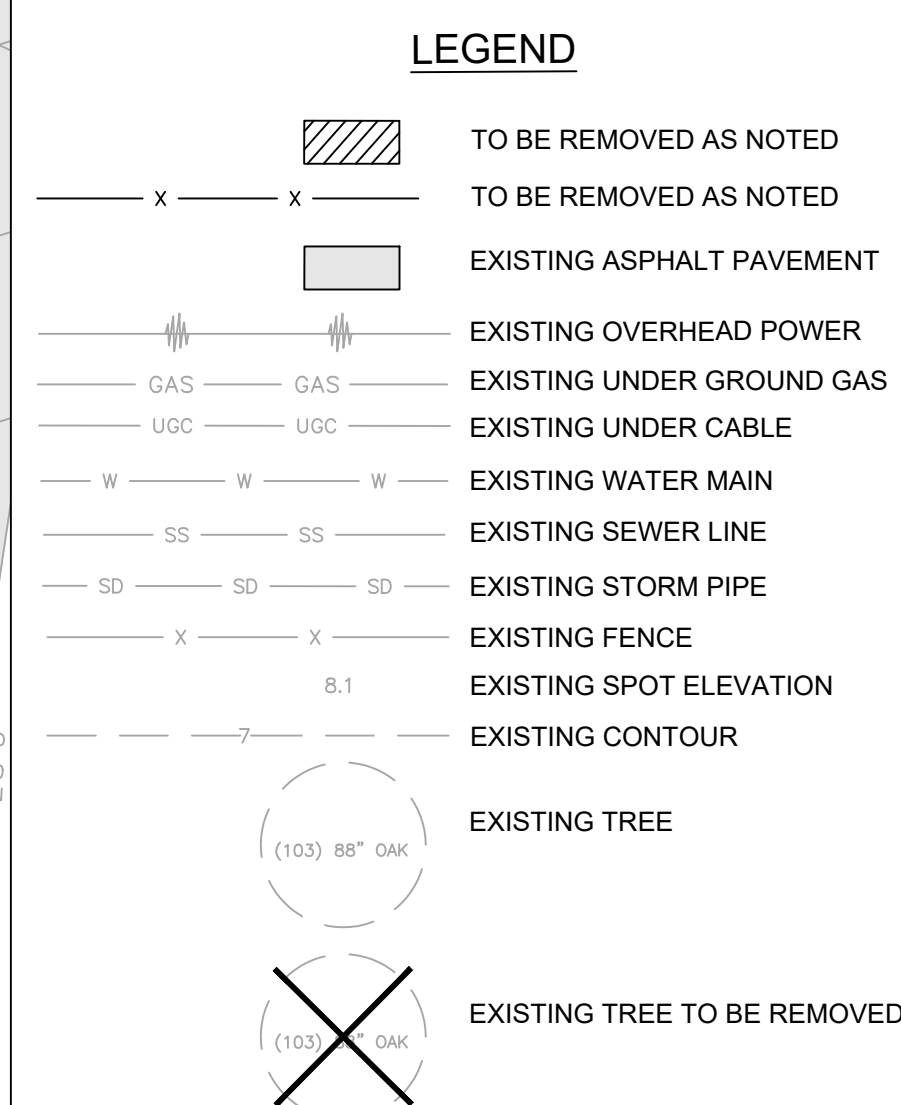


- GENERAL NOTES**
1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS.
 2. ALL PERMITS NECESSARY FOR CONSTRUCTION SHALL BE OBTAINED BY CONTRACTOR.
 3. ANY DEVIATIONS FROM THE PLANS ARE PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.
 4. THE CONTRACTOR IS TO IMMEDIATELY CONTACT THE ENGINEER IF ANY UNFORESEEN COMPLICATIONS OR DISCREPANCIES OCCUR.
 5. CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF ALL UTILITIES ON SITE WITH THE APPROPRIATE PROVIDER (e.g. POWER, PHONE, CABLE, ETC.)
 6. THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR THE PHYSICAL CONSTRUCTION OF THE SITE.
 7. CONTRACTOR SHALL MAINTAIN A SAFE SITE AND MEET ALL APPROPRIATE REGULATIONS CONCERNING SAFETY.
 8. SURVEY DATA PROVIDED BY SHUPE SURVEYING COMPANY, P.C. 3837 DARIEN HWY, BRUNSWICK, GEORGIA 31523, TELE, 912-265-0562.
 9. EXISTING SURVEY INFORMATION TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES IN FIELD OBSERVATIONS VERSUS SURVEY DATA.
 10. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION BY CALLING THE CALL BEFORE YOU DIG HOTLINE: 811.
 11. ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 13127C024F DATED SEPTEMBER 3, 2006, THE SITE IS LOCATED IN ZONE VE 16 AND VE 19.



NOTE:
CONTRACTOR TO COORDINATE REMOVAL OF EXISTING TREES, LIGHTS, CABLE, IRRIGATION AND POWER WITH OWNER.



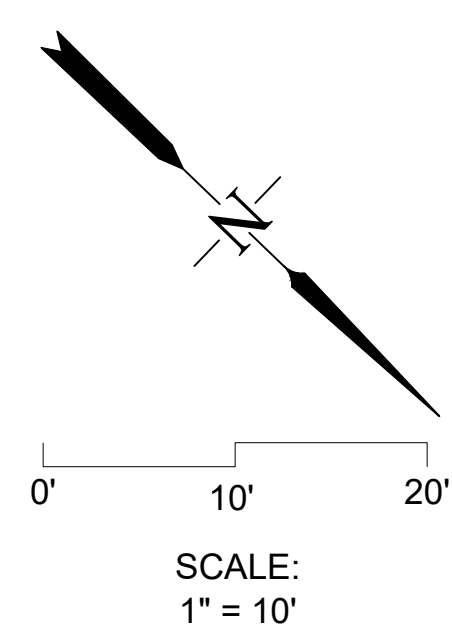
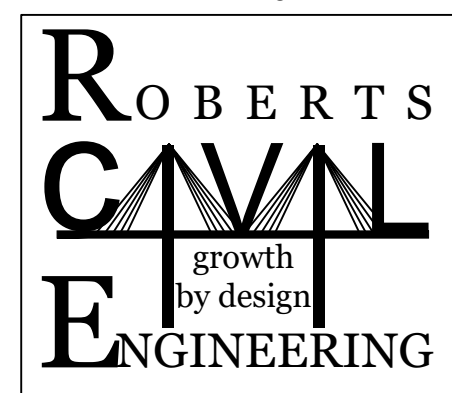
USSERY/RULE ARCHITECTS P.C.
1804-A FREDERICA ROAD
ST. SIMONS ISLAND, GEORGIA 31522
www.usareh.com
PH. 912-638-6688

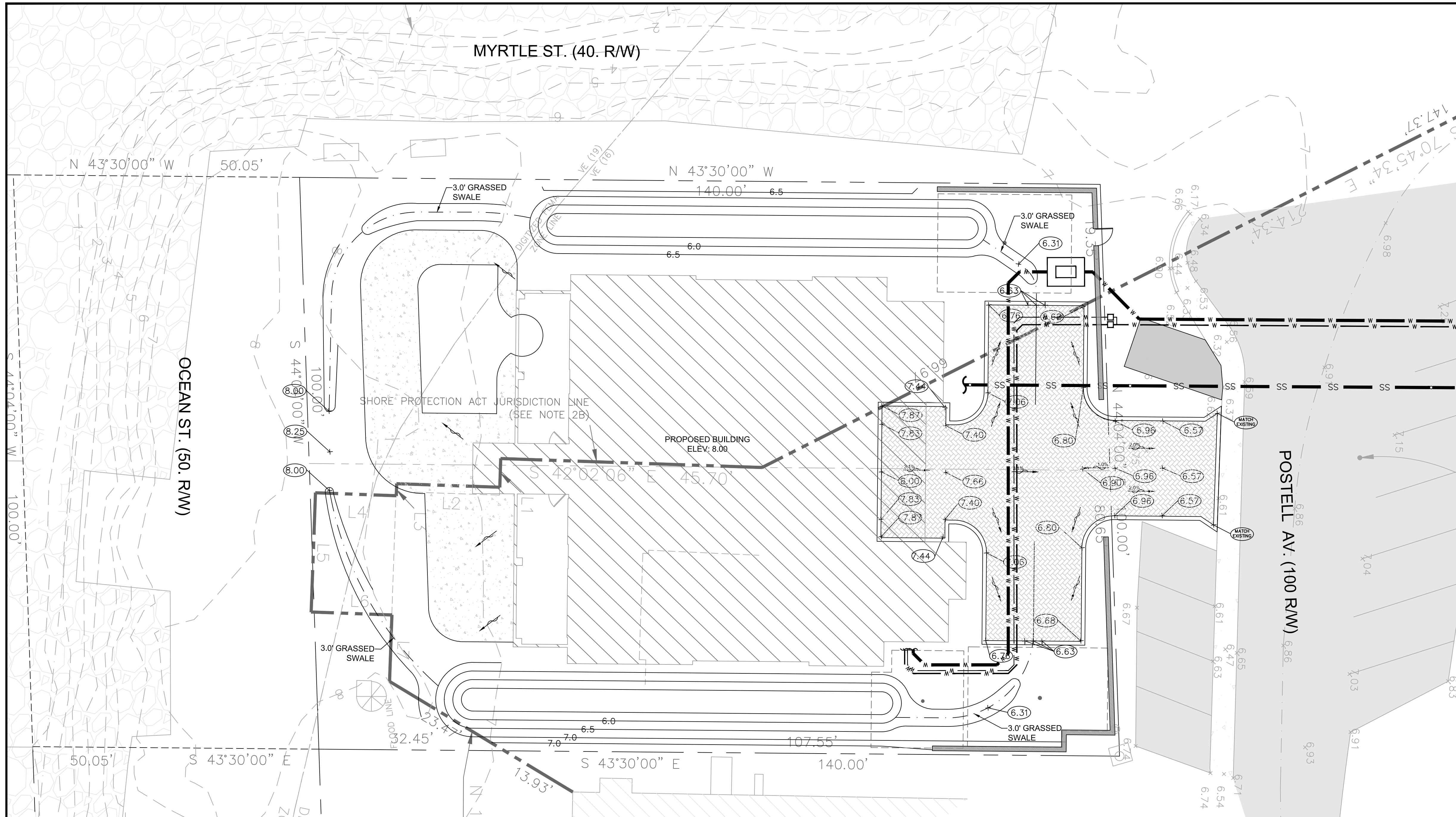
Architecture · Land Planning · Interior Design

**Viewpoint Condominiums
Existing Conditions and
Demolition Plan
ST. SIMONS ISLAND, GA.**

09-06-2017	1st SUBM.

C1





ADA NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL CURRENT ADA REQUIREMENTS.
2. THE EXTERIOR ACCESSIBLE ROUTE SHALL HAVE A MINIMUM WIDTH OF 3 FEET. IF THE ACCESSIBLE ROUTE CLEAR WIDTH IS LESS THAN 5 FEET, THEN 5'X5' PASSING SPACES SHALL BE PROVIDED EVERY 200' OR LESS. INTERSECTING SIDEWALKS MEET THIS REQUIREMENT.
3. THE FINISHED SURFACE HEIGHT DIFFERENCE REQUIREMENTS SHALL MEET THE FOLLOWING:
 0 - 1/4" NO REQUIREMENTS
 1/4" - 1/2" BEVEL WITH 1:2 SLOPE
 GREATER THAN 1/2" CONFORM TO RAMP REQUIREMENTS
4. RAMPS SHALL MEET THE FOLLOWING CONSTRAINTS:
 MAX SLOPE 1:12
 MAX RAMP RISE IS 30"
 MAX RAMP LENGTH IS 30'
 MAX CROSS SLOPE IS 2.00%
5. RAMP LANDINGS SHALL MEET THE FOLLOWING CONSTRAINTS:
 A MINIMUM 5' LONG LEVEL LANDING AT LEAST AS WIDE AS THE RAMP SHALL BE PLACED AT THE TOP AND BOTTOM OF THE RAMP.
 LANDING SHALL BE MINIMUM 5'X5' WHERE RAMP CHANGES DIRECTION.
 LANDINGS SHALL NOT EXCEED A 2.00% SLOPE
6. HANDRAILS SHALL MEET THE FOLLOWING CONSTRAINTS:
 IF RAMP RISE IS GREATER THAN 6", THEN HANDRAILS ARE REQUIRED ON BOTH SIDES OF RAMP. MINIMUM OF 12" LONG HANDRAIL EXTENSIONS SHALL BE PROVIDED AT THE TOP AND BOTTOM OF LANDINGS.

LEGEND

- W - W - W - PROPOSED WATER LINE
- SS - SS - PROPOSED SEWER LINE
- > -> -> PROPOSED DRAINAGE DIRECTION
- 9.00 PROPOSED SPOT ELEVATION
- SD - SD - SD - PROPOSED STORM DRAIN
- SD - SD - SD - PROPOSED STORM PIPE
- [Hatched Box] PROPOSED BUILDING
- [Cross-hatched Box] PROPOSED PERVIOUS SURFACE
- [Solid Grey Box] EXISTING ASPHALT PAVEMENT
- - - - - EXISTING OVERHEAD POWER
- UGG - UGG - UGG - EXISTING UNDER GROUND GAS
- UGC - UGC - UGC - EXISTING UNDER GROUND CABLE
- W - W - W - EXISTING WATER MAIN
- SS - SS - SS - EXISTING SEWER LINE
- SD - SD - SD - EXISTING STORM PIPE
- X - X - X - EXISTING FENCE
- 8.1 EXISTING SPOT ELEVATION
- - - - - EXISTING CONTOUR
- (103) 88" OAK EXISTING TREE

EARTHWORK AND PAVING

1. CONTRACTOR TO REMOVE ALL UNSUITABLE MATERIAL BENEATH PROPOSED PAVEMENT AND BUILDINGS TO A DEPTH OF 3 FEET AND REPLACE WITH SUITABLE FILL. THIS ONLY APPLIES TO AREAS WHERE UNSUITABLE MATERIAL IS PRESENT.
2. THE UPPER 12 INCHES OF SUBGRADE BELOW THE PAVEMENT AND BUILDINGS SHALL BE SCARIFIED AND RECOMPACTED TO 100% STANDARD PROCTOR MAX DRY WEIGHT DENSITY WITH A MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT.
3. IN AREAS WHERE STRUCTURAL FILL IS REQUIRED, THE FILL SHALL BE PLACED IN LIFTS OF 6 INCHES AND COMPACTED TO 100% STANDARD PROCTOR MAX DRY WEIGHT DENSITY. STRUCTURAL FILL SHALL CONSIST OF GRANULAR SOIL CONTAINING LESS THAN 10% MATERIAL PASSING THE NO 200 SIEVE.
4. ALL FILLING AND EXCAVATION SHALL BE COMPLETED PRIOR TO THE INSTALLATION OF ANY UTILITIES.
5. CONTRACTOR TO PROVIDE TEST RESULTS OF SUBGRADE AND BASE COURSE COMPACTION TO ENGINEER.

GRADING & DRAINAGE NOTES:

1. STORM PIPES SHALL BE JOINED PER DOT SPECIFICATIONS.
2. ALL PIPE SHALL BE INSTALLED IN NEW CONDITION.
3. A RIGHT OF WAY WORK PERMIT MAY BE REQUIRED BEFORE ANY WORK CAN BE DONE IN THE RIGHT OF WAY.
4. ALL STORM DRAINAGE PIPING SHALL BE CONSTRUCTED PER DOT SPECS.
5. ALL STORM DRAINAGE PIPING JOINTS SHALL BE WRAPPED IN FILTER FABRIC.
6. CONTRACTOR TO REQUEST CONFIRMATION OF LATEST PLAN REVISION DATE FROM ENGINEER IN WRITING PRIOR TO ORDERING MATERIALS.
7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO REVIEW AND APPROVE SHOP DRAWINGS PRIOR TO ORDERING MATERIALS.



