

ROSENWALD - FIRE MAIN EXTENSION

PANAMA CITY, FLORIDA

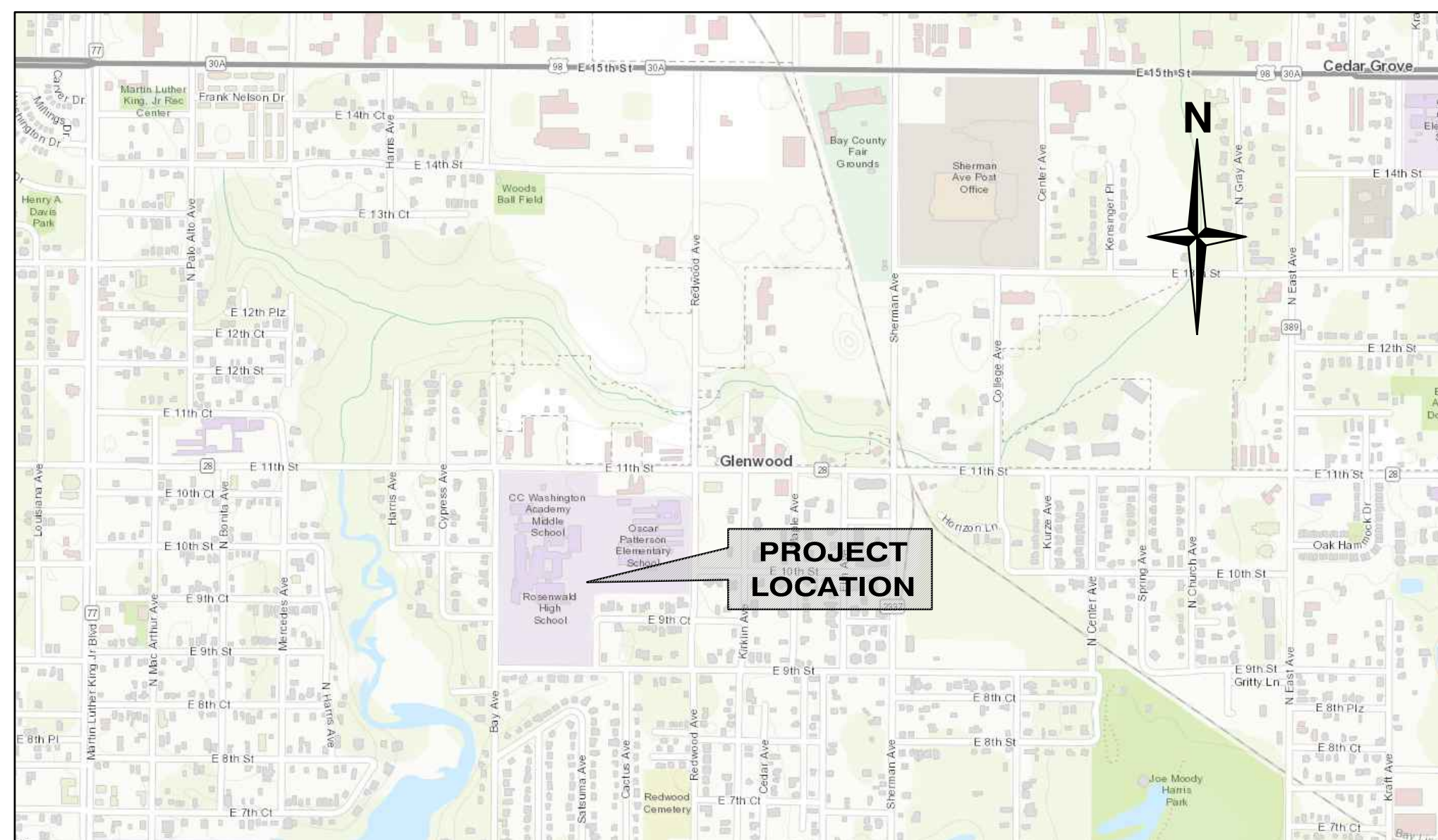
FOR:
BAY DISTRICT SCHOOLS
 1311 BALBOA AVENUE
 PANAMA CITY, FLORIDA

PREPARED BY:

MCNEIL CARROLL ENGINEERING, INC. <i>Professional Engineering Consultants</i> STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288	475 Harrison Avenue, Suite 200 Panama City, Florida 32401
	Phone: 850-763-5730 Fax: 850-763-5744

PROJECT 240.179

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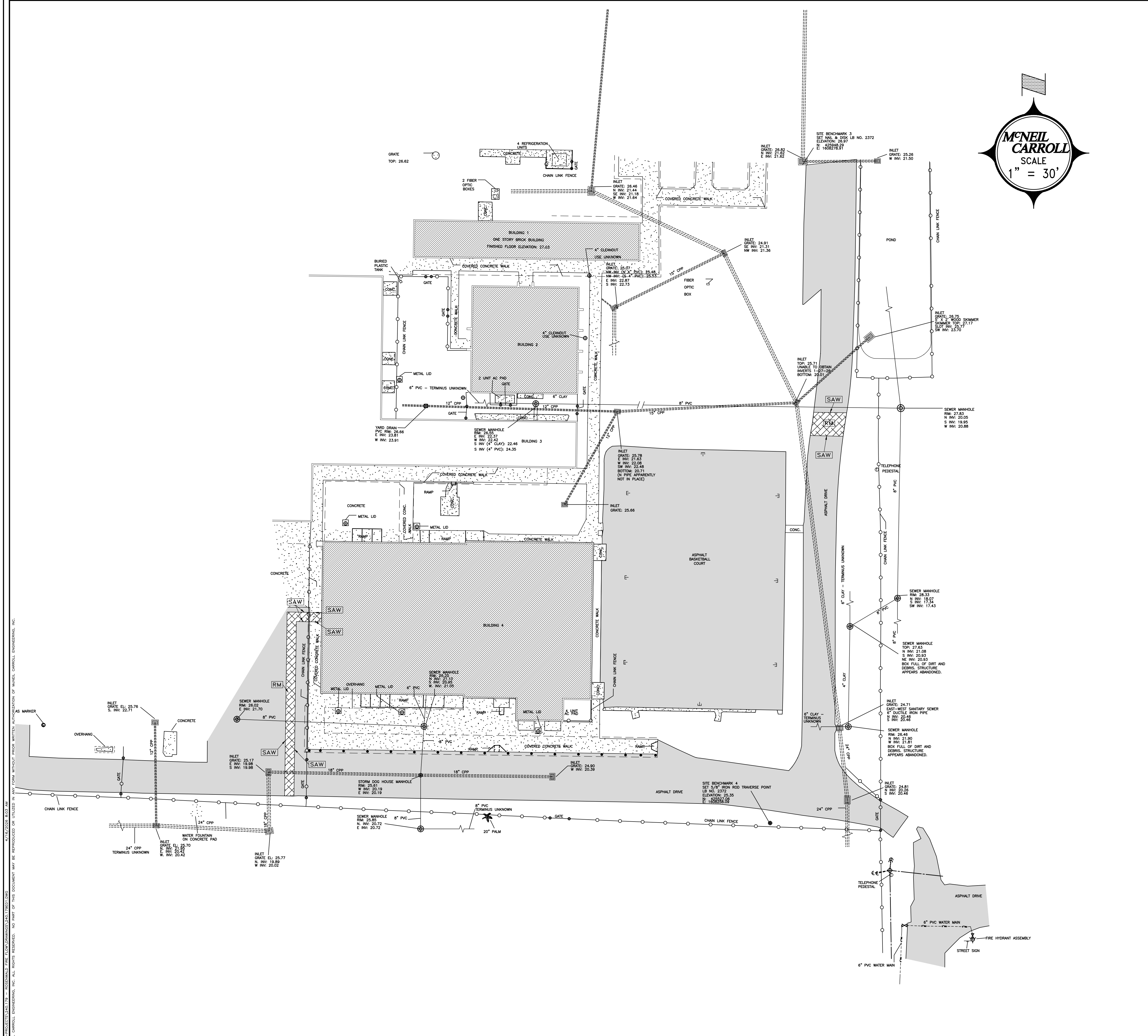
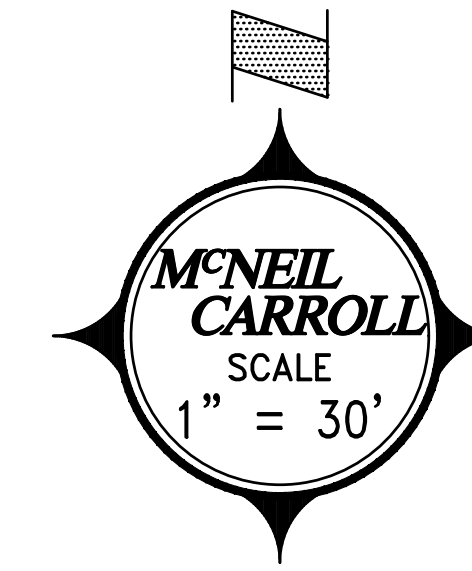
VICINITY MAP
NOT TO SCALE

SITE DEMOLITION DRAWING NOTES:

1. SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
2. ALL DEMOLISHED MATERIALS (i.e., SIGNS, CONCRETE, ASPHALT, ETC...) TO BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
3. ALTHOUGH EVERY ATTEMPT TO LOCATE UNDERGROUND UTILITIES HAS BEEN MADE, THERE IS THE POSSIBILITY OF UNDERGROUND GAS, ELECTRICAL, WATER SEWER, ETC... THAT HAS NOT BEEN LOCATED. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
4. THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR FOLLOWING REQUIRED WASTE MANAGEMENT PRACTICES AS DEFINED BY THE GOVERNING MUNICIPALITY.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO CALL SUNSHINE ONE AT 811 FOR UTILITY LOCATES PRIOR TO CONSTRUCTION.

