FORM. THE BOX AND COVER SHALL HAVE A LOAD RATING OF A8 (ASTM C857). THE BOX SHALL CONFORM TO THESE DESIGN FUNCTIONS AND DIMENSIONAL REQUIREMENTS AND INCLUDE LIFTING STUDS. BOX EXTENSIONS SHALL BE PROVIDED FOR ALL DEEP INSTALLATIONS. THE BOX SHALL BE A 2-PIECE ASSEMBLY INCLUDING MOLDED/RAISED JEA LOGO (LOGO ON BOTH PIECES). RECESSED HOLES (APPROXIMATELY 2" DIAMETER) DESIGNED TO FIT A SCHLUMBERGER ANTENNA USED WITH A METER INTERFACE UNIT (MIU). TWO COVER HOLD-DOWN BOLTS (1/2 - 13NC S.S. PENTAHEAD BOLTS). TORSION ASSISTED COMPONENTS AND TEXTURED NON-SKID SURFACE. A 2" PVC PLUG SHALL BE PROVIDED FOR EACH 2"-HOLE WHICH CAN BE COMPRESSED (TIGHT FIT) INTO THE 2" HOLE FOR TEMPORARY CLOSURE OF THE HOLE.
- 2. <u>FOR WATER METERS LARGER THAN 6" OR FIRE MAINS LARGER THAN 10" SIZE</u>, PLEASE CONTACT JEA METER SHOP FOR CONSTRUCTION REQUIREMENTS.

WATER METER BOX DIMENSIONS 3" - 20" METERS

JANUARY 2023 PLATE W-8



TO BE INSTALLED BY JEA (SEE NOTE #1) MIN. LAYING LENGTH REQUIRED 3" & 4" METERS......14' 6" & 8" METERS......20' 10" METERS.... (D.I.P. REQUIRED, SEE JEA NOTES #1 & #2)

CONTRACTOR NOTES:

- 1. FOR "PRE-PAVE" INSTALLATIONS, THE CONTRACTOR SHALL CONSTRUCT TAP AND WATER MAIN PIPING (PVC OR D.I.P.) BETWEEN TAPPING VALVE AND R/W PROVIDING AN UN-INSTALLED (OPEN) PIPE SECTION WITH A "MINIMUM LAYING LENGTH" AS SHOWN ABOVE FOR THE METER BOX AND BY PASS PIPING. THE FINISHED GRADE GRADE AT THE PROPOSED METER VAULT SHALL BE FLAT. CONTRACTOR SHALL PROVIDE METER BOX. JEA WILL INSTALL METER BOX AND METER ASSEMBLY (INCLUDING METER, THREE (3) GATE VALVES AND ASSOCIATED DUCTILE IRON PIPE ALL THE SAME SIZE).
- 2. FOR "FULL-TAP" METER ASSEMBLY, JEA WILL PROVIDE AND INSTALL THE TAP, METER BOX AND ALL OF THE ABOVE PIPING WITHIN THE R/W.
- 3. FOR BOX DETAILS SEE PLATES W-7 AND W-8.
- 4. ALL POTABLE PIPE AND FITTINGS TO BE SAME SIZE AS METER. IF UTILIZING HDPE PIPE.
- 5. MECHANICAL RETAINER GLAND RESTRAINTS OR MEGA LUGS SHALL BE UTILIZED TO RESTRAIN ALL JOINTS. THE USE OF THRUST BLOCKS, TIE RODS AND/OR BELL/ROD RESTRAINTS SHALL ONLY BE USED IF SPECIFICALLY APPROVE BY JEA MANAGEMENT.
- 6. PIPE FROM TAP TO R/W LINE SHALL BE RESTRAINED.
- 7. MAXIMUM COVER OF LARGE WATER METERS SHALL BE 36" (FROM TOP OF PIPE TO GRADE).
- 8. LOCATING WIRING REQUIRED FROM EXISTING WATER MAIN TO METER BOX. SEE PLATE W-44
- 9. FOR METERS LARGER THAN 10" SIZE, PLEASE CONTACT JEA METER SHOP FOR ADDITIONAL REQUIREMENTS
- 10. EACH SERVICE (FIRE MAIN, POTABLE WATER, ETC.) SHALL INCLUDE A SEPARATE ISOLATION VALVE (TAPPING VALVE OR GATE VALVE, BELOW GROUND TYPE) LOCATED PRIOR TO TEE "A". ALSO, UN-METERED FIRE MAIN SERVICES SHALL INCLUDE A SEPARATE ISOLATION VALVE (TAPPING VALVE OR GATE VALVE, BELOW GROUND TYPE).
- 11. FOR TYPICAL MANIFOLD INSTALLATION, SEE PLATE NO. W-9.
- 12. SERVICE SIZE SHALL BE SAME AS THE METER SIZE

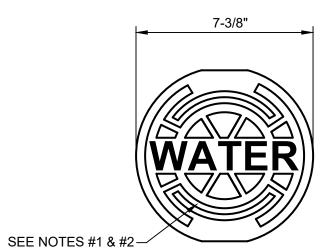
- 1. ALL POTABLE PIPING BETWEEN TEE FITTINGS (TEE "A" AND TEE "B") SHALL BE DR18 OR CLASS 150 D.I.P., INCLUDING BY-PASS PIPING.
- 2. ALL POTABLE VALVES AND FITTINGS TO BE DUCTILE IRON RESTRAINED JOINT.

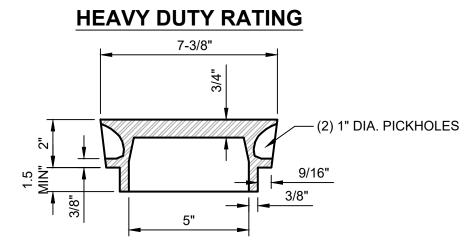
JANUARY 2023

- MINIMUM LENGTH OF TEN (10) PIPE DIAMETERS OF STRAIGHT PIPE TO BE INSTALLED ON INLET SIDE OF METER AND FIVE (5) PIPE DIAMETERS OF STRAIGHT PIPE TO BE INSTALLED ON OUTLET SIDE OF METER.
- 4. ALL METER INSTALLATIONS REQUIRE A TEST TEE TO BE INSTALLED BETWEEN THE METER AND VALVE ON CONSUMER SIDE OF METER.

WATER METER INSTALLATION DETAILS 3" - 20" METERS

7-3/8"





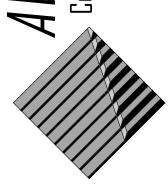
- 1. PAINT TOP OF THE COVER WITH ENAMEL PAINT (BLUE COLOR) FOR WATER.
- 2. FOR "REUSE" PAINT TOP PANTONE PURPLE.
- LID WEIGHT: APPROX. 12 LBS.

WATER SYSTEM VALVE BOX COVER

JANUARY 2023 PLATE W-16

Revisions By DRAINAGE REV'S COMMENTS

ADDED SIDEWALK P



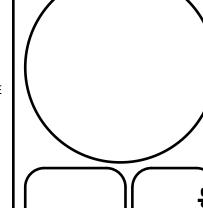


PLATE W-6

Date: 03/2023 Designer: HAV 19-014 Drawn: GCO

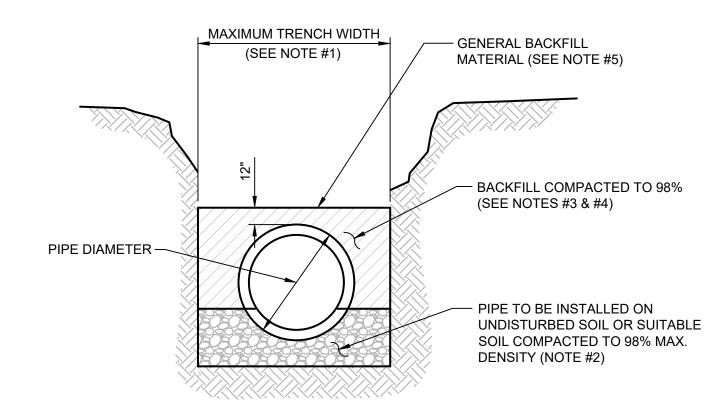
Scale:

Sheet:

- 1. THE DIMENSIONS SHOWN ARE FOR A STANDARD 36" WIDE BY 60" LONG BY 48" DEEP BOX. DIMENSIONS VARY ACCORDING TO METER SIZE & TYPE. SEE PLATE W-8. ALL DIMENSIONS ARE SHOWN IN INCHES.
- CONCRETE OR ASPHALT SLOPE: 1/8 IN./FT.
- GRADE TO SLOPE AWAY FROM METER BOX.
- 4. DO NOT INSTALL METER BOX IN AREA SUBJECTED TO FLOODING.
- 5. LOCATING WIRING REQUIRED. SEE DETAIL W-44.
- 6. THE LARGE BOXES REQUIRE TWO 2" RECESSED HOLES TO FIT ANTENNA.
- 7. A 4" THICK CONCRETE BOTTOM SHALL BE CONSTRUCTED DURING THE BOX INSTALLATION.

36" x 60" x 48" CO-POLYMER WATER METER BOX 3" & 4" METERS

PLATE W-7 JANUARY 2023



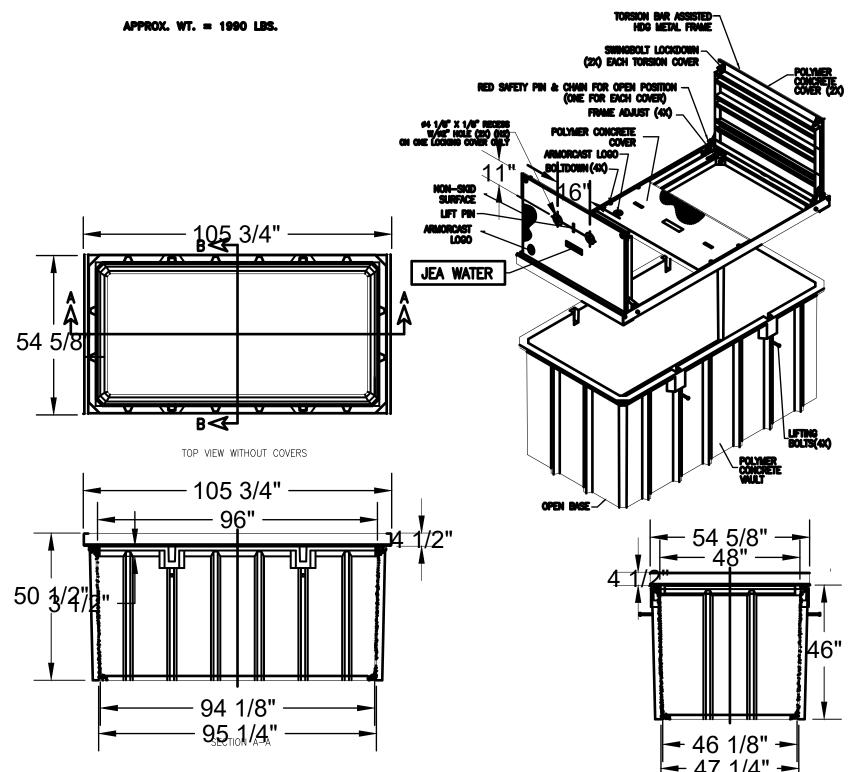
TYPICAL TRENCH

- 1. TRENCH SIDES SHALL BE APPROXIMATELY VERTICAL BETWEEN AN ELEVATION OF 1 FOOT ABOVE THE TOP OF THE PIPE AND THE CENTER LINE OF THE PIPE; OTHERWISE, TRENCH SIDES SHALL BE AS VERTICAL AS POSSIBLE OR AS REQUIRED BY OSHA STANDARDS. REFER TO THE MEASUREMENT AND PAYMENT SECTION (SECTION #801, PARAGRAPH #4)) TO DETERMINE MAXIMUM
- 2. BELL HOLE SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF THE PIPE TO REST ON THE UNDISTURBED TRENCH BOTTOM. BOULDERS OR LOOSE ROCKS LARGER THAN 3/4 INCH IN SIZE WILL NOT BE PERMITTED IN BACKFILL UP TO 1 FOOT
- 3. BACK FILL MATERIAL UP TO A LEVEL OF 1 FOOT OVER THE PIPE SHALL CONSIST OF AASHTO CLASS A-3 SOIL (SUITABLE SOIL) AND SHALL EXCLUDE CLAY MATERIALS AND LOOSE ROCKS LARGER THAN 3/4 INCH SIZE.
- 4. BACKFILL MATERIAL UP TO A LEVEL 1 FOOT OVER THE TOP OF PIPE OR BOTTOM OF STRUCTURES SHALL BE PLACED IN 6 INCH COMPACTED THICKNESS LAYERS AND SHALL BE COMPACTED TO 98% OF IT'S MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D1557.
- 5. SEE " EXCAVATION AND EARTHWORK", SECTION 408 FOR ADDITIONAL REQUIREMENTS INCLUDING REMOVAL AND REPLACEMENT OF UNSUITABLE SOILS, DEWATERING, COMPACTION REQUIREMENTS AND DENSITY TESTING OF COMPACTED SOILS.