USSERY/RULE ARCHITECTS P.C.
 1804-A FREDERICA ROAD
 ST. SIMONS ISLAND, GEORGIA 31522
 www.urarch.com PH. 912-638-6688

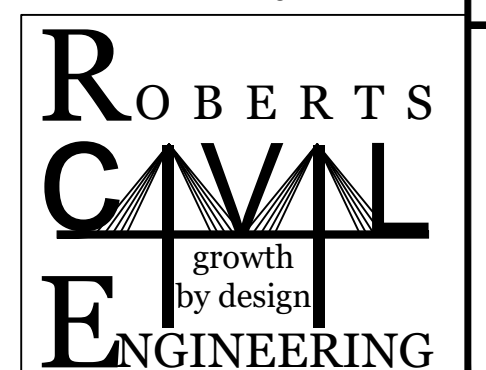
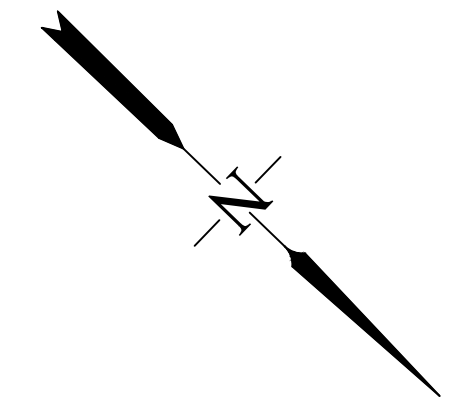
UR
 Architecture · Land Planning · Interior Design

**Viewpoint Condominiums
 Grading & Drainage Plan**

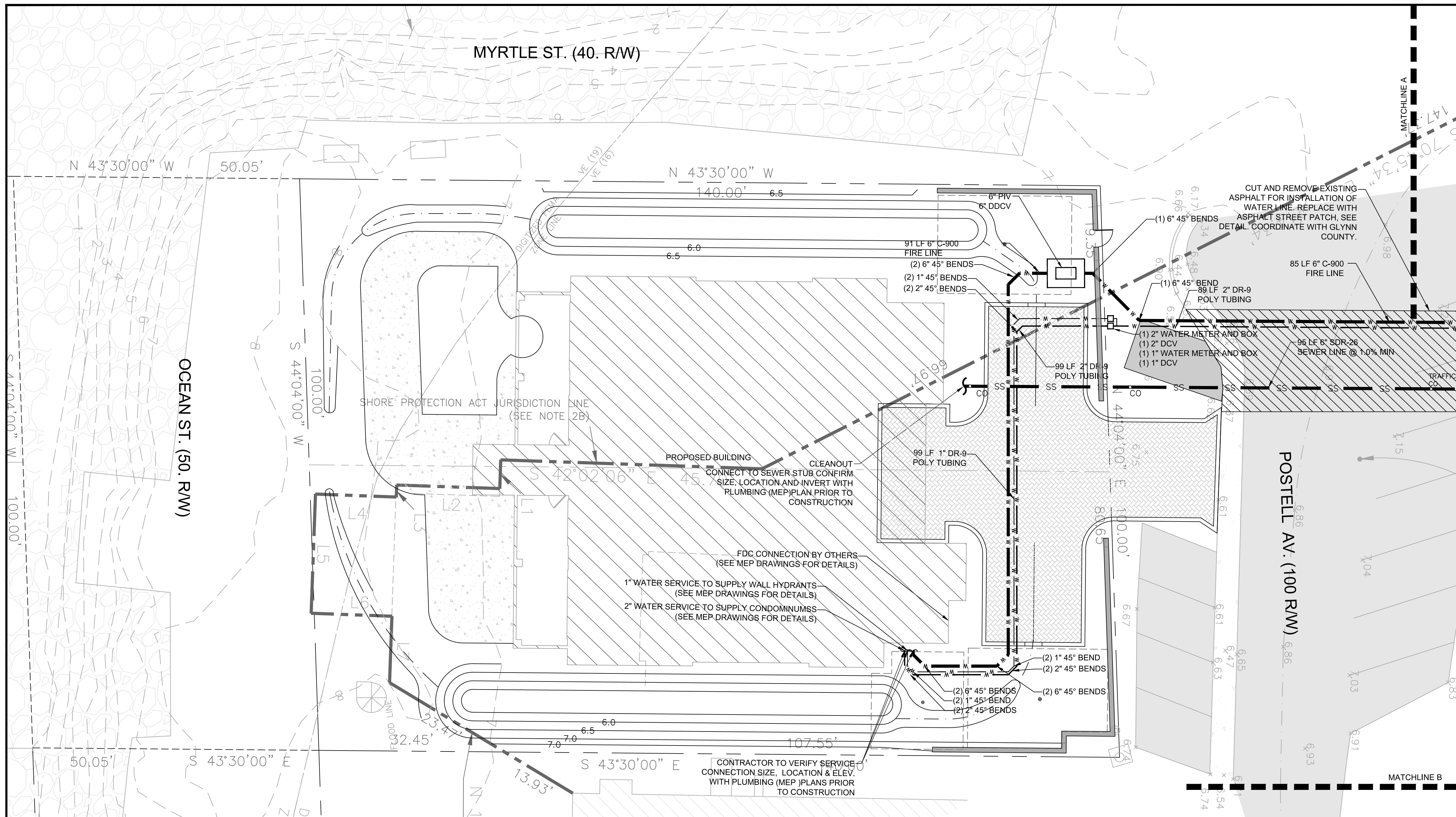
ST. SIMONS ISLAND, GA.

09-06-2017	1st SUBM.

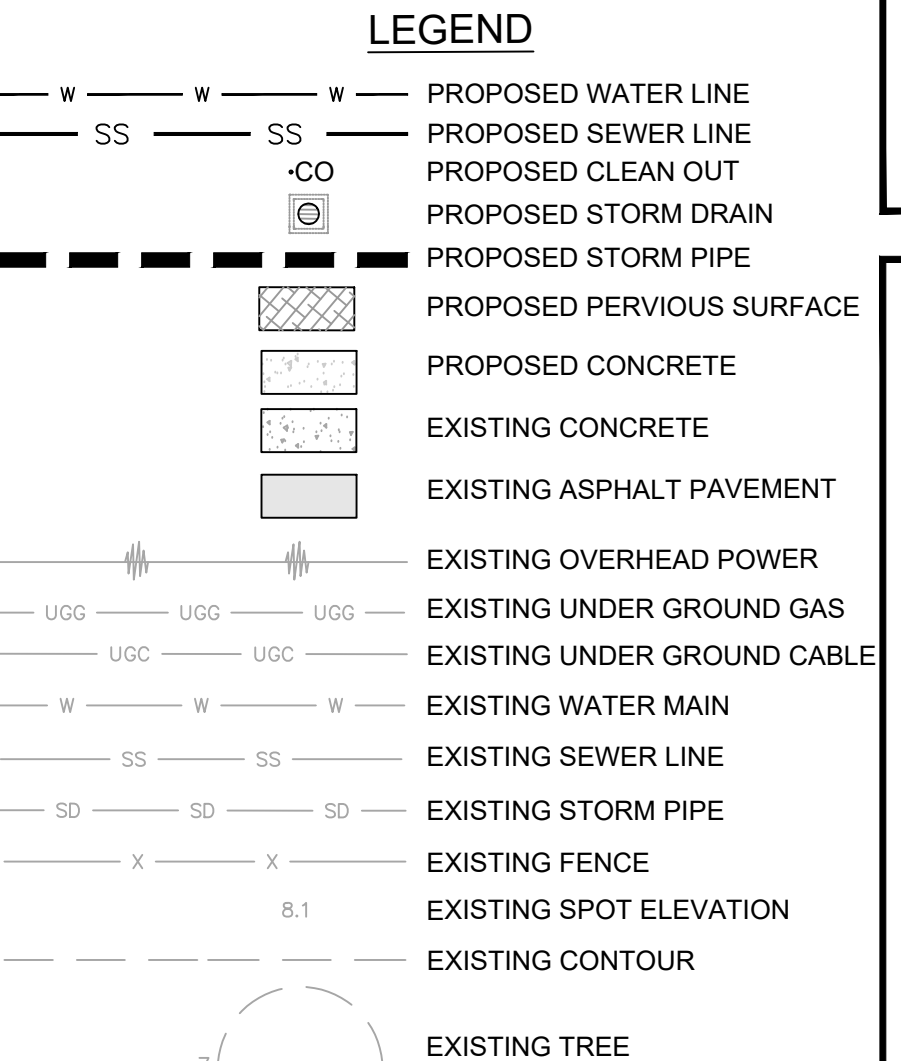
0' 10' 20'
 SCALE:
 1" = 10'



C3



- JWSC WATER & SEWER NOTES**
1. ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM WITH THE REQUIREMENTS OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE JOINT WATER & SEWER COMMISSION. IN THE EVENT OF A DISCREPANCY BETWEEN THESE CONSTRUCTION PLANS AND THE AFOREMENTIONED STANDARDS AND SPECIFICATIONS, THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS SHALL TAKE PRECEDENCE UNLESS THE DEVIATION HAS BEEN APPROVED IN WRITING BY THE JWSC.
 2. THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER LINES, SEWER LINES AND STORM DRAINS SHALL CONFORM TO THE LATEST GEORGIA EPD REQUIREMENTS.
 3. A MINIMUM DISTANCE OF 20' OR TWO TIMES THE DEPTH OF THE MAIN, WHICHEVER IS GREATER, SHALL BE MAINTAINED FROM ALL BUILDINGS, FOUNDATIONS AND THE TOP OF BANK OF ALL PONDS. ANY DEVIATION FROM THIS REQUIREMENT MUST BE APPROVED IN WRITING BY THE JWSC.
 4. PRESSURE AND LEAKAGE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE JWSC.
 5. DISINFECTION OF WATER MAINS SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE JWSC.
 6. AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE UTILITIES PROTECTION CENTER (UPC) AT 1-800-282-7411 TO REQUEST UNDERGROUND UTILITY LOCATE SERVICE.
 7. ALL GRAVITY SEWERS SHALL BE LOW PRESSURE AIR TESTED IN ACCORDANCE WITH JWSC STANDARDS 3.6.9.
 8. SEE JWSC STANDARD 2.5.3.3 FOR MINIMUM PIPE COVER REQUIREMENTS.
 9. RECORD DRAWINGS MUST BE PROVIDED TO JWSC FOR PUBLIC WATER AND SEWER LINES IN ACCORDANCE WITH JWSC RECORD DRAWING STANDARDS.



- GENERAL WATER NOTES:**
1. PVC PIPE SHALL BE BLUE IN COLOR. PIPE 4" TO 12" SHALL CONFORM TO REQUIREMENTS OF AWWA C-900, DR 18 PRESSURE CASS 235 P.S.I. AND SHALL HAVE THE FOLLOWING MINIMUM WALL THICKNESS:

4"	0.267 INCHES
6"	0.383 INCHES
8"	0.503 INCHES
10"	0.617 INCHES
12"	0.733 INCHES

 PIPE LESS THAN 4" IN DIAMETER SHALL CONFORM TO ASTM D-1784 AND D-2241 (SDR 21). THE PIPE SHALL HAVE A MINIMUM PRESSURE RATING OF 200 P.S.I. THE PVC PIPE SHALL BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL.
 2. FITTING FOR PVC SHALL BE DUCTILE IRON IN ACCORDANCE WITH ANSI A-21.53 (AWWA C-153). FITTINGS SHALL BE CEMENT LINED IN ACCORDANCE WITH ANSI A-21.4 (AWWA C-104). FITTINGS LESS THAN 4" SHALL BE PVC WITH RING TITE RUBBER JOINTS CONFORMING TO ASTM D-3139.
 3. VALVES SHALL BE INSTALLED IN APPROVED UNDERGROUND VALVE BOXES OF DUCTILE IRON WITH A SUITABLE CRUSHING STRENGTH.
 4. MAINTAIN A TEN (10) FOOT HORIZONTAL SEPARATION BETWEEN ANY EXISTING OR PROPOSED WATER MAIN AND SANITARY SEWER, STORM SEWER, OR SEWER MANHOLE.
 5. WHEN A 10 FOOT HORIZONTAL SEPARATION CANNOT BE MAINTAINED, THE WATER MAIN MAY BE LAID CLOSER TO THE SEWER PROVIDED THAT THE WATER MAIN IS LAID IN A SEPARATE TRENCH AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
 6. WATER CROSSING A SEWER SHALL BE AT LEAST 18" ABOVE THE TOP OF THE SEWER. A FULL LENGTH OF WATER PIPE SHALL BE USED AT THE CROSSING WITH THE ENDS OF THE WATER AS FAR AWAY FROM THE SEWER AS POSSIBLE.
 7. VERIFY SIZE AND LOCATION OF WATER SERVICES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS.
 8. IF UTILITY CONFLICT IS ENCOUNTERED IN THE FIELD, SEE UTILITY CONFLICT DETAIL.

- GENERAL SEWER NOTES:**
1. PVC PIPE BE POLYVINYL CHLORIDE PLASTIC (PVC) AND SHALL MEET ALL REQUIREMENTS OF ASTM D 3034 SDR 26. DEPTHS LESS THAN 3 FEET SHALL BE DUCTILE IRON PIPE. ASTM D 2321 MUST BE FOLLOWED FOR THE INSTALLATION OF PVC PIPE. RUBBER RINGS SHOULD BE USED FOR CONTRACTION AND EXPANSION AT EACH JOINT. FITTINGS SHALL MEET THE SAME SPECIFICATION REQUIREMENTS AS THE PIPE. TESTS ON PVC PIPE SHALL BE DESIGNED TO PASS ALL TESTS AT 73° F. PIPE STANDARD LENGTHS SHALL BE 12.5 FEET (PLUS OR MINUS 1 INCH). PIPE SIZES AND DIMENSIONS SHALL BE AS SHOWN IN THE TABLE BELOW:

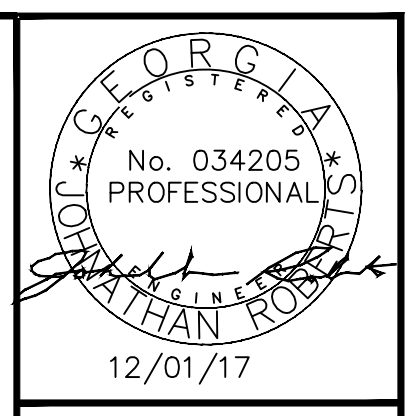
NOM SIZE	OUTSIDE DIA	MIN WALL THICKNESS
4"	4.215	0.162
6"	6.275	0.241
8"	8.400	0.232
10"	10.500	0.404
12"	12.500	0.481
 2. JOINTS FOR PVC PIPE - SHALL BE INTEGRAL WALL BELL AND SPIGOT WITH A RUBBER RING GASKET. THE JOINTS SHALL CONFORM TO ASTM D 3212 AND THE GASKETS SHALL CONFORM TO ASTM F 477.
 3. PIPE CONNECTIONS - SHALL HAVE FLEXIBLE WATERTIGHT JOINTS AT THE POINT OF ENTRY OF ANY SEWER MAIN INTO THE MANHOLE. THE JOINT SHALL BE WEDGED RUBBER SHAPE EQUIVALENT TO "PRESS WEDGE II," OR A RUBBER SLEEVE EQUIVALENT TO "KOR-N-SEAL" OR "LOCK JOINT."
 4. #12 GAUGE SINGLE STRAND COPPER TRACING WIRE SHALL BE USED OVER ALL FORCE MAIN, SANITARY SEWER, AND SERVICE LATERAL LINES.
 5. SEWER EXCAVATIONS SHALL BE TO THE DESIRED DEPTHS SHOWN ON THE PLANS WITH ADHERENCE TO THE OCCUPATIONAL AND SAFETY HEALTH ADMINISTRATION'S (OSHA) REGULATIONS. IN AREAS OF UNSUITABLE SOIL CONDITIONS, THE TRENCH MAY BE REQUIRE ADDITIONAL EXCAVATION AND BACKFILLED WITH SAND, GRAVEL, OR CONCRETE.
 6. SEWER PIPES SHALL BE LAID UPGRADE WITH SPIGOTS POINTING DOWNGRADE. ASSEMBLY OF JOINTS SHALL COMPLY WITH MANUFACTURER'S RECOMMENDATIONS. SEAL OPEN ENDS OF PIPES IF INSTALLATION IS INTERRUPTED. MANHOLE CONNECTIONS SHOULD BE WATER TIGHT WITH THE USE OF FLEXIBLE WATER STOPS AND RESILIENT CONNECTORS.

OWNER/DEVELOPER CONTACT INFO:
 ISLAND VIEWPOINT
 PO BOX 927
 STATHAM, GA 30666
 CONTACT: ADAM SWANN (706) 296-2771
 adams@atlarealestateadvisors.com

ENGINEER CONTACT:
 BERT ETHEREDGE
 betheredge@robertscivilengineering.com

NOTE:
 WATER AND SEWER SERVICES ARE NOT FINALIZED OR RELEASED FOR CONSTRUCTION. A SEPARATE LETTER FROM THE CIVIL ENGINEER IS REQUIRED AUTHORIZING WORK PRIOR TO CONSTRUCTION OF WATER AND SEWER SERVICES.

CONTRACTOR TO COORDINATE WATER AND SEWER INSTALLATION WITH BGJWSC AND GLYNN COUNTY PRIOR TO CONSTRUCTION.



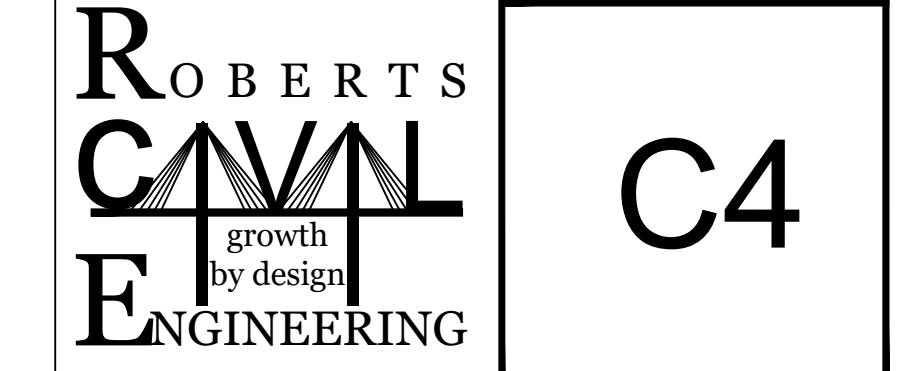
USSERY/RULE ARCHITECTS P.C.
 1804-A FREDERICA ROAD
 ST. SIMONS ISLAND, GEORGIA 31522
 www.urareh.com
 PH. 912-638-6688

Architecture · Land Planning · Interior Design

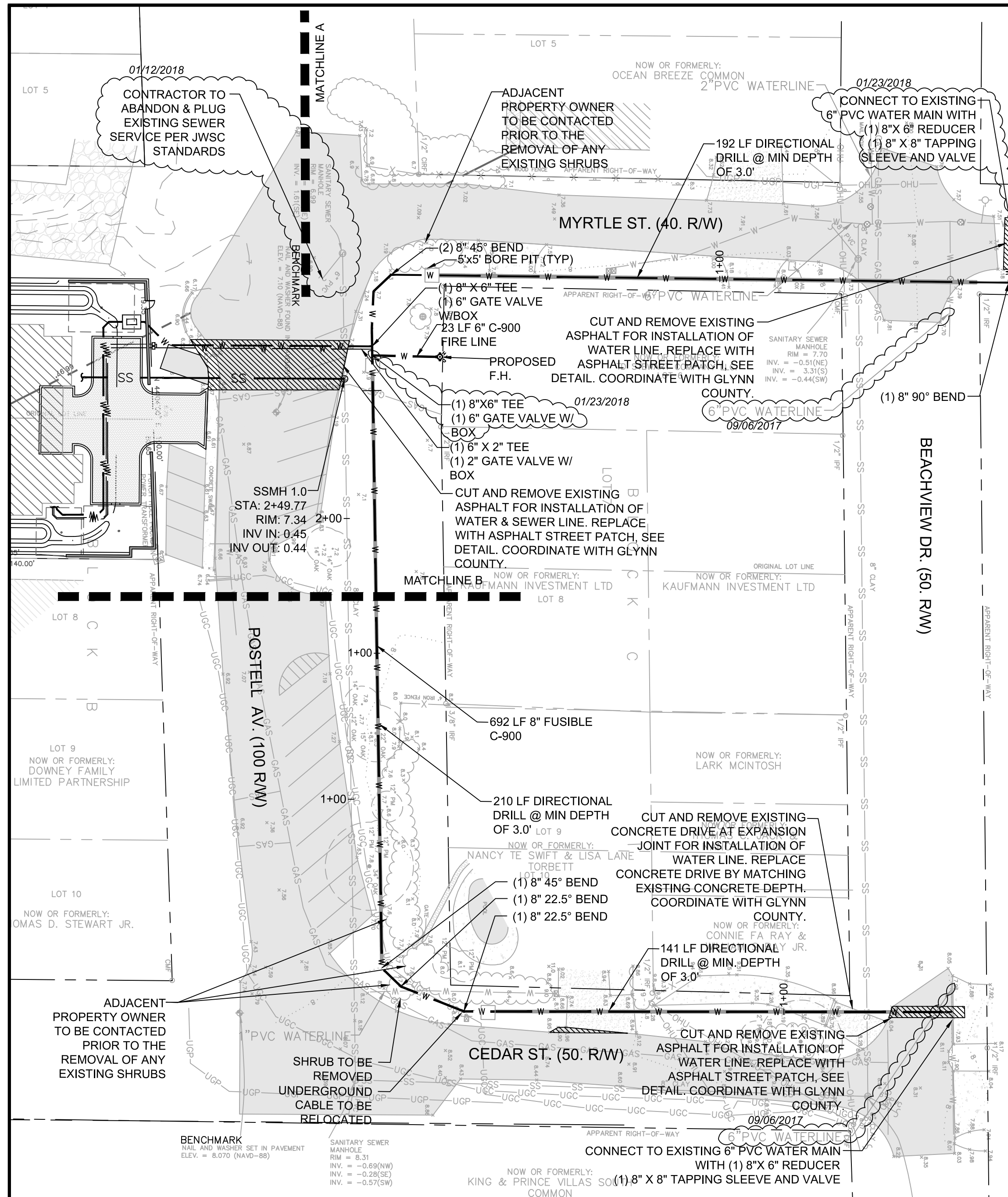
Viewpoint Condominiums
 Utility Plan A

ST. SIMONS ISLAND, GA.