SYMBOL LEGEND

- [N1] (SEE NOTE 16, #1 - SEE NOTES ON THIS SHEET)
- [RM] (REMOVE EXISTING MATERIALS)
- [SAW] (SAW CUT AND REMOVE EXISTING MATERIALS)



PERMIT PURPOSES ONLY

DEMOLITION PLAN
ROSENWALD - FIRE MAIN EXTENSION
BAY DISTRICT SCHOOLS
 PANAMA CITY, FLORIDA

SCALE SHOWN
 DESIGNED BY: JFP
 DRAWN BY: JFP
 REVIEWED BY: SDM
 ISSUE DATE: 4/16/2026
 C/D #: 240.172001
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McNEIL CARROLL
ENGINEERING, INC.
 Professional Engineering Consultants
 STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288

475 Harrison Avenue, Suite 200
 Panama City, Florida 32401
 850-763-5730

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Sean D. McNeil, P.E.
 PROFESSIONAL ENGINEER
 FL. LC. # 49303

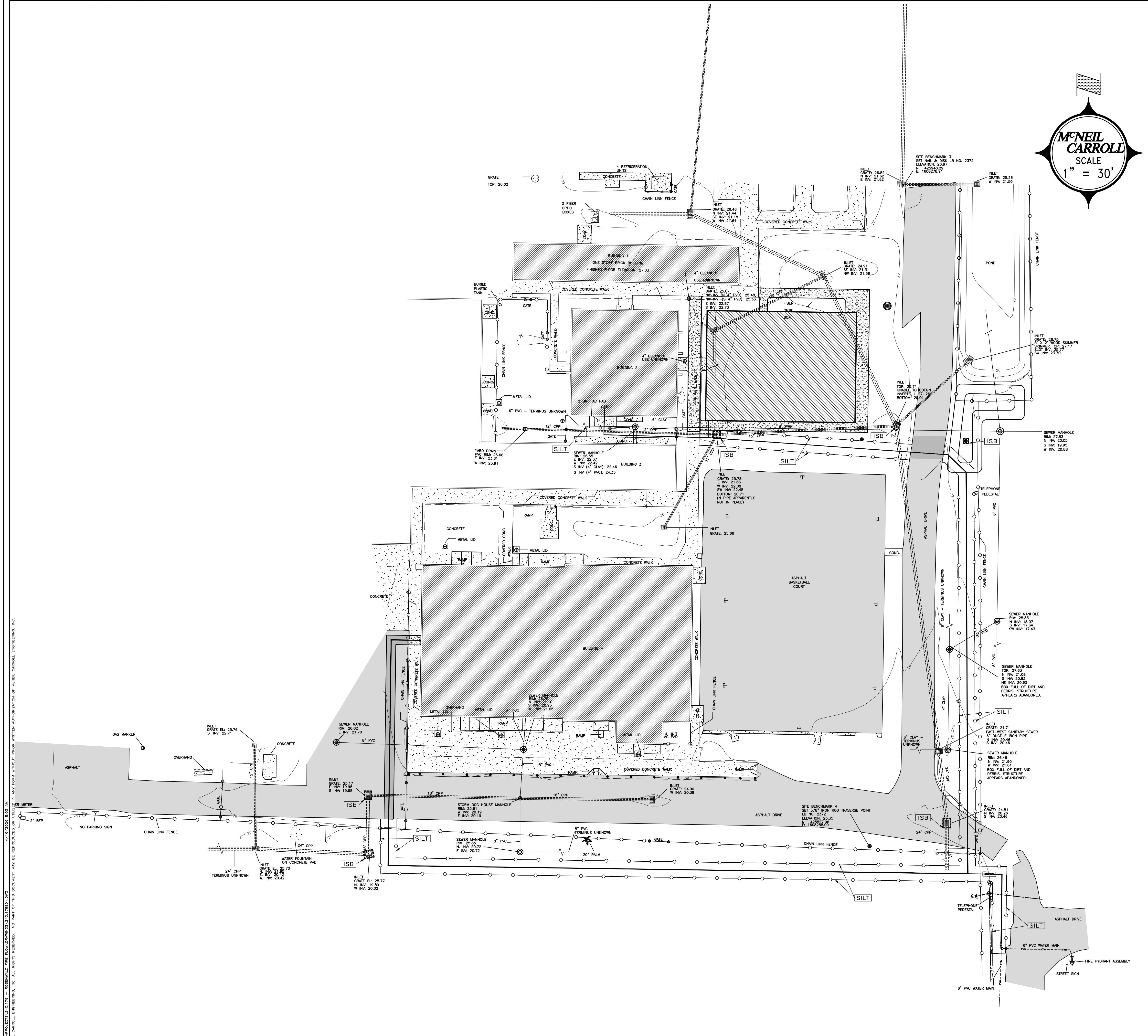
Robert L. Carroll, P.E.
 PROFESSIONAL ENGINEER
 FL. LC. # 57883

NO. DATE BY REVISIONS

04/16/26

SHEET NUMBER
1 OF 5
240.172 - ROSENWALD - FIRE MAIN EXTENSION

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- SITE EROSION CONTROL DRAWING NOTES:**
1. EROSION CONTROL SHALL BE MAINTAINED FOR THE DURATION FOR THE PROJECT.
 2. ALL CONSTRUCTION OUTSIDE OF PROPERTY LINES IS SHOWN IN DETAIL ON PERMIT DRAWINGS. (SEE GENERAL NOTES.)
 3. SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
 4. SEE SECTIONS IN CONSTRUCTION DETAILS.
 5. SILT FENCE TO BE INSTALLED AT PERIMETER OF SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT TO RESTRICT ANY TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
 6. CONTROL OF SEDIMENT-LADEN RUNOFF SHALL BE PROVIDED WITH HAY BALES AND/OR GEOTEXTILE FABRICS. ALL CONTROL MEASURES SHALL BE PROPERLY LOCATED AND CONSTRUCTED TO PREVENT SEDIMENT TRANSPORT. THE MEANS FOR RETAINING THE SEDIMENTS WILL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IMPROVEMENTS ARE COMPLETED.
 7. THE CONTRACTOR IS RESPONSIBLE FOR TREATING ALL ONSITE STORMWATER DRAINAGE AS REQUIRED TO MEET THE CRITERIA OF 62-3 FLORIDA ADMINISTRATIVE CODE, F.A.C. PRIOR TO DISCHARGE.
 8. ALL CATCH BASINS, INLETS AND ACCESS TO UNDERGROUND STORMWATER SYSTEMS SHALL BE PROTECTED IN ACCORDANCE WITH THE ATTACHED DETAILS.
 9. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF ANY STORMWATER PERMITS THAT MAY APPLY (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FLORIDA DEPARTMENT OF TRANSPORTATION, BAY COUNTY, WATER MANAGEMENT DISTRICT, ETC.).
 10. CONSTRUCTION DRIVES SHALL SLOPE AWAY FROM THE ROADWAY AT A MINIMUM SLOPE OF 2.00% TO DISTANCE OF NOT LESS THAN 15 FEET FROM THE EDGE OF PAVEMENT. THE MAXIMUM WIDTH OF THE DRIVE SHALL BE 30 FEET WITH #57 GRAVEL SURFACE 6 INCHES THICK. SIGNS SHALL BE PLACED (IN ACCORDANCE WITH CITY AND STATE REQUIREMENTS) TO WARN APPROACHING DRIVERS AND PEDESTRIANS.
 11. THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR FOLLOWING REQUIRED WASTE MANAGEMENT PRACTICES AS DEFINED IN THE BAY COUNTY MUNICIPAL CODE SECTION 22-91 "UNLAWFUL DISPOSAL OF WASTE, FAILURE TO DELIVER WASTE", WHICH MAKES IT UNLAWFUL FOR ANY PERSON TO DUMP, LEAVE OR BURY ANY SOLID WASTE ON PUBLIC OR PRIVATE PROPERTY.
 12. THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR OBTAINING COVERAGE UNDER THE DEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES PRIOR TO START OF CONSTRUCTION OR ANY DISTURBANCE OF LAND GREATER THAN ACRE. THE DEVELOPER/CONTRACTOR WILL FORWARD A COPY OF THE PERMIT AND WILL PROVIDE 48 HOUR NOTIFICATION TO THE APPROPRIATE AGENCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL REQUIRED ELEMENTS OF THE SWPP MUST BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION. FAILURE TO COMPLY COULD RESULT IN CODE ENFORCEMENT ACTION AND FINES.
 13. QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND/OR WITHIN 24 HOURS OF THE END OF A STORM EVENT (RAINFALL) THAT IS 1/2 INCH OR GREATER:
 - A. POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES.
 - B. POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM WATER SYSTEMS.
 - C. DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
 - D. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - E. STRUCTURAL CONTROLS.
 - F. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
 14. THE CONTRACTOR SHALL INITIATE REPAIRS WITHIN 24 HOURS OF INSPECTION THAT INDICATE ITEMS ARE NOT IN GOOD WORKING ORDER. TO COMPLY, THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAGES AND DAILY RAINFALL RECORDS. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. THE CONTRACTOR SHALL ALSO INSPECT AND CERTIFY THAT CONTROLS INSTALLED IN THE FIELD AGREE WITH THE LATEST STORMWATER POLLUTION PREVENTION PLAN.
 15. IF INSPECTIONS INDICATE THAT THE INSTALLED STABILIZATION AND STRUCTURAL PRACTICES ARE NOT SUFFICIENT TO MINIMIZE EROSION, RETAIN SEDIMENT, AND PREVENT DISCHARGING POLLUTANTS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES, WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH, AS NEEDED.
 16. RECORDS OF THE INSPECTIONS AND THE CONSTRUCTION PERMIT MUST BE MAINTAINED AT THE CONSTRUCTION SITE AND BE READILY AVAILABLE FOR INSPECTION.
 17. ALL STORMWATER MANAGEMENT FACILITIES AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, DEMOLITION OR OTHER DISTURBANCE TO THE SUBJECT SITE.
- CONSTRUCTION SEQUENCE AND BMP'S NWFWD**
18. THE INITIAL PART OF THE CONSTRUCTION PROCESS SHALL BE THE INSTALLATION OF SILT FENCE AROUND THE PERIMETER OF THE AREA THAT IS TO BE DISTURBED TO ENSURE NO TURBID RUNOFF LEAVES THE CONSTRUCTION SITE. THE SILT FENCE SHALL BE INSTALLED PER THE CONSTRUCTION DETAILS. IF THERE IS A POSSIBILITY OF RUNOFF TO A WATER BODY, TURBIDITY CURTAIN SHALL BE INSTALLED PER THE CONSTRUCTION DETAILS. THE SECOND STEP SHALL BE THE INSTALLATION OF THE CONSTRUCTION ENTRANCE AND DEMOLITION OF ANY EXISTING IMPROVEMENTS AS NEEDED (SEE DEMOLITION PLAN). THE THIRD STEP SHALL BE TO CLEAR AND GRUB AREAS WHERE IMPROVEMENTS ARE TO BE INSTALLED. AS FILL IS BROUGHT INTO THE SITE, THE STORMWATER BASIN SHOULD BE CREATED TO CAPTURE ANY OVERLAND FLOW AND ACT AS A SEDIMENT TRAP. IT IS RECOMMENDED THE BASIN BE CONSTRUCTED APPROXIMATELY 1/2' HIGHER THAN DESIGN AT THIS POINT TO ENSURE ALL SILTS AND FINES ARE REMOVED AT THE TIME OF FINAL GRADING OF THE STORMWATER BASIN.
 19. TYPICALLY, THE SANITARY SEWER, STORM SEWER, AND WATER MAINS ARE INSTALLED RESPECTIVELY. UPON INSTALLATION OF THE STORM SEWER, HAY BALES AND FILTER FABRICS SHALL BE USED AT ALL INLET OPENINGS PER THE CONSTRUCTION DETAILS TO KEEP THE SYSTEM FREE OF SEDIMENTS DURING THE CONSTRUCTION PHASE. DEPENDING ON SITE CONDITIONS AND SIZE, SEDIMENT TRAPS SHALL BE UTILIZED TO PREVENT TURBID RUNOFF FROM LEAVING THE SITE (SEE EROSION CONTROL PLAN).
 20. SITE STABILIZATION SHALL BE PROVIDED AS SOON AS THE GRADING WILL ALLOW IN ORDER TO STOP EROSION AND REDUCE TURBID RUNOFF. SEEDING, SODDING, OR HYDROSEEDING SHALL BE USED WHEN FINAL GRADES ARE ESTABLISHED.
 21. EROSION CONTROL MEASURES SHALL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT AND BE MANAGED IN ACCORDANCE WITH THE STATE NPDES PROGRAM.
 22. THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT.
 23. THE ENGINEER OF RECORD IS RESPONSIBLE FOR MONITORING CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY AND SUBMITTING TO THE APPROPRIATE AGENCY NOTICE OF COMMENCEMENT AND AS-BUILT CERTIFICATIONS FOR THE PROJECT WHEN COMPLETED.