OPEN CUT TRENCH FOR PRESSURE PIPE

IN CITY RIGHT -OF-WAY

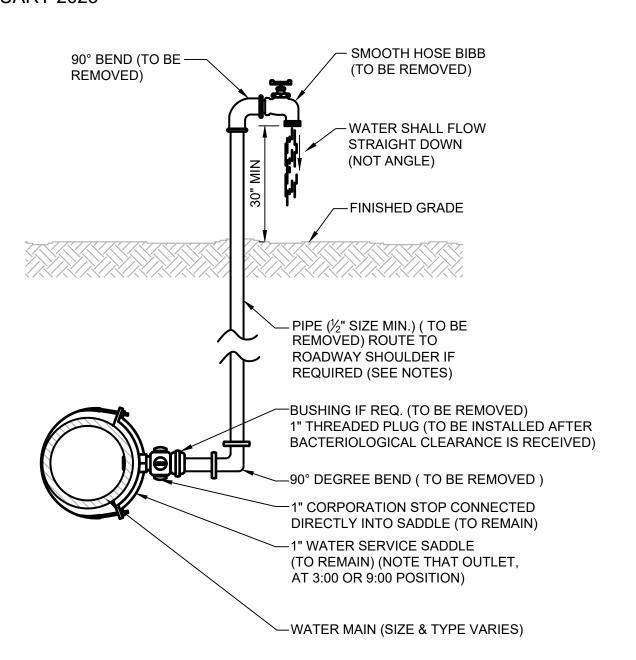
JANUARY 2023 PLATE W-42



- 1. THE DIMENSIONS SHOWN ARE FOR A STANDARD 48" WIDE BY 96" LONG BY 48" DEEP BOX. DIMENSIONS VARY ACCORDING TO METER SIZE & TYPE. SEE PLATE W-8. ALL DIMENSIONS ARE SHOWN IN INCHES.
- 2. CONCRETE OR ASPHALT SLOPE: 1/8 IN./FT.
- GRADE TO SLOPE AWAY FROM METER BOX.
- 4. DO NOT INSTALL METER BOX IN AREA SUBJECTED TO FLOODING.
- 5. LOCATING WIRING REQUIRED. SEE DETAIL W-44.
- 6. THE LARGE BOXES REQUIRE TWO 2" RECESSED HOLES TO FIT ANTENNA.
- 7. A 4" THICK CONCRETE BOTTOM SHALL BE CONSTRUCTED DURING THE BOX INSTALLATION.

48" x 96" x 48" CO-POLYMER WATER METER BOX 6" - 20" METERS

JANUARY 2023 PLATE W-7B



- 1. LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROADWAY SHOULDERS (NON-TRAFFIC AREAS).
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS (AS NOTED), AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
- 3. PIPE AND FITTINGS SHALL BE PVC (SCH. 40) OR GALV. MATERIAL
- 4. THE USE OF THE ABOVE CONSTRUCTION FOR A TEMPORARY SAMPLE POINT SHALL BE LIMITED TO AREAS WHERE A SAMPLE TAP BY ALTERNATIVE METHODS (SEE W-24) IS NOT FEASIBLE OR IF DIRECTED OTHERWISE BY JEA.
- 5. THE CONTRACTOR SHALL COMPLY WITH ALL JEA RULES AND POLICIES AS AS OUTLINED BY JEA'S ENVIRONMENTAL RESPONSE COORDINATOR (ERC) AND OTHER ASSOCIATED JEA STANDARDS.

TEMPORARY SAMPLE TAP

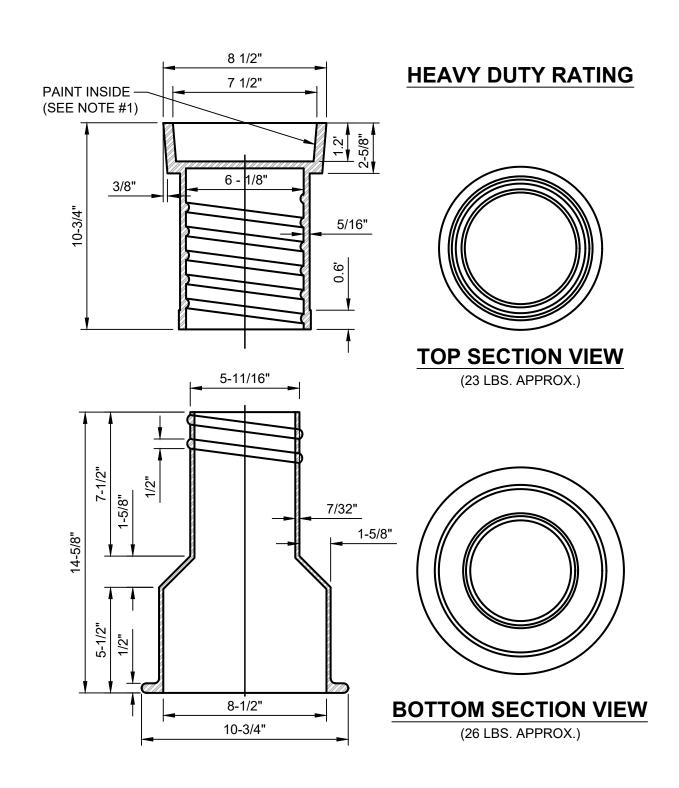
JANUARY 2023 PLATE W-25

APPLY GROUT TO FILL ANNULAR SPACE BETWEEN VALVE BOX AND CONCRETE PAD PAINT COVER AND INSIDE OF BOX BLUE - 24" ROUND PRECAST CONCRETE COMPACTED EARTH (TYP) -PAD 6" THICK (SEE SPEC) SET ON COMPACTED EARTH, (SEE NOTE #7) - VALVE BOX ADJUSTMENT (SEE NOTE #5) FINISHED GRADE VALVE BOX & COVER (TYP) -PROVIDE BLUE PAINT TO THE INSIDE OF THE TOP SECTION OF THE BOX (NOTE #5) - ELECTRONIC LOCATE BALL MARKER 6" PVC RISER PIPE -LOCATED WITHIN 12" FROM (LENGTH AS REQUIRED) RISER PIPE (NOTE #10) PROVIDE "V" CUT IN TOP OF 6' RISER PIPE FOR LOCATE WIRE GATE VALVE W/ 2" OPERATING ACCESS INTO VALVE BOX NUT (NOTE #4) PLASTIC DEBRIS SHIELD REQUIRED - PIPE W/ LOCATING WIRE ON ALL VALVES 12" AND SMALLER (SEE NOTE # 9) RESTRAINED MECHANICAL 12" (MIN) LAYER OF #57 STONE (REQUIRED FOR UNDISTURBED EARTH VALVES 20" AND LARGER, (NOTE #8)

- 1. FOR UNPAVED LOCATIONS, A PRECAST CONCRETE VALVE PAD SHALL BE PROVIDED AND INSTALLED FLUSH WITH GRADE. CONCRETE PAD IS NOT REQUIRED FOR VALVE LOCATED IN THE ROADWAY, UNLESS SHOWN OR NOTED OTHERWISE.
- 2. LOCATING WIRE IS REQUIRED ON ALL PRESSURE PIPING (SEE DETAILW-44).
- 3. A "V" CUT SHALL BE CARVED IN THE CURB CLOSEST/ADJACENT/(ASPHALT IF NO CURB) TO ALL BELOW GRADE VALVES. THE "V" CUT IS TO BE PAINTED BLUE WATER/PURPLE RECLAIMED.
- OPERATING NUT. OUTSIDE OF PAVED AREAS (GRASS), INSTALL VALVE AT A DEPTH TO ALLOW A 6" MINIMUM DISTANCE BETWEEN THE VALVE COVER AND THE TOP OF THE VALVE OPERATING NUT. OPERATING NUT/STEM EXTENSION SHALL BE PROVIDED (WHERE APPLICABLE) SO THAT THE
- THRU A "V" CUT IN THE TOP OF THE 6" PVC RISER PIPE FOR LOCATE WIRE ACCESS INTO VALVE BOX. THE LOCATE WIRES WITH A 24" LONG PIG-TAIL AT THE TOP SHALL BE CONNECTED TOGETHER WITH A WIRE NUT.
- 6. BRASS IDENTIFICATION TAG INDICATING "WATER", VALVE SIZE, DIRECTION AND TURNS TO OPEN & VALVE TYPE. PROVIDE A 1" HOLE IN BRASS TAG AND ATTACH TAG (TWIST WIRE AROUND TAG) TO THE END OF THE LOCATE WIRE. TAGS ARE NOT REQUIRED ON VALVES INSTALLED ON FIRE
- 7. IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POURED CONCRETE PAD W/2 #4 REBAR AROUND PERIMETER, MAY BE
- 8. GRAVEL SHALL BE PROVIDED UNDER ALL VALVES 20" AND LARGER. THE MINIMUM VERTICAL LIMIT OF GRAVEL IS 12" UNDER THE VALVE UP TO $\frac{1}{3}$ THE
- 9. FOR VALVES 12 INCH AND SMALLER, PROVIDE A WHITE OR BLACK PLASTIC DEBRIS SHIELD WHICH INSTALLS BELOW THE OPERATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE OPERATING NUT AND MINIMIZE INFILTRATION. SHIELD SHALL BE BY AFC, BOXLOK OR
- 10. ALL VALVES SHALL BE INSTALLED WITH AN ELECTRIC LOCATE MARKER. MARKER SHALL BE 4" DIA. COLOR CODED BALL MARKER (3M-1403XR FOR WATER AND 1408XR FOR RECLAIMED WATER).

WATER VALVE INSTALLATION DETAIL

JANUARY 2023 PLATE W-18

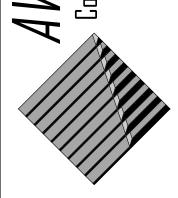


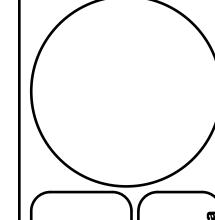
- 1. PAINT THE INSIDE OF THE TOP SECTION OF THE BOX WITH APPLICABLE COLOR (BLUE OR PURPLE)
- 2. HEAVY DUTY RATING (TOTAL WEIGHT APPROX. 50 LBS.)
- 3. REFERENCE SECTION 351, PARAGRAPH X.2

WATER SYSTEM VALVE BOX

JANUARY 2023 PLATE W-17

Revisions By DRAINAGE REV'S COMMENTS





Date: 03/2023 Designer: HAV 19-014

Job #: GCO Drawn:

Scale: Sheet:

LENGTH (L)	TO BE F	RESTRAI	NED				(SEE	PLA	ATE Nos.	38C & 3	8D F	OR ADD	ITIONAL DE	TAILS)
NOMINAL		HORIZON	TAL BENDS	5	45° B	OFFSETS BENDS	VALVES OR		REDU	CERS			TEES SEE NOTE 5	
PIPE SIZE (IN.)	90° BENDS L (FT.)	45° BENDS L (FT.)	22.5° BENDS L (FT.)	11.25° BENDS L (FT.)	`	LOWER L (FT.)	DEAD ENDS L (FT.)		SIZE (IN.)	L (FT.)		RUN SIZE (IN.)	BRANCH SIZE (IN.)	L (FT.)
4	21	9	5	3	17	3	47		6x4	34		4	4	F.O.
6	30	13	6	3	23	4	66		8x6	36		4	6 4 < LESS	10 F.O.
8	38	16	8	4	30	6	86		8x4 10x8	62 35		8	8	29
10	45	19	9	5	36	7	103		10x6	63		10	6 < LESS 10	F.O. 45
12	53	22	11	6	43	8	121		12x10	36		10	8	13
14	61	26	13	6	50	9	140		12x8	64		12	6 < LESS 12	F.O. 62
16	66	28	14	7	55	10	154		16x12 16x10	66 92		12	10 8 < LESS	32 F.O.
18	73	30	15	8	60	11	170		20x18	35		16	16	94
20	79	33	16	8	66	12	186		20x16	66			12 10	39 5
24	79	33	16	8	77	15	185		20x12	117			10 < LESS	F.O.
30	93	39	19	10	97	17	222		24x20	56		20	20	125
36	106	39	21	11	107	20	257		24x18 24x16	80 101			16 12	76 14
42	117	49	24	12	120	24	289		30x24	78		24	10 < LESS	F.O.
48	144	53	26						30x20	121		24	24 20	124 84
40	144	ეა	20	13	133	26	321		36x30	78			16 12 < LESS	36 F.O.
									00-04	444				· · · · ·

16 < LESS F.O.