09-06-2017	1st SUBM.
12-01-2017	2nd SUBM.



C4



FUSIBLE PVC SPECIFICATIONS
3.01 HANDLING AND STORAGE

A. PIPE SHALL BE OFF-LOADED, LOADED, INSTALLED, HANDLED, STORED AND STACKED PER THE PIPE SUPPLIER'S GUIDELINES. THESE GUIDELINES INCLUDE COMPLIANCE WITH THE MINIMUM RECOMMENDED BEND RADIUS AND MAXIMUM SAFE PULL FORCE FOR THE SPECIFIC PIPE BEING USED.

B. THE GENERAL BEST PRACTICES OF THE INDUSTRY PER AWWA M23 SHALL ALSO BE OBSERVED.

3.02 FUSION PROCESS

A. FUSIBLE POLYVINYLCHLORIDE PIPE WILL BE HANDLED IN A SAFE AND NON-DESTRUCTIVE MANNER BEFORE, DURING, AND AFTER THE FUSION PROCESS AND IN ACCORDANCE WITH THIS SPECIFICATION AND PIPE SUPPLIER'S GUIDELINES.

B. FUSIBLE POLYVINYLCHLORIDE PIPE WILL BE FUSED BY QUALIFIED FUSION TECHNICIANS HOLDING CURRENT QUALIFICATION CREDENTIALS FOR THE PIPE SIZE BEING FUSED, AS DOCUMENTED BY THE PIPE SUPPLIER.

C. PIPE SUPPLIER'S PROCEDURES SHALL BE FOLLOWED AT ALL TIMES DURING FUSION OPERATIONS.

D. EACH FUSION JOINT SHALL BE RECORDED AND LOGGED BY AN APPROVED ELECTRONIC MONITORING DEVICE (DATA LOGGER) CONNECTED TO THE FUSION MACHINE, WHICH UTILIZES A CURRENT VERSION OF THE PIPE SUPPLIER'S RECOMMENDED AND COMPATIBLE SOFTWARE.

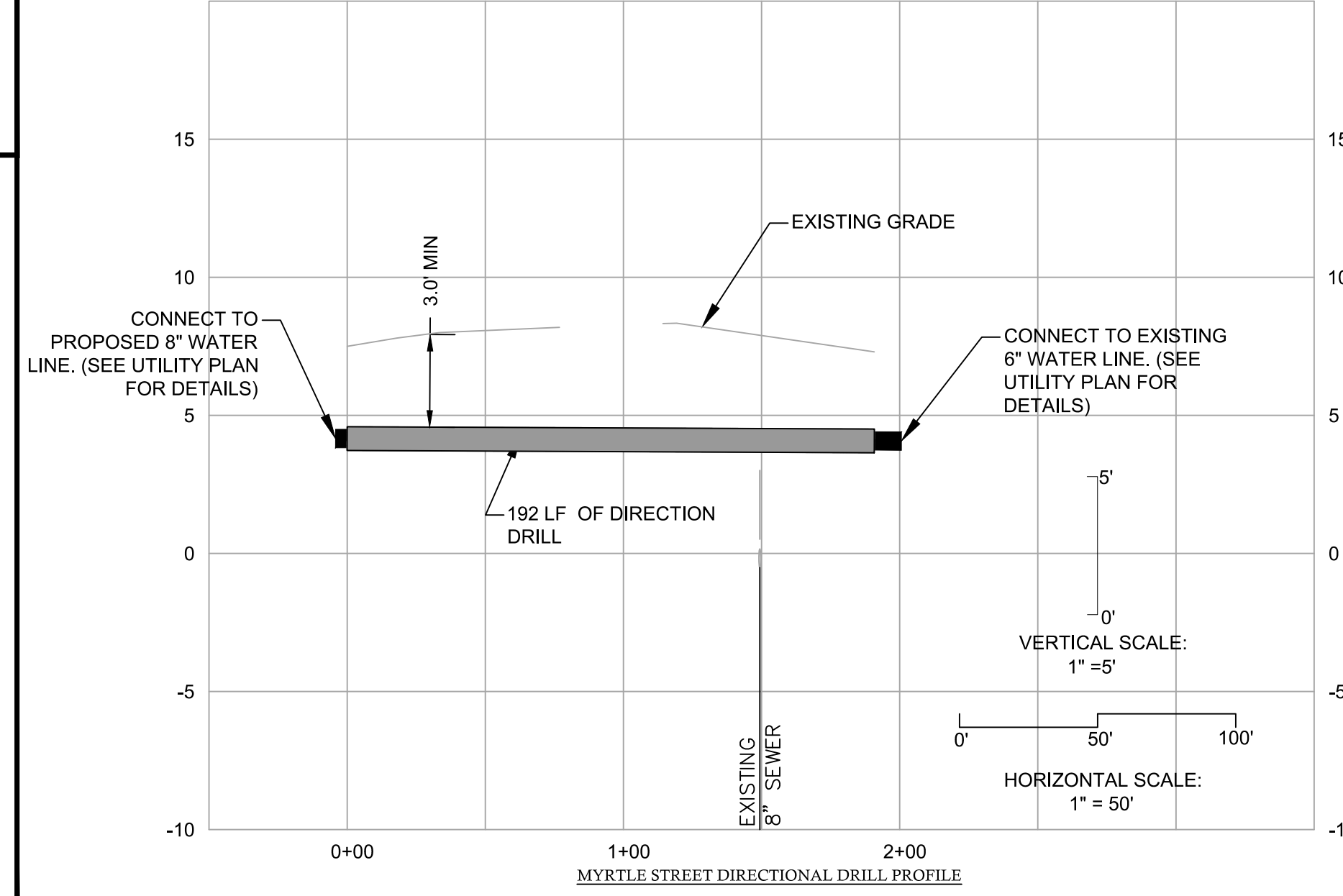
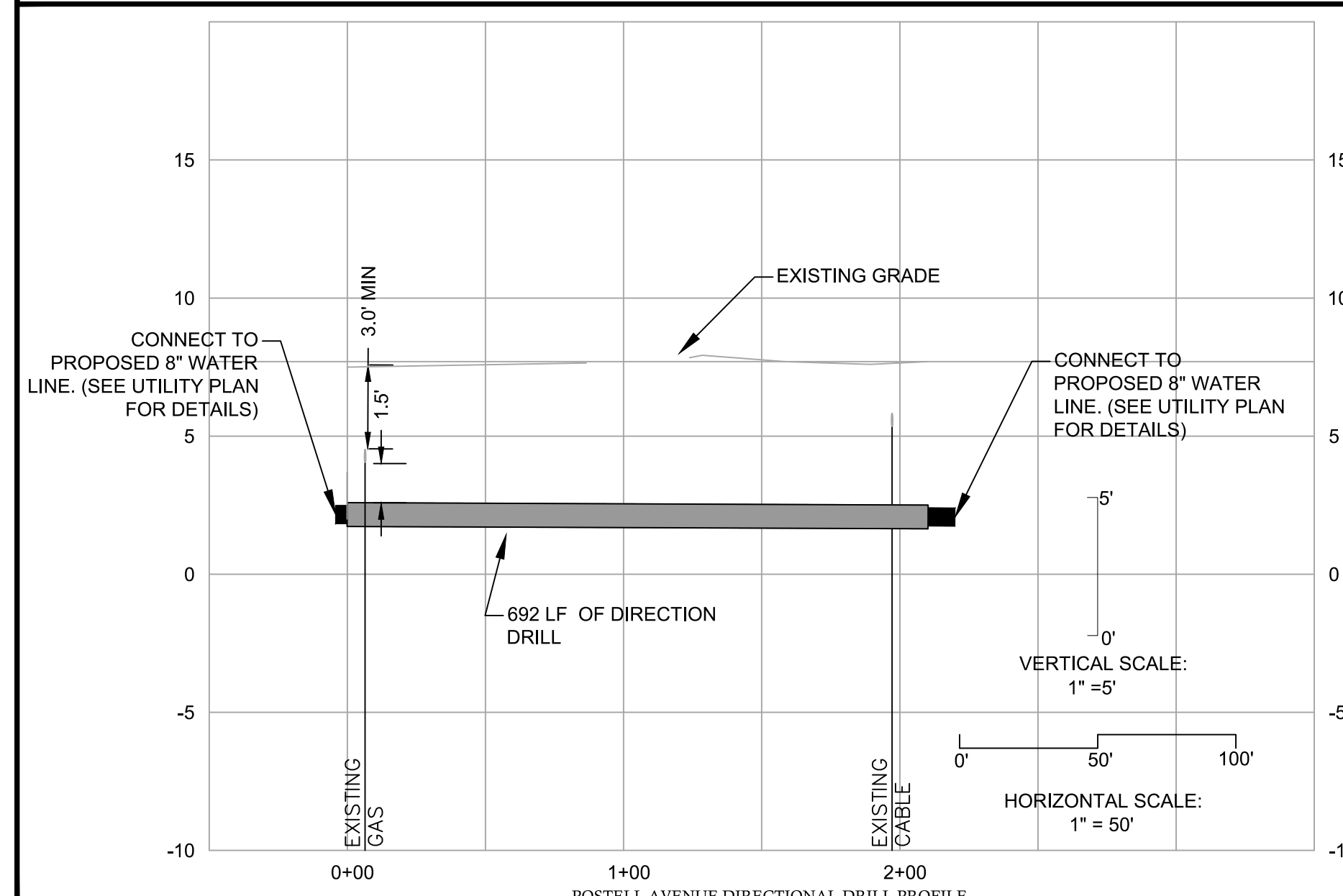
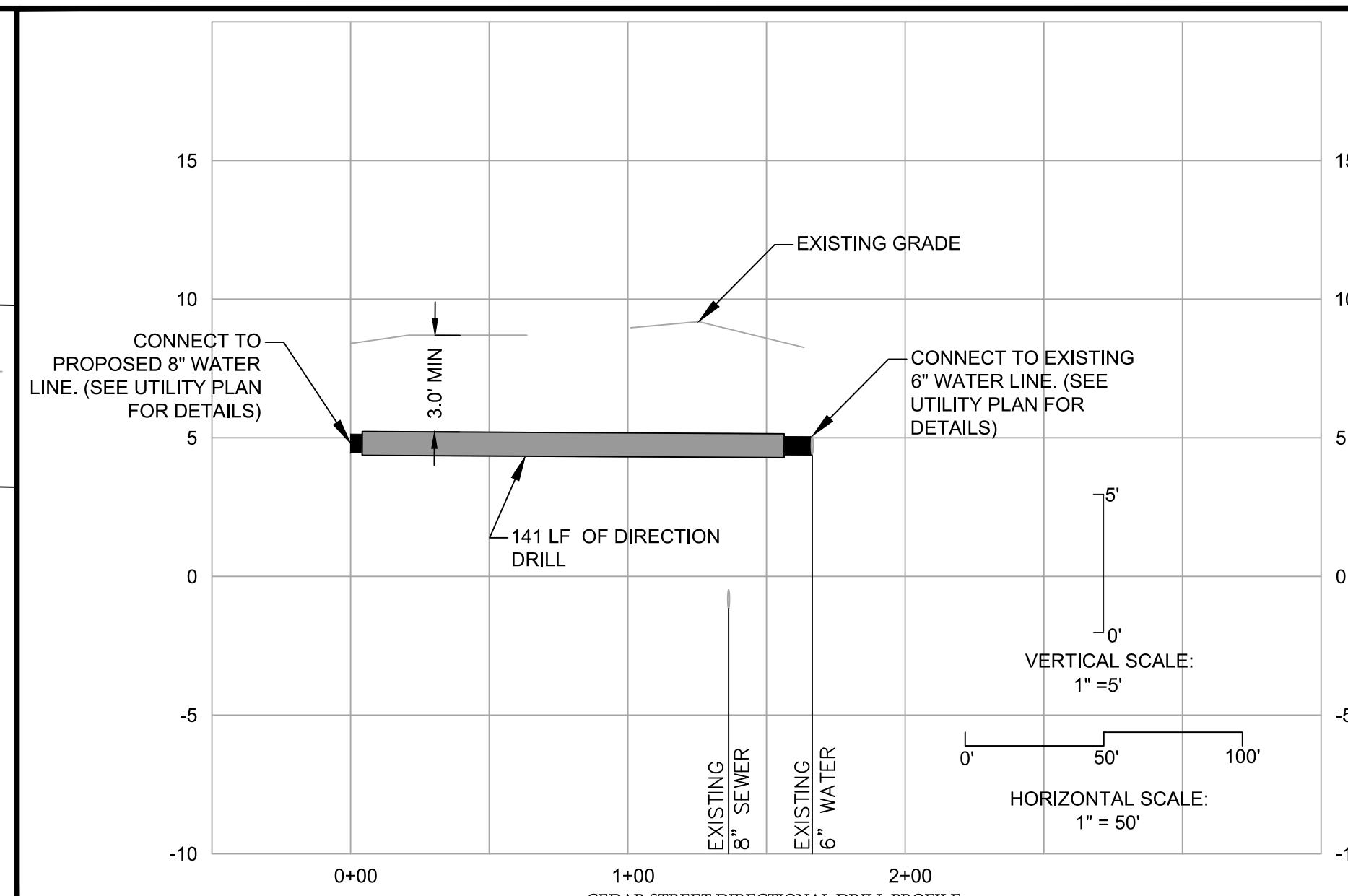
E. ONLY APPROPRIATELY SIZED AND OUTFITTED FUSION MACHINES THAT HAVE BEEN APPROVED BY THE PIPE SUPPLIER SHALL BE USED FOR THE FUSION PROCESS. THIS INCLUDES REQUIREMENTS FOR SAFETY, MAINTENANCE, AND OPERATION WITH MODIFICATIONS MADE FOR PVC.

3.03 GENERAL INSTALLATION

A. INSTALLATION GUIDELINES FROM THE PIPE SUPPLIER SHALL BE FOLLOWED FOR ALL INSTALLATIONS.

B. THE FUSIBLE POLYVINYLCHLORIDE PIPE WILL BE INSTALLED IN A MANNER SO AS NOT TO EXCEED THE RECOMMENDED BENDING RADIUS GUIDELINES.

C. WHERE FUSIBLE POLYVINYLCHLORIDE PIPE IS INSTALLED BY PULLING IN TENSION, THE RECOMMENDED MAXIMUM SAFE PULLING FORCE, ESTABLISHED BY THE PIPE SUPPLIER, SHALL NOT BE EXCEEDED.

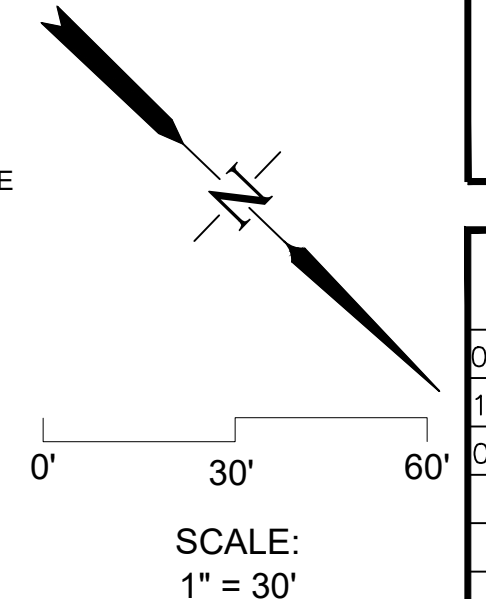


CONTRACTOR TO COORDINATE WATER AND SEWER INSTALLATION WITH BGJWSC AND GLYNN COUNTY PRIOR TO CONSTRUCTION.

CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES CROSSING PROPOSED WATER AND SEWER.

CONTRACTOR MAY CHANGE BORE PIT AND/OR MACHINE STAGING AREA SHOWN ON THIS PLAN BASED ON SITE CONDITIONS.