SYMBOL LEGEND

→ (STORMWATER SURFACE FLOW)

ISB (INLET SEDIMENT BARRIER - SEE CONSTRUCTION DETAILS)

SILT (SILT FENCE - SEE CONSTRUCTION DETAILS)

PVIG (24" WIDE x 50" DEEP FDOT #1 OR #2 GRAVEL CONSTRUCTION ENTRANCE 6" THICK)

PERMIT PURPOSES ONLY

EROSION CONTROL PLAN

ROSENWALD - FIRE MAIN EXTENSION

BAY DISTRICT SCHOOLS

PANAMA CITY, FLORIDA

SCALE SHOWN
 DESIGNED BY: JFP
 DRAWN BY: JFP
 REVIEWED BY: SDM
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 CD NO: 240.17201
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Professional Engineering Consultants
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475 Harrison Avenue, Suite 200
 Panama City, Florida 32401
 850-763-5730

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Sean D. McNeil, P.E.
 PROFESSIONAL ENGINEER
 FL. LC. # 83303

Robert L. Carroll, P.E.
 PROFESSIONAL ENGINEER
 FL. LC. # 57883

04/16/26

SHEET NUMBER 2 OF 5 240.172 - ROSENWALD - FIRE MAIN EXTENSION

- SITE UTILITY DRAWING NOTES:
- SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
 - SEE SECTION AND DETAILS IN CONSTRUCTION DETAILS.
 - ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND.
 - CONTRACTOR SHALL PROVIDE McNEIL CARROLL ENGINEERING, INC. FIVE (5) SETS AND ONE (1) DIGITAL COPY (AUTOCAD FORMAT) OF AS-BUILT DRAWINGS OF THE COMPLETED PROJECT. DRAWINGS SHALL BE PREPARED AND SIGNED & SEALED BY A FLORIDA REGISTERED SURVEYOR.
 - IT IS THE CONTRACTORS RESPONSIBILITY TO CALL SUNSHINE ONE AT 811 FOR UTILITY LOCATES PRIOR TO CONSTRUCTION.
 - ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION AND SODED PER FDOT INDEX 105.



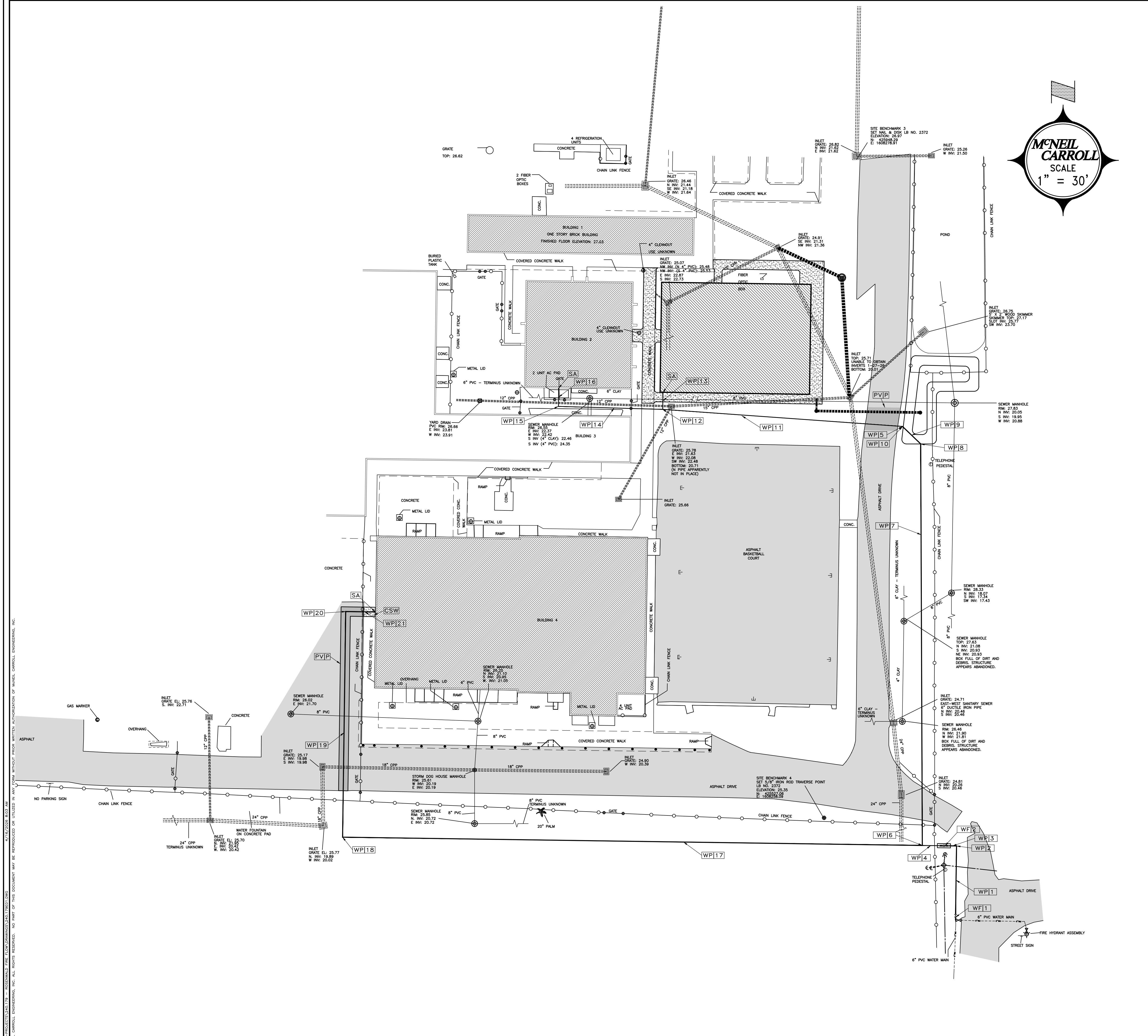
- SYMBOL LEGEND
- CSW (CONCRETE SIDEWALK - SEE CONSTRUCTION DETAILS)
 - N1 (SEE NOTE 16, #1 - SEE NOTES THIS SHEET)
 - PVIP (PAVEMENT PATCH - SEE CONSTRUCTION DETAILS)
 - SA (SEE ARCHITECTURAL PLANS FOR CONNECTION)
 - WF14 (SEE WATER FIXTURE SCHEDULE THIS SHEET 16, #14 - SEE CONSTRUCTION DETAILS)
 - WP10 (SEE WATER PIPE SCHEDULE THIS SHEET 16, #10 - SEE CONSTRUCTION DETAILS)

WATER MAIN PIPE SCHEDULE				
NO.	SIZE	LF		TYPE
WP1	8"	45		PVC
WP2	6"	N/A	90°	ELBOW
WP3	6"	5		PVC
WP4	6"	11		PVC
WP5	4x6	N/A		REDUCER
WP6	8x6x6	N/A		TEE
WP7	6"	257		PVC
WP8	6"	N/A	45°	ELBOW
WP9	6"	16		PVC
WP10	6"	N/A	45°	ELBOW
WP11	4"	153		PVC
WP12	4x4x4	N/A		TEE
WP13	4"	1		PVC
WP14	4"	68		PVC
WP15	4"	N/A	90°	ELBOW
WP16	4"	12		PVC
WP17	6"	371		PVC
WP18	6"	N/A	90°	ELBOW
WP19	6"	144		PVC
WP20	6"	N/A	90°	ELBOW
WP21	6"	19		PVC

WATER FIXTURE SCHEDULE	
NO.	TYPE
WF1	6" GATE VALVE ASSEMBLY
WF2	6" DETECTOR CHECK VALVE ASSEMBLY W/ FIRE DEPARTMENT CONNECTION

SEE CONSTRUCTION DETAILS.
ALL LINES SHALL BE THE COLOR BLUE.