16 < LESS | F.O

S < LESS

F.O. = FITTING ONLY

42x30 140

PVC PIPE RESTRAINT NOTES:

- 1. THIS SCHEDULE SHALL BE UTILIZED ON ALL WATER, SEWER FORCE MAIN OR RECLAIMED WATER SYSTEMS. ALL FITTINGS SHALL BE RESTRAINED TO LENGTHS INDICATED ON THE ABOVE SCHEDULE, AT A MINIMUM.
- ASSUMPTIONS: PVC PIPE, SAFETY FACTOR=1.5, TEST PRESSURE=150PSI, SOIL=GM OR SM, TRENCH TYPE 3, DEPTH OF COVER=30 INCHES FOR 20" AND SMALLER PIPE SIZE OR 36 INCHES FOR 24" AND LARGER PIPE SIZE.
- BENDS AND VALVES: SHALL BE RESTRAINED ON EACH SIDE OF FITTING.
- VERTICAL OFFSETS: ARE APPROX. 3 FEET COVER ON TOP AND APPROX. 8 FEET COVER ON BOTTOM. PER THE DETAILS, Lu IS THE RESTRAINED LENGTH FOR THE UPPER (TOP) LEVEL. Li IS THE RESTRAINED LENGTH FOR THE LOWER (DEEPER) LEVEL. ASSUME 45 DEGREE BENDS.
- TEES: TOTAL LENGTH BETWEEN FIRST JOINTS OR RESTRAINED LENGTH ON EITHER SIDE OF TEE (RUN) SHALL BE A TOTAL DISTANCE OF 30 FEET (MIN). SEE SCHEDULE ABOVE FOR RESTRAINT LENGTH ON TEE "BRANCH" LINE.
- 6. HDPE TO PVC TRANSITIONS: THE PVC PIPE SIDE SHALL BE RESTRAINED 35 FT (MIN).
- THE INSTALLATION OF BELL HARNESS RESTRAINTS AT PVC JOINTS (DR-18 & 25 PIPE) SHALL BE COMPLETED PER THE MANUFACTURERS RECOMMENDATION, WHICH INCLUDES NOT OVER TIGHTENING THE PARALLEL RODS/NUTS. THESE NUTS SHOULD ONLY BE SNUG TIGHT. THE HOME MARKS ON THE PIPE SHOULD ALWAYS BE VISIBLE AFTER THE RESTRAINT IS INSTALLED. OVERHOMING THE JOINT MAY CAUSE A FAILURE AT THE BELL RESULTING IN A SERVICE OUTAGE.

PVC PIPE RESTRAINT JOINT SCHEDULE

PLATE W-31A JANUARY 2023

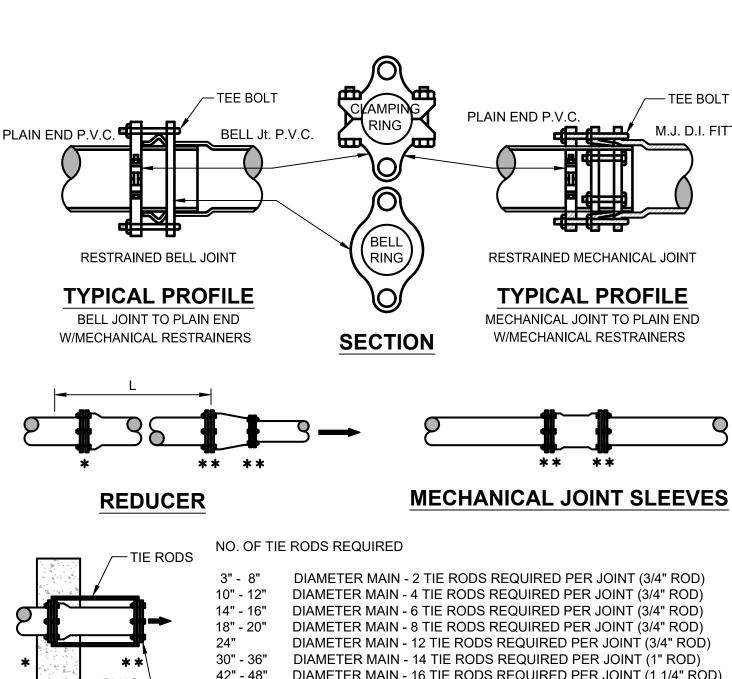
IOMINAL		HORIZONT	AL BENDS		45° B	OFFSETS	VALVES OR		REDU	CERS		TEE SEE NOTE 5	
PIPE SIZE (IN.)	90° BENDS L (FT.)		22.5° BENDS L (FT.)	11.25° BENDS L (FT.)	LIBBER	IOTE 4) LOWER L (FT.)	DEAD ENDS L (FT.)		SIZE (IN.)	L (FT.)	RUN SIZE (IN.)	BRANCH SIZE (IN.)	L (F1
4	17	7	4	2	11	3	30		6x4	22	4	4	F.O
6	24	15	5	3	15	4	42		8x6	23	4	6 4 < LESS	6 F.O
8	31	13	6	3	20	5	55		8x4 10x8	39 22	8	4 \ LE33	19
10	36	15	8	4	23	6	65		10x6	40		6 < LESS	F.C
12	42	18	9	5	27	7	77		12x10	23	10	10 8	29 9
14	48	20	10	5	31	7	87		12x8	41	- 10	6 < LESS	F.C
16	53	22	11	6	35	8	97		16x12	42	12	12 10	40 21
18	58	24	12	6	39	9	107		16x10 20x18	58 22	40	8 < LESS	F.C
20	63	27	13	6	42	10	118		20x16	42	16	16 12	60 25
24	63	27	13	7	49	12	118		20x12	74		10 8 < LESS	F.C
30	75	31	15	8	59	14	141		24x20	36	20	20	79
36	86	36	17	9	68	17	163		24x18	51		16 12	48 9
42	95	40	19	10	76	19	183		24x16 30x24	64 50	24	10 < LESS	F.C
48	117	43	21	11	84	21	203		30x20	77	24	24 20	79 54
40	117	43	21	11	04	21	203	l	36x30	50		16 12 < LESS	23 F.C
									36x24	89	30	30	10
									42x36 42x30	48 89		24 20	66 38
									48x42	48		16 12 < LESS	F.C
									48x36	88	36	36	12
												30 24	90 53
												20 16	2 ⁻
											42	12 < LESS 42	F.(
											42	36	14 11
												30 24	79 38
												20 16	3
												12 < LESS	F.C
											48	48 42	16 13
												36 30	10 66

DUCTILE IRON PIPE RESTRAINT NOTES:

- 1. THIS SCHEDULE SHALL BE UTILIZED ON ALL WATER, SEWER FORCE MAIN OR RECLAIMED WATER SYSTEMS. ALL FITTINGS SHALL BE RESTRAINED TO LENGTHS INDICATED ON THE ABOVE SCHEDULE, AT A MINIMUM.
- 2. ASSUMPTIONS: DUCTILE IRON PIPE (WITHOUT POLY WRAP), SAFETY FACTOR=1.5, TEST PRESSURE=150PSI, SOIL=GM OR SM, TRENCH TYPE 3, DEPTH OF COVER=30 INCHES FOR 20" AND SMALLER PIPE SIZE OR 36 INCHES FOR 24" AND LARGER PIPE SIZE. FOR D.I.P. W/POLY WRAP, USE RESTRAINT JOINT SCHEDULE FOR PVC PIPE.
- 3. BENDS AND VALVES: SHALL BE RESTRAINED ON EACH SIDE OF FITTING.
- 4. VERTICAL OFFSETS: ARE APPROX. 3 FEET COVER ON TOP AND APPROX. 8 FEET COVER ON BOTTOM. PER THE DETAILS, Lu IS THE RESTRAINED LENGTH FOR THE UPPER (TOP) LEVEL. Li IS THE RESTRAINED LENGTH FOR THE LOWER (DEEPER) LEVEL. ASSUME 45 DEGREE BENDS.
- 5. TEES: TOTAL LENGTH BETWEEN FIRST JOINTS OR RESTRAINED LENGTH ON EITHER SIDE OF TEE (RUN) SHALL BE A TOTAL DISTANCE OF 30 FEET (MIN). SEE SCHEDULE ABOVE FOR RESTRAINT LENGTH ON TEE "BRANCH" LINE.
- 6. HDPE TO D.I.P. TRANSITIONS: THE D.I.P. PIPE SIDE SHALL BE RESTRAINED 35 FT (MIN).

DUCTILE IRON PIPE RESTRAINT JOINT SCHEDULE

JANUARY 2023 PLATE W -31B



DIAMETER MAIN - 12 TIE RODS REQUIRED PER JOINT (3/4" ROD) DIAMETER MAIN - 14 TIE RODS REQUIRED PER JOINT (1" ROD) DIAMETER MAIN - 16 TIE RODS REQUIRED PER JOINT (1 1/4" ROD) DIAMETER MAIN - 18 TIE RODS REQUIRED PER JOINT (1 1/4" ROD) **DEAD - END THRUST COLLAR ANCHOR** TO BE USED INSTEAD OF TOTAL RESTRAINED LENGTH (OPTIONAL) SIZE AS PER THRUST BLOCK DETAIL (W-38). SEE DETAILS W-36 & W-37.

FIRE HYDRANT LATERAL GENERAL NOTE:

- 1. PAY ITEM " * " DENOTES A RESTRAINT WHICH IS PAID FOR ON A PER EACH BASIS.
- 2. PAY ITEM " ** " DENOTES A RESTRAINT WHICH IS INCLUDED IN THE UNIT PRICE BID FOR FITTING OR VALVE.
- INDICATES DIRECTION OF THRUST FORCE.

MECHANICAL RESTRAINT DETAILS -

MECHANICAL RESTRAINT DETAILS - II PLATE W-31D JANUARY 2023

UPPER BEND

BE A TOTAL DISTANCE OF 30 FEET (MIN.).

ANGLE OF 45° -

DIRECTION CHANGE

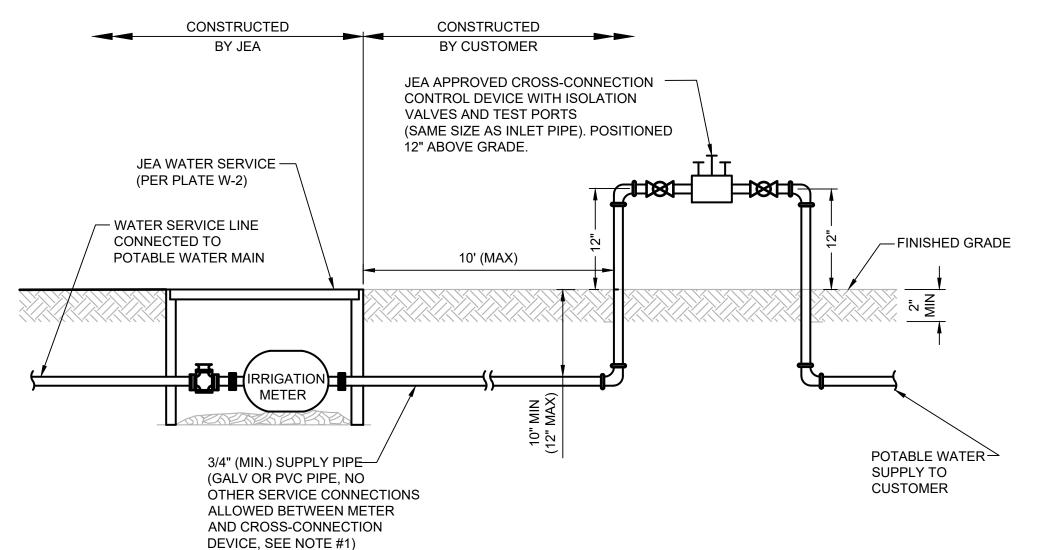
ANGLE OF 45°

DIRECTION CHANGE

1. TOTAL LENGTH BETWEEN FIRST JOINTS OR RESTRAINED LENGTH ON EITHER SIDE OF TEE (RUN) SHALL

3. PAY ITEM "**" DENOTES A RESTRAINT WHICH IS INCLUDED IN THE UNIT PRICE BID FOR FITTING OR VALVE.

2. PAY ITEM "*" DENOTES A RESTRAINT WHICH IS PAID FOR ON A PER EACH BASIC.



- 1. WATER SERVICE CONNECTIONS REQUIRE ABOVE GRADE REDUCED PRESSURE BACKFLOW PREVENTERS. (SEE PLATE W-15)
- 2. BACKFLOW PREVENTION DEVICES REQUIRED WHEN: IRRIGATION SYSTEMS - REQUIRED ON IRRIGATION SYSTEMS AT THE CONNECTION TO POTABLE SYSTEM RESIDENTIAL SYSTEMS - REQUIRED ON WATER SERVICE IF RECLAIMED SERVICE WATER AVAILABLE TO SITE COMMERCIAL SITES - REQUIRED ON ALL WATER SERVICES

INDUSTRIAL SITES - REQUIRED ON BOTH WATER AND RECLAIMED SERVICE CONNECTIONS.