- LEGEND**
- W — W — W — PROPOSED WATER LINE
 - SS — SS — SS — PROPOSED SEWER LINE
 - CO — CO — CO — PROPOSED CLEAN OUT
 - SD — SD — SD — PROPOSED STORM DRAIN
 - — — — PROPOSED STORM PIPE
 - — — — PROPOSED PERVIOUS SURFACE
 - — — — PROPOSED CONCRETE
 - — — — EXISTING CONCRETE
 - — — — EXISTING ASPHALT PAVEMENT
 - — — — EXISTING OVERHEAD POWER
 - UGG — UGG — UGG — EXISTING UNDER GROUND GAS
 - UGC — UGC — UGC — EXISTING UNDER GROUND CABLE
 - W — W — W — EXISTING WATER MAIN
 - SS — SS — SS — EXISTING SEWER LINE
 - SD — SD — SD — EXISTING STORM PIPE
 - X — X — X — EXISTING FENCE
 - 8.1 — EXISTING SPOT ELEVATION
 - — — — EXISTING CONTOUR
 - — — — EXISTING TREE



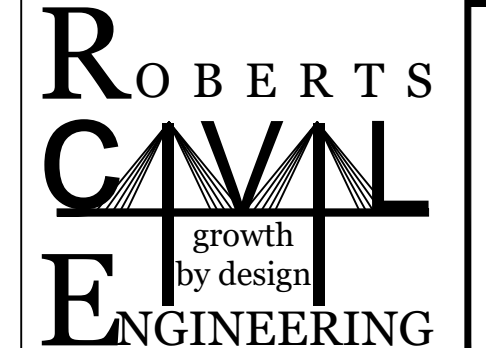
USSERY/RULE ARCHITECTS P.C.
1804-A FREDERICA ROAD
ST. SIMONS ISLAND, GEORGIA 31522
www.urareh.com
PH. 912-638-6688

Architecture · Land Planning · Interior Design

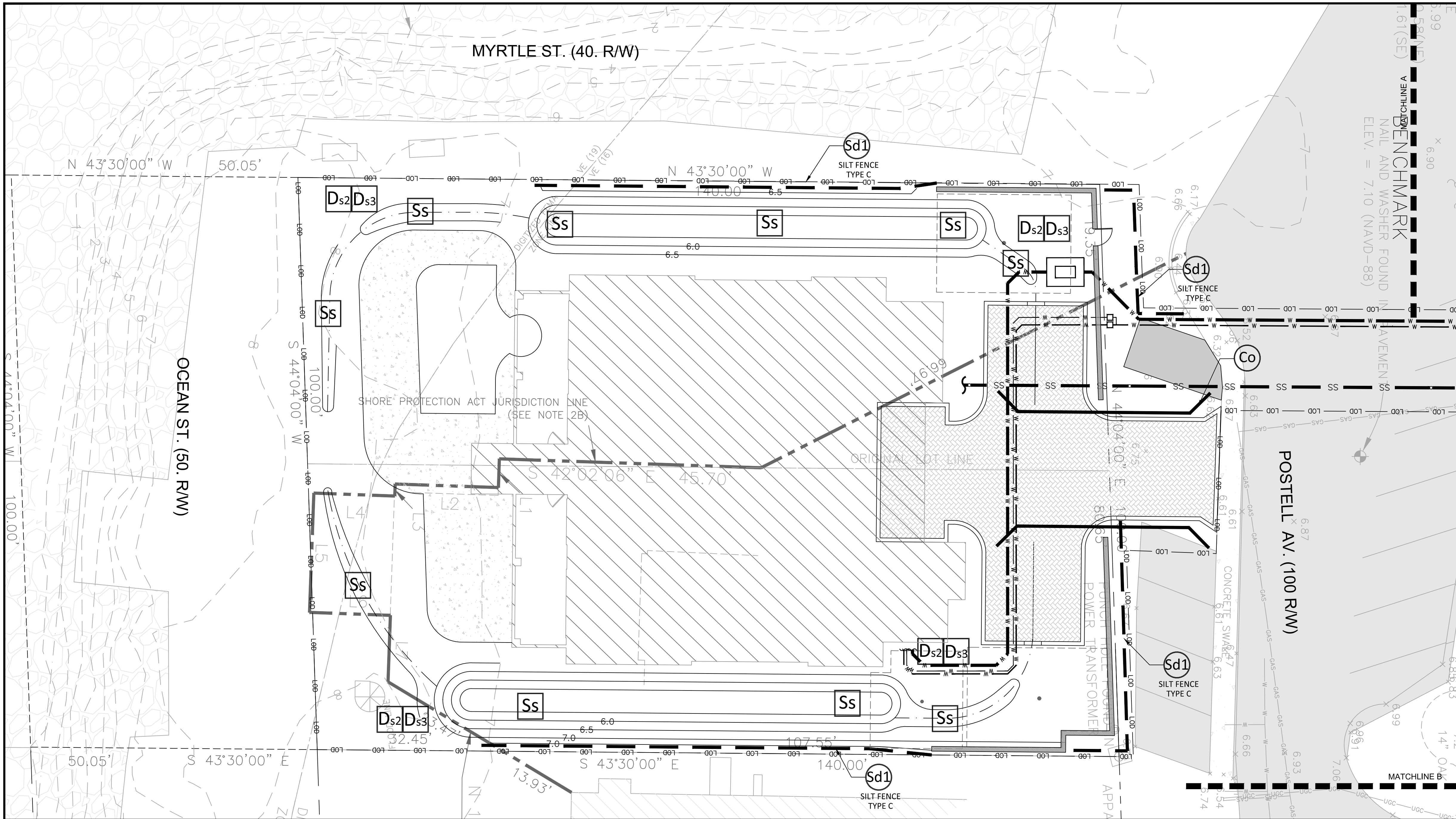
Viewpoint Condominiums
Utility Plan B

ST. SIMONS ISLAND, GA.

09-06-2017	1st SUBM.
12-01-2017	2nd SUBM.
01-23-2018	3d SUBM.



C5



NOTE:

THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION.

NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMIT.

AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

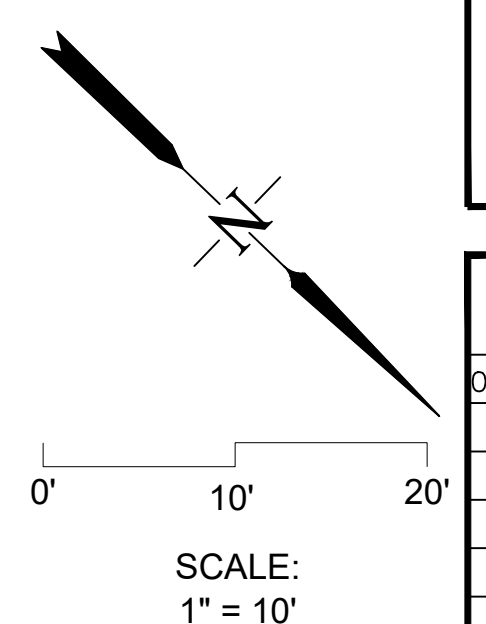
EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

- ES&PC LEGEND**
- CONSTRUCTION EXIT
 - SEDIMENT BARRIER AS NOTED
 - MATTING & BLANKET
 - TEMPORARY SEEDING
 - PERMANENT SEEDING
 - LOD LIMIT OF DISTURBANCE
 - SOILS

THE LIMIT OF DISTURBANCE DOES NOT REFLECT THE CLEARING AREA. CLEARING AND TREE REMOVAL SHALL BE COORDINATED WITH OWNER. NO TREES SHALL BE REMOVED WITHOUT THE WRITTEN CONSENT OF OWNER.

OWNER/DEVELOPER CONTACT INFO:
 ISLAND VIEWPOINT, LLC
 PO BOX 927
 STAR HAM, GA 30666
 CONTACT: ADAM SWANN (706) 296-2771



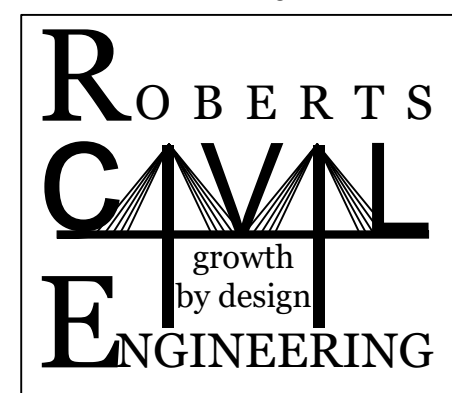
USSERY/RULE ARCHITECTS P.C.
 1804-A FREDERICA ROAD
 ST. SIMONS ISLAND, GEORGIA 31522
 www.urrchl.com PH. 912-638-6688

Architecture · Land Planning · Interior Design

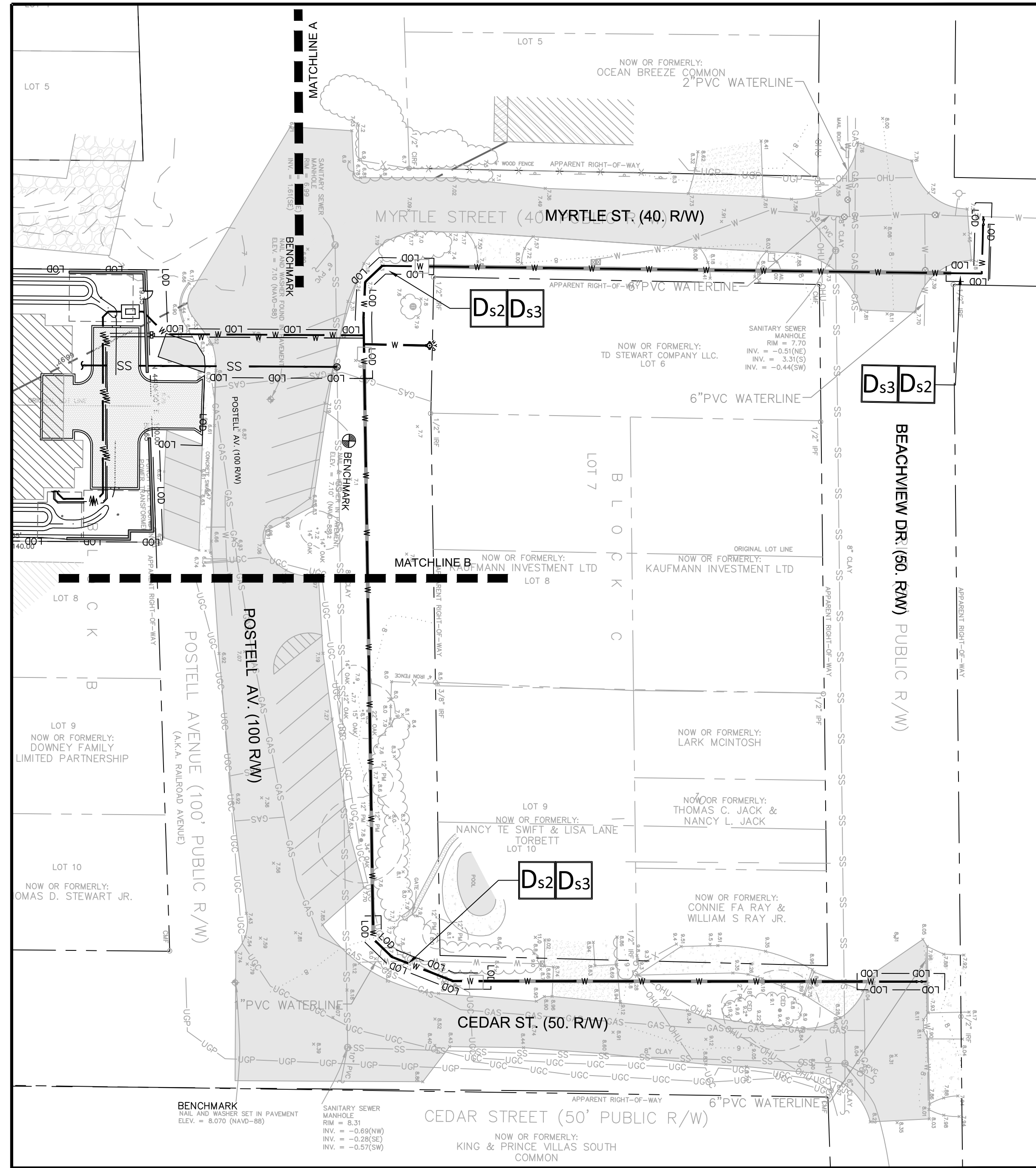
Viewpoint Condominiums
ES & PC Plan A

ST. SIMONS ISLAND, GA.

09-06-2017	1st SUBM.



C6



NOTE:

THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION.

NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMIT.

AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

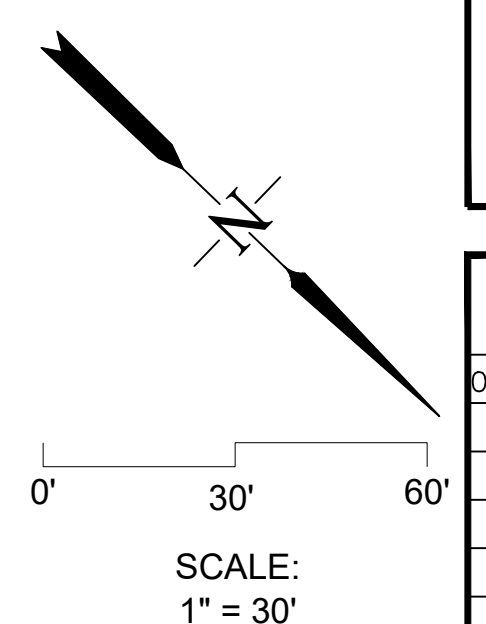
EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

ES&PC LEGEND

- Ds2 TEMPORARY SEEDING
- Ds3 PERMANENT SEEDING
- LOD — LIMIT OF DISTURBANCE
- Ma SOILS

THE LIMIT OF DISTURBANCE DOES NOT REFLECT THE CLEARING AREA. CLEARING AND TREE REMOVAL SHALL BE COORDINATED WITH OWNER. NO TREES SHALL BE REMOVED WITHOUT THE WRITTEN CONSENT OF OWNER.



UR

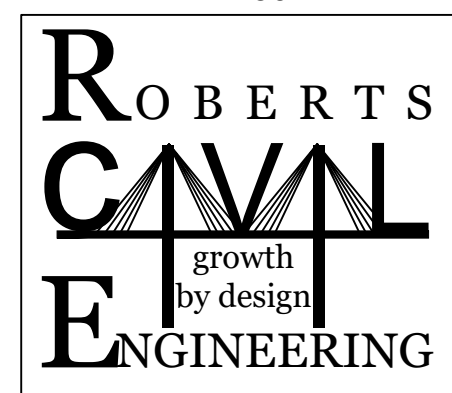
USSERY/RULE ARCHITECTS P.C.
 1804-A FREDERICA ROAD
 ST. SIMONS ISLAND, GEORGIA 31522
 www.urarch.com PH. 912-638-6688

Architecture · Land Planning · Interior Design

**Viewpoint Condominiums
 ES & PC Plan B**

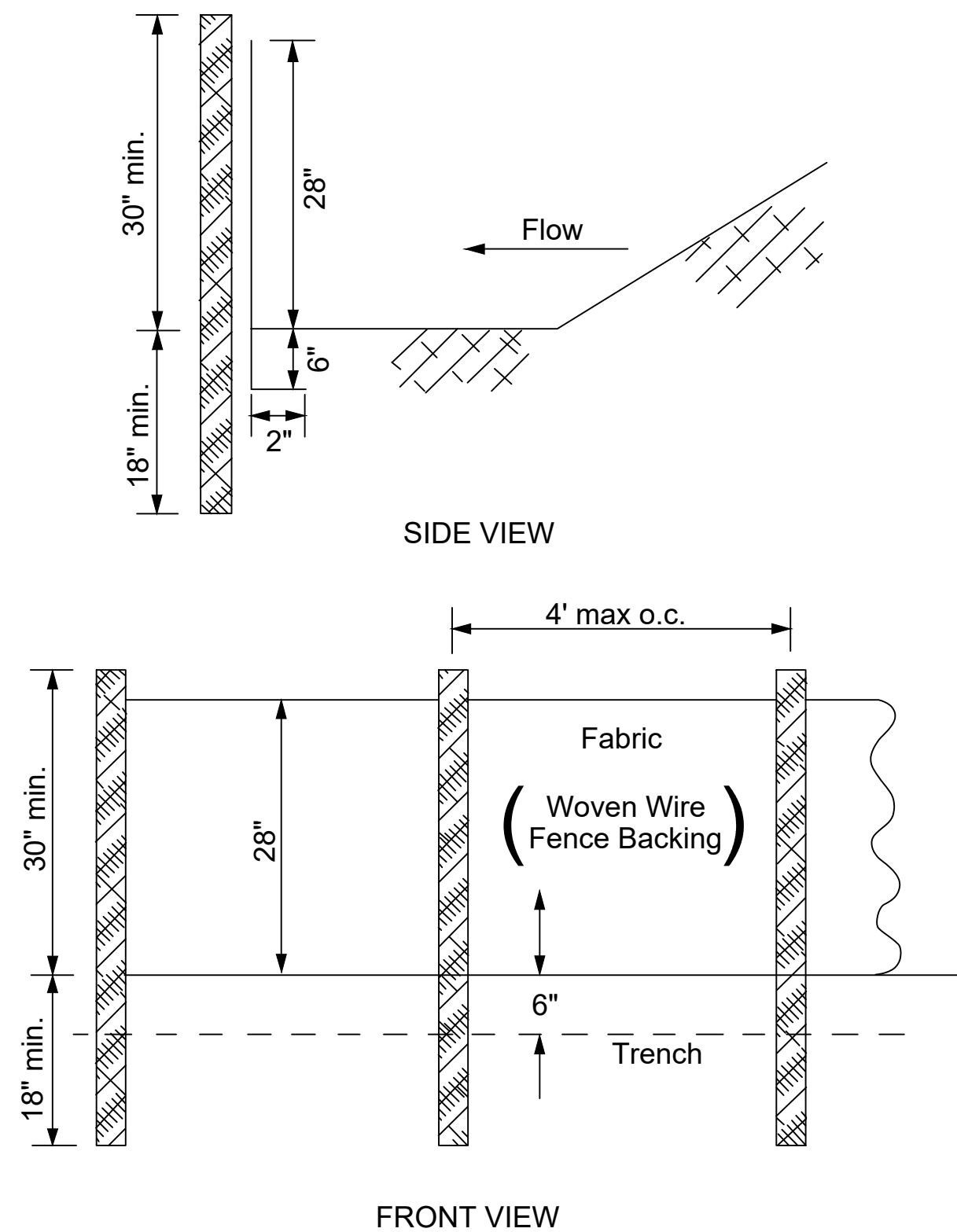
ST. SIMONS ISLAND, GA.

09-06-2017	1st SUBM.