PANAMA CITY UTILITY CONTACTS		
UTILITY	CONTACT	
TELEPHONE	SUNSHINE STATE ONE CALL	1-800-432-4770
ELECTRIC	GULF POWER	1-850-872-3212
CABLE TV	COMCAST WOW CABLE	1-850-769-0392 1-850-747-0139
WATER & SEWER	CITY OF PANAMA CITY	1-850-872-3195
GAS	TECO PEOPLES GAS	1-850-872-6140
	FLORIDA GAS TRANSMISSION	1-800-432-4770



PERMIT PURPOSES ONLY

UTILITY PLAN
ROSENWALD - FIRE MAIN EXTENSION
BAY DISTRICT SCHOOLS
 PANAMA CITY, FLORIDA

SCALE SHOWN
 DESIGNED BY: JFP
 DRAWN BY: JFP
 REVIEWED BY: SDM
 ISSUE DATE: 4/16/2026
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 FL. LIC. # 49303

Robert L. Carroll, P.E.
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 FL. LIC. # 57889

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SHEET NUMBER
3 OF 5
 240.179 - ROSENWALD - FIRE MAIN EXTENSION

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GENERAL NOTES

PREVENTION, CONTROL AND ABATEMENT OF EROSION

ALL ON AND OFF SITE WORK INCLUDED CONSISTS OF BUT NOT LIMITED TO THE FOLLOWING:

- 10.2643; SEEDING AND MULCHING OR SODDING FOR STABILIZATION.
- CONSTRUCTION OF SEDIMENT BASINS, CHECK DAMS OR FLOATING BARRIERS.
- PLACEMENT OF SILTATION FENCES DURING THE COURSE OF CONSTRUCTION.

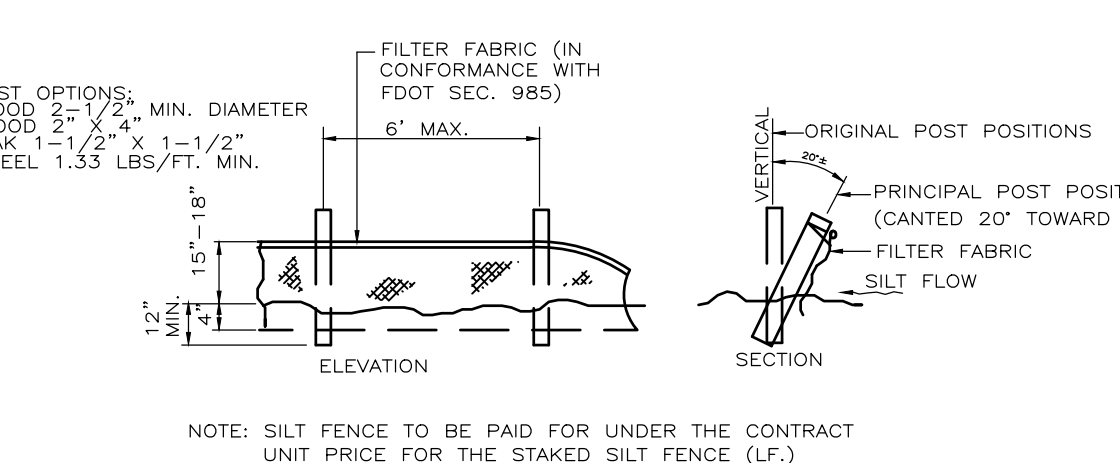
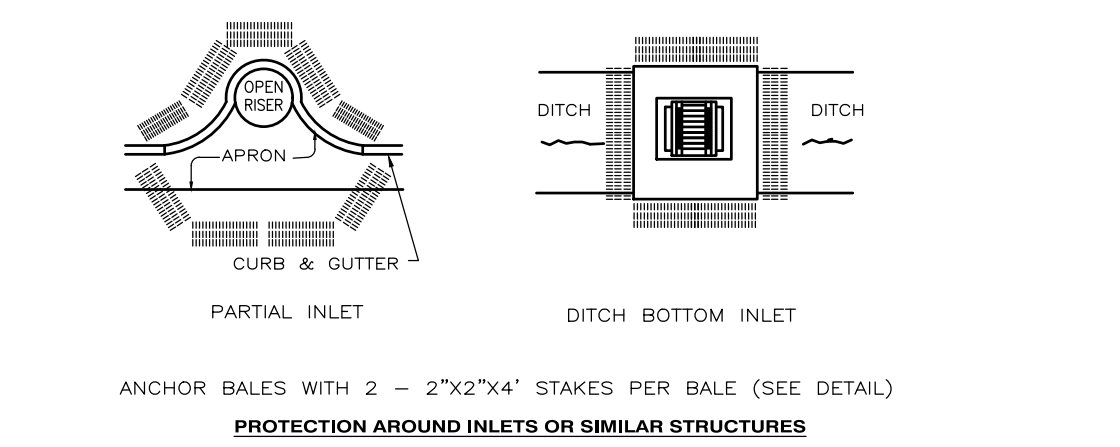
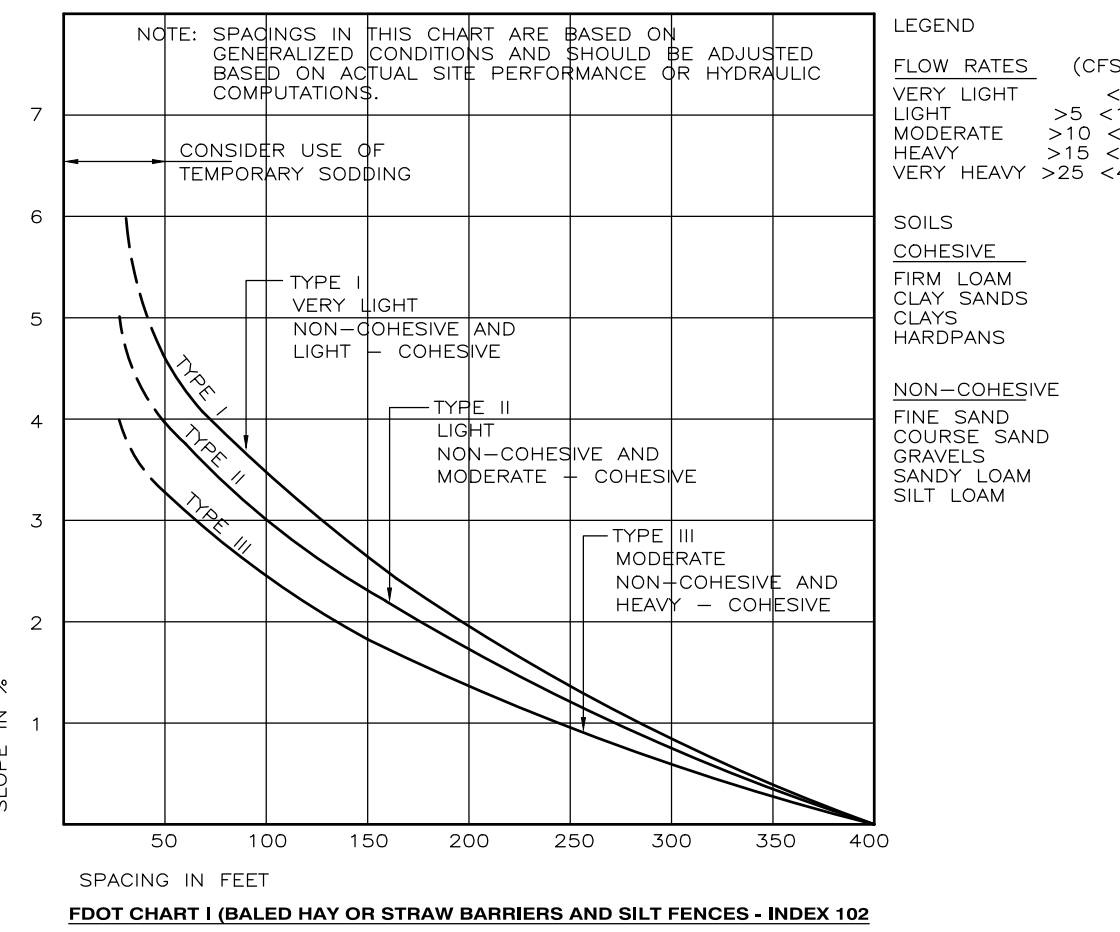
SILT FENCE TO BE INSTALLED AT PERIMETER OF SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT TO RESTRICT ANY TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CONTROL OF SEDIMENT-LADEN RUNOFF SHALL BE PROVIDED WITH HAY BALES AND/OR GEOTECH STYLE FABRICS. ALL CONTROL MEASURES SHALL BE PROPERLY LOCATED AND CONSTRUCTED TO PREVENT SEDIMENT TRANSPORT. THE MEANS FOR RETAINING THE SEDIMENTS WILL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IMPROVEMENTS ARE COMPLETE.