- 3. RESIDENTIAL IRRIGATION SERVICES MAY UTILIZE AN ALTERNATE BACKFLOW PREVENTER LOCATION IF THE FOLLOWING CONDITIONS EXITS:
- 3.a. CUSTOMER HAS SUBMITTED A COMPLETED "CUSTOMER AFFIDAVIT" FORM AND 3.b. THERE ARE NO ADDITIONAL CONNECTIONS BETWEEN THE METER AND THE BACKFLOW PREVENTER, AND 3.c. THE ALTERNATE BACKFLOW LOCATION IS EASILY ACCESSIBLE TO JEA AND BACKFLOW TESTERS.
 - CROSS CONNECTION CONTROL DEVICE

JANUARY 2023 JEA IRRIGATION SERVICE CONNECTIONS PLATE W-15A

Revisions By ADDED SIDEWALK PR DRAINAGE REV'S CITY / GC COMMENTS LOWER BEND **VERTICAL OFFSET PROFILE**

- ANGLE OF DIRECTION CHANGE

HORIZONTAL BEND

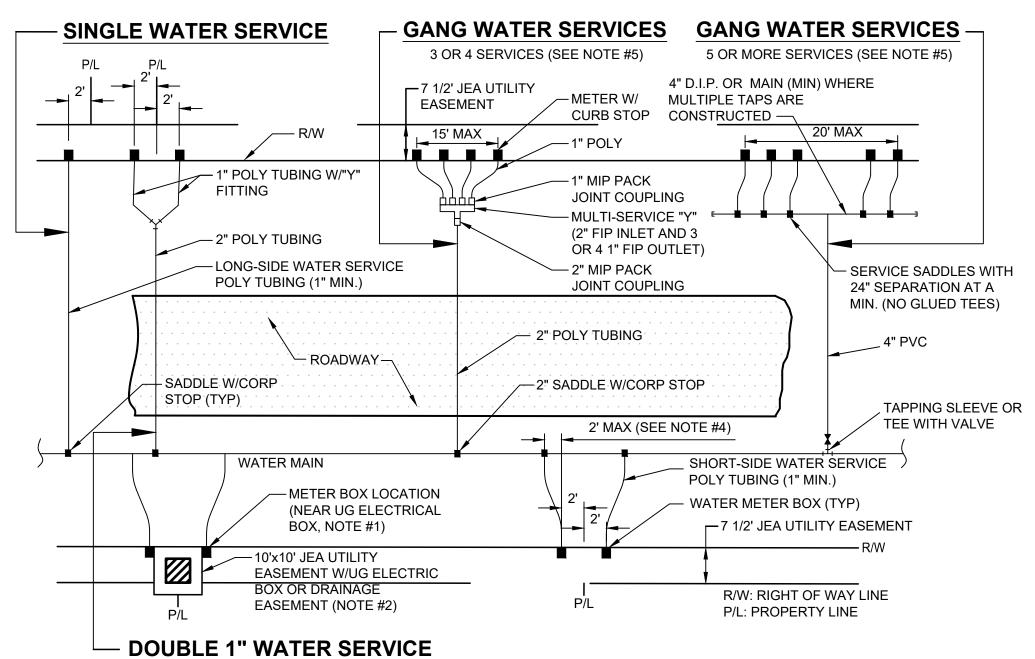
DEAD END

Date: 03/2023 Designer: HAV 19-014

Job #: GCO Drawn:

Scale: Sheet:

A LOCATE WIRE SHALL BE PLACED ON SERVICES 10FT OR GREATER.



(SEE NOTE #6)

- 1. THE SKETCHES ABOVE INDICATE TYPICAL WATER SERVICE AND METER BOX LOCATIONS. ACTUAL LOCATIONS OF BOXES MAY VARY SLIGHTLY ACCORDING TO FIELD CONDITIONS ENCOUNTERED. TYPICALLY, THE METER BOX SHALL LOCATED AT THE R/W LINE BUT INSIDE THE 7 1/2' ELECTRIC EASEMENT.
- 2. UNLESS SPECIFIED OTHERWISE BY THE APPLICABLE COUNTY (NASSAU, CLAY OR ST. JOHNS COUNTY), THE METER BOX SHALL BE LOCATED IN THE JEA 7 1/2' UTILITY EASEMENT, AND TWO FEET INSIDE OF THE PROLONGATION OF ONE OF THE SIDE PROPERTY LINES. IF A CONFLICT EXISTS WITH OTHER UTILITIES, THE METER BOX MAY BE ADJUSTED TO FOUR FEET (MAX.) INSIDE PROPERTY LINES (IN LIEU OF TWO FEET). UNLESS APPROVED OTHERWISE BY JEA, THE WATER METER BOX SHALL BE LOCATED IN NON-TRAFFIC AREAS (NOT IN SIDEWALKS OR DRIVEWAYS). IF THE METER BOX IS APPROVED BY JEA TO BE LOCATED IN A DRIVEWAY OR SIDEWALK, THEN THE CONSTRUCTION SHALL MEET STANDARD DETAIL NUMBERS W-3&4, AT A MINIMUM (SEE W-3 AND W-4 FOR THE REQUIREMENTS OF SPECIAL ORDER POLYMER BOX AND TOP). SET TOP OF BOX AT FINISHED GRADE. IF AN UNAPPROVED METER BOX IS IDENTIFIED BY JEA, THEN THE CONTRACTOR OR CUSTOMER SHALL BE RESPONSIBLE FOR THE COST OF RELOCATING ANY METER BOX WHICH IS LOCATED IN THE SIDEWALK OR DRIVEWAY OR THE COST TO PROVIDE THE CORRECT METER BOX. JEA SHALL APPROVE ALL DEVIATIONS TO THE ABOVE PRIOR TO CONSTRUCTION
- 3. IF DRAINAGE OR OTHER EASEMENT LOCATED BETWEEN LOTS, METER BOXES SHALL BE LOCATED AT THE EASEMENT LINE BUT OUTSIDE THE EASEMENT AREA.
- 4. FOR SINGLE SERVICES, THE HORIZONTAL DISTANCE (PERPENDICULAR TO THE MAIN)BETWEEN THE SERVICES SADDLE AND THE METER BOX SHALL BE 2 FEET MAXIMUM. FOR DOUBLE 1" SERVICES, THE 2" POLY MAIN SHALL BE LOCATED CENTERED BETWEEN THE TWO METER BOXES. LOCATE WIRE IS REQUIRED ON ALL SERVICES 10' OR GREATER IN LENGTH. IF LOCATE WIRE IS REQUIRED, THE WIRE SHALL RUN FROM THE METER BOX (W/ PIG TAIL) TO THE MAIN (DEAD END SHALL BE TAPED WITH NO CONNECTION TO MAIN WIRE WITH THE LAST 24 INCHES STRIPED OF INSULATION/BARE WIRE AS GROUND). ALL EXCEPTIONS TO THIS REQUIREMENT MUST BE APPROVED BY JEA. THIS WILL ASSIST IN LOCATING EXISTING SERVICE LINES IN THE FUTURE
- 5. GANG WATER SERVICES: FOR 3 OR 4 SERVICES IN ONE AREA, A DUCTICLE IRON PIPE (D.I.P.) WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT-SIDE OR LONG SIDE SERVICES WHERE SHOWN ON THE DRAWINGS. LOCATE WIRE SHALL EXTEND FROM ONE METER BOX TO CORP STOP AT WATER MAIN. FOR 5 OR MORE SERVICES IN ONE AREA, A WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT-SIDE OR LONG SIDE SERVICES WHERE SHOWN ON THE DRAWINGS (TAPS STAGGERED AND AT 2 FEET ON CENTER-MIN). FOR WATER SUPPLY HEADERS WHERE 5 OR MORE TAPS ARE CONSTRUCTED, THE HEADER PIPE SHALL BE 4" AT A MINIMUM. EXAMPLE: CONSTRUCT A 4" MAIN PVC CROSSING THE STREET FOR 5 RESIDENTIAL CUSTOMERS, UTILIZING 4" DIP, 4" PIPE, 4"X1" SADDLES AND 1" CORP STOPS (NO GLUED TEE FITTINGS). THE 4" OR LARGER D.I.P. WATER MAIN MUST BE SIZED AND DESIGNED BY THE P.E. ENGINEER.
- 6. DOUBLE 1" WATER SERVICES IS ALLOWED FOR SHORT SIDE OR LONG SIDE SERVICES AND WHERE SHOWN ON THE DRAWINGS.
- 7. A 1" IRRIGATION SERVICE MAYBE TAPPED INTO THE (1" MIN) DOMESTIC WATER SERVICE LINE (WHICH SERVES THE SAME CUSTOMER) UTILIZING A 1" BRONZE "Y" FITTING. (IN AREAS WHERE NO RECLAIMED WATER IS AVAILABLE).
- 8. No 2" AND SMALLER WATER SERVICE TAPS PERMITTED ON WATER MAINS WHICH ARE 20" AND LARGER SIZE.
- 9. RECLAIMED WATER METER BOXES OR SERVICES SHALL BE CONSTRUCTED SIMILAR TO THE ABOVE AND SHALL BE LOCATED, AT A MIN. OF 10' FROM THE POTABLE WATER SERVICE, AND/OR BOX AND NOT ALLOWED IN CONCRETE OR ASPHALT UNLESS APPROVED OTHERWISE BY JEA.
- 10. SERVICE SIZE SHALL BE SAME AS THE METER SIZE.