C7

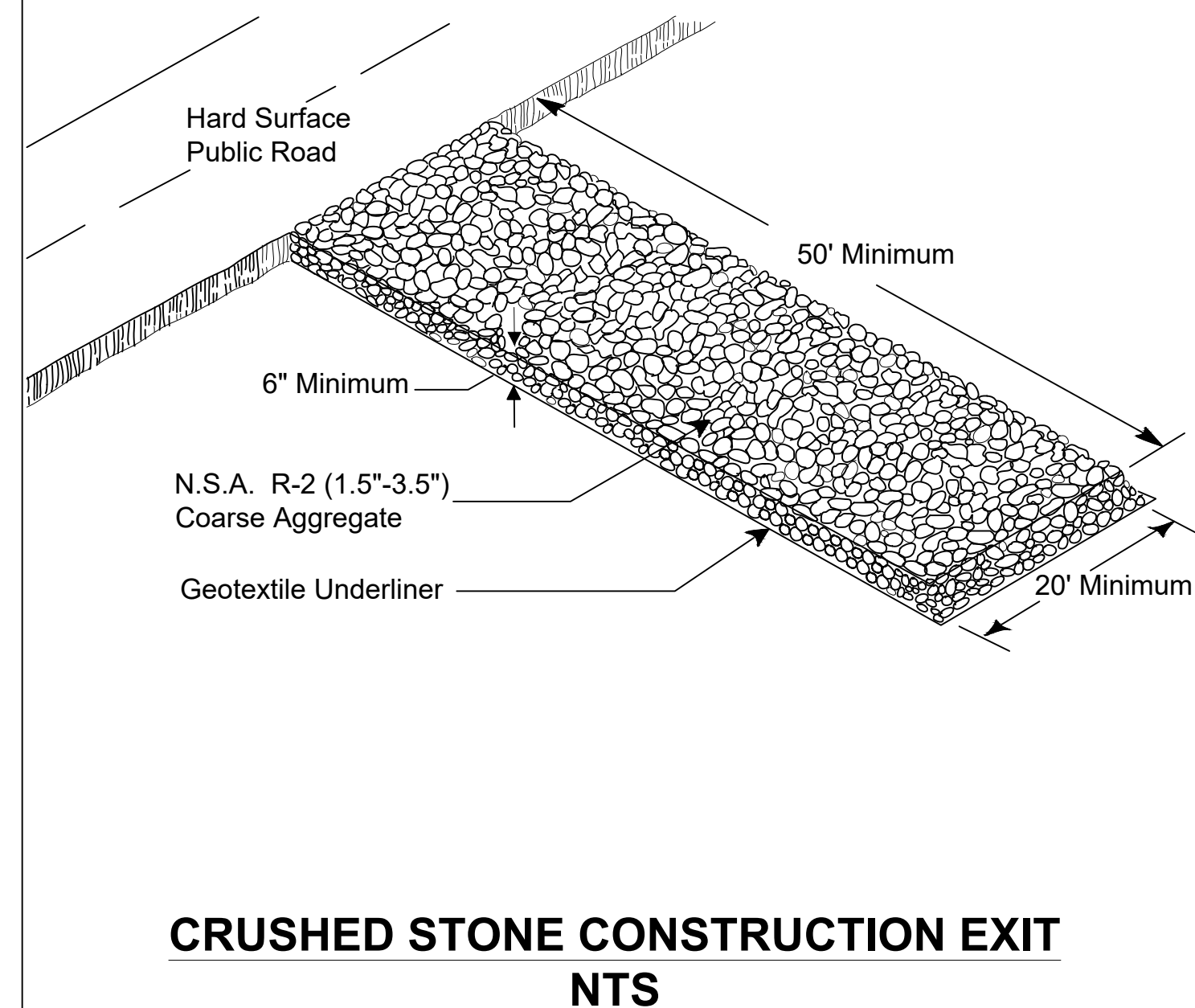
Sd1



NOTE:
Use 36" D.O.T. approved fabric.
Use steel posts. - only

**SILT FENCE - TYPE C
NTS**

Co



**CRUSHED STONE CONSTRUCTION EXIT
NTS**

ACTIVITY	MONTH					
	1	2	3	4	5	6
INSTALL AND MAINTAIN INITIAL BMP'S	██████████					
DEMOLITION	██████████					
INSTALL AND MAINTAIN INTERMEDIATE BMP'S	██████████					
INSTALL FINAL BMP'S	██████████					

CONSTRUCTION TIMELINE

	Area	Sowing Season	Species	Seed	Fertilizer	Lime	Mulch
Ds1							2" - 4" depth dry straw or dry hay
Ds2	Flat to rolling terrain with slopes less than 3:1	8/1-4/1 4/1-8/1	Rye Browntop Millet	1/2 BU/ac (28 lb) 10 lb/ac	12 lb/1000 sq. ft (10-10-10)	*	
Ds3	Flat to rolling terrain with slopes less than 3:1	1/1-3/1 3/2-8/1 6/2-9/1 9/2-12/31	Common Bermuda Common Bermuda Common Bermuda Common Bermuda	5 lb/acre unhulled and 5 lb/acre hulled 10 lb/acre unhulled 5 lb/acre unhulled and 5 lb/acre hulled 10 lb/acre unhulled	35 lb/1000 sq. ft (6-12-12)	1-2 tons/acre	2 tons/acre-dry straw 2.5 tons/acre-dry hay
Ds4	Areas requiring immediate vegetative cover, drop inlets, grass swales, and waterways with intermittent flow.		Bermudagrass Bahagrass Centipede St. Augustine Zoysia		1500 lb/acre (6-12-12)		

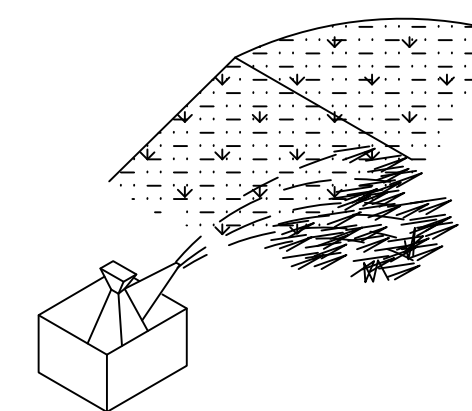
* as determined by soil test.

**MULCH, LIME, SEEDING AND FERTILIZER
APPLICATION RATES**

Ds2

**DISTURBED AREA
STABILIZATION
(WITH TEMPORARY
SEEDINGS)**

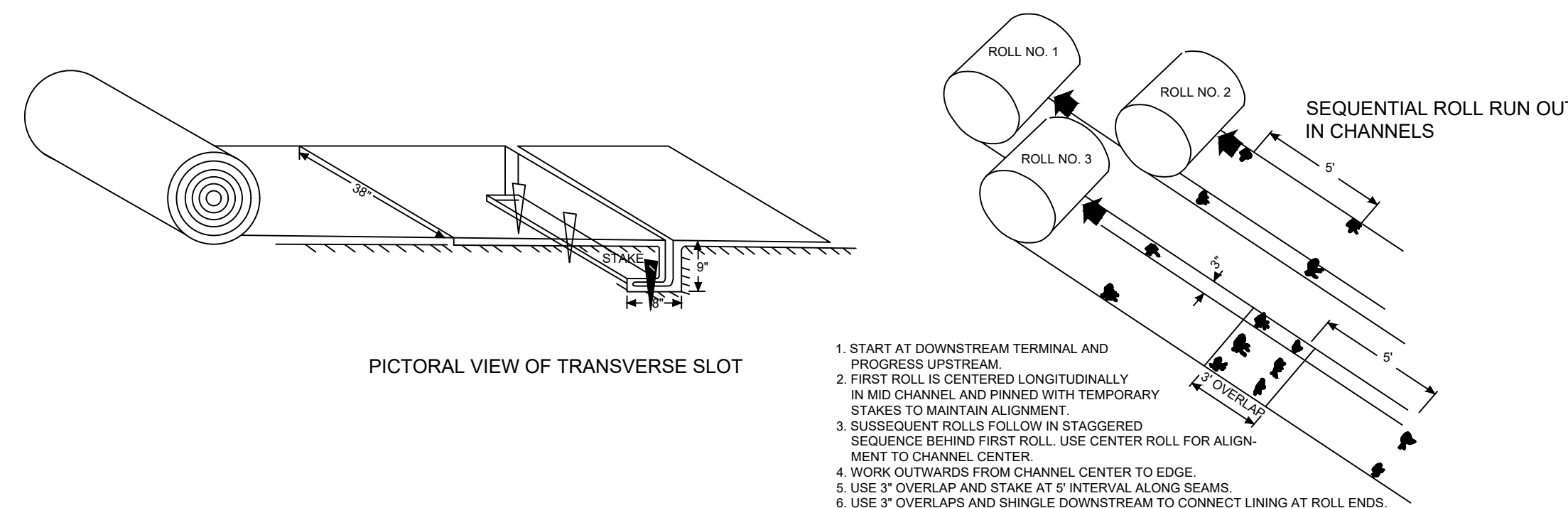
ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS.



12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION.
SITE PREPARATION:

- * GRADING AND SHAPING
- * SEED BED PREPARATION
- * APPLY LIME AND FERTILIZER
- * PLANT SEEDING, SELECT SPECIES BY SEASON AND REGION
- * APPLY MULCHING MATERIAL IF NEEDED
- * IRRIGATE IF NEEDED, BUT NOT AT RATE TO CAUSE EROSION

Ss

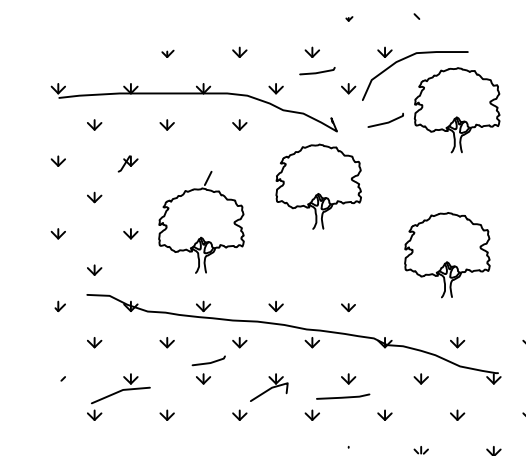


**EROSION CONTRL MATTING AND BLANKETS
NTS**

Ds3

**DISTURBED AREA
STABILIZATION
(WITH PERMANENT
SEEDINGS)**

ESTABLISHING A PERMANENT VEGETATIVE COVER WITH FAST GROWING SEEDINGS.



APPLICABLE ON HIGHLY ERODIBLE OR SEVERELY ERODED AREAS, SOMETIMES CALLED "CRITICAL AREAS" INCLUDING:

- * CUT OR FILL SLOPES
- * EARTH SPILLWAYS
- * BORROW AREAS
- * CHANNEL BANKS
- * BERMS
- * ROADSIDES
- * SPOIL AREAS
- * GULLIED LANDS



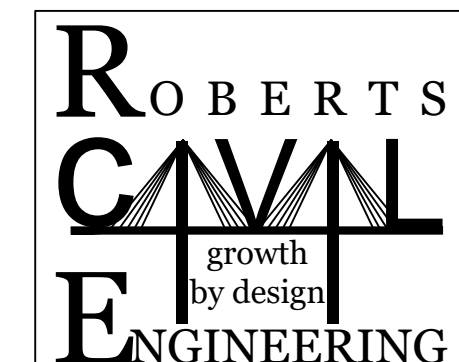
UR
 USSERY/RULE ARCHITECTS P.C.
 1804-A FREDERICA ROAD
 ST. SIMONS ISLAND, GEORGIA 31522
 www.urarch.com PH. 912-658-6688
 Architecture · Land Planning · Interior Design

**Viewpoint Condominiums
ES & PC Details**
 ST. SIMONS ISLAND, GA.

09-06-2017 1st SUBM.

C8

CERTIFIED DESIGN
PROFESSIONAL:
JOHNATHAN ROBERTS, PE
LEVEL II CERTIFICATION #: 0000058719



GENERAL NOTES:

WATER METER TO BE PURCHASED FROM THE BRUNSWICK-GLYNN COUNTY JOINT WATER AND SEWER COMMISSION (JWSC) THE OWNER WILL PAY ALL COSTS FOR THE PURCHASE OF THE METER FROM JWSC AS WELL AS ALL ASSOCIATED CONNECTION AND ACCOUNT SET-UP FEES.

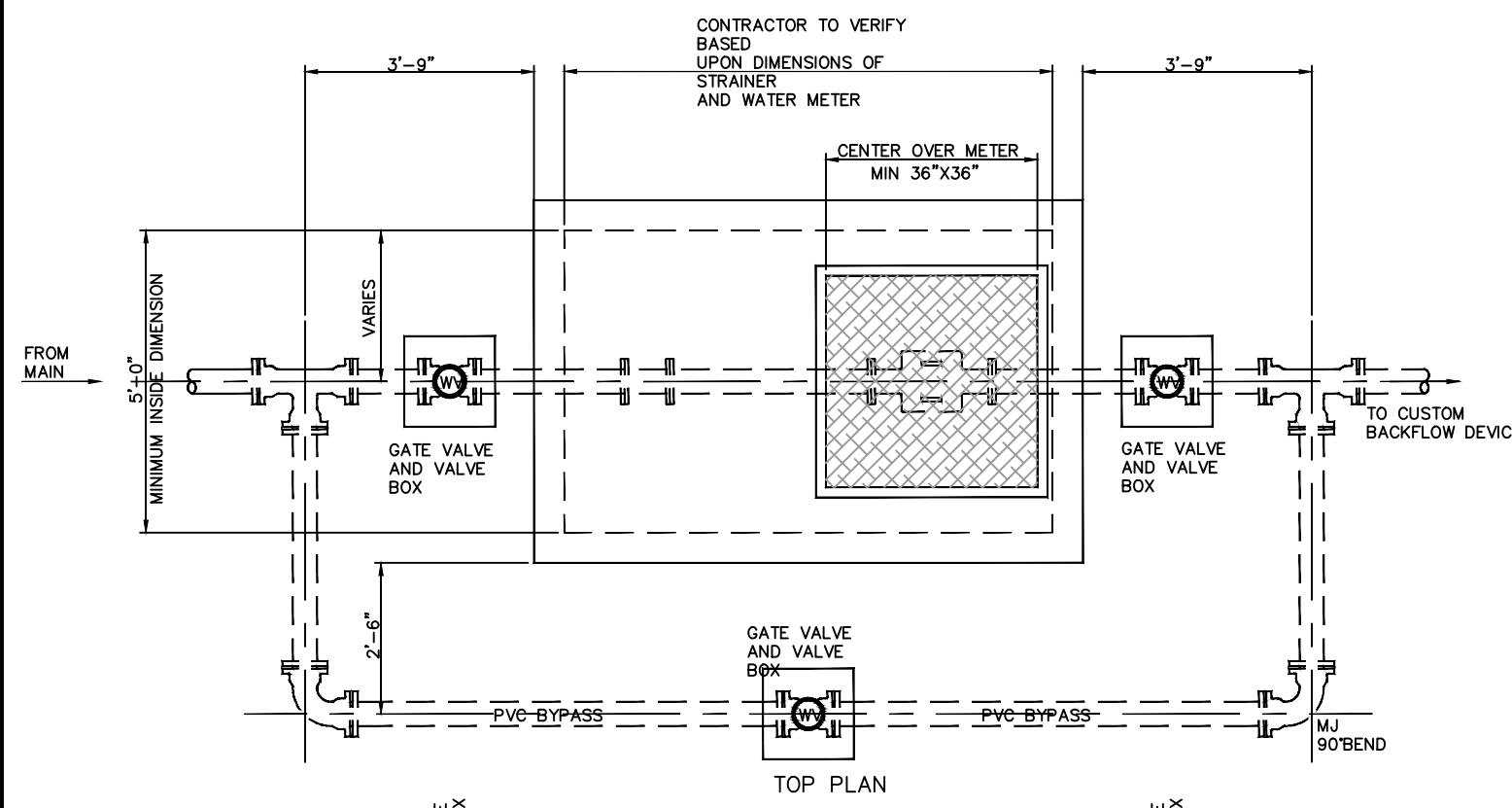
CONTRACTOR SHALL BE RESPONSIBLE FOR PICK UP AND DELIVERY OF THE METER FROM JWSC TO THE JOB SITE. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR WATER METER INSULATION INCLUDING, ALL NECESSARY PIPE, VALVES, FITTINGS, ACCESSORIES, PRECAST VALVE VAULT AND ALL OTHER WORK AND APPURTENANCES REQUIRED.

PRECAST CONCRETE VALVE VAULT TO BE IN ACCORDANCE WITH ASTM C-478.