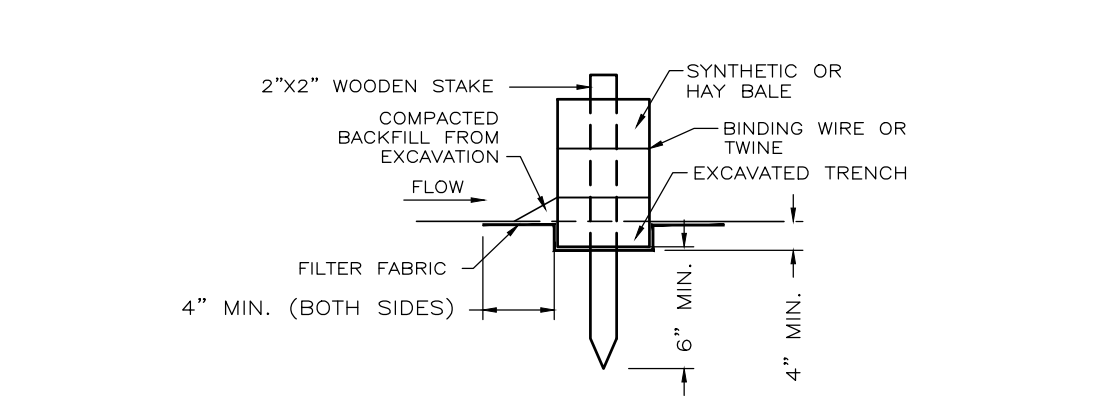
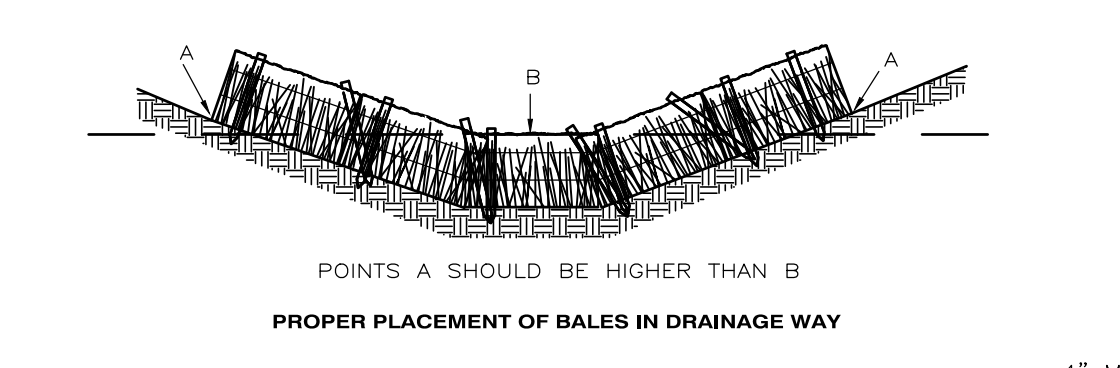
THE CONTRACTOR IS RESPONSIBLE FOR TREATING ALL ONSITE STORM WATER DRAINAGE AS REQUIRED TO MEET THE CRITERIA OF 62-3 FLORIDA ADMINISTRATIVE CODE, F.A.C. PRIOR TO DISCHARGE.

ALL CATCH BASINS, INLETS AND ACCESS TO UNDERGROUND STORM WATER SYSTEMS SHALL BE PROTECTED IN ACCORDANCE WITH THE ATTACHED DETAILS.

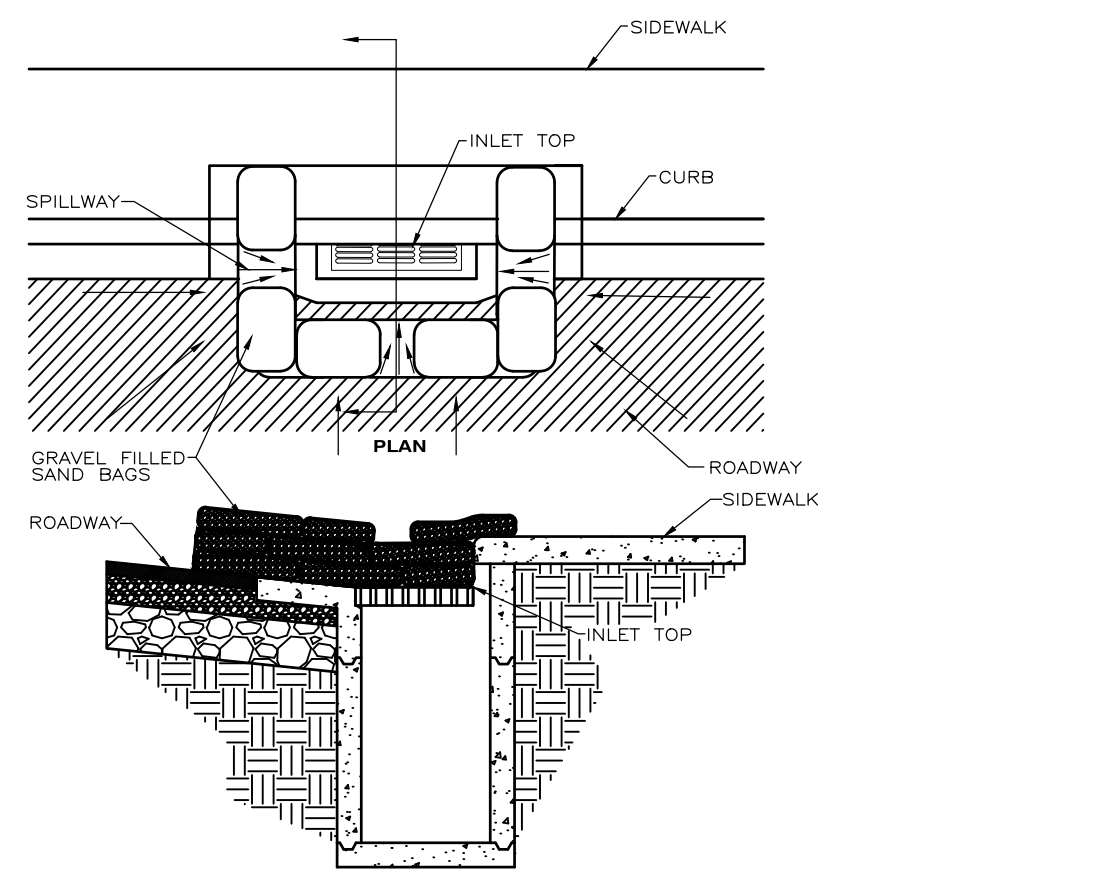
THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF ANY STORM WATER PERMITS THAT MAY APPLY (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FLORIDA DEPARTMENT OF TRANSPORTATION, BAY COUNTY, WATER MANAGEMENT DISTRICT, ETC.).



NOTE: LD.315,10.252;10.200 NOT DEPLOY SILT FENCES IN A MANNER THAT WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND AS TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER. SILT FENCE SHOULD BE REPLACED EVERY SIX (6) MONTHS. SILT FENCE SHALL EXTEND A MINIMUM OF 4" BELOW GRADE. SILT FENCE SHALL EXTEND 4" AWAY FROM STAKES.

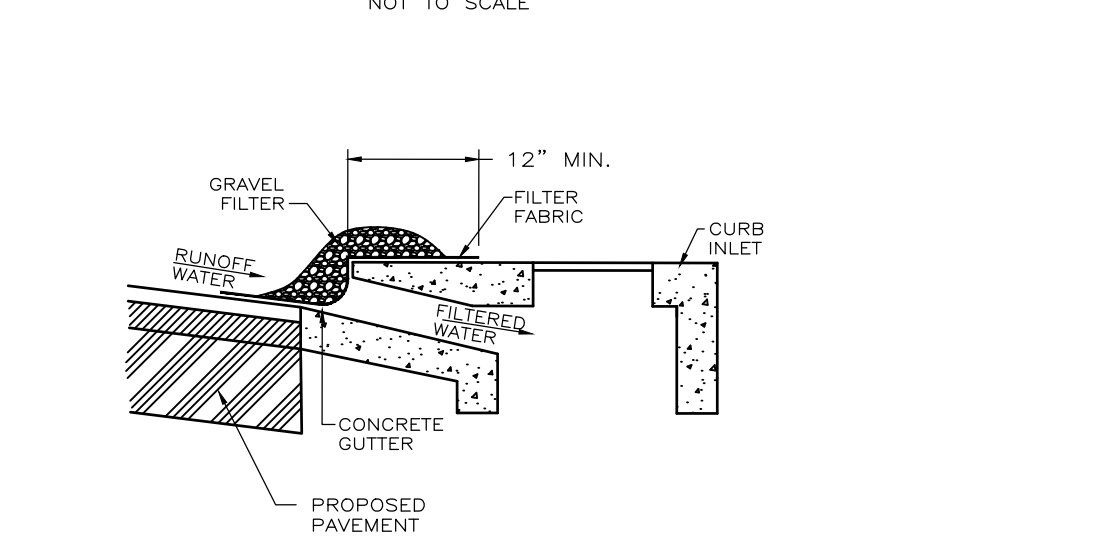


EROSION CONTROL DETAILS



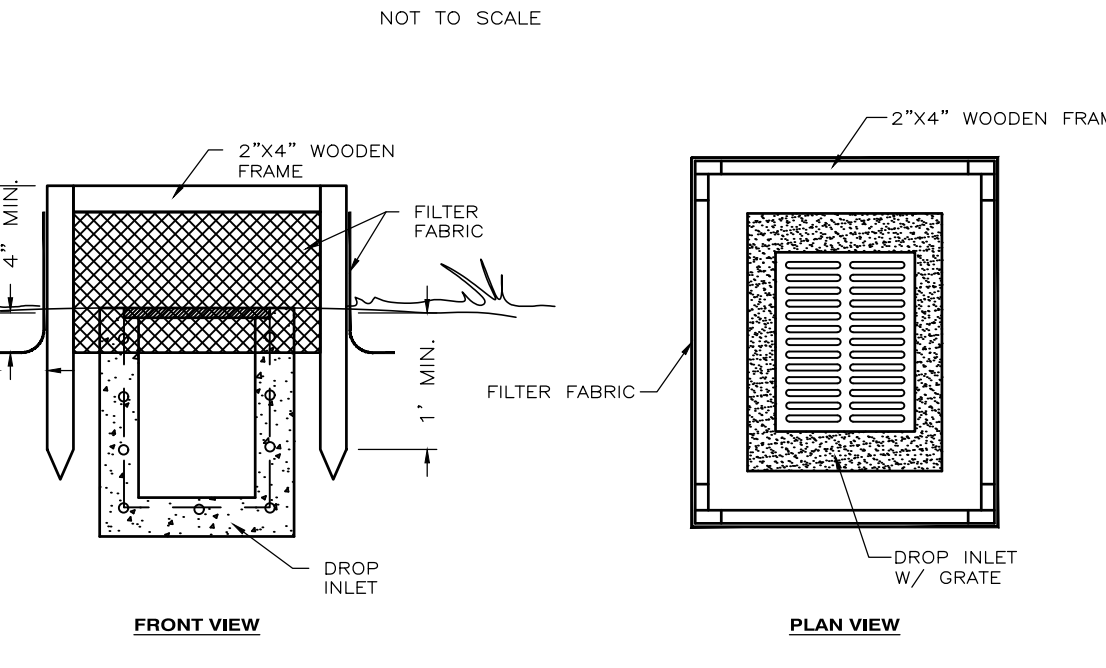
- NOTE:
1. GRAVEL FILLED BAGS TO BE PLACED TIGHTLY TOGETHER AS TO NOT ALLOW ANY GAPS IN BETWEEN THE BAGS VERTICALLY AND HORIZONTALLY.
 2. IF SEDIMENT IS PENETRATING BAGS, BAGS MAY NEED TO BE WRAPPED IN ADDITIONAL FILTER FABRIC.