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WATER OR RECLAIM SERVICE INSTALLATIONS

2" AND SMALLER METER

PLATE W-1

1½"x ¾6" STEEL GUSSET PLATE WELDED TO NO WELDS PAST ENDS OF GUSSET BACKSIDE OF TOP PLATES. ALL GUSSET PLATES ALIGNED WITH EACH OTHER RECESSED HOLE DESIGNED TO FIT THE METER TOUCH READ PAD WATER SERVICE MARKER-16" STEEL NON-SKID TOP, PRIMED REQUIRED FOR NEW AND PAINTED BLACK WITH ROUNDED KEY HOLE (1 REQ'D **DEVELOPMENT AREAS** CORNERS (WITHIN 1" FROM (SEE NOTE #4) GUSSET) - 2" HOLE DESIGNED TO SET AT FINAL GRADE (NOTE #7)-FIT THE METER TOUCH CO-POLYMER METER BOX — READ PAD (TWO REQUIRED CENTER & COVER (NOTE #1) BETWEEN GUSSETS) PROVIDE 2" PVC PLUGS TO CLOSE METER COUPLING (NOTE #4)— - PROVIDE 2" PVC PLUG TO CLOSE HOLES WHICH ARE NOT USED OR HOLES WHICH ARE NOT USED OR WHERE NO METER IS INSTALLED (MAX) WHERE NO METER IS INSTALLED DURING THE CONSTRUCTION PERIOD LOCATE WIRE PIG TAIL — DURING THE CONSTRUCTION PERIOD END (4' ABOVE GRADE) (NOT-IN-USE SERVICE). (NOT-IN-USE SERVICE). - CORPORATION STOP REQUIRED ON (SEE NOTE #1) (SEE NOTE #4) ALL SERVICES REGARDLESS OF SIZE. (CONNECTED DIRECTLY INTO SADDLE) CONNECTION TO CUSTOMER'S WATER MAIN AND BACKFLOW — FLARED OUTWARD SET CURB STOP AS -PREVENTER (IF APPLICABLE) WALLS (SEE NOTE #4) CLOSE TO WALL ¹/₂"AS SERVICE SADDLE -— SET METER ON UNDISTURBED POSSIBLE (2 MAX) (SEE NOTE #2) OR COMPACTED SOIL POLYETHYLENE WATER SERVICE LINE (100LF MAX., NOTE #3) ACCEPTABLE RANGE FOR TAPS 0°-45° - DISTRIBUTION MAIN

PLATE W-2

1. SEE PLATE W-1 FOR METER LOCATION REQUIREMENTS.

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- 2. SINGLE BAND SADDLES SHALL BE UTILIZED ON NEW 1" WATER SERVICES WHICH ARE INSTALLED ON A DRY 10" SIZE OR SMALLER WATER MAIN (NEW WATER MAIN CONSTRUCTION). FOR WET TAPS OR WATER MAINS 12" SIZE AND LARGER, A DOUBLE BAND SADDLE IS REQUIRED. BRASS SADDLES MAY BE UTILIZED ON NEW 1 INCH AND SMALLER WATER SERVICES WHICH ARE INSTALLED ON A DRY 10 INCH OR SMALLER PVC WATER MAIN.
- 3. NO OPEN CUT UNDER ROADWAY PAVING ALLOWED UNLESS THE ROADWAY IS BEING RECONSTRUCTED OR IF DIRECTED OTHERWISE BY J.E.A. CONSTRUCT POLY LINE WITH 24" (MIN.) COVER UNDER ROADWAYS. THE POLY WATER SERVICE LINE SHALL BE SAME SIZE AS THE METER (1" MINIMUM) AND BE INSTALLED PERPENDICULAR TO THE MAIN AND NOT EXCEED 100LF UNLESS APPROVED OTHERWISE BY JEA.
- 4. INSTALL PVC PLUG IN ALL CURB STOPS IF WATER SERVICE IS "NOT IN USE" (I.E.: IF NO METER IS INSTALLED). WATER SERVICES SERVING VACANT LOTS (SERVICE NOT IN USE), SHALL INCLUDE A "W" CUT INTO THE CURB (CLOSEST TO THE METER BOX), AND PAINTED BLUE (PAINTED PURPLE FOR RECLAIMED WATER). IN ADDITION, FOR NEW DEVELOPMENT AREAS WHERE THE WATER SERVICE IS "NOT IN USE", A LANDSCAPE TIMBER OR 3x3 MIN. P.T. POST (TOP PAINTED BLUE OR PURPLE FOR RECLAIMED WATER). THE REMOVAL OR TRANSFER OF A WATER SERVICE SHALL INCLUDE BRASS METER COUPLINGS (HEX ON BARREL TYPE).
- 5. NO 2" AND SMALLER WATER SERVICE TAPS PERMITTED ON WATER MAINS WHICH ARE 20" AND LARGER SIZE
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE METER OR ELECTRONIC DEVICES IF DAMAGED BY THE CONTRACTOR
- 7. METER BOX AND TOP SHALL BE CLEAR OF ALL DEBRIS TO ALLOW FULL ACCESS TO BOX (i.e. NO DIRT, TRASH OR OTHER DEBRIS PLACED ON TOP OF BOX).
- 8. LOCATE WIRING REQUIRED ON ALL SERVICES 10' OR GREATER IN LENGTH. SEE PLATE W-44.

WATER SERVICE DETAIL- 2" AND SMALLER METER

JANUARY 2023 PLATE W-4

POLYMER BOX

- 1. THE STANDARD BOX (FLARED OUTWARD WALLS) & TOP (2 HOLE) SHALL BE MADE OF POLYMER CONCRETE. (SIMILAR TO OLD BROOKS SERIES 65). BOX WALLS SHALL BE FIBERGLASS. BOX, INCLUDING THE INSIDE LIP, AND TOP SHALL MEET A-8 (ATSM C857) LOAD RATING.
- 2. ALL SIZES SHOWN ARE IN INCHES AND ARE APPROXIMATE SIZES.

HOLE (BOTH ENDS)

- 3. POLYMER BOX APPROXIMATE WEIGHT 50lbs. POLYMER TOP APPROXIMATE WEIGHT 50lbs. SEE CONSTRUCTION DETAIL W-4A FOR MANUFACTURING DETAIL FOR TWO HOLE COVER.
- 4. UNLESS APPROVED OTHERWISE IN WRITING BY JEA, ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS (NOT IN THE ROADWAY, DRIVEWAYS OR SIDEWALKS).
- 5. METAL TOPS MAY BE UTILIZED IF SPECIFICALLY APPROVED BY A JEA MANAGER OR BY JEA METER O&M STAFF.

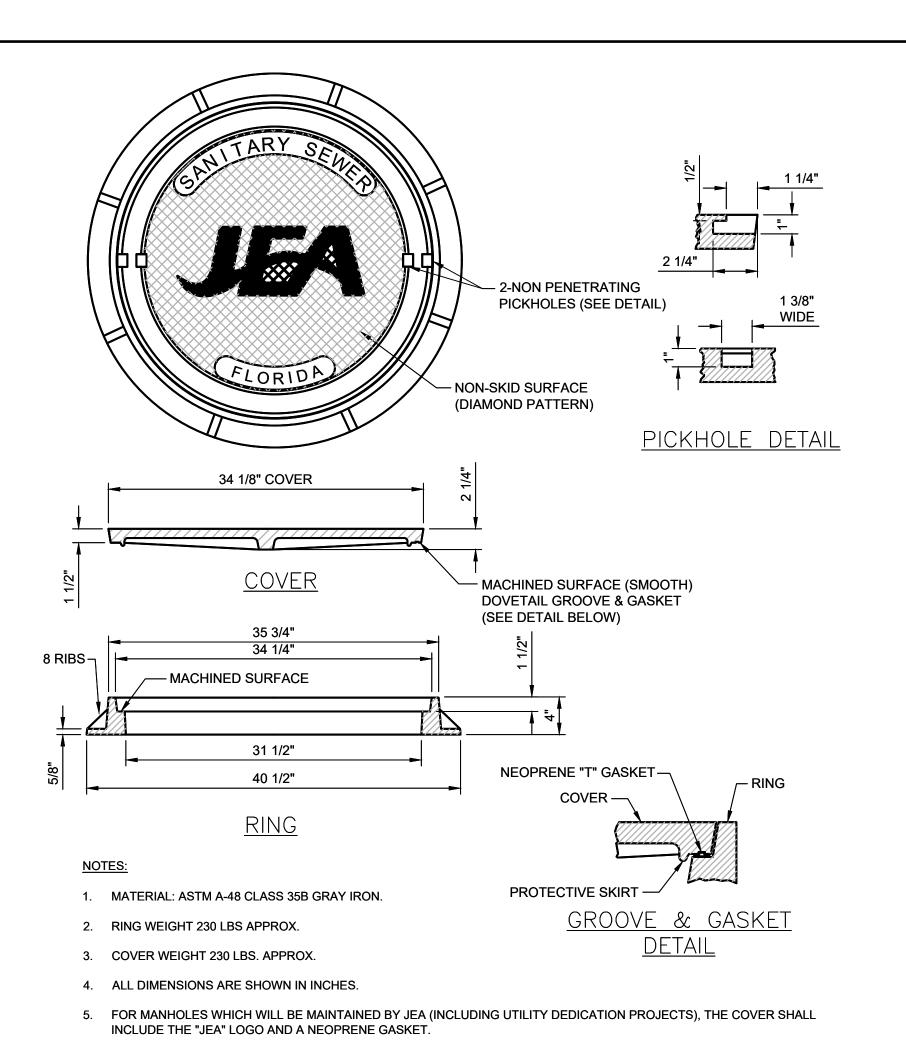
WATER METER BOX & COVER FOR 1-1/2" AND 2" METERS

DRAINAGE REV'S COMMENTS

Date: 03/2023 Designer: HAV

19-014 Job #: Drawn: GCO

Scale:



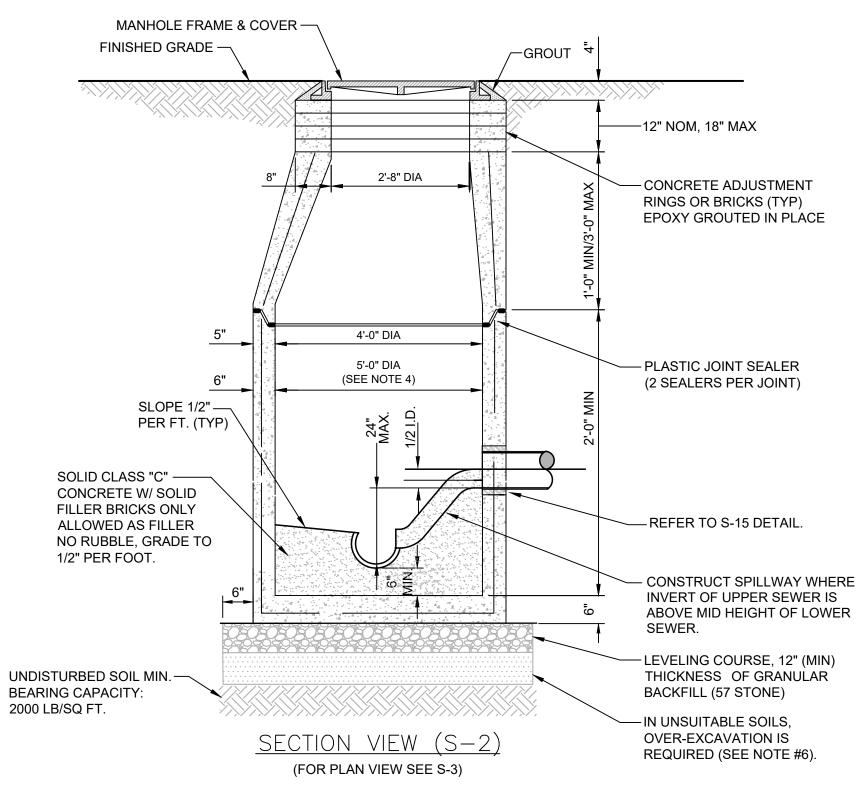
SANITARY SEWER MANHOLE FRAME AND COVER

6. FOR MANHOLES WHICH WILL BE MAINTAINED BY PARTIES OTHER THAN JEA (SUCH AS PRIVATE SEWER COLLECTION

"SANITARY SEWER" GENERIC LETTERING (NO "JEA" LOGO OR NEOPRENE GASKET).

JANUARY 2023

SYSTEMS, PRIVATE (FORCE MAIN) PUMP OUT BOX AND SYSTEMS NOT MAINTAINED BY JEA), THE COVER SHALL INCLUDE



NOTES:

PLATE S-1

—FILL ALL LIFTING HOLES

- 1. PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL
- 2. THE INTERIOR AND EXTERIOR OF MANHOLE AND ADJUSTING RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
- 3. IF SPECIALTY LINER IS TO BE INSTALLED ON INSIDE SURFACE OF MANHOLE, THE BITUMINOUS WATERPROOFING MATERIAL SHALL BE OMITTED ON THE INSIDE.
- 4. JUNCTION MANHOLE (CLOSEST TO WETWELL) SHALL BE 5' DIA WITH SPECIALTY LINER.

INSIDE DROP FOR 8"

HIGH-LINE (NOTE 2)

LEVELING COURSE 12" (MIN.)

THICKNESS OF GRANULAR

BACKFILL (#57 STONE)

4' DIA REINFORCED-

CONCRETE MANHOLE

6" (TYP.)

SOLID CLASS "C"-

FILLER, NO RUBBLE.