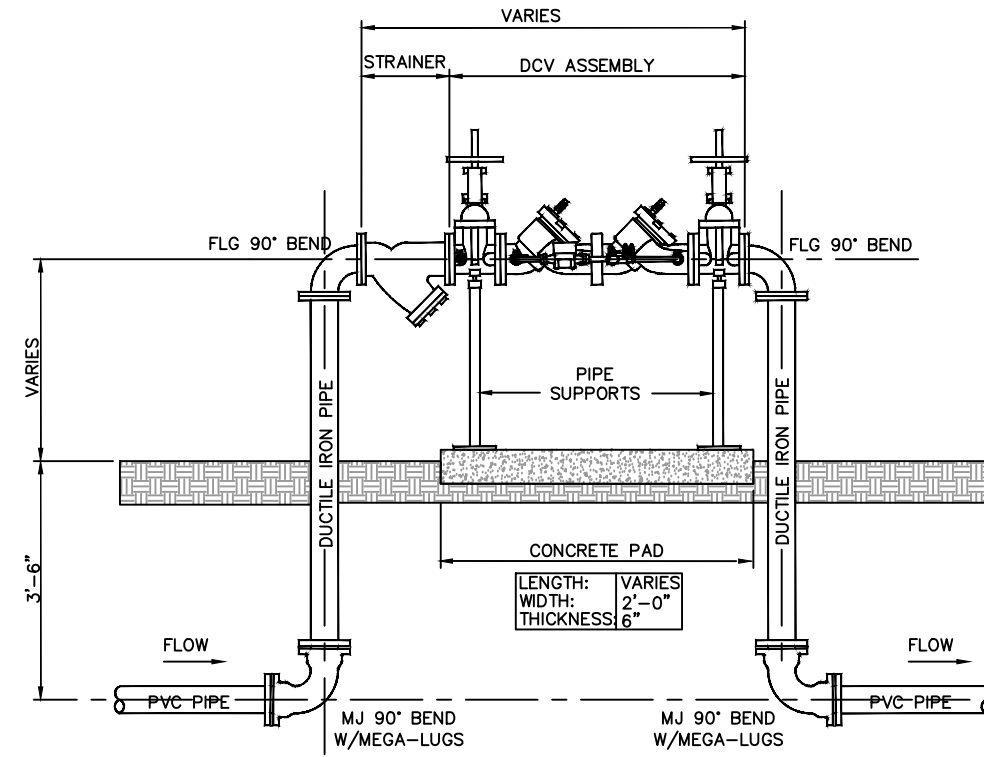
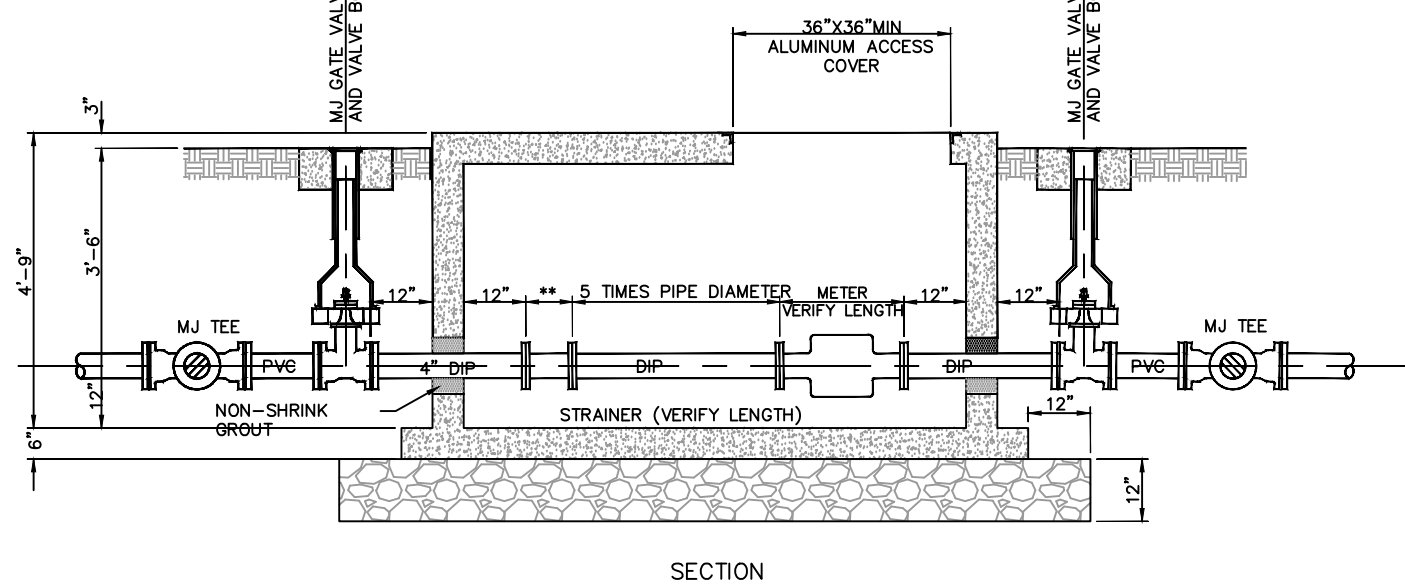
ALL INTERIOR FITTINGS TO BE DUCTILE IRON WITH FLANGED JOINTS. BURED FITTINGS TO BE DUCTILE IRON WITH MECHANICAL JOINTS, UTILIZING MEGA LUG JOINT RESTRAINTS.

TRANSMITTER FOR THE WATER METER SHALL BE LOCATED AS DIRECTED BY THE JWSC INSPECTOR.

ALUMINUM ACCESS COVER TO BE AS MANUFACTURED BY HALLIDAY PRODUCT INC. OR APPROVED EQUAL. APPLY BITUMASTIC COATING TO ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE.



WATER METER INSTALLATION DETAIL 3" AND LARGER
NTS
JWSC STANDARD DETAIL 2-19
AUGUST 2011



DOUBLE CHECK VALVE (DCV) ASSEMBLY 3"-10"
NTS
JWSC STANDARD DETAIL
AUGUST 2011 2-20

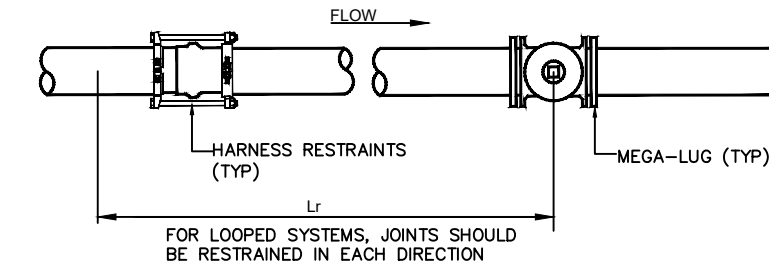
GENERAL NOTES:

DOUBLE CHECK ASSEMBLY SHALL INCLUDE TIGHT CLOSING RESILIENT SEATED SHUTOFF VALVES, TEST COCKS AND STRAINER. THE ASSEMBLY SHALL MEET THE REQUIREMENTS OF ASSE NO. 1015, ANWA C510-92, CSA B64.5 AND UL CLASSIFIED FILE NO. EX3185. ASSEMBLY SHALL BE A WAITS REGULATOR COMPANY SERIES 709 OR APPROVED EQUAL.

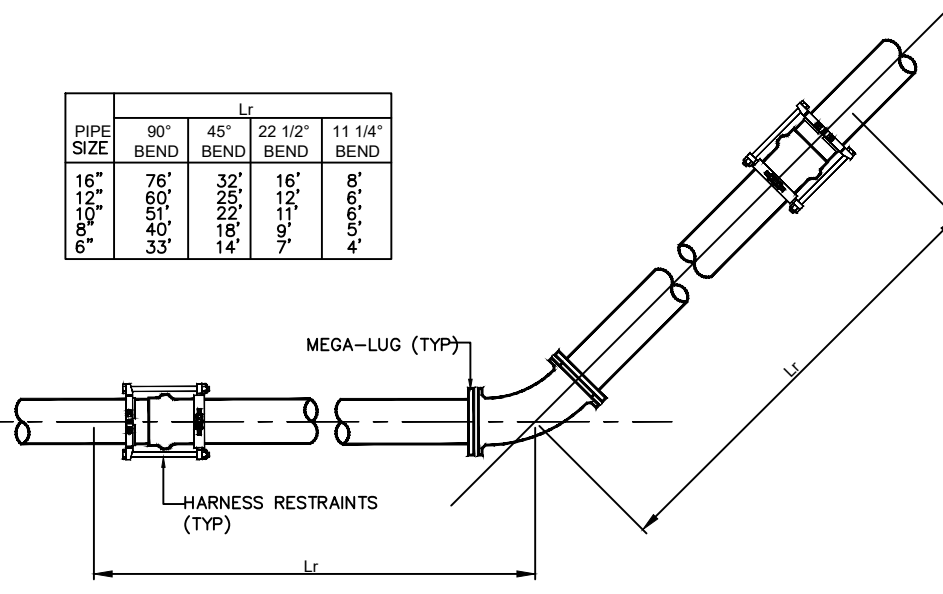
ALL ABOVE GROUND FITTINGS TO BE DUCTILE IRON WITH FLANGED JOINTS. BURED FITTINGS TO BE DUCTILE IRON WITH MECHANICAL JOINTS UTILIZING MEGA-LUG JOINT RESTRAINTS.

ALL ABOVE GROUND DUCTILE IRON PIPING SHALL BE PAINTED WITH AN EXTERIOR GRADE ENAMEL PAINT. COLOR SELECTION IN ACCORDANCE WITH ANWA STANDARDS FOR POTABLE WATER PIPE.

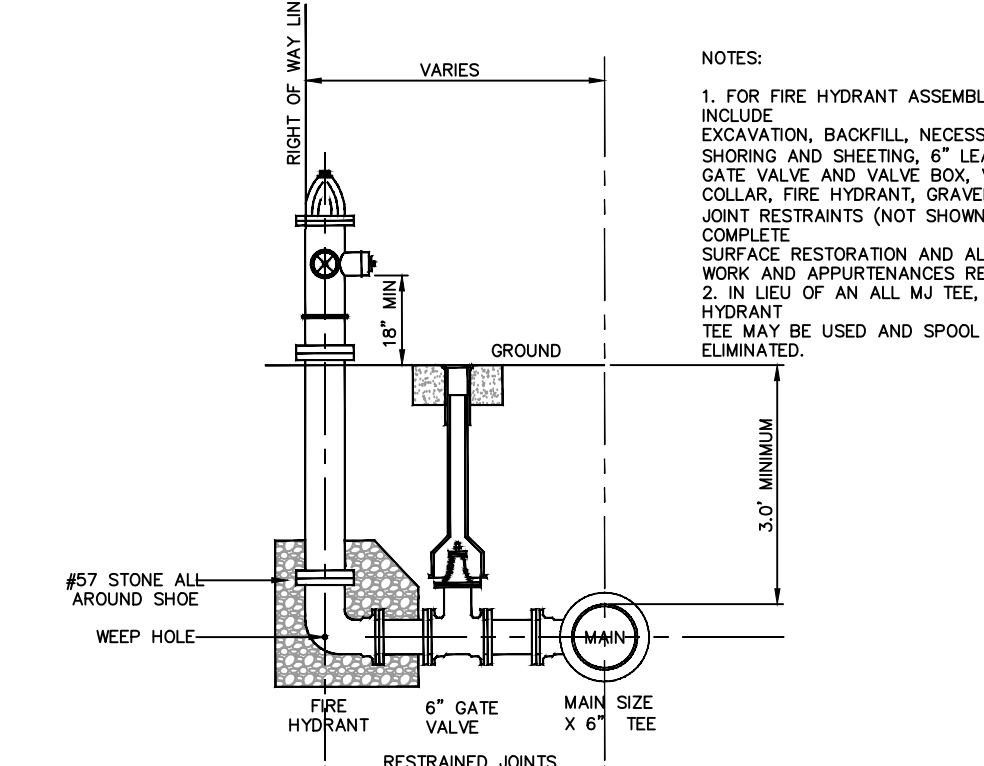
LINE SIZE	L1
18"	175
12"	135
10"	115
8"	95
6"	74
4"	52



PVC JOINTS RESTRAINTS - IN-LINE VALVE
NTS
JWSC STANDARD DETAIL 2-6
AUGUST 2011

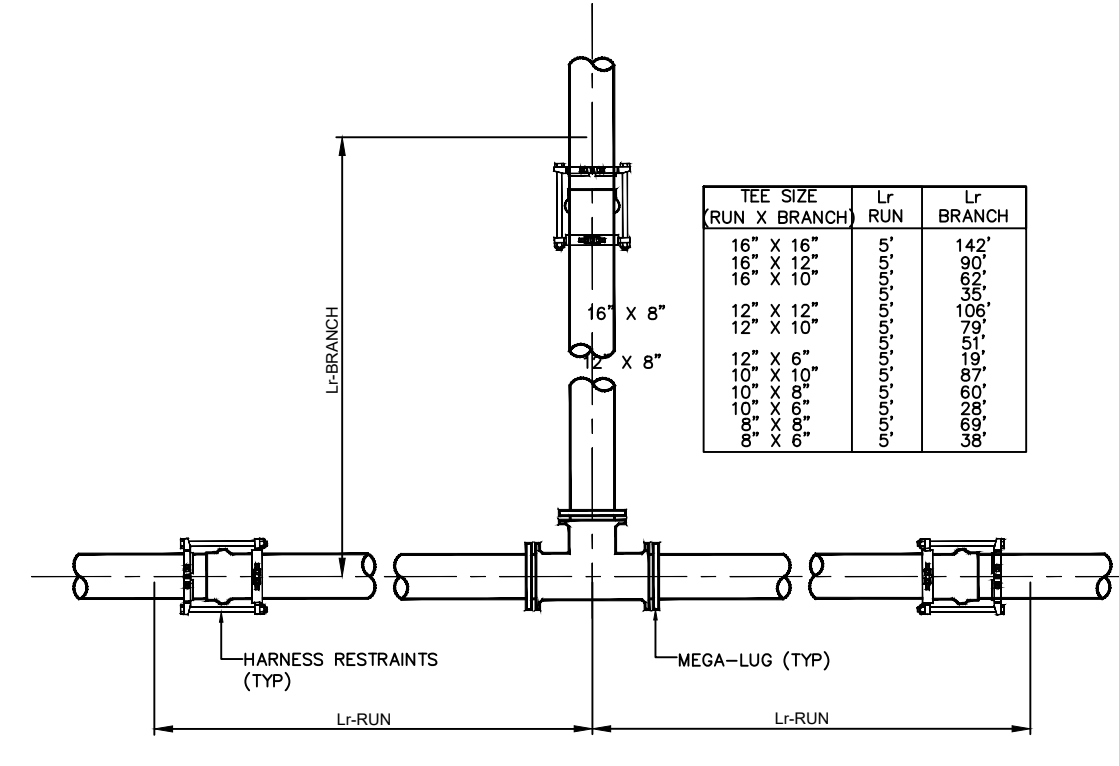


PVC JOINTS RESTRAINTS - HORIZONTAL
NTS
JWSC STANDARD DETAIL 2-4
AUGUST 2011

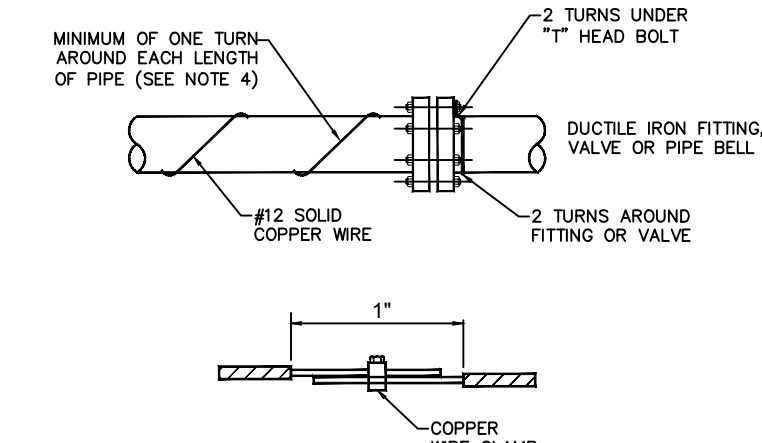


FIRE HYDRANT DETAIL
NTS
JWSC STANDARD DETAIL 2-14
AUGUST 2011

NOTES:
1. FOR FIRE HYDRANT ASSEMBLIES INCLUDE EXCAVATION, BACKFILL, NECESSARY SHORING AND SHEETING, 6" LEAD PIPE, 6" GATE VALVE AND VALVE BOX, VALVE BOX COLLAR, FIRE HYDRANT GRAVEL, THE ROD JOINT RESTRAINTS (NOT SHOWN), COMPLETE SURFACE RESTORATION AND ALL OTHER WORK AND APPURTENANCES REQUIRED.
2. IN LIEU OF AN ALL MJ TEE, A HYDRANT TEE MAY BE USED AND SPOOL PIECE ELIMINATED.

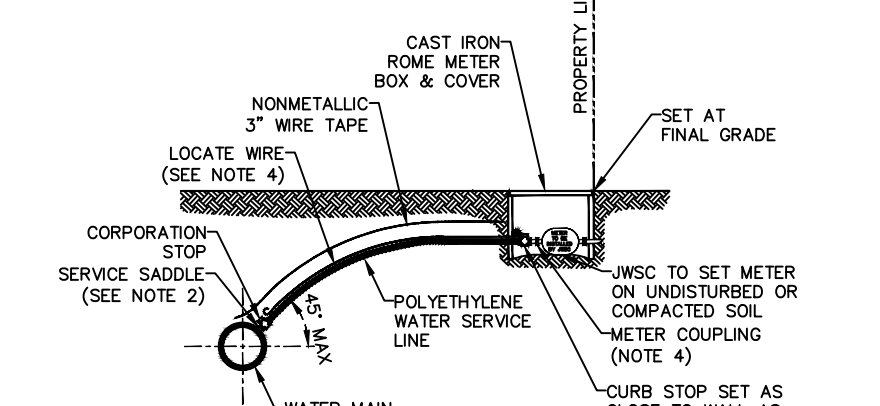


PVC JOINTS RESTRAINTS - TEE
NTS
JWSC STANDARD DETAIL 2-3
AUGUST 2011



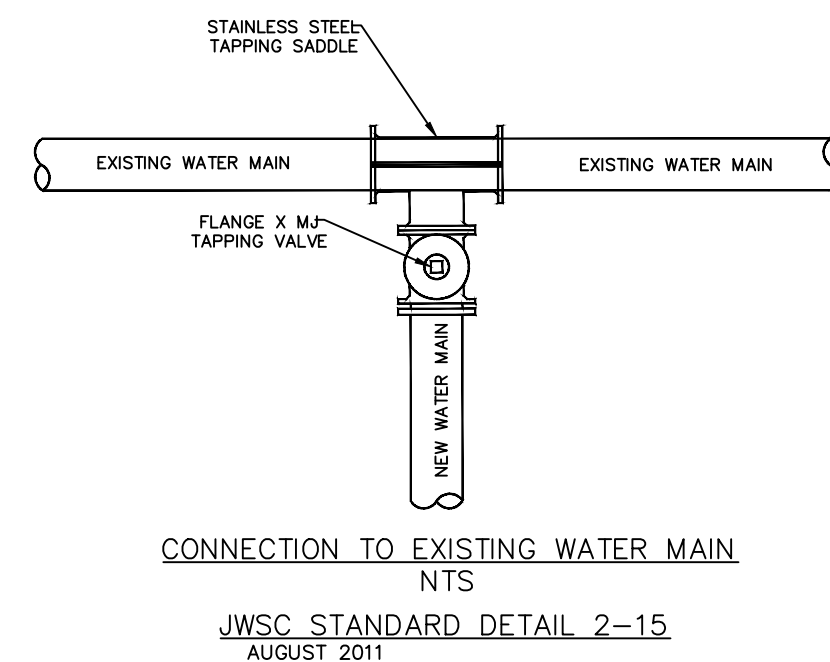
NOTE:
1. USE #12 AWG SOLID PLASTIC COATED COPPER WIRE.
2. STRIP 2" OF COATING & WRAP WIRE 2 TURNS UNDER "T" HEAD BOLT ON TOP OF DUCTILE IRON FITTING (VALVE). NEXT WRAP WIRE 2 TURNS AROUND BELLY OF FITTING (VALVE) AND WIND WITH A CONTINUOUS LENGTH OF AT LEAST 4 WRAPS PER LENGTH OF PVC PIPE TO THE NEXT DUCTILE IRON FITTING. TERMINATE AT FITTING IN A SIMILAR MANNER AS NOTED ABOVE.
3. ALL SPLICES MUST BE MADE BY USING COPPER WIRE SPLICE, "U" BOLT ASSEMBLIES AND THEN WRAPPING WITH ELECTRICAL TAPE.
4. IN LIEU OF "WRAPPING" TRACER WIRE AROUND PVC PIPE, WIRE MAYBE STRUNG ALONG THE TOP OF PIPE, PROVIDED IT IS TAPED TO THE PIPE EVERY 5'-0" TO INSURE ACCURATE POSITION MAINTAINED DURING BACKFILL.