CURB INLET SEDIMENT BARRIER (OPTION 1)



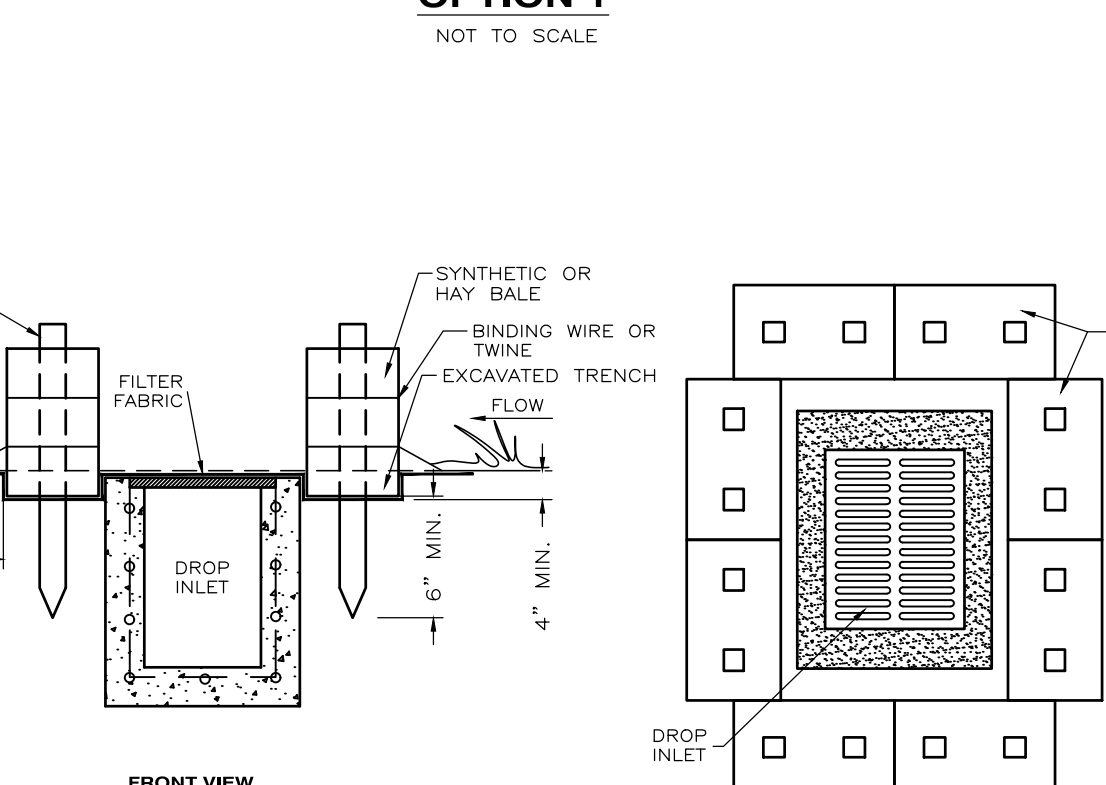
- NOTES:
1. GRAVEL SHALL BE #57 STONE.

GRAVEL CURB INLET SEDIMENT FILTER (OPTION 2)



- NOTES:
1. TOP FRAME REQUIRED FOR STABILITY.
 2. THIS METHOD OF INLET PROTECTION IS NOT TO BE USED IN RIGHT-OF-WAYS OR MEDIANS.
 3. STAKES SHALL EXTEND 1" MIN. BELOW GRADE.
 4. FILTER FABRIC SHALL EXTEND 4" MIN. BELOW GRADE AND 4" MIN. BEYOND WOODEN FRAME.

DROP INLET SEDIMENT FILTER OPTION 1



DROP INLET SEDIMENT FILTER OPTION 2



EROSION CONTROL DETAILS

WORK IN RIGHTS-OF-WAYS

ALL WORK WITHIN RIGHTS-OF-WAYS SHALL BE IN STRICT ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE RESPECTIVE AGENCIES. THE CONTRACTOR SHALL COOPERATE WITH THE GOVERNING STATE AND LOCAL AGENCIES IN ALL PROCEDURES, MATERIALS AND METHODS OF CONSTRUCTION.

ALL OFF-SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING: CONSTRUCTION OF DRIVEWAY CONNECTIONS TO EXISTING MUNICIPAL ROADWAYS AS SHOWN ON PLANS.

PLACEMENT OF ABOVE OR BELOW GROUND UTILITIES AND CONNECTION TO EXISTING UTILITIES AS SHOWN ON PLANS.

SITE CLEARING AND DEMOLITION

ANY WORK WITHIN STREET OR HIGHWAY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNMENTAL AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL THESE GOVERNING AUTHORITIES HAVE BEEN NOTIFIED AND PROPER PERMITS OBTAINED.

KEEP ALL AREAS WITHIN THE CONSTRUCTION AREA SUFFICIENTLY DAMPENED TO PREVENT DUST FROM RISING DUE TO CONSTRUCTION. COMPLY WITH ALL ANTI-POLLUTION ORDINANCES.

THIS SUBCONTRACTOR SHALL SEE TO IT THAT TRUCKS LEAVING THE SITE SHALL DO SO IN SUCH A MANNER THAT MUD AND EARTH WILL NOT BE DEPOSITED ON ADJACENT STREET PAVEMENTS. ANY MUD OR EARTH DEPOSITED ON STREET PAVEMENTS SHALL BE PROMPTLY REMOVED BY THIS SUBCONTRACTOR.

ALL CLEARING SHALL BE PERFORMED IN A MANNER SUCH AS TO PREVENT ANY WASH-OFF OF SOILS FROM THE SITE INTO STREAMS AND/OR STORM DRAINAGE SYSTEMS. APPROPRIATE SEDIMENTATION PONDS, DICES, COLLARS, AND FILTER MEDIA SHALL BE EMPLOYED TO INSURE COMPLIANCE WITH THESE REQUIREMENTS. WHERE A SPECIFIC STATUTE GOVERNS THESE PROCEDURES, SUCH STATUTE SHALL BE COMPLIED WITH IN ITS ENTIRETY.

TOPSOIL IS DEFINED AS FRIABLE, CLAY LOAM SURFACE SOIL FOUND IN A DEPTH OF NOT LESS THAN 4". SATISFACTORY TOPSOIL IS REASONABLY FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER 2" IN DIAMETER, AND WITHOUT WEEDS, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.

STRIP TOPSOIL TO WHATEVER DEPTHS ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OTHER OBJECTIONABLE MATERIAL. REMOVE HEAVY GROWTHS OF GRASS FROM AREAS BEFORE STRIPPING. WHERE TREES ARE INDICATED TO BE LEFT STANDING, STOP TOPSOIL STRIPPING A SUFFICIENT DISTANCE TO PREVENT DAMAGE TO MAIN ROOT SYSTEM. DISPOSE OF UNSUITABLE OR EXCESS TOPSOIL SAME AS WASTE MATERIAL, HEREIN SPECIFIED.

BURNING WILL NOT BE PERMITTED ON PROJECT SITE. ALL EXISTING STRUCTURES, UTILITIES AND OTHER OBSTACLES IN CONFLICT WITH THE PROPOSED FACILITY SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER. SEE OTHER UTILITY AND MISCELLANEOUS NOTES CONCERNING REMOVAL.

ALLOW TESTING SERVICES TO INSPECT AND APPROVE SUBGRADE AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS PERFORMED. ATTENTION IS CALLED TO THE FACT THAT THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES TO OBTAIN LOCATIONS OF ALL EXISTING UTILITIES OR OBSTRUCTIONS WHICH HE MAY ENCOUNTER DURING CONSTRUCTION.

AFTER LOCATION OF UTILITIES BY THE APPROPRIATE UTILITY COMPANY, IT IS THE CONTRACTOR'S LIABILITY TO PROTECT ALL SUCH UTILITY LINES, INCLUDING SERVICE LINES AND APPURTENANCES, AND TO REPLACE AT HIS OWN EXPENSE ANY WHICH MAY BE DAMAGED BY THE CONTRACTOR'S EQUIPMENT OR FORCES DURING CONSTRUCTION.

TO PROTECT PERSON FROM INJURY AND TO AVOID PROPERTY DAMAGE, ADEQUATE BARRICADES, CONSTRUCTION SIGNS, TORCHES, RED LANTERNS AND GUARDS AS REQUIRED SHALL BE PLACED AND MAINTAINED DURING THE PROGRESS OF THE CONSTRUCTION WORK. ADEQUATE PROVISION SHALL BE MADE FOR THE FLOW OF SEWERS, DRAINS, AND WATER COURSES ENCOUNTERED DURING CONSTRUCTION AND THE STRUCTURES WHICH MAY HAVE BEEN DISTURBED SHALL BE SATISFACTORILY RESTORED BY THE CONTRACTOR.

EXCAVATING, FILLING AND GRADING

ALL ON AND OFF-SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING: ALL ON AND OFF-SITE PREPARATION WORK FOR EXCAVATION, PIPE BED PREPARATION AND BACKFILL FOR UNDERGROUND UTILITIES. COMPACTION OF BACKFILL. REMOVAL OF ALL EXCESS OR UNUSABLE MATERIAL.