CONCRETE, SOLID FILLER

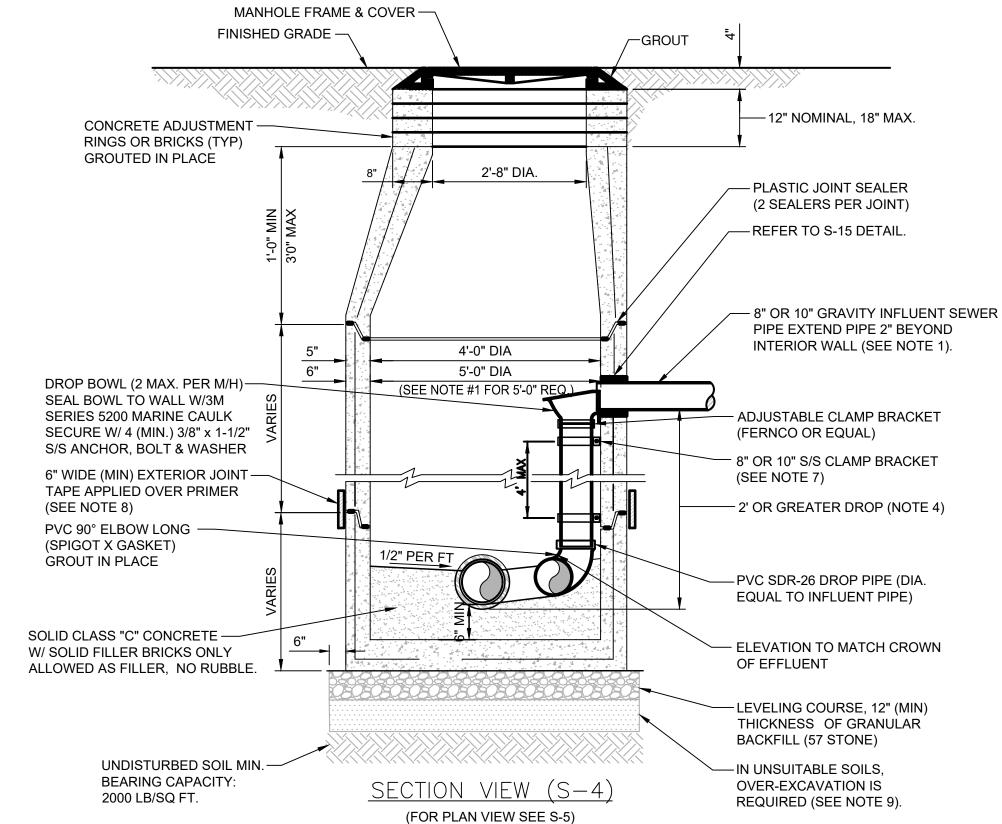
GRADE TO 1/2" PER FOOT

BRICKS ONLY ALLOWED AS

- 5. ALL MANHOLE JOINTS BELOW THE TOP COVER SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (WITH PRIMER). TAPE ON THE CONE SECTION IS OPTIONAL. SEE PLATE S-17.
- 6. IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN.) AND BACKFILLED WITH AASHTO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).

JANUARY 2023 PLATES S-2, S-3

SANITARY SEWER CONCRETE TYPE "A" MANHOLE 8"-21" SEWERS



CUT OFF PIPE

AT WALL LINE (TYP)

REFER TO S-15 DETAIL.

- 8" OR 10" GRAVITY INFLUENT

SEWER PIPE (SEE NOTE: 1)

DROP BOWL (2 MAX PER M/H) SEAL BOWL TO

WALL W/ 3M SERIES 5200 MARINE CAULK &

CHANNELS AND EFFLUENT PIPE SHALL BE 90° OR

2. THE 8" HIGH-LINE, WHERE UTILIZED, SHALL ENTER

THE MANHOLE OFF-CENTER AS SHOWN ABOVE.

GREATER UNLESS APPROVED OTHERWISE BY JEA.

SECURE W/ 4(MIN.) 3/8" x 1-1/2" 304L S/S

EXTEND PIPE 2" BEYOND

INTERIOR WALL

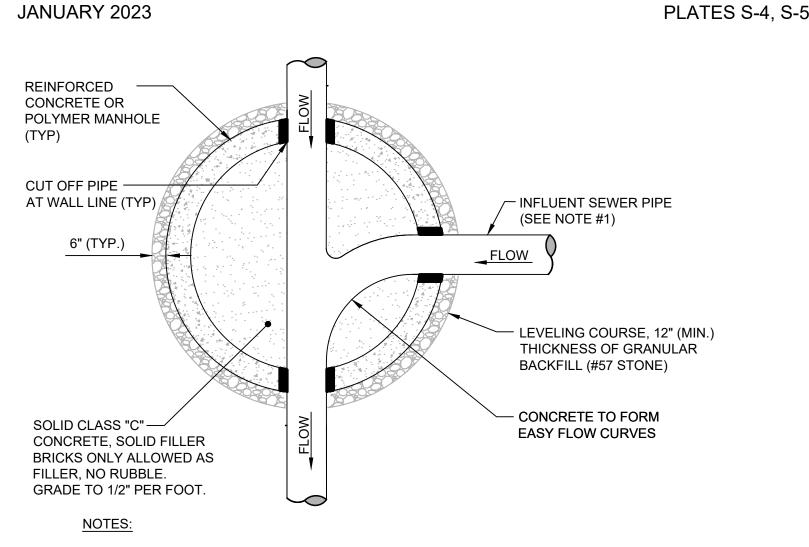
BOLT, ANCHOR & WASHER

1. THE ANGLE BETWEEN ALL INFLUENT FLOW

(SPIGOT & GASKET)

- THIS ASSEMBLY IS FOR 8" OR 10" GRAVITY INFLUENT LINES ONLY. NEW CONSTRUCTION ONLY NO FORCE MAINS LARGER THAN 6". MAXIMUM OF 2 INSIDE DROP BOWLS PER MANHOLE. A 5'-0" DIA. MANHOLE (6" THICK WALLS) IS REQUIRED IF TWO INSIDE DROPS ARE CONSTRUCTED WITH ONE OR BOTH BEING 10" SIZE. DROP BOWL BY RELINER OR APPROVED EQUAL REQUIRED. THE INSIDE DROP FOR AN 8" HIGH-LINE SHALL BE CONSTRUCTED SIMILAR TO ABOVE (SEE PLATE S-5).
- PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH 4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND COATED WITH BITUMINOUS WATERPROOFING MATERIAL.
- THE INTERIOR AND EXTERIOR OF MANHOLE AND THE INTERIOR OF ADJUSTMENT RINGS SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
- 4. TYPE "B" MANHOLE MUST BE USED FOR 2' OR GREATER INFLUENT PIPE DROPS.
- 5. THE DROP BOWL ASSEMBLY SHALL BE INSTALLED PRIOR TO APPLICATION OF SPECIALTY LINING MATERIAL.
- A TYPE "D" MANHOLE SHALL BE UTILIZED WHEN THREE OR MORE (2' OR GREATER) DROPS ARE INVOLVED OR WHEN INFLUENT PIPES AREA
- ADJUSTABLE CLAMPING BRACKET (MIN. 2 PER DROP BOWL ASSY). 1-1/2" WIDE, 11 GA. W/ 3/8" DIA. 18-8 PINCH BOLTS AND NUTS. SECURE TO M/H WALL WITH (2) 3/8" X 1" BOLT, ANCHOR & WASHER PER BRACKET ASSY. ALL 304 OR 316 STAINLESS STEEL MATERIALS.
- ALL M/H JOINTS BELOW THE TOP CONE SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/PRIMER). TAPE ON THE CONE
- 9. IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN.) AND BACKFILLED WITH AASHTO CLASS A-3 SOIL (COMPACTED TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).

SANITARY SEWER CONCRETE TYPE "B" MANHOLE 8"-10" SEWERS



1. THE ANGLE BETWEEN ALL INFLUENT FLOW CHANNELS AND EFFLUENT PIPE SHALL BE BETWEEN 90° - 180° UNLESS OTHERWISE APPROVED BY JEA.

> PLAN VIEW (S-3) (FOR SECTION VIEW SEE S-2, S-2A)

JANUARY 2023 PLATE S-3

PRECAST MANHOLE -W/NON SHRINKING GROUT - FILL VOID AREAS WITH AND COAT W/BITIMINOUS PRECAST MANHOLE: NON-SHRINK GROUT WATERPROOFING MATERIAL CUT PIPE FLUSH TO EDGE OF INTERIOR WALL FILL ALL EXTERIOR VOIDS AND **ENCAPSULATE ALL EXTERIOR** MANHOLE INVERT FILL INTERIOR VOID AREAS W/ PARTS OF THE RUBBER BOOT EPOXY PACKING GROUT AND COAT CREATING A COLLAR W/ NON WITH APPROVED EPOXY COATING SHRINK GROUT MANHOLE INVERT GRAVITY SEWER PIPE - GRAVITY SEWER PIPE . SOLID CLASS "C" CONCRETE W/ SOLID FILLER BRICKS ONLY PVC SAND SLEEVE/COUPLING ALLOWED AS FILLER NO RUBBLE (SAME SDR AS PIPE) PRECAST CONCRETE MANHOLE PVC SAND SLEEVE RUBBER BOOT, DOUBLE BANDED, 316 S/S CLAMPS, MEETING THE ASTM C923 STANDARD. Kor-N-Seal® I EX SERIES (FOR EXISTING AND NEW M/H CONSTRUCTION) CONNECTOR WITH DOUBLE STAINLESS STEEL BANDS OR EQUAL. RUBBER BOOT (FOR NEW M/H CONSTRUCTION ONLY, MAXIMUM DEPTH 15FT)

SEAL W/ COAL TAR MASTIC OR-PREMOLDED PLASTIC JOINT DIA OF MANHOLE VARIES SEALER (2 PLACES PER JOINT) - VARIES W/ MANHOLE DIA SEE S-17 FOR DETAILS GROOVE TO BE FORMED -6" (MIN) EXTERIOR JOINT TAPE — WITH AN ACCURATE APPLIED OVER PRIMER (TYP) BELL RING FORM - #4-6" O.C. E.W. - POURED IN PLACE 4,000 LB P.S.I. CONCRETE PAD

MANHOLE BOTTOM

THE USE OF THE POURED IN PLACE MANHOLE BOTTOM SHALL BE MINIMIZED

AND SHALL BE SPECIFICALLY APPROVED BY JEA PRIOR TO CONSTRUCTION.

CONCRETE MANHOLE PIPE CONNECTION DETAIL

JANUARY 2023 PLATE S-15

PLATE S-5 JANUARY 2023

PLAN VIEW (S-5)

(FOR SECTION VIEW SEE S-4)