TRACER WIRE INSTALLATION
NTS
JWSC STANDARD DETAIL 2-9
AUGUST 2011

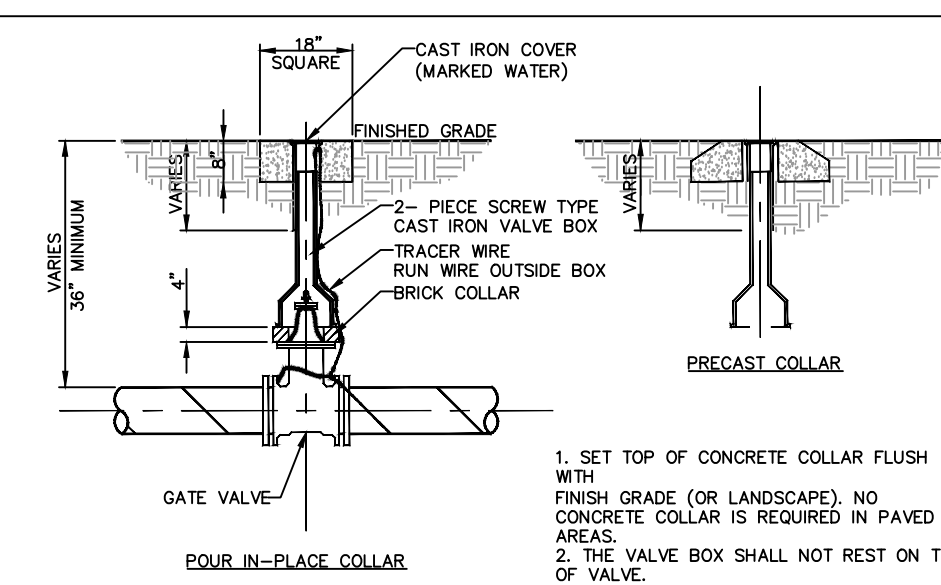


SINGLE WATER SERVICE DETAIL
NTS
JWSC STANDARD DETAIL 2-16
AUGUST 2011

NOTE:
1. CONTRACTOR SHALL INSTALL METER AND METER BOX. METER IS TO BE PURCHASED THROUGH BGJWSC.
2. ALL FITTINGS IN LATERAL SHALL BE COMPRESSION TYPE.
3. A MINIMUM OF TWO FULL THREADS ARE REQUIRED FOR TAPPING SLEEVE TO GO INTO THE PIPE WALL.
4. INSULATED SINGLE STRAND COPPER WIRE SHALL BE STRAPPED TO THE PIPE AND ATTACHED TO THE CORPORATION AND CURB STOPS.
5. INSTALL PVC PLUG IN ALL CURB STOPS IF WATER SERVICE IS NOT IN USE (NO METER IS INSTALLED).
6. WATER SERVICES SERVING VACANT LOTS (SERVICE NOT IN USE), SHALL INCLUDE A "W" CUT INTO THE CURB. FOR NEW DEVELOPMENT AREAS WHERE THE WATER SERVICE IS NOT IN USE.
7. POLYETHYLENE WATER SERVICE LINE SHALL BE PERPENDICULAR TO THE MAIN UNLESS APPROVED OTHERWISE BY BGJWSC.

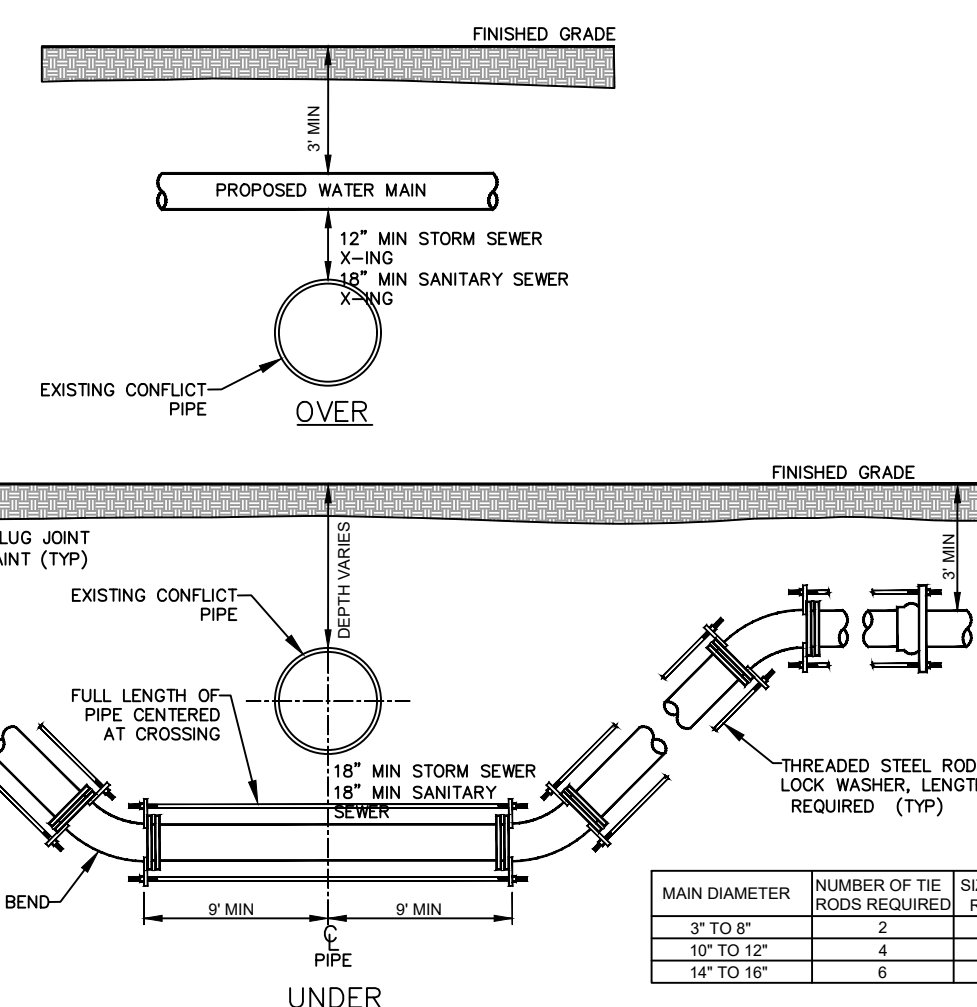


CONNECTION TO EXISTING WATER MAIN
NTS
JWSC STANDARD DETAIL 2-15
AUGUST 2011



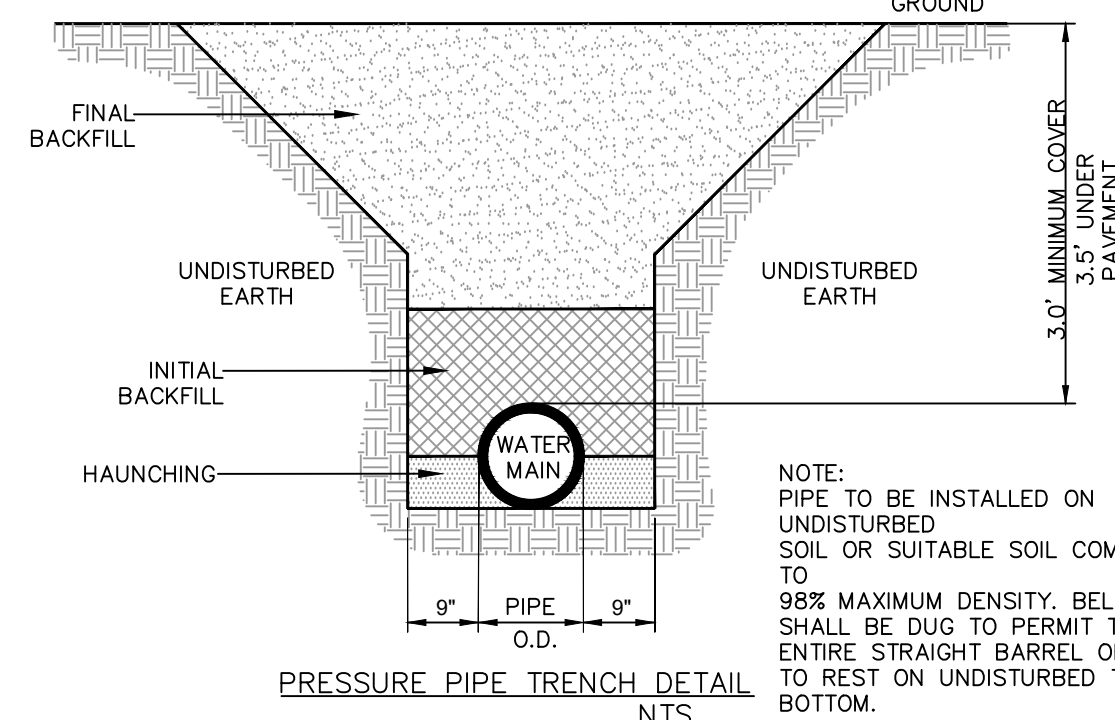
WATER VALVE DETAIL
NTS

1. SET TOP OF CONCRETE COLLAR FLUSH WITH FINISH GRADE (OR LANDSCAPE). NO CONCRETE COLLAR IS REQUIRED IN PAVED AREAS.
2. THE VALVE BOX SHALL NOT REST ON TOP OF VALVE.
3. PRECAST CONCRETE COLLARS MAY BE USED UPON APPROVAL OF THE BGJWSC REPRESENTATIVE. SEE ALTERNATE DETAIL ABOVE.



UTILITY CONFLICT DETAIL
NTS

MAIN DIAMETER	NUMBER OF THE SIZE OF RODS REQUIRED	SIZE OF RODS
3" TO 8"	2	3/4"
10" TO 12"	4	3/4"
14" TO 18"	6	3/4"



PRESSURE PIPE TRENCH DETAIL
NTS

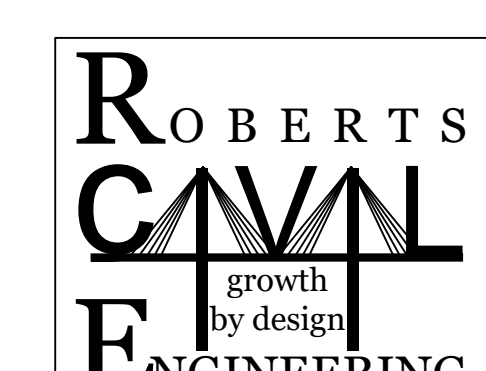
NOTE:
PIPE TO BE INSTALLED ON UNDISTURBED SOIL OR SUITABLE SOIL COMPACTED TO 98% MAXIMUM DENSITY. BELL HOLE SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF PIPE TO REST ON UNDISTURBED TRENCH BOTTOM.



USSERY/RULE ARCHITECTS P.C.
1804-A FREDERICA ROAD
ST. SIMONS ISLAND, GEORGIA 31522
www.urareh.com
PH. 912-638-6688
Architecture Land Planning Interior Design

Viewpoint Condominiums
Construction Details
ST. SIMONS ISLAND, GA.

09-06-2017 1st SUBM.



C9



USSERY/RULE ARCHITECTS P.C.
 1804-A FREDERICA ROAD
 ST. SIMONS ISLAND, GEORGIA 31522
 PH. 912-638-6688
 www.urrarch.com

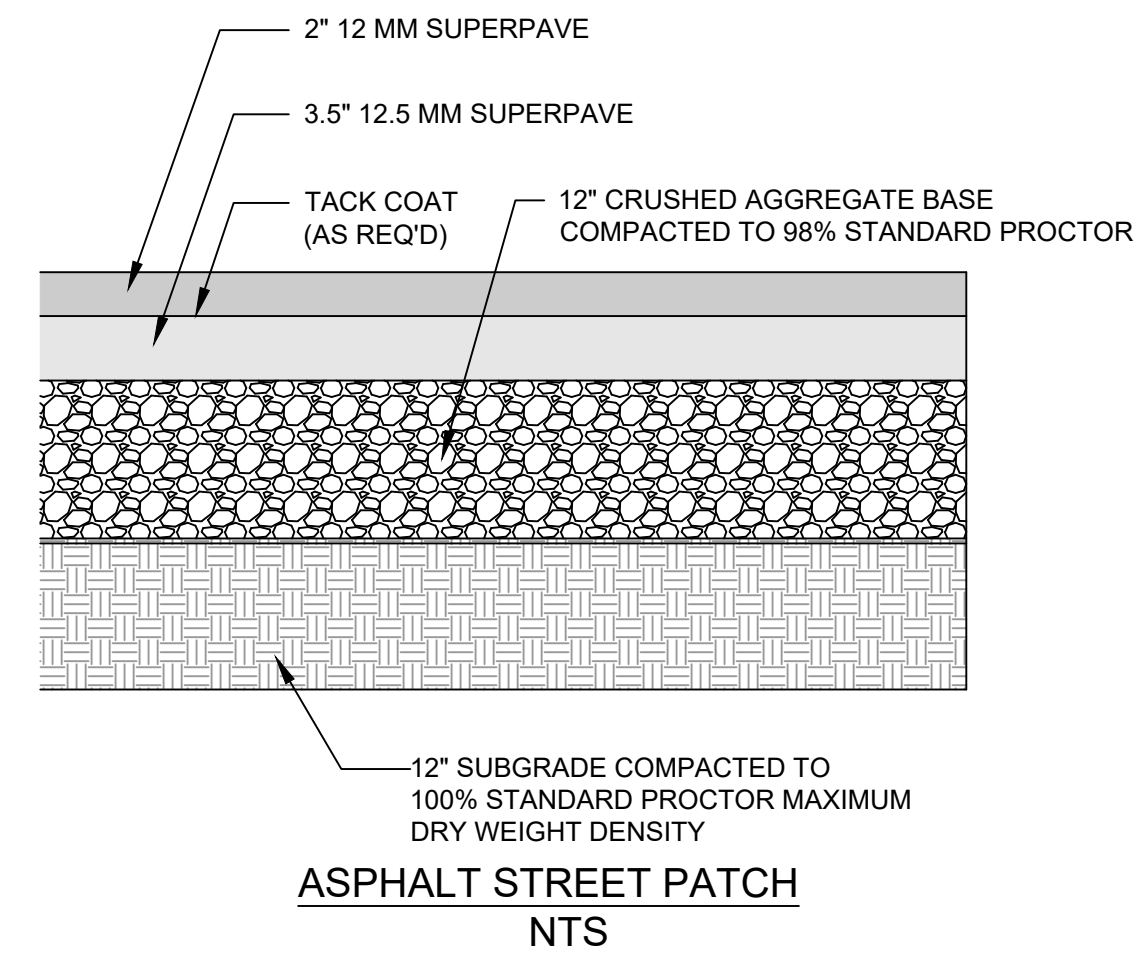
Architecture · Land Planning · Interior Design

Viewpoint Condominiums
 Construction Details
 ST. SIMONS ISLAND, GA.

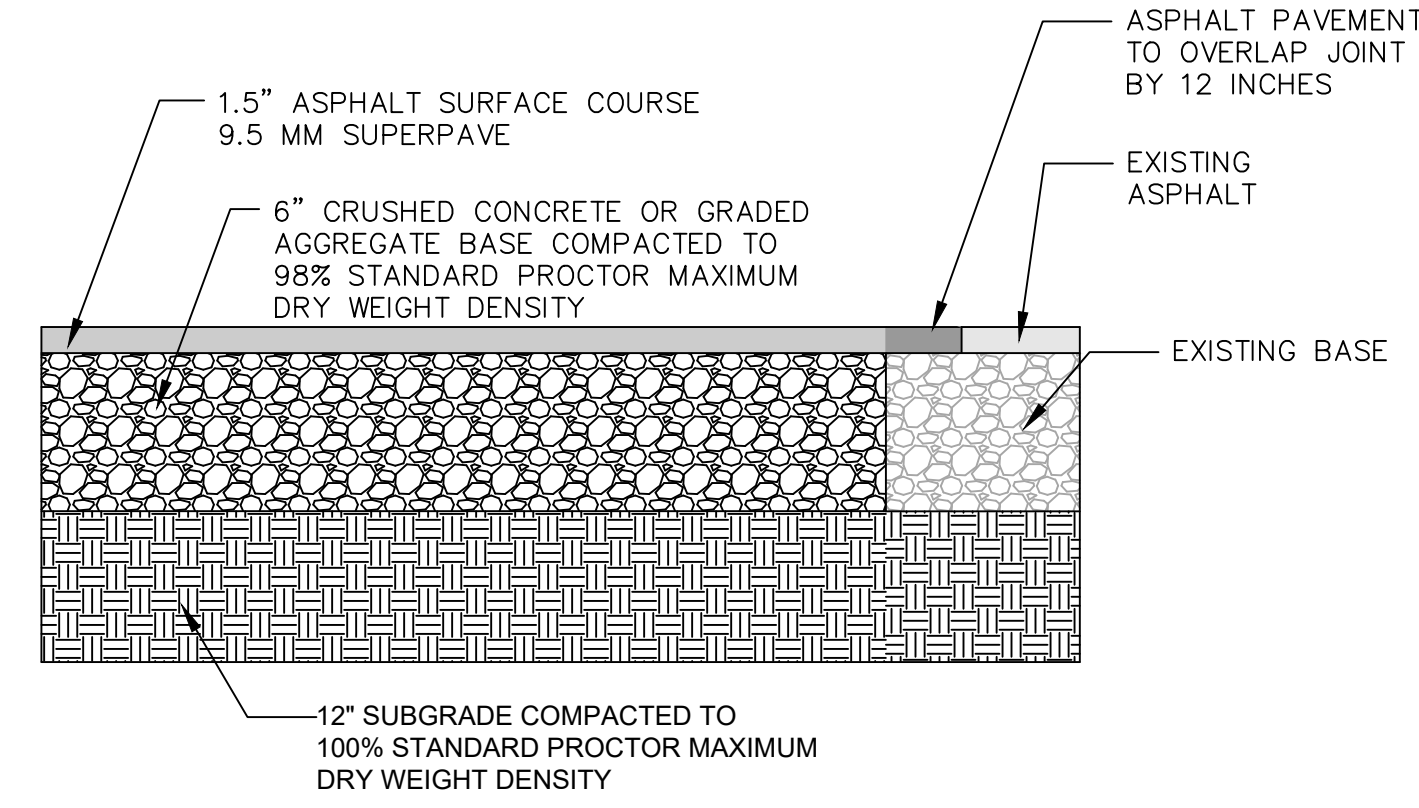
09-06-2017 1st SUBM.