APPROVAL REQUIRED: ALL FILL MATERIAL SHALL BE SUBJECT TO APPROVAL OF THE GEO-TECHNICAL ENGINEER. ALL ON-SITE FILL MATERIAL SHALL BE SOIL-ROCK MIXTURE WHICH IS FREE FROM ORGANIC MATTER (LESS THAN 3% BY IGNITION), AND OTHER DELETERIOUS SUBSTANCE. IT SHALL CONTAIN NO ROCKS OR LUMPS OVER SIX (6) INCHES IN GREATEST DIMENSION AND NOT MORE THAN 15% OF THE ROCKS OR LUMPS BY DRY WEIGHT, SHALL BE LARGER THAN 2 AND 1/2 INCHES IN GREATEST DIMENSION.

ALL IMPORTED FILL MATERIAL SHALL MEET THE REQUIREMENTS OF ON-SITE FILL MATERIAL AND SHALL, IN ADDITION, BE PREDOMINANTLY GRANULAR WITH A MAXIMUM PARTICLE SIZE OF TWO (2) INCHES AND A PLASTICITY INDEX OF 12 OR LESS.

ALL ON-SITE FILL MATERIAL USED FOR TRENCH AND STRUCTURAL BACKFILL SHALL MEET THE REQUIREMENTS OF ARTICLE ABOVE.

ALL IMPORTED COHESIONLESS MATERIAL USED FOR TRENCH AND STRUCTURAL BACKFILL SHALL BE FREE FROM ORGANIC SUBSTANCE (LESS THAN 3% BY IGNITION), AND OTHER DELETERIOUS MATTER, SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

PRIOR TO ALL WORK OF THIS SECTION, CONTRACTOR IS TO BECOME THOROUGHLY FAMILIAR WITH THE SITE, THE SITE CONDITIONS, AND ALL PORTIONS OF THE WORK, FALLING WITHIN THIS SECTION.

DO NOT ALLOW OR CAUSE ANY OF THE WORK PERFORMED OR INSTALLED TO BE COVERED UP OR ENCLOSED BY WORK OF THIS SECTION PRIOR TO ALL REQUIRED INSPECTIONS, TESTS AND APPROVALS.

AFTER THE WORK HAS BEEN COMPLETELY TESTED, INSPECTED AND APPROVED, MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO RESTORE THE WORK TO THE CONDITION IN WHICH IT WAS FOUND AT THE TIME OF UNCOVERING. ALL AT NO ADDITIONAL COST TO THE OWNER.

FOR SETTING AND ESTABLISHING FINISH ELEVATIONS AND LINES, SECURE THE SERVICES OF A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR ACCEPTABLE TO THE OWNER. CAREFULLY PRESERVE ALL DATA AND ALL MONUMENTS SET BY THE CIVIL ENGINEER OR LAND SURVEYOR, AND IF DISPLACED OR LOST, IMMEDIATELY REPLACE TO THE APPROVAL OF THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER.

PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, ETC. NECESSARY AND INCIDENTAL TO THE COMPLETION OF ALL EARTHWORK AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS. ALL OFF-SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING: THIS WORK CONSISTS OF GRADING IN ORDER TO ACHIEVE FINISHED ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS.

ALL GRADED SURFACES SHALL BE SMOOTH AND UNIFORM, WITHOUT ABRUPT CHANGES IN SLOPE OR GRADE. AREAS TO BE COVERED WITH PAVING SHALL BE FINE GRADED TO THE REQUIRED ELEVATIONS AND SLOPES. FINISHED SURFACES IN ALL OTHER AREAS MAY VARY UP TO 0.1 FEET FROM THE REQUIRED ELEVATIONS.

PERFORM EXCAVATION WORK IN COMPLIANCE WITH APPLICABLE REQUIREMENTS OF GOVERNING AUTHORITIES HAVING JURISDICTION. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, LATEST EDITION.

EMPLOY, AT CONTRACTOR'S EXPENSE, DESIGN LABORATORY TO PERFORM SOIL TESTING AND INSPECTION SERVICE FOR QUALITY CONTROL TESTING DURING EARTHWORK OPERATIONS. SUBMIT FOLLOWING REPORTS DIRECTLY TO ENGINEER AND COPIES TO CITY ENGINEERING DEPARTMENT FROM THE TESTING SERVICES, WITH COPY TO THE CONTRACTOR.

TEST REPORTS ON BORROW MATERIAL. FIELD DENSITY TEST REPORTS. ONE OPTIMUM MOISTURE-MAXIMUM DENSITY CURVE FOR EACH TYPE OF SOIL ENCOUNTERED.

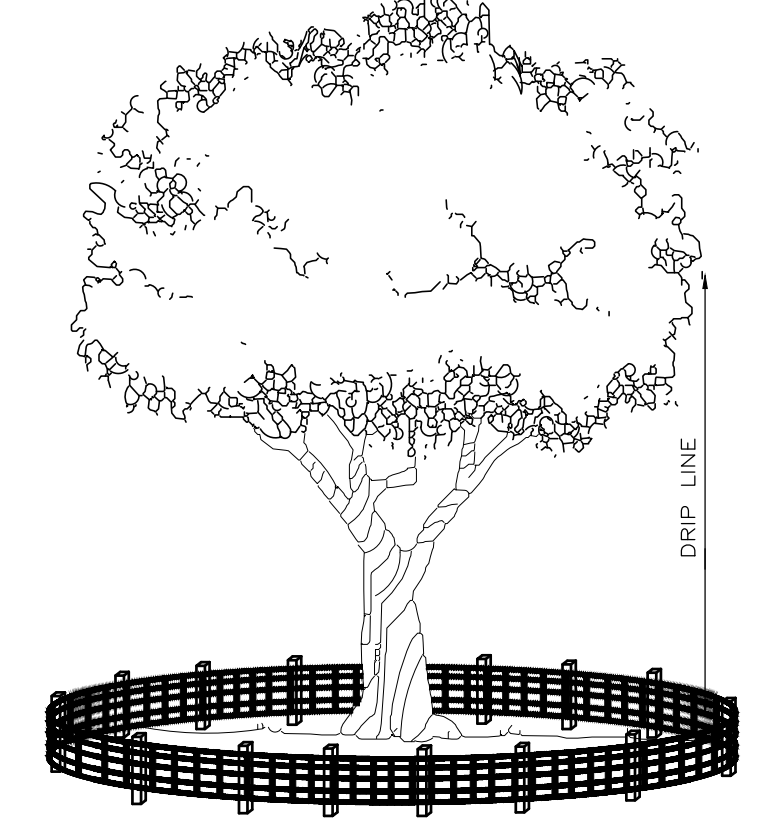
WHERE REQUIRED, THE SITE SHALL BE EXCAVATED TO THE GRADES COURSE. EXCAVATED MATERIAL THAT IS SUITABLE SHALL BE USED IN THE FILL SECTIONS OF THE SITE. NO SUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE. ANY EXCESS SUITABLE MATERIAL SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER.

EXCAVATION FOR MANHOLES, CATCH BASINS, AND OTHER ACCESSORIES SHALL BE SUFFICIENT TO LEAVE AT LEAST 12 INCHES IN THE CLEAR BETWEEN THEIR OUTER SURFACES AND THE EMBANKMENT OF TIMBER THAT MAY BE USED TO PROTECT THEM. SOD BLOCKS SHALL BE PLACED WITH STAGGERED TRANSVERSE JOINTS.

THIS WORK CONSISTS OF SODDING AREAS CLEARED DURING CONSTRUCTION AND NOT PAVED, OR AS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 570, 571, 573, OR 575 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST REVISION.

USE ST. AUGUSTINE GRASS (FLORATAM) SOD. THE SOD SHALL BE LIVE, FRESH AND UNINJURED AT THE TIME OF PLANTING AND SHALL HAVE A THICK MAT OF ROOTS WITH ENOUGH ADHERING SOIL TO ASSURE GROWTH. APPLY SOD WITHIN 72 HOURS OF CUTTING OR STACKING TO KEEP MOIST.

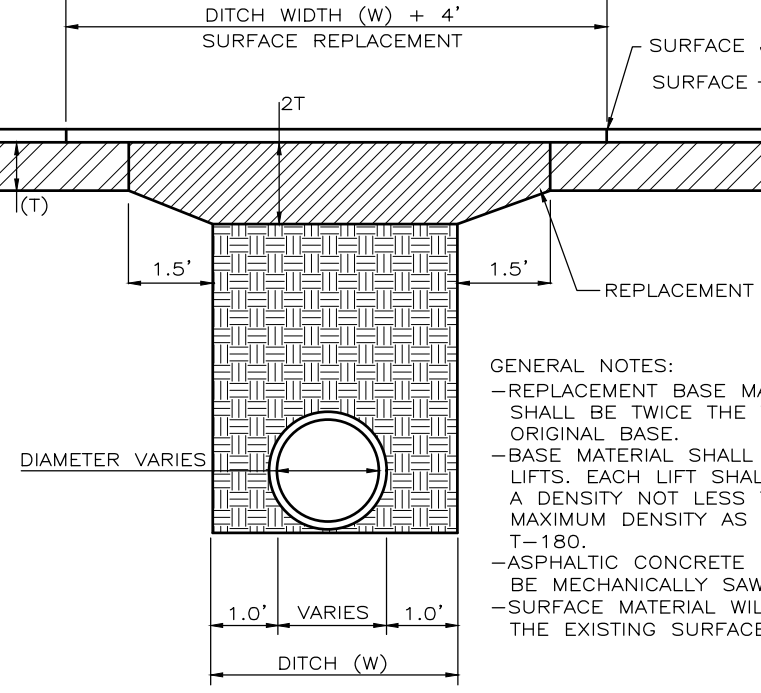
PREPARE THE GROUND BY LOOSENING THE SOIL. PLACE SOD ON THE PREPARED SOIL WITH EDGES IN CLOSE CONTACT. STAGGER THE SOD PIECES SO AS TO AVOID A CONTINUOUS DOWNHILL SEAM. TAMP THE OUTER EDGES OF THE SODDED AREA TO PRODUCE A SMOOTH CONTOUR. KEEP SOD CONTINUOUSLY MOIST TO A DEPTH BELOW THE ROOT ZONE FOR THREE WEEKS AFTER PLACEMENT.