Revisions By

ADDED SIDEWALK PR

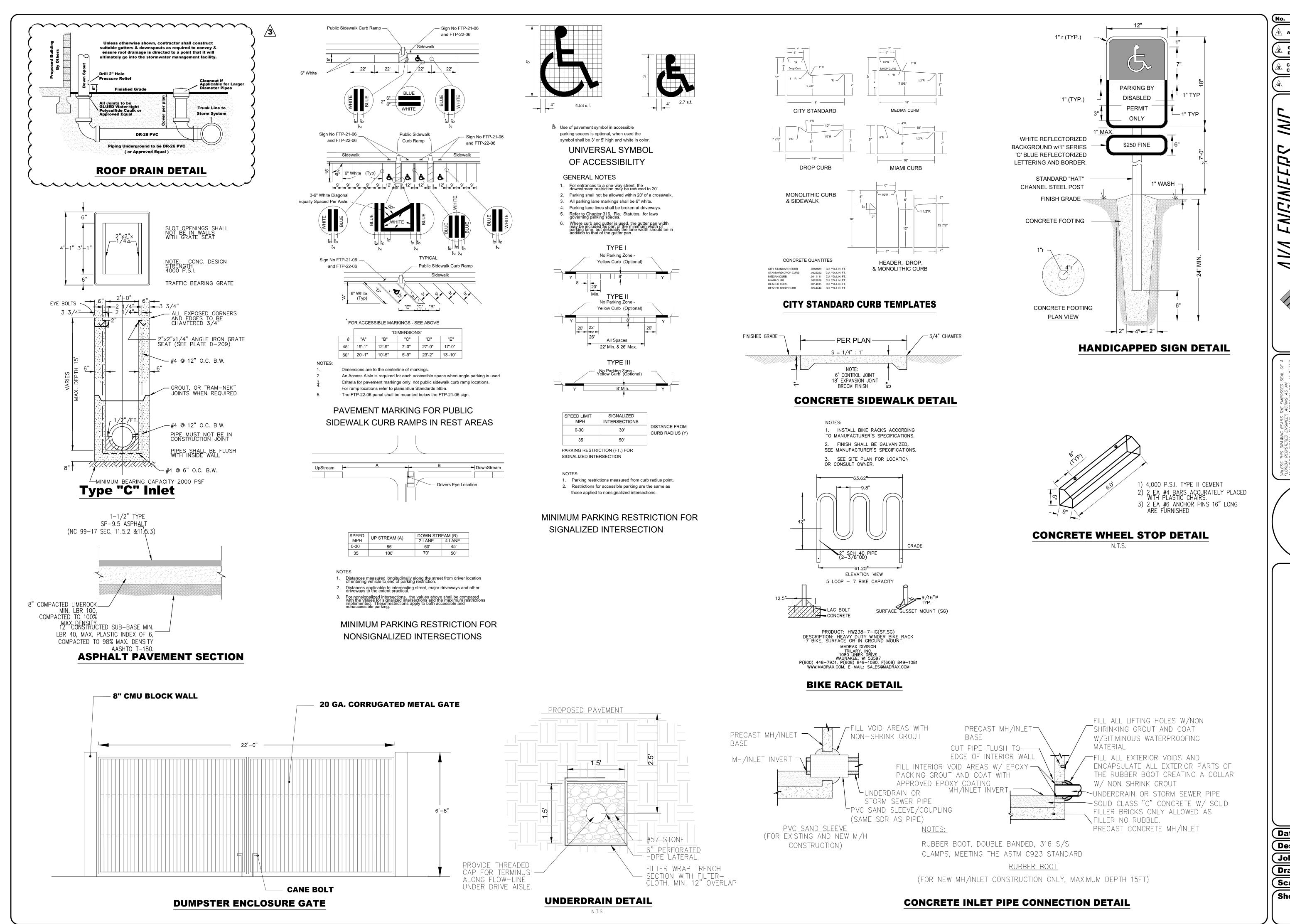
GRADING AND

COMMENTS

DRAINAGE REV'S

Date: 03/2023 Designer: HAV 19-014 GCO

Job #: Drawn: Scale:



Revisions By ADDED SIDEWALK PR **GRADING AND** DRAINAGE REV'S CITY / GC COMMENTS

Date: 03/2023

Designer: HAV 19-014 Job #: **Drawn:** GCO

Scale: Sheet:

EROSION AND SEDIMENT CONTROL NOTES

. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) HAS ISSUED TO FLORIDA A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR CERTAIN STROMWATER DISCHARGES. THIS NPDES PROGRAM REQUIRES THAT IF THE MAGITUDE OF CONSTRUCTION SCTIVITIES COVERED BY THE GENERAL PERMIT ARE ABOVE CERTAIN THRESHOLDS, THEN A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED. ALSO INVOLVED ARE CERTAIN CERTIFICATION, NOTIFICATION, INSPECTION AND RECORD KEEPING IN ACCORDANCE WITH THE EPA PUBLICATION EPA 832-R-92-005 DATED SEPT., 1992 & TITLED "STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES-DEVELOPING POLLUTION PREVENTION PLANS & BEST MANAGEMENT PRACTICES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE IF THIS PROJECT REQUIRES AN NPDES APPLICATION AND NOTIFICATION AND, IF NECESSARY, PREPARE, SUBMIT AND MAINTAIN THE REQUIRED DOCUMENTATION IN COMPLIANCE WITH THE EPA GUIDELINES AND

2. THESE PLANS INDICATE THE MINIMUM EROSION AND SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUILDELINES AND MAY NEED TO INSTALL ADDITIONAL

3. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS, AND THE ST. JOHNS RIVER MANAGEMENT DISTRICT PERMIT AND REGULATIONS. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER MANAGEMENT DISTRICT.

4. ALL EXCAVATIONS AND EARTHWORK SHALL BE DONE IN A MANNER TO MINIMIZE WATER TURBIDITY AND POLLUTION. DISCHARGE SHALL BE CONTROLLED AND REROUTED THROUGH HAY FILTERS, SILTATION DIAPERS AND SUMPS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION, CORRECTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION IN ACCORDANCE WITH CHAPTER 17-3, FLORIDA ADMINISTRATIVE CODE. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "FLORIDA DEVELOPEMENT MANUAL — A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 6.

5. THE CONTRACTOR SHALL PAY FOR ANY WATER QUALITY CONTROL VIOLATIONS FROM ANY AGENCY THAT RESULTS IN FINES BEING ASSESSED TO THE OWNER BECAUSE OF THE CONTRACTOR'S FAILURE TO ELIMINATE TURBID RUNOFF FROM LEAVING THE SITE AND RAISING BACKGROUND LEVELS. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM

6. QUALITY DEGRADATION.

'. ADDITIONAL PROTECTION — ON SITE PROTECTION, AS MAY BE DEEMED NECESSARY DURING CONSTRUCTION SHALL BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORSEEN CONDITIONS OR ACCIDENTS,

8. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.

9. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

10. BALES SHALL BE PLACED LENGTHWISE IN SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE

11. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 8 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. LOOSE FIBER SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.

12. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS AND SHALL BE MAINTAINED UNTIL COMPLETION OF ALL CONSTRUCTION ACTIVITY.

13. CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC., ARE CLEANED OUT AND WORKING PROPERLY AT ALL TIMES AND THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND REPAIRS, AS NEEDED, SHALL BE MADE IMMEDIATELY.

14. ANY DISCHARGE FROM A DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND THE TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.

15. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

16. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.

17. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT LEAVES THE SITE AND CHANGES ANY DOWNSTREAM CONDITIONS BY RAISING CHANNEL BOTTOMS AND/OR CLOGGING OUTFALL CULVERTS.

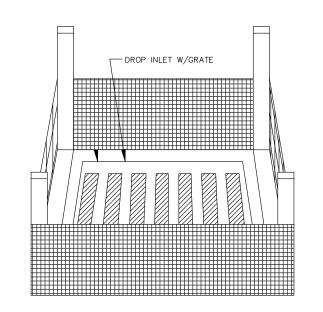
18. SEDIMENT DEPOSITS TO BE REMOVED AFTER EACH RAINFALL AND REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT ON THE BARRIER. SEDIMENT TRAPS TO BE RESTORED TO THIER ORIGIONAL DIMENSIONS BY REMOVING THE SEDIMENT WHEN IT HAS ACCUMULATED TO ONE-THIRD THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT TO BE DEPOSITED IN A SUITABLE AREA AND MANNER THAT IT WILL

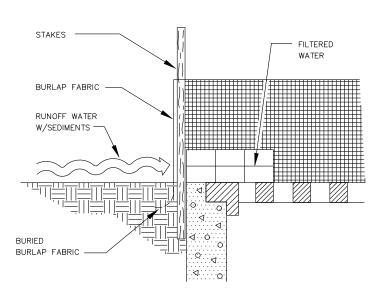
19. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE, SYNTHETIC BALE OR FILTER BARRIER IS NO LONGER REQUIRED OR AFTER COMPLETION OF CONSTRUCTION SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

20. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED. ALL DEWATERING, EROSION AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.

21. ALL DISTURBED AREAS SHALL BE STABILIZED THROUGH COMPACTION, GRASSING AND SODDING. THE GRASS/SODDING SHALL BE MAINTAINED UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED. ALL FILL SLOPES 4:1 OR GREATER TO RECEIVE STAKED SOLID SOD.

ONLY SYNTHETIC BALES TO BE USED (TYP)

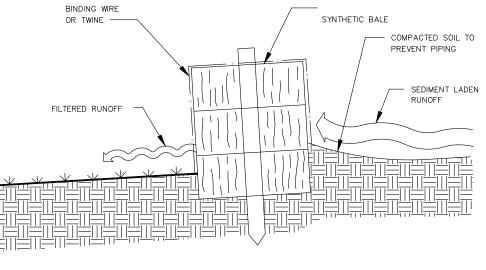


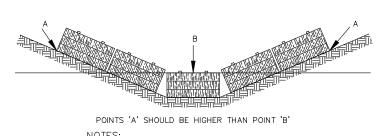


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

BURLAP DROP INLET SEDIMENT FILTER



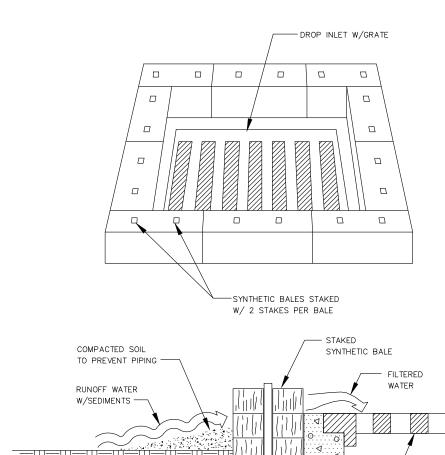


SYNTHETIC BALE BARRIER

4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

1. EXCAVATE THE TRENCH

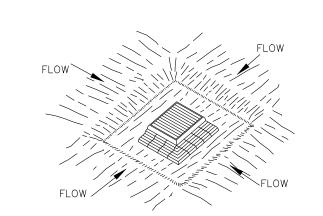
2. PLACE AND STAKE SYNTHETIC BALES 3. WEDGE LOOSE FIBER BETWEEN BALES

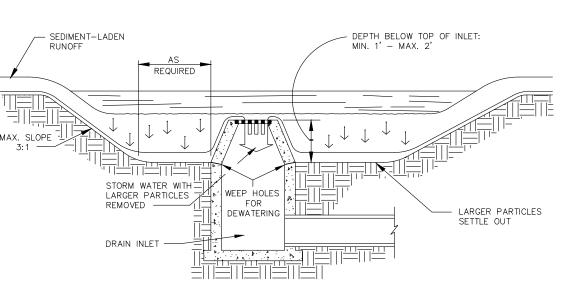


THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

 ── DROP INLET W/GRATE

SYNTHETIC BALE DROP INLET **SEDIMENT FILTER**

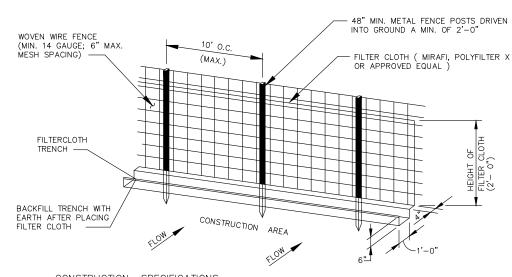




SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPABILITY AND EASE OF MAINTENANCE ARE DESIRABLE

EXCAVATED DROP INLET SEDIMENT TRAP

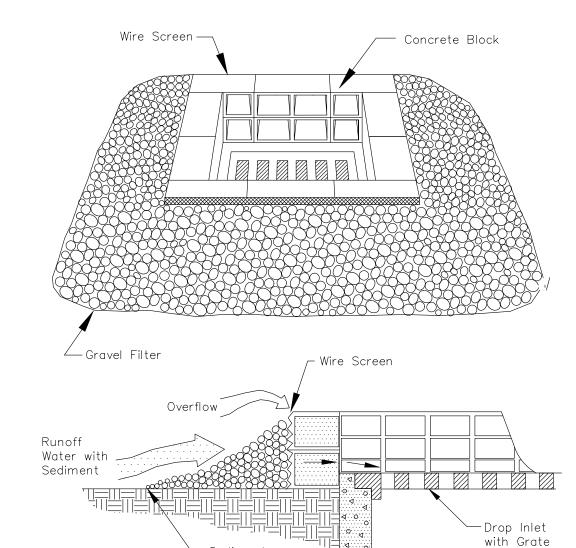


. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS BY USE OF WIRE TIES 2. FILTER CLOTH TO BE FASTEN SECURELY TO WOVEN WIRE FENCE BY USE OF WIRE TIES

SPACED EVERY 24"x 24".

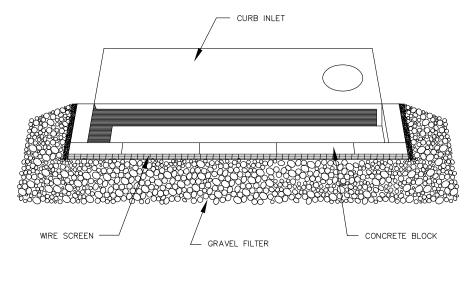
- 3. SILT FENCES TO BE INSTALLED IN LOCATIONS AS SHOWN ON THIS EROSION AND SEDIMENT CONTROL PLAN PRIOR TO BEGINNING OF CONSTRUCTION TO CONTROL SEDIMENT. 4. SILT FENCES TO BE MAINTAINED AND CLEANED AS NECESSARY TO MAINTAIN IN
- 5. SILT FENCES TO BE REMOVED AND THE AREA TO BE RESTORED TO ITS NATURAL CONDITION WHEN PERMANENT EROSION AND SEDIMENT CONTROL PROCEDURES ARE EFFECTIVE.