ROBERTS
CAVAL
 ENGINEERING
 growth by design

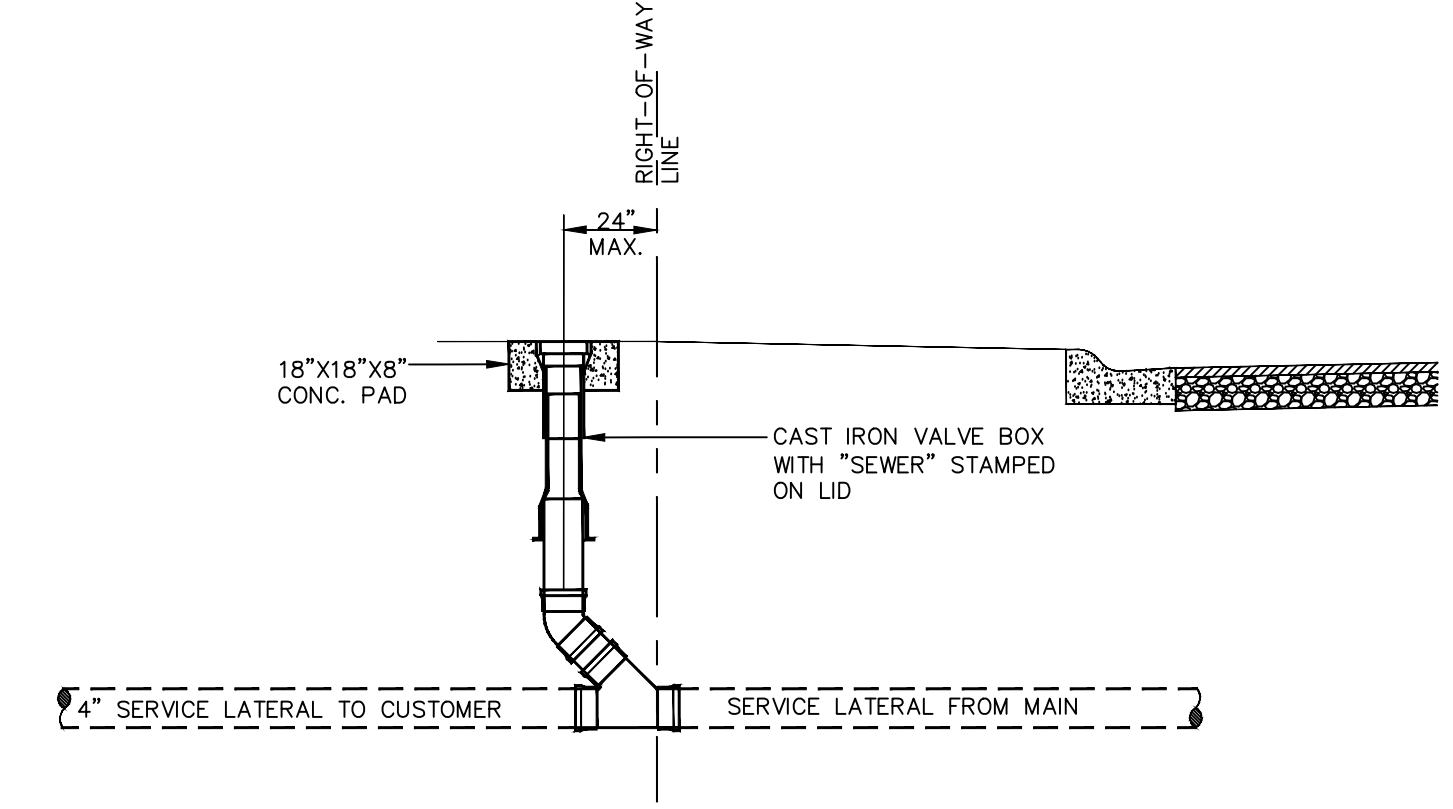
C10



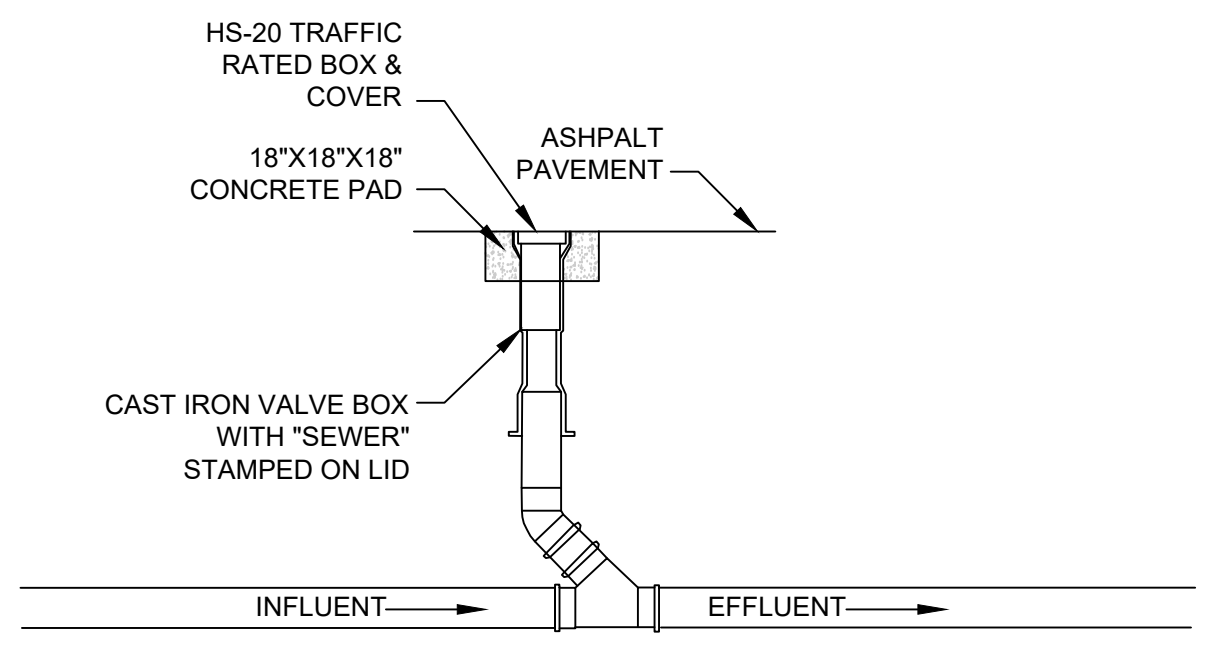
ASPHALT STREET PATCH
 NTS



ASPHALT JOINT DETAIL
 NTS



SEWER SERVICE - CLEANOUT
 NTS
 JWSC STANDARD DETAIL 3-9
 OCTOBER 2011



SEWER CLEANOUT IN PAVED AREA
 NTS

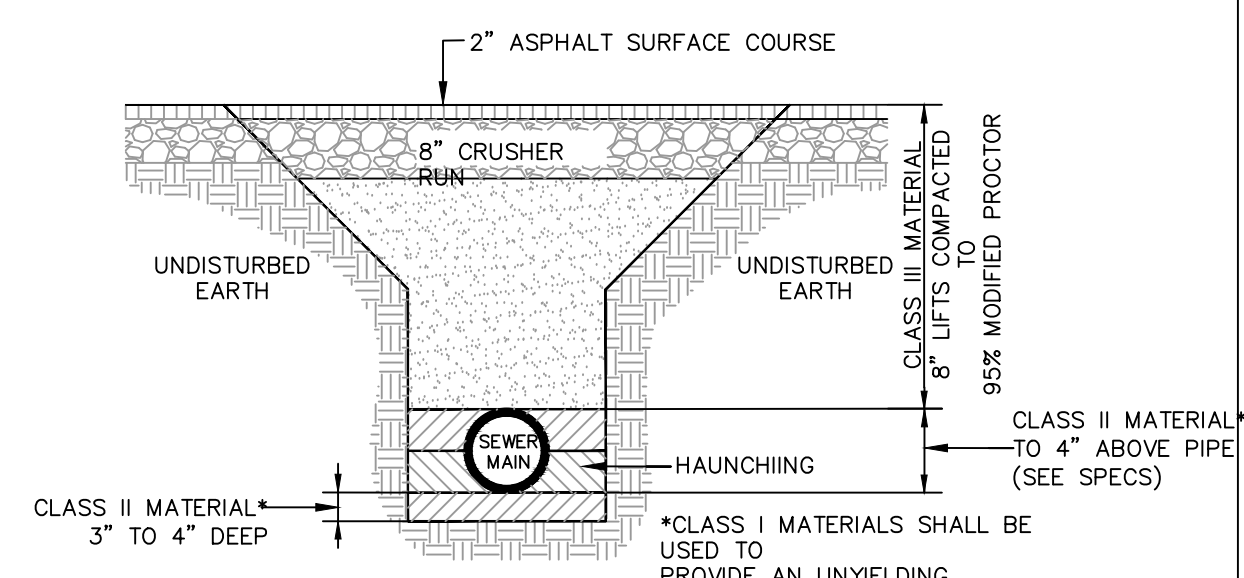
GENERAL NOTES:

1. THE MINIMUM SIZE FOR HOUSE SERVICE LATERALS SHALL BE 4". WHERE DOUBLE SERVICES ARE INSTALLED, A 6" LATERAL SHALL BE USED FROM THE MAIN TO THE PROPERTY LINE.
2. THE MAXIMUM LENGTH OF A SERVICE LATERAL SHALL NOT EXCEED 60' AS MEASURED FROM THE SEWER MAIN (OR MANHOLE) TO THE PROPERTY LINE.
3. THE SEWER SERVICE LATERAL SHALL BE CONSTRUCTED AT A DEPTH TO ALLOW A GRAVITY CONNECTION BY THE CUSTOMER WHERE POSSIBLE. SEWER SERVICE DEPTHS GREATER THAN 60" REQUIRE APPROVAL OF THE JWSC PLANNING AND CONSTRUCTION DIVISION.
4. ALL SERVICES SHALL BE RUN PERPENDICULAR TO THE RIGHT OF WAY LINE.
5. SERVICE CONNECTIONS ARE NOT PERMITTED ON SEWER MAINS OR TRUNK LINES LARGER THAN 15-INCHES IN DIAMETER.
6. ALL GRAVITY MAINS AND SEWER SERVICE LATERALS (INCLUDING THE TEE-WYE FITTING) WITH A DEPTH OF CUT GREATER THAN 12 FEET SHALL BE PVC SDR-26.
7. CLEANOUT SHALL BE INSTALLED AT RIGHT OF WAY LINE UPON CONNECTION OF THE CUSTOMER TO PUBLIC SEWER. SEE CLEANOUT DETAIL FOR ADDITIONAL INFORMATION.

GENERAL NOTES - SEWER SERVICES
 NTS

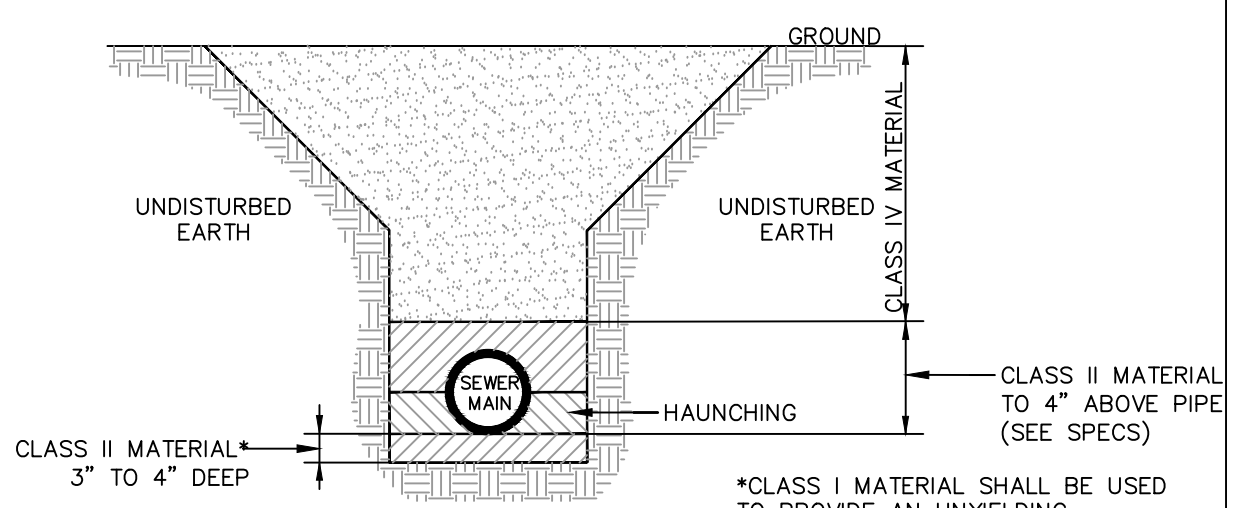
JWSC STANDARD DETAIL 3-5
 OCTOBER 2011

CLASS	TYPE	DESCRIPTION
I		MANUFACTURED ANGULAR GRANULAR MATERIAL 1/2" TO 1 1/2" SIZE INCLUDING MATERIALS HAVING REGIONAL SIGNIFICANCE SUCH AS CRUSHED STONE OR ROCK
II	GW	WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES: LITTLE OR NO FINES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE
	GP	POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES: LITTLE OR NO FINES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE
	SW	WELL-GRADED SANDS AND GRAVELLY SANDS: LITTLE OR NO FINES, MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE
	SP	POORLY GRADED SANDS AND GRAVELLY SANDS: LITTLE OR NO FINES, MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE
III	GM	SILTY GRAVELS: GRAVEL-SAND-SILT MIXTURES: 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 50% MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 200 SIEVE
	GC	CLAYEY GRAVELS: GRAVEL-SAND-SILT MIXTURES: 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 50% MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 200 SIEVE
	SM	SILTY SANDS: SAND-SILT MIXTURES: MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE
	SC	CLAYEY SANDS: SAND-SILT MIXTURES: MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE
IV	ML	INORGANIC SILTS: VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS: LIQUID LIMIT 50% OR LESS, 50% OR MORE PASSES ON NO. 200 SIEVE
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY: GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS: LIQUID LIMIT 50% OR LESS, 50% OR MORE PASSES ON NO. 200 SIEVE
	MH	INORGANIC SILTS: MEDIUM TO HIGH PLASTICITY: FINE SANDS OR SILTS, ELASTIC SILTS: LIQUID LIMIT GREATER THAN 50%, 50% OR MORE PASSES ON NO. 200 SIEVE
	CH	INORGANIC CLAYS OF HIGH PLASTICITY: FAT CLAYS: LIQUID LIMIT GREATER THAN 50%, 50% OR MORE PASSES ON NO. 200 SIEVE



FLEXIBLE PIPE IN TRAFFIC AREAS
 NTS
 JWSC STANDARD DETAIL 3-11B
 FEBRUARY 2012

CLASS	TYPE	DESCRIPTION
I		MANUFACTURED ANGULAR GRANULAR MATERIAL 1/2" TO 1 1/2" SIZE INCLUDING MATERIALS HAVING REGIONAL SIGNIFICANCE SUCH AS CRUSHED STONE OR ROCK
II	GW	WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES: LITTLE OR NO FINES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE
	GP	POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES: LITTLE OR NO FINES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE
	SW	WELL-GRADED SANDS AND GRAVELLY SANDS: LITTLE OR NO FINES, MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE
	SP	POORLY GRADED SANDS AND GRAVELLY SANDS: LITTLE OR NO FINES, MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE
III	GM	SILTY GRAVELS: GRAVEL-SAND-SILT MIXTURES: 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 50% MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 200 SIEVE
	GC	CLAYEY GRAVELS: GRAVEL-SAND-SILT MIXTURES: 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 50% MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 200 SIEVE
	SM	SILTY SANDS: SAND-SILT MIXTURES: MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE
	SC	CLAYEY SANDS: SAND-SILT MIXTURES: MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE
IV	ML	INORGANIC SILTS: VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS: LIQUID LIMIT 50% OR LESS, 50% OR MORE PASSES ON NO. 200 SIEVE
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY: GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS: LIQUID LIMIT 50% OR LESS, 50% OR MORE PASSES ON NO. 200 SIEVE
	MH	INORGANIC SILTS: MEDIUM TO HIGH PLASTICITY: FINE SANDS OR SILTS, ELASTIC SILTS: LIQUID LIMIT GREATER THAN 50%, 50% OR MORE PASSES ON NO. 200 SIEVE
	CH	INORGANIC CLAYS OF HIGH PLASTICITY: FAT CLAYS: LIQUID LIMIT GREATER THAN 50%, 50% OR MORE PASSES ON NO. 200 SIEVE



FLEXIBLE PIPE IN NON-TRAFFIC AREAS
 NTS
 JWSC STANDARD DETAIL 3-11A
 OCTOBER 2011



ROBERTS
CAVAL
 ENGINEERING
 growth by design