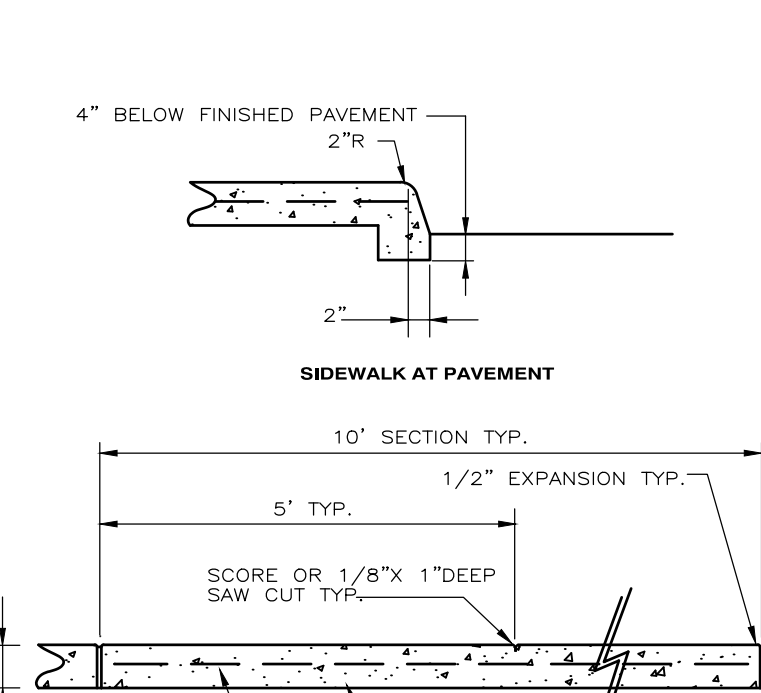
TREE BARRIER DETAIL



REPLACEMENT OF FLEXIBLE PAVEMENT SECTION



CONCRETE SIDEWALK DETAIL



SEEDING RATE ZONES

TYPE OF SEED	ZONE I				ZONE II			
	COASTAL		INLAND		COASTAL		INLAND	
	MAR. 1 TO NOV.	NOV. TO MAR.	MAR. 1 TO OCT.	OCT. TO MAR.	FEB. TO DEC.	DEC. TO FEB.	FEB. 1 TO DEC.	DEC. TO FEB.
PERMANENT GRASS	15	15	10	15	15	15	10	15
UNHULLED BERMUDA								
BAHIA ARGENTINA OR PENSACOLA			30	30			30	30
QUICK GROWING								
BROWN TOP MILLET	20	20	20	20	20	20		
ANNUAL RYE GRASS		20		20		20		20
TOTAL POUNDS PER ACRE	35	35	60	65	35	35	60	65

NOTE: THE SEEDING RATES SHOWN IN THIS TABLE APPLY ONLY WHEN SEED IS SPREAD BY AN APPROVED MECHANICAL SPREADER MEETING THE REQUIREMENTS OF SECTION 570 AND 577 OF THE STANDARD SPECIFICATIONS.

GENERAL NOTES

1. SPECIAL ATTENTION IS TO BE DIRECTED TO THE CONSTRUCTION OF THE REQUIRED 1" DROP-OFF AT EDGE OF PAVEMENT.
2. FERTILIZE ENTIRE UNPAVED SHOULDER AND FRONT SLOPE TO TOE OF SLOPE OR BOTTOM OF DITCH.
3. TOPSOIL OBTAINED FROM BORROW PITS OR OTHER SOURCES MAY BE USED IN LIEU OF EXCAVATED TURF AND TOPSOIL WHEN ECONOMICALLY FEASIBLE. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBSTITUTING TOPSOIL FOR EXCAVATED TURF OR TOPSOIL.

IF THE QUANTITY OF EXISTING STORED OR EXCAVATED TOPSOIL IS INADEQUATE FOR PLANTING, SUFFICIENT ADDITIONAL TOPSOIL SHALL BE FURNISHED. TOPSOIL FURNISHED SHALL BE A NATURAL, FERTILE, FRABLE SOIL, POSSESSING CHARACTERISTICS OF REPRESENTATIVE PRODUCTIVE SOILS IN THE VICINITY. IT SHALL BE OBTAINED FROM NATURALLY WELL-DRAINED AREAS.

TOPSOIL SHALL BE WITHOUT ADMIXTURE OF SUBSOIL AND FREE FROM JOHNSON GRASS (SORGHUM HALDENENSE), NUT GRASS (CYPERUS ROTUNDUS) AND OBJECTIONABLE WEEDS AND TOXIC SUBSTANCES.

GROUND LIMESTONE (DOLOMITE) CONTAINING NOT LESS THAN 85 PERCENT OF TOTAL CARBONATES, AND SHALL BE GRADUATED TO SUCH A FINENESS THAT 50 PERCENT WILL PASS A 100-MESH SIEVE AND 90 PERCENT WILL PASS A 20-MESH SIEVE.

16-18-18 FORMULATION OF WHICH 60 PERCENT OF THE NITROGEN IS IN THE UREA-FORMALDEHYDE FORM AND SHALL CONFORM TO THE APPLICABLE STATE FERTILIZER LAWS. IT SHALL BE GRANULATED SO THAT 80 PERCENT IS HELD ON A 16-MESH-SCREEN, UNIFORM IN COMPOSITION, DRY AND FREE-FLOWING. MULCH: CLEAN HAY OR FREE STRAW MULCH.

AREAS TO BE GRASSED SHALL BE GRADED TO REMOVE DEPRESSIONS, UNDULATIONS, AND IRREGULARITIES IN THE SURFACE BEFORE GRASSING.

PLACING TOPSOIL: AREAS TO BE GRASSED SHALL HAVE A MINIMUM TOPSOIL OVER OF TWO INCHES. TOPSOIL SHALL NOT BE PLACED WHEN THE SUBGRADE IS EXCESSIVELY WET, EXTREMELY DRY OR IN A CONDITION OTHERWISE DETRIMENTAL TO THE PROPOSED PLANTING OR PROPER GRADING.

TILLAGE: THE AREA TO BE GRASSED SHALL BE THOROUGHLY TILLED TO A DEPTH OF FOUR INCHES USING A PLOW AND DISC HARROW OR ROTARY TILLING MACHINERY UNTIL A SUITABLE BED HAS BEEN PREPARED AND NO CLOSUS OR CLUMPS REMAIN LARGER THAN 1-1/2 INCHES IN DIAMETER.

APPLICATION OF LIME: THE PH OF THE SOIL SHALL BE DETERMINED. IF THE PH IS BELOW 5.0, SUFFICIENT LIME SHALL BE ADDED TO PROVIDE A PH BETWEEN 5.5 AND 6.5. THE LIME SHALL BE THOROUGHLY INCORPORATED INTO THE TOP THREE TO FOUR INCHES OF THE SOIL. LIME AND FERTILIZER MAY BE APPLIED IN ONE OPERATION.

APPLICATION OF FERTILIZER: FERTILIZER SHALL BE APPLIED AT THE RATE OF 6 POUNDS PER 1,000 SQUARE FEET AND SHALL BE THOROUGHLY INCORPORATED INTO THE TOP THREE TO FOUR INCHES OF SOIL.

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEED AS SPECIFIED HEREIN, IMMEDIATELY BEFORE SEEDS ARE SOWN AND AFTER FERTILIZER AND LIME ARE APPLIED. THE GROUND SHALL BE SMOOTH AND UNIFORM AND SHALL BE RAKED UNTIL THE SURFACE IS SMOOTH, FRABLE, AND OF UNIFORM FINE TEXTURE. AREAS TO BE GRASSED SHALL BE SEEDER, RAKED WITH A MECHANICAL SPREADER, RAKED LIGHTLY, ROLLED WITH A 200-POUND ROLLER, AND WATERED WITH A FINE SPRAY.

SEEDS SHALL BE APPLIED AT THE FOLLOWING RATE:

SEEDS RATE OF APPLICATION

BERMUDA 6 LBS./1000 SQ.FT.

SEEDED AREAS SHALL BE MULCHED AT THE RATE OF NOT LESS THAN 1-1/2" LOOSE MEASUREMENT OVER ALL SEEDED AREAS. SPREAD BY HAND, BLOWER, OR OTHER SUITABLE EQUIPMENT. MULCH SHALL BE CUT INTO THE SOIL WITH EQUIPMENT CAPABLE OF CUTTING THE MULCH UNIFORMLY INTO THE SOIL. MULCHING SHALL BE DONE WITHIN 24 HOURS OF THE TIME SEEDING IS COMPLETED.

AFTER SEEDING AND MULCHING, A CULTIPACKER, TRAFFIC ROLLER, OR OTHER SUITABLE EQUIPMENT SHALL BE USED FOR ROLLING THE GRASSED AREAS. AREAS SHALL THEN BE WATERED WITHIN A FINE SPRAY.

ALL AREAS TO BE GRASSED SHALL BE PROTECTED AGAINST EROSION AT ALL TIMES. FOR PROTECTION DURING WINTER MONTHS (NOVEMBER 1ST THRU MARCH 31ST) ITALIAN RYE GRASS SHALL BE PLANTED AT A RATE OF FOUR POUNDS PER 1,000 SQUARE FEET ON ALL AREAS WHICH ARE NOT PROTECTED BY PERMANENT GRASS.

PERMIT PURPOSES ONLY

CONSTRUCTION DETAILS
ROSENWALD - FIRE MAIN EXTENSION
BAY DISTRICT SCHOOLS
 PANAMA CITY, FLORIDA

McNEIL CARROLL ENGINEERING, INC.
 Professional Engineering Consultants
 STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288

475 Harrison Avenue, Suite 200
 Panama City, Florida 32401
 Phone: 850-763-5730

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
 PROFESSIONAL ENGINEER
 #112 # 4909

Robert L. Carroll, P.E.
 PROFESSIONAL ENGINEER
 #112 # 5708

04/16/26

SHEET NUMBER 4 OF 5 240.179 - ROSENWALD - FIRE MAIN EXTENSION