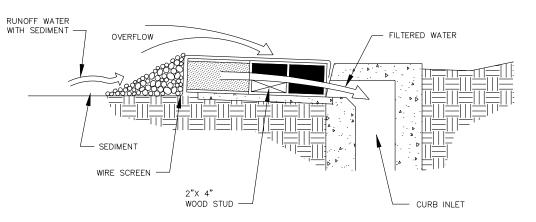
FILTER FENCE



SPECIFIC APPLICATION THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVEN' EXCESSIVE PONDING AROUND THE STRUCTURE

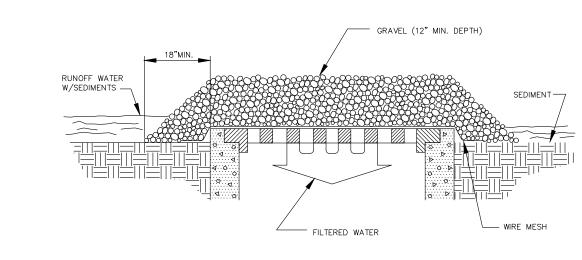
BLOCK & GRAVEL DROP INLET SEDIMENT FILTER





SPECIFIC APPLICATION THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE AN OVERFLOW CAPABILITY IS NECESSARY TO PREVENT EXESSIVE PONDING IN FRONT OF THE STRUCTURE.

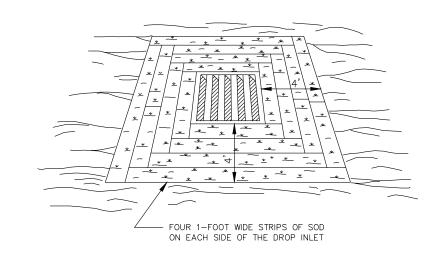
BLOCK & GRAVEL CURB INLET SEDIMENT FILTER

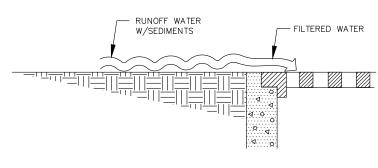


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURED ARE UNPROTECTED AREAS.

GRAVEL & WIRE MESH DROP INLET SEDIMENT FILTER

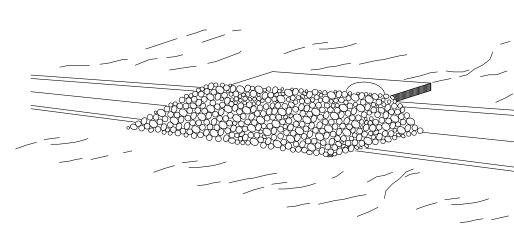


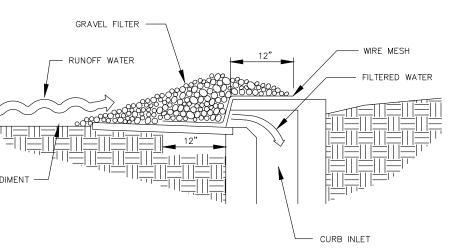


SPECIFIC APPLICATION

PROTECT THE INLET FROM SEDIMENT AND MULCH MATERIALS UNTIL PERMANENT VEGETATION HAS BECOME ESTABLISHED.

SOD DROP INLET **SEDIMENT FILTER**



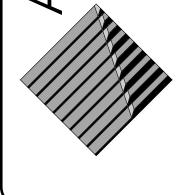


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

> **GRAVEL CURB INLET SEDIMENT FILTER**

Revisions By ADDED SIDEWALK GRADING AND DRAINAGE REV'S COMMENTS



SU

Date: 05-21-19 **Designer: HAV** 19-014

Job #: GCO **Drawn:**

Scale:

SITE DESCRIPTION

OWNER NAME AND ADDRESS: JKM IMPACT WILDLIGHT, LLC 10175 FORTUNE PARKWAY, SUITE 504 JACKSONVILLE, FL 32256

PROPOSED HOTEL WITH ASSOCIATED PARKING AREAS, UTILITIES AND POOL.

SOIL DISTURBING ACTIVITIES WILL INCLUDE: CLEARING AND GRUBBING; PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; GRADING; EXCAVATION FOR UTILTIES INCLUDING STORM, SANITARY AND WATER MAINS: CONSTRUCTION OF CURB, GUTTER AND ASPHALT PAVING; ALSO INCLUDES PREPARATION FOR FINAL PLANTING AND SEEDING.

RUNOFF COEFFICIENT: PRE-CONSTRUCTION = 802. DURING CONSTRUCTION = 853. POST-CONSTRUCTION = 90

SEE SOILS REPORT FOR SOILS DATA

SEE ATTACHED GRADING PLAN FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOIL, DISTURBANCE. LOCATION OF SURFACE WATERS, PROTECTED AREAS, MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS AND STORM WATER DISCHARGE POINTS.

* SEE ATTACHED EROSION & TURBIDITY CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS.

* SEE GENERAL NOTES FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION. | CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS

. TOTAL AREA OF SITE = 1.76 Ac. 2. TOTAL AREA TO BE DISTURBED = 1.76 Ac.

NAME OF RECEIVING WATERS: NASSAU RIVER

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUNOFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS AS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL , STATE, AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY CURB AND GUTTER, STORM SEWER, CURB INLETS AND CATCH BASINS FOR THE PAVED AREAS. AREAS WHICH ARE NOT DEVELOPED BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE. WHEN __ ACRES WILL HAVE BEEN REGRADED. THE SITE DISCHARGES TO AN EXISTING WETLAND SYSTEM WHERE PRACTICAL, TEMPORARY SEDIMENT BASINS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN.

TIMING OF CONTROLS/MEASURES

REFER TO " CONTRACTORS RESPONSIBILITY " FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED:

D.E.R. DREDGE/FILL PERMIT # C.O.E. DREDGE/FILL PERMIT # S.J.R.W.M.D. PERMIT #

CITY OF JACKSONVILLE, FL DEVELOPMENT PERMIT

POLLUTION PREVENTION PLAN CERTIFICATION

IN AN EFFORT TO ENSURE COMPLIANCE WITH FEDERAL. STATE, AND LOCAL LAWS REGARDING

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE HE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE. AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

CORPORATE OFFICER, GENERAL PARTNER, PROPRIETOR, EXECUTIVE OFFICER, RANKING ELECTED OFFICIAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULATES TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES

GENERAL

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

- INSTALL STABILIZED CONSTRUCTION ENTRANCE INSTALL SILT FENCES AND HAY
- BALES AS REQUIRED CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT
- CONSTRUCT SEDIMENTATION BASIN CONTINUE CLEARING AND
- PERFORM PRELIMINARY GRADING

STABILIZE DENUDED AREAS AND

STOCK PILE TOP SOIL IF REQUIRED ON SITE AS REQUIRED

STOCKPILES AS SOON AS PRACTICABLE

- 9. INSTALL UTILITIES, STORM SEWER CURBS AND GUTTER. 10. APPLY BASE TO PARKING LOT
- SEEDING/SOD AND PLANTING 12. COMPLETE FINAL PAVING 13. REMOVE ACCUMULATED SEDIMENT FROM BASINS 14. WHEN ALL CONSTRUCTION

11. COMPLETE GRADING AND

INSTALL PERMANENT

ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/ SOD AS REQUIRED

CONTROLS

IT IS IN THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND FURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES. AS REQUIRED TO ENSURE THE SITE MEETS ALL FEDERAL, STATE, AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS STABILIZATION PRACTICES

STRAW BALE BARRIER: STRAW BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION

- WITH THE FOLLOWING LIMITATIONS: A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33
- B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2
- WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS
- OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.
- FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
- B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE

A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT

USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED

SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR

WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED

AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS

STORM WATER COLLECTION FACILITY. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING OR GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH

DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT

SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT -LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT

TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT AFTER COMPETE WITH PERMANENT GRASSING

TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.

. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.

TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

- MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFF SITE FACILITIES.
- 4. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF TROUGH A SEDIMENT-TRAPPING

- TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP IS USUALLY INSTALLED IN A DRAINAGE WAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA WITH THE FOLLOWING LIMITATIONS: A. THE SEDIMENT TRAP MAY BE INSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY
- . OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE VELOCITY OF FLOW AT DESIGN CAPACITY OF THE OUTLET WILL EXCEED THE PERMISSIBLE VELOCITY OF THE RECEIVING CHANNEL OR AREA.
- . SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME. THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3, 600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3, 600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESES PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMETS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

CONCRETE ASPHALT DETERGENTS

FERTILIZERS PETROLEUM BASED PRODUCTS CLEANING SOLVENTS PAINTS

MASONRY BLOCKS ROOFING MATERIALS METAL STUDS

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURERS LABEL.

. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE

DISPOSING OF THE CONTAINER. . MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED;

THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

. IF SURPLUS PRODUCT MUST BE DISPOSED OF. MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIFD ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE

SPILL CONTROL PRACTICES

N ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL

STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC, AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE. SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE

THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE THER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE |MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE

STORM EVENT OF 0.25 INCHES OR GREATER. ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED

SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY

. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

WITHIN 24 HOURS OF REPORT.

SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF

DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER, OR ANY FEDERAL, STATE, OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON- COMPLIANCE.

THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE

CONSTRUCTION PERIOD:

SEDIMENT BASIN PRIOR TO DISCHARGE.

WATER FROM WATER LINE FLUSHING PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED)

. UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE

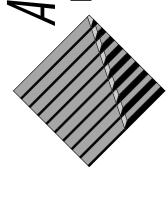
CONTRACTOR'S CERTIFICATION

CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

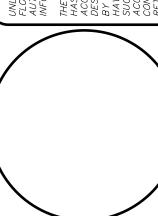
SIGNATURE	BUSINESS NAME AND ADDRESS OF CONTRACTOR AND ALL SUBS	RESPONSIBLE FOR/DUTIES
		GENERAL CONTRACTOR
		SUB-CONTRACTOR

Revisions By ADDED SIDEWALK PR

GRADING AND DRAINAGE REV'S CITY / GC COMMENTS



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Date: 03/2023 Designer: HAV 19-014 Job #:

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FABILIZATION REQUIRED:					

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NOTE TO CONTRACTOR:

THIS IS THE CONTRACTORS CERTIFICATE REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.

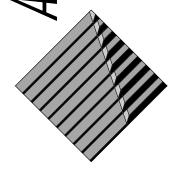
ADDED SIDEWALK PR

GRADING AND DRAINAGE REV'S

CITY / GC COMMENTS

PR

Commercial | Residential | Mar Florida Certificate No. 00008161 4201 BAYMEADOWS ROAD SUITE 3 | JACKSONVILLE, FLORIDA 3227 Ph. (904) 730-3223 | Fx. (904) 730-3226



UNLESS THIS DRAWING BEARS THE EMBOSSED SEAL OF A FLORIDA REGISTERED ENGINEER ACTING AS AN AUTHORIZED AGENT FOR AVA ENGINEERS, INC., IT IS FOR THE STORMATION PURPOSES ONLY AND IS NOT VALID.

THE STORMWATER SYSTEM AS SHOWN ON THESE PLANS HAS BEEN PREPARED IN ACCORDANCE WITH STANDARD, ACCEPTED ENGINEERING FRACTICE, HOWEVER, CERTAIN DESIGN COTHERS (ie CITY, COUNTY, STATE, FEDERAL, etc.) BY OTHERS (ie CITY, COUNTY, STATE, FEDERAL, etc.) BY OTHERS (ie CITY, COUNTY, STATE, FEDERAL, etc.) SUCH STORMWATER ACLLITIES. THE ENGINEER DOES NOT ACCEPT RESPONSIBILITY FOR POSSIBLE FUTURE CONTAMINATION RESULTING FROM THE REQUIREMENT FOR RETENTION AND TREATMENT OF STORMWATER.

Florida

SWPPP-2

Date: 03-2023

Designer: HAV

Designer: HAV

Job #: 19-014

Drawn: GCO

Scale:

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